ANNUAL TRANSURANIC WASTE INVENTORY REPORT – 2021
(Data Cutoff Date 12/31/2020)

DOE/TRU-21-3425

Revision 0

December 2021

U.S. Department of Energy
Carlsbad Field Office

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U.S. Department of Energy
Carlsbad Field Office

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HISTORY OF REVISION

Revision Number	Pages Affected	Description of Revision
0	All	Initial issue to document the inventory estimate of transuranic waste reported by the transuranic waste generator sites as of December 31, 2020.

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ACRONYMS AND ABBREVIATIONS

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

ANL	Argonne National Laboratory
ATWIR	Annual Transuranic Waste Inventory Report
BAPL	Bettis Atomic Power Laboratory
BL	Babcock and Wilcox Nuclear Energy Services
CBFO	Carlsbad Field Office
CH	contact-handled
Ci	curie(s)
CID	Comprehensive Inventory Database
CY	calendar year
D&D	decontamination and decommissioning
DOE	U.S. Department of Energy
DSA	Documented Safety Analysis
DT	data template
EDTA	ethylenediaminetetraacetic acid
HWFP	Hazardous Waste Facility Permit
INL	Idaho National Laboratory
KAPL-NFS	Knolls Atomic Power Laboratory – Nuclear Fuel Services
KAPL-S	Knolls Atomic Power Laboratory – Schenectady
kg	kilogram(s)
LANL	Los Alamos National Laboratory
LANL-CO	Los Alamos National Laboratory – Carlsbad Operations
LBNL	Lawrence Berkeley National Laboratory
LLNL	Lawrence Livermore National Laboratory
LQS	large quantity site
LWA	Land Withdrawal Act
m^3	cubic meter(s)
MFC	Material and Fuels Complex
NEPA	National Environmental Policy Act
NNSS	Nevada National Security Site
NRD	Nuclear Radiation Development

ACRONYMS AND ABBREVIATIONS, cont.

ORIGEN-S	Oak Ridge Isotope Generation and Depletion Code
ORNL	Oak Ridge National Laboratory
PA	performance assessment
QA	quality assurance
QAPD	Quality Assurance Program Document
RH	remote-handled
RL	Hanford (Richland) Site
RP	Hanford Site – Office of River Protection
SCALE	Standardized Computer Analyses for Licensing Evaluation
SNL	Sandia National Laboratories
SPRU	Separations Process Research Unit
SRS	Savannah River Site
TRU	transuranic
WAC	Waste Acceptance Criteria
WCS	Waste Control Specialists, LLC
WDS	Waste Data System
WIPP	Waste Isolation Pilot Plant
WPR	Waste Profile Report
WV	West Valley Demonstration Project

EXECUTIVE SUMMARY

The purpose of this *Annual Transuranic Waste Inventory Report* (ATWIR) – *2021* is to document the inventory estimate of transuranic (TRU) waste reported by the TRU waste generator sites as of December 31, 2020. This report also notes major changes to the inventory used for the ATWIR-2020 that had a data cutoff date of December 31, 2019. This updated inventory information is available to the U.S. Department of Energy (DOE) TRU waste complex, Waste Isolation Pilot Plant (WIPP) stakeholders, and regulators. The TRU waste inventory information is used for strategic planning, and supports the DOE Carlsbad Field Office (CBFO) input into documents (e.g., WIPP Documented Safety Analysis and National Environmental Policy Act analyses), planned changes, and other design changes as needed for the WIPP project.

The TRU waste generator sites were asked to report the most comprehensive TRU waste inventory estimate available, including decontamination and decommissioning waste, and all other defense-related TRU waste information projected up to the final estimated year of TRU waste generation. At the direction of the DOE/CBFO, this ATWIR-2021 focuses on all TRU waste stored or projected to be generated through calendar year (CY) 2033 at the TRU waste generator sites. All data presented throughout this report are based on this directive, with the exception of section 4.2, which provides information on TRU waste projected beyond CY 2033 that may be used for strategic planning.

Waste streams are designated as either WIPP-bound (appear to meet the requirements for emplacement in the WIPP repository) or potential (have uncertainties regarding eligibility for emplacement in the WIPP repository, as of the data cutoff date for this report). Regardless of its designation or status within this report, all TRU waste must meet the WIPP requirements (e.g., WIPP Waste Acceptance Criteria and the WIPP Hazardous Waste Facility Permit) before it can be disposed of in the WIPP repository.

This ATWIR-2021 was developed from an annual inventory data update provided by the TRU waste generator sites, and reflects the changes in the data that have occurred in the defense-related TRU waste inventory since the data cutoff date of the ATWIR-2020. This inventory report includes estimates for TRU waste volume, waste and packaging material mass, chemical component mass, and radionuclide activity (decayed to common years 2020 and 2033). Table ES-1 presents an overview of the changes in the data from the ATWIR-2020. Specific details of these changes are discussed in section 3.0 of this report.

Table ES-1. Summary of Parameter Changes

Parameter	ATWIR-2020 Total	ATWIR-2021 Total	Net Change	Percent Change
Volume (m^3) [1]	1.12E+05	1.13E+05	+7.54E+02	+0.67%
Waste and Packaging Material Mass (kg) [1]	9.45E+07	9.81E+07	+3.60E+06	+3.81%
Radionuclide Activity (Ci) [1, 2]	3.90E+06	4.88E+06	+9.82E+05	+25.19%
Complexing Agents Mass (kg) [3]	1.32E+04	1.67E+04	+3.50E+03	+26.52%
Oxyanions Mass (kg) [3]	5.92E+05	6.88E+05	+9.57E+04	+16.16%

Data Source: Comprehensive Inventory Database (CID) Data Versions D.19.00.33 (Los Alamos National Laboratory – Carlsbad Operations [LANL-CO] 2020) and D.20.00.33 (LANL-CO 2021) are used for the ATWIR-2020 and for the ATWIR-2021, respectively.
Note: Actual numerical values in this table are rounded to three significant figures for presentation purposes.
[1] Data include stored and projected values from WIPP-bound waste streams at the TRU waste generator sites, waste emplaced at WIPP, and waste in temporary storage at Waste Control Specialists, LLC. Data in this table are presented as follows: volume in cubic meters (m^3), mass in kilograms (kg), and activity in curies (Ci).
[2] Data decay-corrected through CY 2033.
[3] Since these components are not tracked in the WIPP Waste Data System, data only include stored and projected values from WIPP-bound waste streams at the TRU waste generator sites.

1.0 INTRODUCTION

Each year, transuranic (TRU) waste inventory information is updated, reported in a TRU waste inventory report, and made available to the U.S. Department of Energy (DOE) complex, Waste Isolation Pilot Plant (WIPP) stakeholders, and regulators. This *Annual Transuranic Waste Inventory Report* (ATWIR) – *2021*, with a data cutoff date of December 31, 2020, provides the DOE Carlsbad Field Office (CBFO) with the TRU waste generator sites' best estimate of their inventory to facilitate achieving national TRU waste disposal objectives and commitments. The inventory data used to develop this report support numerous tasks. These tasks can include planned changes, National Environmental Policy Act (NEPA) activities, design changes, identifying waste containing oxyanions and complexing agents, and various analyses such as the WIPP Documented Safety Analysis (DSA). At the direction of the DOE/CBFO, this ATWIR-2021 focuses on all TRU waste stored or projected to be generated through calendar year (CY) 2033 at the TRU waste generator sites (U.S. DOE 2021).

This seven-section report documents the updated total inventory of TRU waste as reported by the TRU waste generator sites. Section 1.0 introduces the annual TRU waste inventory updates, the generator sites, waste in temporary storage, and the sources and uses of the inventory information. Section 2.0 describes the methodology used to develop and compile the inventory information. Section 3.0 discusses the updated WIPP-bound TRU waste inventory estimates and the changes in the data since the ATWIR-2020 (U.S. DOE 2020) with a data cutoff date of December 31, 2019. At the time of the data collection cutoff date, WIPP-bound waste streams appeared to meet the requirements for emplacement in the WIPP repository. Potential waste streams have meaningful uncertainties regarding their eligibility, due to technical or legal considerations, for emplacement in the WIPP repository as of the data cutoff date for this report. Section 4.0 discusses potential TRU waste streams as well as waste projected to be generated beyond CY 2033. Section 5.0 presents a summary of this report, section 6.0 provides a glossary, and section 7.0 lists the references cited in this report. This report contains three appendices. Appendix A presents the WIPP-bound TRU Waste Profile Reports (WPRs), Appendix B presents the WPRs for potential waste streams, and Appendix C presents a crosswalk of waste streams between ATWIR-2020 and ATWIR-2021.

This ATWIR-2021 was prepared by the Los Alamos National Laboratory – Carlsbad Operations (LANL-CO) TRU Waste Inventory Team for the DOE/CBFO. The work for this report was performed in accordance with the requirements of DOE/CBFO-94-1012, *Quality Assurance Program Document* (QAPD) (U.S. DOE 2017). The processes used by the LANL-CO TRU Waste Inventory Team to collect, maintain, and report inventory information are graded and implemented to QAPD requirements under the LANL-CO Quality Assurance (QA) Program, which includes the software QA procedures used to qualify the Comprehensive Inventory Database (CID) and other software used in the development of this report. The LANL-CO Software QA Program is documented in LCO-QPD-02, *LANL-CO Software Quality Assurance Plan* (LANL-CO 2017a), and LCO-QP19-1, *Software Quality Assurance* (LANL-CO 2017b).

1.1 Annual TRU Waste Inventory Updates

The TRU waste inventory at the generator sites changes frequently due to retrieval, treatment, characterization, and shipping activities; therefore, the inventory is updated on an annual basis. This report is an update based on the sites' estimated inventory as of December 31, 2020.

Since the ATWIR-2020, a number of changes and improvements have occurred that affected the volume and the non-radiological and radiological characteristics of TRU waste streams. These changes were largely based on:

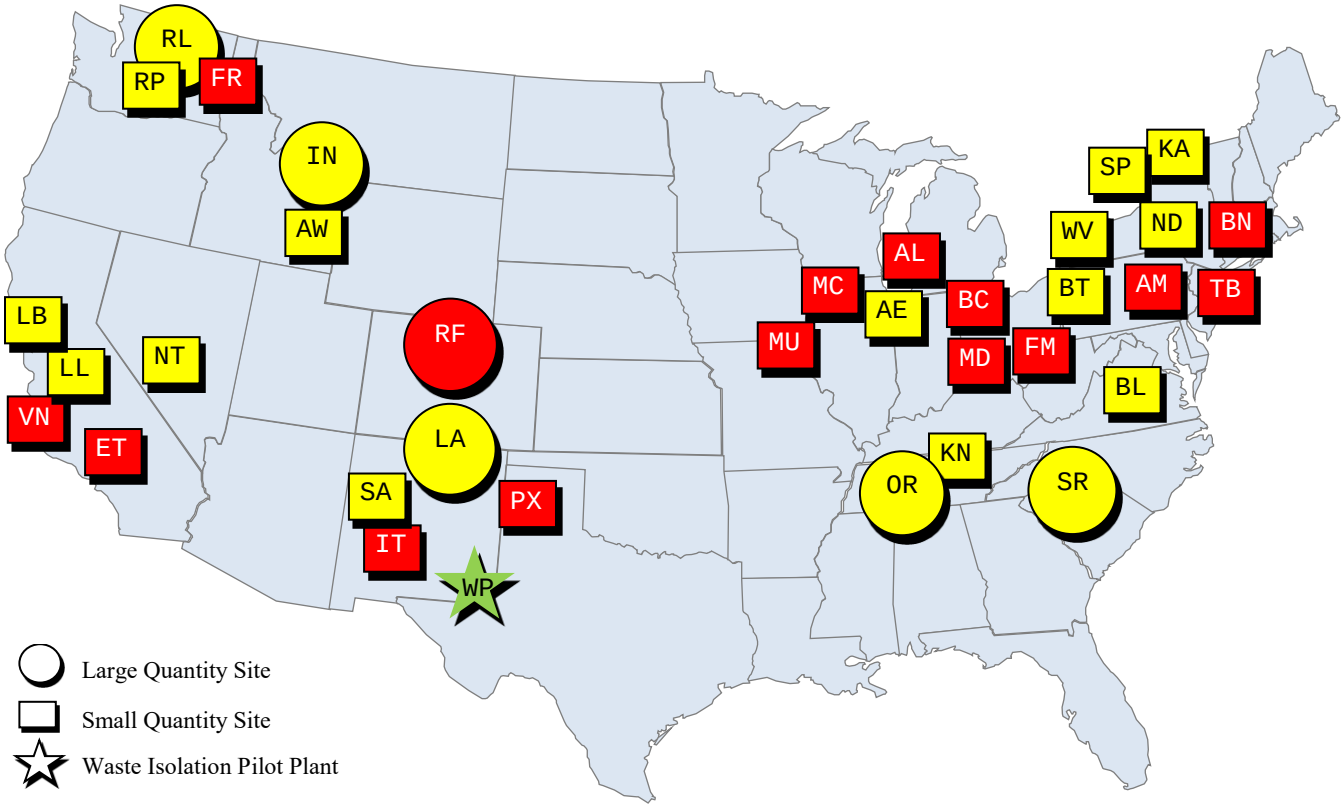
- Updates made by Hanford (Richland) Site (RL) to projected TRU waste inventory;
- Reassignment of TRU waste previously reported by Savannah River Site (SRS) as Potential to WIPP-bound; and
- Acquisition of new characterization data, processing information, and repackaging experience by multiple sites, resulting in more accurate data and better estimates.

1.2 TRU Waste Generator Sites

As seen in Figure 1-1**,** TRU waste is currently stored at both small quantity sites and large quantity sites (LQSs) across the country. This figure presents the DOE TRU waste generator sites as of December 31, 2020, which are divided into two categories: active TRU waste generator sites (yellow) and sites de-inventoried of all TRU waste (red).

There are three TRU waste generator sites shown in Figure 1-1 that currently report only potential TRU waste: West Valley Demonstration Project (WV), Hanford Site - Office of River Protection (RP), and Babcock and Wilcox Nuclear Energy Services (BL). Potential TRU waste is discussed in section 4.1 of this report.

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



Yellow – Active TRU Waste Generator Sites

AE	Argonne National Laboratory
AW	Materials and Fuels Complex
BL	Babcock and Wilcox Nuclear Energy Services (Potential)
BT	Bettis Atomic Power Laboratory
IN	Idaho National Laboratory
KA	Knolls Atomic Power Laboratory-Schenectady
KN	Knolls Atomic Power Laboratory-Nuclear Fuel Services
LA	Los Alamos National Laboratory
LB	Lawrence Berkeley National Laboratory
LL	Lawrence Livermore National Laboratory
ND	Nuclear Radiation Development Site
NT	Nevada National Security Site
OR	Oak Ridge National Laboratory
RL	Hanford (Richland) Site
RP	Hanford Site - Office of River Protection (Potential)
SA	Sandia National Laboratories
SP	Separations Process Research Unit
SR	Savannah River Site
WV	West Valley Demonstration Project (Potential)

Red – De-inventoried of all TRU Waste

AL	Ames Laboratory
AM	ARCO Medical Products
BC	Battelle Columbus Laboratories
BN	Brookhaven National Laboratory
ET	Energy Technology Engineering Center
FM	Fernald Environmental Management Project
FR	Framatome
IT	Lovelace Respiratory Research Institute
MC	U.S. Army Materiel Command
MD	Mound Plant
MU	University of Missouri Research Reactor
PX	Pantex Plant
RF	Rocky Flats Environmental Technology Site
TB	Teledyne Brown Engineering
VN	General Electric Vallecitos Nuclear Center

1.3 Temporary Storage of TRU Waste

As of December 31, 2020, ≈56.7 cubic meters (m^3) of TRU waste from Los Alamos National Laboratory (LANL) remained in temporary storage at Waste Control Specialists, LLC (WCS) near Andrews, Texas. No containers were shipped to the WIPP in CY 2020. The WCS inventory is accounted for in Table 3-3, Table 3-5, and Table 3-11. The WCS values in these tables are based on a query of the WIPP Waste Data System (WDS).

1.4 Sources of TRU Waste Inventory Information

The sources of TRU waste inventory information are: 1) the inventory used for the previous ATWIR, 2) updated information provided by the TRU waste generator sites, and 3) WDS, the official database of record for waste emplaced in the WIPP repository. For ATWIR-2021, the TRU waste generator sites began with the inventory data used for the ATWIR-2020, and updated the information using data obtained from their site-specific databases and acceptable knowledge reports which provide comprehensive information pertaining to waste streams being characterized.

1.5 Uses of TRU Waste Inventory Information

The DOE uses TRU waste inventory information to support strategic decisions related to waste retrieval, treatment, repackaging, characterization, shipment, and disposal initiatives. As requested, sites develop and update site-specific project plans and schedules, which detail approaches for moving TRU waste to the WIPP based on current TRU waste inventory information. TRU waste volumes projected to be generated beyond CY 2033 are provided separately in section 4.2 for the DOE to use as a planning basis for future TRU waste storage and disposal needs.

The inventory data used to develop this report support numerous tasks, such as planned changes, NEPA activities, design changes, and various analyses, such as the WIPP DSA. The DOE/CBFO tracks radiological and non-radiological (waste and packaging materials, and chemical components) information about the TRU waste destined for the WIPP. When these inventory data are needed for performance assessment (PA) modeling, the DOE/CBFO will request a Performance Assessment Inventory Report that provides a scaled inventory to model the WIPP repository at its legislated capacity, based on the latest inventory data.

2.0 METHODOLOGY

This report was generated using documented processes and methods that are qualified under the LANL-CO QA Program (see section 1.0). The following steps were completed to generate this report:

1. Collected current TRU waste stream information from the TRU waste generator sites, with projected estimates extending beyond CY 2033.

2. Performed a thorough review of all data to check for accuracy, consistency, and completeness.

3. Entered the updated information in the CID.

4. Obtained validation of the updated CID information from the DOE TRU waste generator site representatives.

5. Performed analyses to adjust inventory data to CY 2033 and to transform WDS data for input into the CID (see section 2.3).

6. Generated the required data tables by decaying the radionuclides and performing necessary calculations in the CID.

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

The process used to collect TRU waste inventory data from the generator sites and to enter it into the CID is documented in LANL-CO procedure INV-SP-01, *Data Collection and Entry for the Comprehensive Inventory* (LANL-CO 2019). In December 2020, in accordance with the procedure, a letter was sent from DOE/CBFO (Patterson 2020) to the active TRU waste generator sites requesting the annual TRU waste inventory update. The Inventory Team then sent each site an electronic notification of the update with an attached Microsoft® Excel data template (DT) workbook file containing the previous year's validated data along with guidance explaining the steps required to update the DT information.

The TRU waste generator sites were asked to update the information on their waste streams. The sites designate each waste stream as either WIPP-bound or potential. The data for WIPP-bound waste streams are discussed in section 3.0 and potential waste streams are discussed in section 4.0. The data for WIPP-bound waste streams are used for PA compliance calculations, whereas the data for potential waste streams are not. Regardless of its designation in this report, TRU waste must meet all WIPP requirements (e.g., WIPP Waste Acceptance Criteria [WAC], WIPP Hazardous Waste Facility Permit [HWFP]) before it can be disposed of at the WIPP.

The Inventory Team worked with personnel from the active TRU waste generator sites to assist in the updating process. After the DTs were updated, the Inventory Team performed reviews for completeness, accuracy, and consistency. The sites were then contacted for resolutions of any issues identified. The reviews included, but were not limited to the verification that:

- All required information for WIPP-bound waste streams is entered, and potential waste streams meet the screening memo criteria as discussed in section 4.1;

- TRU alpha concentration is greater than 100 nanocuries per gram;

- Waste streams are categorized correctly as contact-handled (CH) or remote-handled (RH) based on radionuclide threshold limits;

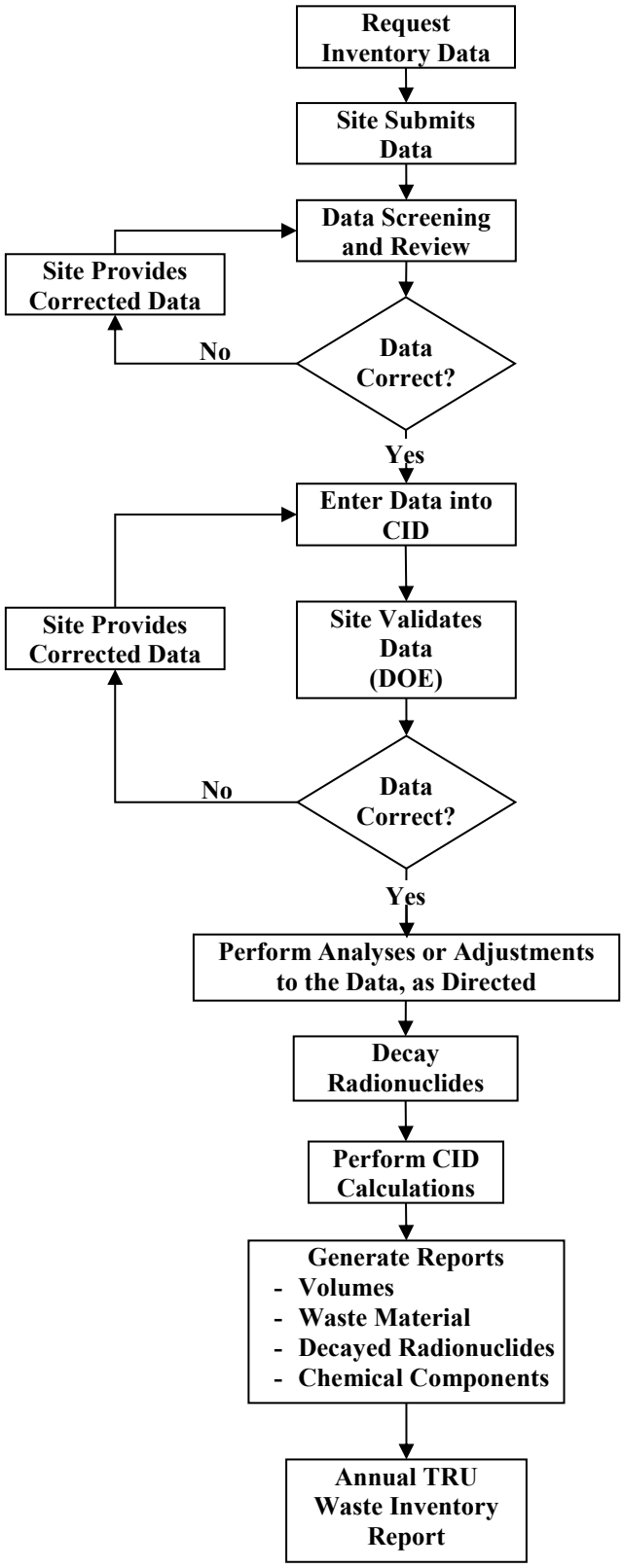
- Activity concentration for RH-TRU waste streams does not exceed the WIPP Land Withdrawal Act (LWA) limits (i.e., confirm RH-TRU waste does not exceed 23 curies [Ci] per liter) (U.S. Congress 1992 and 1996);

- Waste does not exceed mass limits for reported final form container types;

- Complexing agents and oxyanions are reported if applicable;
- Waste matrix code groups are consistent with waste materials reported; and
- Any significant differences between the current and previous year's waste stream data are identified and understood.

Once all issues were resolved, the TRU waste inventory information was uploaded from the DT or entered manually into the CID. Once the data were entered and verified, waste stream data reports were prepared and sent to the DOE TRU waste generator site representative (manager or designee). A validation letter signed by the DOE TRU waste generator site representative and site contractor (contractor signature optional) documented the correctness of the information as reported in the CID. Hard copies of the waste stream data reports and signed validation letters were then submitted to the LANL-CO Record Center. After an analysis was performed to adjust the inventory to CY 2033, the CID data were then labeled as data version D.20.00.33 (LANL-CO 2021). Figure 2-1 presents a flowchart of the TRU waste inventory process.

Figure 2-1. TRU Waste Inventory Process Flowchart



2.2 Data Generated from CID Reports

Data tables included in this report were generated from the CID. The CID is a DOE/CBFO database developed by LANL-CO and qualified in accordance with the LANL-CO QA Program, which is in compliance with the requirements of the DOE/CBFO QAPD (U.S. DOE 2017). The LANL-CO Software QA Program is documented in LCO-QPD-02, *LANL-CO Software Quality Assurance Plan* (LANL-CO 2017a), and LCO-QP19-1, *Software Quality Assurance* (LANL-CO 2017b). The CID is used to manage, maintain, and perform specific qualified calculations using inventory data. The data are then used to generate qualified data reports and tables.

The TRU waste generator sites were asked to update the information for each waste stream's stored and projected volume and to provide data that reflected the total composition of each waste stream's waste materials, radionuclides, and chemical components. For the waste materials and radionuclides update, the sites were asked to report only the data for the stored waste (already generated but not shipped), even if the waste stream included waste that is projected (will be generated in the future). The CID then derived projected mass and activity based on the projected-to-stored volume ratio for each waste stream; however, if a waste stream consisted only of projected waste, then the sites were asked to report their estimates of the projected data for that waste stream. The anticipated data were calculated by summing the stored and projected data. The stored, projected, and anticipated values for volumes, waste materials, radionuclides, and chemical components presented throughout this report are aggregate sums of the individual waste stream values for the specified categories (site, CH/RH designation, etc.).

Information for emplaced waste (disposed in the repository or in above-ground storage at the WIPP) and waste in temporary storage at a designated storage location (e.g., WCS) was obtained from the DOE/CBFO WDS administrator (see section 2.3.1). After this information was transformed for use in the CID (Van Soest 2021a), the WIPP and WCS data were then imported into the CID.

2.2.1 Volume Reporting

The waste stream container information collected from the TRU waste generator sites include stored and projected estimates in both current form and final form configurations. Current form represents the waste in its current packaging configuration. Final form represents estimates of the WIPP-approved container type(s) that will ultimately be used to ship the waste to the WIPP. For stored waste not already packaged in WIPP-approved containers, final form container types and counts reported are determined by considering factors such as volume, repackaging, treatment, and regulatory limits. The final form stored and projected waste stream volumes were derived by applying standardized WIPP-approved container type volumes, which are maintained within the CID, to the respective stored and projected container type counts reported by the TRU waste generator sites. The volume for waste emplaced at the WIPP and in temporary storage at WCS is directly reported as provided from the WDS.

In January 2019, the DOE/CBFO issued a memorandum (Shrader 2019) establishing a policy for the implementation of the WIPP WDS method of tracking and reporting the volume of TRU waste disposed at the WIPP facility. In June 2019, the DOE/CBFO issued an amendment (Lachman 2019) to Attachment 1 of the memorandum, which specifies the WIPP-approved

container types and their associated volumes. In the policy, the DOE/CBFO established the LWA TRU Waste Volume to be the gross internal volume of the disposal container for direct-loaded containers and the innermost disposal container for overpacked containers. As directed by the DOE/CBFO, the CH- and RH-TRU waste volume presented throughout this report are consistent with the LWA TRU Waste Volume methodology described in the policy.

2.2.2 Waste and Packaging Materials Reporting

Waste materials are non-radiological materials present in TRU waste. The TRU waste generator sites reported the total estimated mass of each waste stream's waste materials under the following categories, where applicable:

- Aluminum-based Metal/Alloys – Aluminum or aluminum-based alloys in the waste materials.
- Cellulose – Material generally derived from high-polymer plant carbohydrates (e.g., paper, cardboard, wood, and cloth).
- Cement – An agent used to solidify liquid, particulate, and sludge. Cement may be reacted (hydrated by setting up under aqueous conditions), or unreacted (added under dry, non-aqueous conditions as an absorbent or neutralizer).
- Iron-based Metal/Alloys – Includes iron and steel alloys in the waste, but does not include the waste container materials.
- Other Inorganic Materials – Nonmetallic inorganic waste materials (e.g., concrete, glass, firebrick, ceramics, sand, and inorganic sorbents) not categorized under Solidified Inorganic Material.
- Other Metal/Alloys – All other metal/alloys (e.g., copper, zirconium, tantalum), not categorized under Aluminum- or Iron-based Metal/Alloys, including the lead portion of leaded rubber gloves/aprons.
- Plastic – Generally man-made materials, often derived from petroleum feedstock (e.g., polyethylene and polyvinyl chloride).
- Rubber – Natural or man-made elastic latex materials (e.g., surgical gloves and leaded rubber gloves [rubber portion only]).
- Soil – Generally consists of naturally occurring soil that has been contaminated with radioactive waste materials at a high enough level to be considered TRU waste.
- Solidified Inorganic Material (Inorganic Matrix) – Any homogeneous materials consisting of sludge or aqueous-based liquids that are solidified (e.g., wastewater treatment sludge and inorganic particulates).

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

- Vitrified – Waste that was melted or fused at high temperatures with glass-forming additives (e.g., soil or silica) in appropriate proportions to result in a homogeneous glass-like matrix. (Unoxidized metallic phases, if present, are included in the Iron-based Metal/Alloys category.)

The packaging materials are non-radiological materials (steel, plastic, cellulose, rubber, and lead) used as components of the WIPP-approved containers that hold TRU waste, and are defined in INV-SAR-19, *Analysis of Container Material Masses* (French 2009), and in memos to the QA File QAM-12-17 and QAM-19-06 (Van Soest 2012; Toothman 2019). The packaging material masses are standardized for all WIPP-approved container types in the CID, which uses these values to generate each waste stream's overall packaging material makeup based upon the respective final form containers reported by the TRU waste generator sites. Appendix A and Appendix B present a list of waste and packaging material mass expressed in kilograms (kg) for each waste stream.

2.2.3 Radionuclide Reporting

The TRU waste generator sites reported the estimated activity of each radionuclide for their waste streams. In addition, they provided the most recent assay year or projected generation year for each waste stream. These assay years were used to determine the time basis for decay and buildup calculations ("decay-correction").

Since dates of assay vary among waste streams, radionuclide activity data were decay-corrected to common dates for reporting purposes (see section 3.3). Radionuclides are decayed through CY 2020 to bring all sites' radionuclides to the common collection year. Radionuclides from both the current and previous year inventories have also been decayed through CY 2033, which allows the activities from the inventories to be compared using a common year. The CID automates the radionuclide decay process by using the Oak Ridge Isotope Generation and Depletion Code (ORIGEN-S), a modular code system for performing Standardized Computer Analyses for Licensing Evaluation (SCALE) Version 6 (ORNL 2009), which is a depletion and decay library that is qualified for use under the LANL-CO QA Program, in accordance with LCO-QPD-02 and LCO-QP19-1. The CID first exports the radionuclide activities reported by the TRU waste generator sites in the form of ORIGEN-S input files for each waste stream. Next, the CID executes ORIGEN-S in a sequential fashion for each input file, where the radionuclide decay and buildup calculations are performed and written to an output file. Finally, each output file is read and imported back into the CID, resulting in the decay-corrected radionuclide tables generated for this report. Appendix A and Appendix B present a list of radionuclide activities in Ci for each waste stream. The radionuclides in Appendix A are decay-corrected through CY 2020. The radionuclides in Appendix B are not decay-corrected.

2.2.4 Complexing Agent and Oxyanion Reporting

When applicable, TRU waste generator sites reported stored and projected mass separately for each waste stream's complexing agents (acetic acid, citric acid, oxalic acid, acetate, citrate,

oxalate, and ethylenediaminetetraacetic acid [EDTA]) and oxyanions (nitrates, phosphates, and sulfates).

2.3 Analyses Supporting the ATWIR

In addition to collecting and processing information from the DOE TRU waste generator sites and securing the site information in a qualified database, the analyses described in the sections below were performed and documented in accordance with LANL-CO QA procedure LCO-QP9-1, *Analyses* (LANL-CO 2017c), as applicable, to support the preparation of this report.

2.3.1 WDS Data Transformation 2020

To update the TRU waste inventory data within the CID for waste emplaced and in temporary storage, a request was submitted to the DOE/CBFO WDS administrator to supply data as of December 31, 2020, consistent with the methodology described in section 2.2. The WDS data were migrated into a standardized DT file. This data migration required that the original WDS data undergo various transformations including, but not limited to, calculations, aggregations, and data mapping. These activities and calculations are documented in INV-SAR-59, *WDS Data Transformation for Insertion in the 2020 Inventory CID Import Template* (Van Soest 2021a). Transformations were included in this analysis for waste streams with waste containers residing in more than one location (WIPP underground, WIPP above-ground, or WCS). By using unique waste stream identification prefixes, these waste streams were separately transformed and tracked in the DT file for each location reported. The DT file was subsequently imported into the CID to update the information for TRU waste that is emplaced and in temporary storage.

2.3.2 Adjustment of 2020 Projected Inventory to CY 2033

Since the inventory data collection campaign that was used for this report directed the TRU waste generator sites to report all projected generation estimates as far into the future as can be estimated, an analysis was performed to adjust the updated projected inventory to the reporting term for this report (CY 2033). As such, INV-SAR-60, *Adjustment of 2020 Projected Inventory to 2033 Closure Year* (Van Soest 2021b), documents the adjustment of the inventory to CY 2033 to facilitate equivalent comparison with the ATWIR-2020 inventory. After the modifications described within INV-SAR-60 were performed on the updated inventory, the radionuclide activities underwent decay calculations. The data version was then labeled D.20.00.33 (LANL-CO 2021) and is used for the ATWIR-2021 inventory throughout this report.

3.0 TRU WASTE INVENTORY ESTIMATES AND CHANGES

This section presents the TRU waste inventory data that were collected and reported using the methodology discussed in section 2.0. Actual numerical values in this section are rounded to three significant figures for presentation purposes.

Inventory data reported from the sites are included in the tables presented throughout this section based on TRU waste that is currently stored or projected to be generated through CY 2033. The emplaced and temporary storage inventory totals reported from the WDS are not included in the data reported by the sites, but are presented as summations under WIPP (Emplaced) and WCS

(Temporary Storage) within Table 3-3, Table 3-5, and Table 3-11. These tables compare the volumes, waste and packaging materials, and radionuclides in this report to the respective ATWIR-2020 values. Chemical components are not reported in the emplaced or temporary storage inventory because these components are not tracked in the WDS. More specific information on the waste emplaced can be obtained from the DOE/CBFO WDS administrator at the WIPP Information Center at 1-800-336-WIPP (9477) or at infocntr@wipp.ws. The WDS is the official database of record including container-level data on the emplaced TRU waste.

3.1 TRU Waste Volume Estimates

This section presents the TRU waste inventory final form volume estimates for CH- and RH-TRU waste and a discussion of changes since the ATWIR-2020.

3.1.1 TRU Waste Inventory Total Volume by Site

The tables in this section present only final form data. Section 2.2.1 describes how volume is reported.

Table 3-1 shows the total CH-TRU stored, projected, and anticipated waste volume. An estimated anticipated final form total of ≈40,100 m^3 of CH-TRU waste is currently being reported at the sites and could be shipped to the WIPP in the future, provided all WIPP requirements are met. Approximately 98 percent of the anticipated CH-TRU waste is stored or will be generated at the LQSs (RL, Idaho National Laboratory [INL], LANL, Oak Ridge National Laboratory [ORNL], and SRS).

Table 3-2 shows the total RH-TRU stored, projected, and anticipated waste volume. An estimated anticipated final form total of ≈2,540 m^3 of RH-TRU waste is currently being reported by the sites and could be shipped to the WIPP in the future, provided all WIPP requirements are met. Approximately 96 percent of the anticipated RH-TRU waste is stored or will be generated at the LQSs.

Table 3-1. CH-TRU Waste Inventory Total Volume

TRU Waste Generator Site	Stored Volume (m^3)	Projected Volume (m^3)	Anticipated Volume (m^3)
Argonne National Laboratory	4.94E+01	2.56E+01	7.50E+01
Hanford (Richland) Site	1.13E+04	5.62E+03	1.69E+04
Idaho National Laboratory	1.16E+04	--	1.16E+04
Knolls Atomic Power Laboratory - Nuclear Fuel Services	4.33E+01	4.20E+00	4.75E+01
Knolls Atomic Power Laboratory - Schenectady	--	3.60E-02	3.60E-02
Lawrence Berkeley National Laboratory	4.20E-01	--	4.20E-01
Lawrence Livermore National Laboratory	2.28E+02	2.80E+02	5.08E+02
Los Alamos National Laboratory	3.68E+03	4.61E+03	8.29E+03
Material and Fuels Complex	2.10E-01	1.91E+01	1.93E+01

Table 3-1. CH-TRU Waste Inventory Total Volume
Continued

TRU Waste Generator Site	Stored Volume (m^3)	Projected Volume (m^3)	Anticipated Volume (m^3)
Nevada National Security Site	8.46E+01	1.02E+02	1.86E+02
Nuclear Radiation Development Site	2.10E+00	--	2.10E+00
Oak Ridge National Laboratory	6.12E+02	1.30E+02	7.41E+02
Sandia National Laboratories	1.94E+01	7.14E+01	9.09E+01
Savannah River Site	6.20E+02	1.01E+03	1.63E+03
Separations Process Research Unit	6.27E+00	--	6.27E+00
Grand Total	**2.82E+04**	**1.19E+04**	**4.01E+04**

Data Source: CID Data Version D.20.00.33 (LANL-CO 2021). Note: This table only contains data for WIPP-bound waste streams at the TRU waste generator sites.

Table 3-2. RH-TRU Waste Inventory Total Volume

TRU Waste Generator Site	Stored Volume (m^3)	Projected Volume (m^3)	Anticipated Volume (m^3)
Argonne National Laboratory	3.30E+01	3.25E+01	6.55E+01
Bettis Atomic Power Laboratory	7.56E+00	--	7.56E+00
Hanford (Richland) Site	1.74E+03	1.62E+02	1.90E+03
Idaho National Laboratory	2.10E+02	--	2.10E+02
Los Alamos National Laboratory	8.01E+01	--	8.01E+01
Material and Fuels Complex	6.93E+00	2.14E+01	2.84E+01
Oak Ridge National Laboratory	1.09E+02	8.68E+01	1.96E+02
Sandia National Laboratories	3.15E+00	6.60E-01	3.81E+00
Savannah River Site	3.16E+01	1.56E+01	4.72E+01
Separations Process Research Unit	2.52E+00	--	2.52E+00
Grand Total	**2.22E+03**	**3.19E+02**	**2.54E+03**

Data Source: CID Data Version D.20.00.33 (LANL-CO 2021). Note: This table only contains data for WIPP-bound waste streams at the TRU waste generator sites.

3.1.2 Changes to TRU Waste Volume

Table 3-3 shows the net changes for final form total volume of the combined CH- and RH-TRU waste between the ATWIR-2020 and this report. The net change column includes both increases and decreases in volume of waste as reported by the sites, as well as waste emplaced and in temporary storage as reported in the WDS. The net anticipated volume reported by the sites shows a decrease of ≈260 m^3. This decrease, when combined with the net increase of ≈1,010 m^3

of waste that was emplaced at the WIPP during CY 2020, results in an overall increase of ≈754 m^3.

As shown in Table 3-3, the site reporting the largest anticipated waste volume increase (≈464 m^3) is RL, which is primarily due to updates made to the estimated projected generation for waste stream RL200-02. SRS also shows a significant volume increase (≈320 m^3) resulting from TRU waste that was previously reported in potential waste streams being reassigned into WIPP-bound waste streams SR-KAC-PuOx and SR-KAC-HET. The sites that emplaced the most volume at the WIPP during CY 2020 were INL (≈520 m^3) and LANL (≈245 m^3), which contributed to the decrease shown in anticipated waste volume for both of these sites.

Table 3-3. CH/RH-TRU Waste Volume Changes

TRU Waste Generator Site	ATWIR-2020 Total (m^3)	ATWIR-2021 Total (m^3)	Net Change (m^3)
Hanford (Richland) Site	1.83E+04	1.88E+04	+4.64E+02
Idaho National Laboratory	1.19E+04	1.18E+04	-1.08E+02
Los Alamos National Laboratory	8.82E+03	8.37E+03	-4.51E+02
Oak Ridge National Laboratory	9.98E+02	9.37E+02	-6.03E+01
Savannah River Site	1.36E+03	1.68E+03	+3.20E+02
Small Quantity Sites	1.47E+03	1.04E+03	-4.24E+02
Anticipated Total	**4.29E+04**	**4.26E+04**	**-2.60E+02**
WIPP (Emplaced)	6.90E+04	7.00E+04	+1.01E+03
WCS (Temporary Storage)	5.67E+01	5.67E+01	--
Emplaced/Temporary Storage Total	**6.91E+04**	**7.01E+04**	**+1.01E+03**
Grand Total	**1.12E+05**	**1.13E+05**	**+7.54E+02**

Data Source: CID Data Versions D.19.00.33 (LANL-CO 2020) and D.20.00.33 (LANL-CO 2021).

3.2 Non-Radiological Material Estimates

This section presents the non-radiological properties (waste and packaging materials, and chemical components) of the TRU waste inventory as reported by the TRU waste generator sites, and a discussion of changes to the data since the ATWIR-2020.

3.2.1 Waste and Packaging Materials

Waste and packaging materials for CH- and RH-TRU waste are reported as final form anticipated mass, and are presented in Table 3-4. Section 2.2.2 provides information on how waste and packaging materials are derived.

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

Waste Material	CH Mass (kg)	RH Mass (kg)	Total Mass (kg)
Aluminum-based Metal/Alloys	1.66E+05	1.08E+04	1.77E+05
Cellulose	8.46E+05	5.67E+04	9.03E+05
Cement	1.52E+06	2.46E+03	1.53E+06
Iron-based Metal/Alloys	5.27E+06	1.94E+05	5.46E+06
Other Inorganic Materials	3.80E+06	4.28E+05	4.23E+06
Other Metal/Alloys	2.41E+05	2.86E+04	2.70E+05
Plastic	1.06E+06	1.10E+05	1.17E+06
Rubber	2.47E+05	1.60E+04	2.63E+05
Soil	3.23E+06	1.15E+04	3.24E+06
Solidified Inorganic Material	2.00E+06	3.64E+04	2.03E+06
Solidified Organic Material	1.25E+06	2.16E+03	1.25E+06
Vitrified	--	--	--
Packaging Material, Cellulose	7.90E+05	--	7.90E+05
Packaging Material, Lead	--	6.72E+06	6.72E+06
Packaging Material, Plastic	1.12E+06	1.84E+05	1.30E+06
Packaging Material, Rubber	2.15E+04	2.25E+03	2.37E+04
Packaging Material, Steel	8.59E+06	7.13E+06	1.57E+07
Grand Total	**3.01E+07**	**1.49E+07**	**4.51E+07**

Data Source: CID Data Version D.20.00.33 (LANL-CO 2021). Note: This table only contains data for WIPP-bound waste streams at the TRU waste generator sites.

3.2.2 Waste and Packaging Material Inventory Changes

The changes in waste and packaging material data between the ATWIR-2020 and this report are presented in Table 3-5. Data for the waste and packaging materials improve as additional waste is characterized and the sites apply the information to estimate the waste materials remaining in that waste stream at the site. The net change column includes both increases and decreases in waste stream mass as reported by the TRU waste generator sites.

As shown in Table 3-5, the total anticipated waste material mass increased by ≈1.04 million kg and anticipated packaging material mass increased by ≈1.75 million kg. For the waste emplaced at the WIPP, the mass of waste materials increased by ≈418,000 kg and packaging materials increased by ≈380,000 kg. The overall net increase in waste and packaging material masses is ≈3.60 million kg.

The increase in anticipated waste material mass can be mostly attributed to RL updates made to the projected generation of waste stream RL200-02. The largest packaging material increase is primarily attributed to the reassignment of potential TRU waste from SRS waste stream SR-KAC-PuOx-2 to the WIPP-bound waste stream SR-KAC-PuOx.

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

Waste and Packaging Material	ATWIR-2020 Total (kg)	ATWIR-2021 Total (kg)	Net Change (kg)
Waste Material			
Aluminum-based Metal/Alloys	1.58E+05	1.77E+05	+1.83E+04
Cellulose	9.26E+05	9.03E+05	-2.31E+04
Cement	1.57E+06	1.53E+06	-4.54E+04
Iron-based Metal/Alloys	5.00E+06	5.46E+06	+4.62E+05
Other Inorganic Materials	3.84E+06	4.23E+06	+3.90E+05
Other Metal/Alloys	2.39E+05	2.70E+05	+3.02E+04
Plastic	1.10E+06	1.17E+06	+6.54E+04
Rubber	2.59E+05	2.63E+05	+4.62E+03
Soil	2.97E+06	3.24E+06	+2.71E+05
Solidified Inorganic Material	2.12E+06	2.03E+06	-8.25E+04
Solidified Organic Material	1.29E+06	1.25E+06	-4.62E+04
Vitrified	--	--	--
Anticipated Waste Total	**1.95E+07**	**2.05E+07**	**+1.04E+06**
WIPP (Emplaced) Waste Total	3.03E+07	3.07E+07	+4.18E+05
WCS (Temporary Storage) Waste Total	2.92E+04	2.92E+04	--
Emplaced/Temporary Storage Waste Total	**3.04E+07**	**3.08E+07**	**+4.18E+05**
Packaging Material			
Packaging Material, Cellulose	4.01E+05	7.90E+05	+3.89E+05
Packaging Material, Lead	6.73E+06	6.72E+06	-7.33E+03
Packaging Material, Plastic	1.18E+06	1.30E+06	+1.25E+05
Packaging Material, Rubber	2.19E+04	2.37E+04	+1.79E+03
Packaging Material, Steel	1.45E+07	1.57E+07	+1.24E+06
Anticipated Packaging Total	**2.28E+07**	**2.46E+07**	**+1.75E+06**
WIPP (Emplaced) Packaging Total	2.18E+07	2.22E+07	+3.80E+05
WCS (Temporary Storage) Packaging Total	3.07E+04	3.07E+04	--
Emplaced/Temporary Storage Packaging Total	**2.18E+07**	**2.22E+07**	**+3.80E+05**
Grand Total	**9.45E+07**	**9.81E+07**	**+3.60E+06**

Data Source: CID Data Versions D.19.00.33 (LANL-CO 2020) and D.20.00.33 (LANL-CO 2021).

3.2.3 Complexing Agents and Oxyanions

This report is the mechanism the DOE uses to track chemical components (e.g., complexing agents and oxyanions) for anticipated TRU waste at the sites. The chemical component mass totals for this report are presented in Table 3-6. The changes to complexing agents and oxyanions are listed in Table 3-7.

The DOE tracks the mass of complexing agents and oxyanions destined for emplacement in the WIPP repository because of their potential impact on PA. Table 3-6 presents the anticipated mass of complexing agents and oxyanions estimated for the CH- and RH-TRU waste by site, as well as the grand total of each chemical component.

The anticipated mass of each chemical component is estimated based on the available information for each waste stream as of the data cutoff date. Sites are not required to characterize their chemical constituents and therefore may have limited information on a waste stream's chemical components. When limited information is available, a site may use a qualitative method to estimate the mass of its chemical components, which can result in an identical mass for multiple components. As more information becomes available, through characterization and/or chemical compatibility evaluations, the estimated mass of each complexing agent and oxyanion will improve.

Table 3-6. CH/RH Complexing Agent and Oxyanion Mass (kg) by Site

Chemical Component	ANL	Hanford (RL)	INL	LANL	LBNL	LLNL	ORNL	SNL	Grand Total
Complexing Agents									
Acetate	--	5.28E+03	8.00E-02	--	--	--	9.32E+00	--	**5.29E+03**
Acetic Acid	2.90E-01	3.32E+03	2.12E+03	5.14E-03	--	2.58E+00	9.32E+00	2.00E-09	**5.45E+03**
Citrate	--	2.65E+02	2.66E-02	--	--	--	9.32E+00	--	**2.74E+02**
Citric Acid	2.90E-01	1.07E+03	4.28E+00	5.65E+02	--	2.58E+00	9.32E+00	2.00E-09	**1.65E+03**
EDTA	2.90E-01	3.79E+01	2.14E+00	--	--	5.69E-01	9.32E+00	--	**5.02E+01**
Oxalate	2.90E-01	4.13E+02	2.16E-03	--	--	--	9.32E+00	--	**4.22E+02**
Oxalic Acid	2.90E-01	3.49E+03	4.15E+01	7.11E+00	--	2.58E+00	9.32E+00	--	**3.55E+03**
Oxyanions									
Nitrate	4.08E+02	1.18E+05	5.87E+04	2.12E+05	6.00E-02	2.58E+00	9.32E+00	1.00E-06	**3.90E+05**
Phosphate	3.58E+02	1.29E+05	2.01E+04	--	--	2.58E+00	9.32E+00	--	**1.49E+05**
Sulfate	3.58E+02	2.29E+04	8.90E+04	3.64E+04	--	2.58E+00	9.32E+00	--	**1.49E+05**

Data Source: CID Data Version D.20.00.33 (LANL-CO 2021). Note: This table only contains data for WIPP-bound waste streams at the TRU waste generator sites. Site acronyms used in this table are identified in the Acronyms and Abbreviations section of this report.

3.2.4 Changes to Complexing Agents and Oxyanions

Table 3-7 shows the changes in the total estimated CH- and RH-TRU waste complexing agent and oxyanion mass between the ATWIR-2020 and this report. These data represent only the complexing agents and oxyanions that are currently being reported by the TRU waste generator sites, and do not include complexing agents or oxyanions emplaced in the WIPP or in temporary storage since they are not tracked in the WDS.

As shown in Table 3-7, the total change in anticipated complexing agent mass was an increase of ≈3,500 kg and the total change in anticipated oxyanion mass was an increase of ≈95,700 kg. The changes in mass can be primarily attributed to RL waste stream RL200-02, which had new estimates calculated after it was determined that chemical constituents may be present in the TRU waste that is projected to be generated.

Table 3-7. CH/RH Complexing Agent and Oxyanion Changes

Chemical Component	ATWIR-2020 Total (kg)	ATWIR-2021 Total (kg)	Net Change (kg)
Complexing Agents			
Acetate	3.21E+03	5.29E+03	+2.08E+03
Acetic Acid	4.55E+03	5.45E+03	+9.03E+02
Citrate	2.71E+02	2.74E+02	+3.36E+00
Citric Acid	1.16E+03	1.65E+03	+4.90E+02
EDTA	5.09E+01	5.02E+01	-7.55E-01
Oxalate	4.16E+02	4.22E+02	+6.07E+00
Oxalic Acid	3.54E+03	3.55E+03	+1.32E+01
Grand Total	**1.32E+04**	**1.67E+04**	**+3.50E+03**
Oxyanions			
Nitrate	3.55E+05	3.90E+05	+3.52E+04
Phosphate	9.26E+04	1.49E+05	+5.66E+04
Sulfate	1.45E+05	1.49E+05	+3.90E+03
Grand Total	**5.92E+05**	**6.88E+05**	**+9.57E+04**

Data Source: CID Data Versions D.19.00.33 (LANL-CO 2020) and D.20.00.33 (LANL-CO 2021). Note: This table only contains data for WIPP-bound waste streams at the TRU waste generator sites.

3.3 TRU Waste Radionuclide Estimates

This section presents the updated TRU waste radionuclide activity inventory collected from the TRU waste generator sites. The sites' waste stream radionuclide activities are decay-corrected to common dates for reporting purposes as described in section 2.2.3. The values in Table 3-8, Table 3-9, and Table 3-10 are decayed through the end of CY 2020, and the values in Table 3-11, which shows a comparison between the ATWIR-2020 and ATWIR-2021 activity totals, are decayed through the end of CY 2033.

3.3.1 Radionuclide Inventory by Site

Table 3-8 and Table 3-9 provide the comprehensive anticipated activity inventory estimates for WIPP-bound CH- and RH-TRU waste, respectively. Table 3-10 sums the CH- and RH-TRU waste activity totals to produce a total anticipated activity by site.

Table 3-8. Total CH Radionuclide Activity (Ci) on a Site Basis Decayed through CY 2020

Radionuclide	ANL	Hanford (RL)	INL	KAPL-NFS	KAPL-S	LANL	LBNL	LLNL	MFC	NNSS	NRD	ORNL	SNL	SPRU	SRS	Grand Total
Ac-225	2.09E-05	2.30E-03	5.62E-05	5.36E-06	9.89E-05	1.57E-01	5.02E-19	6.28E-04	2.96E-14	8.12E-12	5.43E-13	4.62E+00	4.21E-12	7.07E-17	3.37E-02	**4.81E+00**
Ac-227	9.68E-06	7.35E-05	1.91E-02	4.12E-08	2.05E-11	3.74E+00	4.01E-23	1.33E+01	3.41E-14	1.54E-09	--	1.14E+01	5.11E-11	1.05E-09	6.94E-03	**2.85E+01**
Ac-228	2.25E-05	9.77E-03	1.24E-04	2.01E-04	2.46E-09	1.61E-12	6.71E-09	4.49E-06	--	3.81E-15	--	1.42E-02	2.42E-05	--	1.33E-03	**2.57E-02**
Ag-108	2.03E-05	1.52E-07	--	--	--	1.59E-07	--	--	--	--	--	1.94E-04	--	--	--	**2.14E-04**
Ag-108m	2.33E-04	1.74E-06	--	--	--	1.83E-06	--	--	--	--	--	2.23E-03	--	--	--	**2.46E-03**
Ag-109m	1.06E-06	4.24E-06	--	--	--	--	--	1.63E-05	--	--	--	3.17E-05	1.85E-07	--	--	**5.35E-05**
Ag-110	--	1.07E-21	--	--	--	--	--	--	--	--	--	7.90E-03	--	--	--	**7.90E-03**
Ag-110m	--	7.90E-20	--	--	--	--	--	--	--	--	--	5.81E-01	--	--	--	**5.81E-01**
Am-241	4.84E+00	4.37E+04	2.20E+04	4.07E-01	9.14E-02	5.41E+04	5.38E-03	3.29E+03	2.81E+01	1.29E+01	3.30E+01	2.70E+03	6.39E+02	2.80E-02	2.87E+05	**4.14E+05**
Am-242	8.79E-04	1.77E-03	--	--	--	--	--	6.95E-02	--	--	--	2.41E-04	--	--	1.04E-02	**8.28E-02**
Am-242m	8.83E-04	1.77E-03	--	--	--	--	--	6.98E-02	--	--	--	2.42E-04	--	--	1.04E-02	**8.32E-02**
Am-243	4.88E-01	5.03E-01	5.88E-01	--	--	2.64E+00	8.99E-04	1.43E-01	1.79E-10	--	--	4.91E+00	--	--	7.54E-01	**1.00E+01**
Am-245	1.22E-08	--	--	--	--	2.92E-03	--	--	--	--	--	1.62E-04	--	--	--	**3.08E-03**
Am-246	7.51E-10	--	--	--	--	--	--	--	--	--	--	3.01E-08	--	--	--	**3.09E-08**
At-217	2.09E-05	2.30E-03	5.62E-05	5.36E-06	9.89E-05	1.57E-01	5.02E-19	6.28E-04	2.96E-14	8.12E-12	5.43E-13	4.62E+00	4.21E-12	7.07E-17	3.37E-02	**4.81E+00**
Ba-133	1.60E-05	1.63E-05	--	--	--	6.61E-06	--	--	--	--	--	3.87E-05	--	--	7.62E-06	**8.52E-05**
Ba-137m	5.17E+00	2.70E+02	4.57E+00	--	--	7.97E+00	7.28E-08	5.42E-01	2.68E-01	--	--	3.09E+02	3.06E-01	2.74E+00	7.33E-01	**6.01E+02**
Ba-140	--	--	--	--	--	--	--	--	--	--	--	4.39E-08	--	--	--	**4.39E-08**
Bi-210	1.00E-02	1.42E-02	1.38E-04	6.74E-07	1.22E-11	2.69E-04	2.73E-11	1.18E-10	4.73E-27	1.57E-10	--	7.07E-01	2.75E-06	5.16E-12	2.30E-05	**7.31E-01**
Bi-211	9.70E-06	7.35E-05	9.79E-03	4.12E-08	2.05E-11	1.92E+00	3.65E-24	6.80E+00	4.61E-15	1.54E-09	--	6.57E+00	5.11E-11	1.05E-09	6.96E-03	**1.53E+01**
Bi-212	4.72E-05	5.49E-01	1.97E-03	2.06E-04	2.46E-09	4.26E+01	8.99E-11	7.69E-04	--	2.52E-15	--	2.12E+01	2.42E-05	--	7.56E-02	**6.44E+01**
Bi-213	2.09E-05	2.30E-03	5.62E-05	5.36E-06	9.88E-05	1.57E-01	5.01E-19	6.28E-04	2.96E-14	8.11E-12	5.43E-13	4.62E+00	4.21E-12	7.07E-17	3.37E-02	**4.81E+00**
Bi-214	2.35E-02	1.47E-01	2.82E-02	4.08E-06	5.72E-11	1.28E-01	1.34E-08	1.28E-07	1.76E-23	1.59E-09	--	1.70E+00	9.31E-12	1.04E-10	1.43E-04	**2.03E+00**
Bk-249	8.40E-04	--	--	--	--	2.01E+02	--	--	--	--	--	1.12E+01	--	--	--	**2.13E+02**
Bk-250	4.65E-10	--	--	--	--	--	--	--	--	--	--	1.87E-08	--	--	--	**1.91E-08**
C-14	2.27E-03	6.75E-04	--	--	--	--	--	--	--	--	--	3.51E-01	--	1.39E-06	1.81E-03	**3.56E-01**
Ca-45	1.03E-08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.03E-08**
Cd-109	1.06E-06	4.24E-06	--	--	--	--	--	1.63E-05	--	--	--	3.17E-05	1.85E-07	--	--	**5.35E-05**
Cd-113	9.35E-25	3.72E-25	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.31E-24**
Cd-113m	8.94E-05	3.15E-07	--	--	--	--	--	--	--	--	--	--	--	--	--	**8.97E-05**
Ce-139	--	--	--	--	--	--	--	--	--	--	--	--	4.39E-15	--	--	**4.39E-15**
Ce-141	--	--	--	--	--	--	--	--	--	--	--	4.54E-01	--	--	--	**4.54E-01**
Ce-144	1.59E-03	8.41E-04	--	--	--	7.40E-08	--	--	--	--	--	1.72E-01	--	--	--	**1.75E-01**
Cf-249	4.07E-02	6.30E-02	1.15E-01	--	--	4.25E-02	2.14E-03	3.77E+00	--	--	--	1.39E+00	--	--	1.63E-03	**5.42E+00**
Cf-250	2.25E-03	5.51E-02	--	--	--	--	4.41E-08	--	--	--	--	8.68E+00	--	--	6.03E-11	**8.74E+00**
Cf-251	3.15E-04	2.45E-03	1.92E-04	--	--	--	--	1.97E-04	--	--	--	1.11E-01	--	--	7.10E-04	**1.15E-01**
Cf-252	1.70E-05	2.31E-04	--	--	--	--	--	9.71E-04	--	--	--	2.01E+01	--	--	7.62E-01	**2.08E+01**
Cf-253	--	--	--	--	--	--	--	--	--	--	--	3.15E-04	--	--	--	**3.15E-04**
Cf-254	--	--	--	--	--	--	--	--	--	--	--	2.52E-04	--	--	--	**2.52E-04**
Cl-36	1.25E-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.25E-07**
Cm-242	1.89E-04	1.47E-03	--	--	--	3.28E+01	--	8.05E-03	--	--	--	5.10E-01	--	--	8.60E-03	**3.33E+01**
Cm-243	1.30E-02	1.71E-01	6.52E-01	--	--	3.16E-01	3.58E-05	1.74E-01	7.93E-03	--	--	1.89E+00	--	--	4.79E-02	**3.27E+00**
Cm-244	6.31E+01	1.15E+02	3.41E+00	--	--	1.09E+03	6.97E-04	1.52E+00	--	--	--	3.93E+03	--	--	5.78E+01	**5.27E+03**
Cm-245	4.33E-05	1.08E+00	1.71E-04	--	--	3.13E-03	1.75E-08	2.20E-01	--	--	--	8.92E-01	--	--	9.25E-03	**2.21E+00**
Cm-246	3.15E-03	1.37E-03	--	--	--	--	6.47E-13	--	--	--	--	2.80E+01	--	--	6.78E-03	**2.80E+01**
Cm-247	5.51E-10	4.72E-09	3.63E-11	--	--	8.96E-04	--	1.85E+00	--	--	--	2.22E-01	--	--	7.53E-03	**2.08E+00**
Cm-248	1.07E-04	1.55E-04	--	--	--	--	8.43E-08	2.04E-01	--	--	--	2.42E-01	--	--	2.21E-05	**4.46E-01**
Cm-249	--	--	--	--	--	--	--	--	--	--	--	9.80E-07	--	--	--	**9.80E-07**
Cm-250	3.32E-09	--	--	--	--	--	--	--	--	--	--	1.33E-07	--	--	--	**1.37E-07**
Co-58	--	1.75E-09	--	--	--	--	--	--	--	--	--	5.54E-03	--	--	--	**5.54E-03**
Co-60	5.47E-03	1.40E+00	1.36E-02	--	--	4.72E-04	--	4.70E-06	--	--	--	2.75E-01	4.65E-05	--	1.43E-03	**1.70E+00**

Table 3-8. Total CH Radionuclide Activity (Ci) on a Site Basis Decayed through CY 2020
Continued

Radionuclide	ANL	Hanford (RL)	INL	KAPL-NFS	KAPL-S	LANL	LBNL	LLNL	MFC	NNSS	NRD	ORNL	SNL	SPRU	SRS	Grand Total
Cs-134	2.42E-02	1.22E-03	--	--	--	--	--	--	--	--	--	2.21E-01	--	--	2.84E-06	**2.46E-01**
Cs-135	2.34E-07	8.11E-10	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.35E-07**
Cs-137	5.48E+00	2.86E+02	4.83E+00	--	--	8.44E+00	7.71E-08	5.74E-01	2.84E-01	--	--	3.27E+02	3.24E-01	2.90E+00	7.76E-01	**6.37E+02**
Es-253	--	--	--	--	--	--	--	--	--	--	--	4.27E-04	--	--	--	**4.27E-04**
Eu-152	1.82E-04	1.17E-01	4.20E-04	--	--	1.21E-03	--	3.13E-04	--	--	--	2.27E+01	6.32E-06	--	1.46E-04	**2.28E+01**
Eu-154	1.80E-02	2.58E+00	--	--	--	1.79E-04	--	3.36E-03	--	--	--	1.80E+00	1.33E-04	--	4.15E-03	**4.41E+00**
Eu-155	2.90E-03	3.03E+00	--	--	--	1.63E-05	--	--	--	--	--	6.04E-01	--	--	1.16E-02	**3.65E+00**
Fe-55	5.09E-03	1.15E-02	--	--	--	--	--	--	--	--	--	2.67E-03	--	--	--	**1.92E-02**
Fe-59	2.74E-13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.74E-13**
Fr-221	2.09E-05	2.30E-03	5.62E-05	5.36E-06	9.89E-05	1.57E-01	5.02E-19	6.28E-04	2.96E-14	8.12E-12	5.43E-13	4.62E+00	4.21E-12	7.07E-17	3.37E-02	**4.81E+00**
Fr-223	1.34E-07	1.01E-06	2.63E-04	5.69E-10	2.83E-13	5.16E-02	5.54E-25	1.83E-01	4.71E-16	2.13E-11	--	1.58E-01	7.05E-13	1.44E-11	9.58E-05	**3.93E-01**
Gd-152	1.16E-19	2.39E-15	7.55E-20	--	--	2.19E-19	--	5.62E-20	--	--	--	5.48E-15	1.30E-19	--	1.97E-18	**7.86E-15**
Gd-153	--	5.58E-22	--	--	--	1.07E-05	--	--	--	--	--	7.43E-03	--	--	--	**7.44E-03**
H-3	7.89E-03	7.48E+01	--	--	--	1.88E+04	--	--	--	--	--	5.92E-02	--	--	2.36E-04	**1.89E+04**
Hg-203	--	--	--	--	--	--	--	--	--	--	--	--	9.07E-29	--	--	**9.07E-29**
Ho-166m	--	--	--	--	--	--	--	1.86E-05	--	--	--	1.04E-03	--	--	3.29E-07	**1.06E-03**
I-129	1.50E-07	1.51E-05	--	--	--	--	--	--	--	--	--	4.10E-04	--	--	1.51E-03	**1.94E-03**
I-131	--	--	--	--	--	--	--	--	--	--	--	4.29E-02	--	--	--	**4.29E-02**
In-113m	--	--	--	--	--	--	--	--	--	--	--	--	5.62E-16	--	--	**5.62E-16**
Ir-192	--	--	--	--	--	--	--	--	--	--	--	2.12E-06	--	--	--	**2.12E-06**
K-40	1.07E-04	2.10E-02	--	--	--	--	--	4.93E-08	--	--	--	3.11E-02	2.16E-04	--	9.83E-07	**5.24E-02**
Kr-85	3.06E-01	1.06E-03	--	--	--	4.28E-02	--	--	--	--	--	--	--	--	1.98E-06	**3.49E-01**
La-140	--	--	--	--	--	--	--	--	--	--	--	5.06E-08	--	--	--	**5.06E-08**
Mn-54	1.99E-04	6.03E-04	--	--	--	1.61E-09	--	--	--	--	--	5.20E-03	--	--	--	**6.00E-03**
Na-22	4.79E-03	3.78E-04	--	--	--	4.49E-03	--	1.17E-04	--	--	--	1.36E-06	--	--	3.94E-04	**1.02E-02**
Na-24	--	--	--	--	--	4.88E-24	--	--	--	--	--	--	--	--	--	**4.88E-24**
Nb-93m	1.26E-06	3.03E-09	--	--	--	--	--	--	--	--	--	2.34E-02	--	--	--	**2.34E-02**
Nb-94	--	1.12E-03	--	--	--	--	--	1.88E-08	--	--	--	2.27E-06	--	--	1.93E-07	**1.12E-03**
Nb-95	3.84E-11	8.01E-12	--	--	--	--	--	--	--	--	--	9.23E-02	--	--	--	**9.23E-02**
Nb-95m	2.05E-13	4.27E-14	--	--	--	--	--	--	--	--	--	1.12E-03	--	--	--	**1.12E-03**
Nd-144	5.52E-20	6.22E-18	--	--	--	2.00E-19	--	--	--	--	--	5.97E-18	--	--	--	**1.24E-17**
Ni-59	--	4.27E-10	--	--	--	--	--	--	--	--	--	--	--	--	2.44E-10	**6.71E-10**
Ni-63	7.82E-06	1.15E-02	--	--	--	--	--	--	--	--	--	3.78E+00	--	--	--	**3.80E+00**
Np-237	2.07E-02	4.14E-01	4.67E-01	1.54E-06	6.35E-04	6.31E-01	8.60E-06	9.76E-02	5.07E-01	1.53E-04	9.93E-05	2.35E+00	1.25E-03	4.53E-08	6.42E-01	**5.14E+00**
Np-238	3.98E-06	7.99E-06	--	--	--	--	--	3.14E-04	--	--	--	1.09E-06	--	--	4.70E-05	**3.74E-04**
Np-239	4.88E-01	5.03E-01	5.88E-01	--	--	2.64E+00	8.99E-04	1.43E-01	1.79E-10	--	--	4.91E+00	--	--	7.54E-01	**1.00E+01**
Np-240	1.47E-08	5.48E-14	--	--	--	1.07E-09	8.03E-20	1.95E-13	--	--	--	7.12E-04	--	--	7.95E-16	**7.12E-04**
Np-240m	1.23E-05	4.56E-11	--	--	--	8.90E-07	6.69E-17	1.62E-10	--	--	--	5.93E-01	--	--	6.63E-13	**5.93E-01**
Pa-231	3.53E-09	1.33E-04	8.12E-06	2.44E-07	5.40E-11	1.71E+00	3.78E-20	1.89E+01	2.15E-11	1.07E-08	--	8.96E-02	6.19E-10	1.38E-08	3.71E-03	**2.07E+01**
Pa-233	1.49E-02	4.14E-01	3.33E-01	1.54E-06	6.35E-04	4.04E-01	5.23E-06	5.95E-02	3.08E-01	1.53E-04	9.93E-05	1.49E+00	1.25E-03	4.53E-08	6.36E-01	**3.66E+00**
Pa-234	4.27E-06	7.08E-03	9.40E-03	1.61E-07	--	3.89E-03	3.30E-13	1.90E-05	6.04E-08	3.22E-06	--	1.13E-04	1.42E-08	2.93E-06	9.13E-05	**2.06E-02**
Pa-234m	3.28E-03	5.44E+00	7.23E+00	1.24E-04	--	3.00E+00	2.54E-10	1.46E-02	4.65E-05	2.48E-03	--	8.68E-02	1.10E-05	2.26E-03	7.02E-02	**1.59E+01**
Pb-209	2.09E-05	2.30E-03	5.62E-05	5.36E-06	9.88E-05	1.57E-01	5.01E-19	6.28E-04	2.96E-14	8.11E-12	5.43E-13	4.62E+00	4.21E-12	7.07E-17	3.37E-02	**4.81E+00**
Pb-210	1.00E-02	1.42E-02	1.55E-04	6.74E-07	1.22E-11	3.46E-04	3.53E-11	1.78E-10	1.03E-26	1.57E-10	--	7.07E-01	2.74E-06	5.16E-12	2.30E-05	**7.32E-01**
Pb-211	9.70E-06	7.35E-05	9.79E-03	4.12E-08	2.05E-11	1.92E+00	3.65E-24	6.80E+00	4.61E-15	1.54E-09	--	6.57E+00	5.11E-11	1.05E-09	6.96E-03	**1.53E+01**
Pb-212	4.72E-05	5.49E-01	1.97E-03	2.06E-04	2.46E-09	4.26E+01	8.99E-11	7.69E-04	--	2.52E-15	--	2.12E+01	2.42E-05	--	7.56E-02	**6.44E+01**
Pb-214	2.35E-02	1.47E-01	2.82E-02	4.08E-06	5.72E-11	1.28E-01	1.34E-08	1.28E-07	1.76E-23	1.59E-09	--	1.70E+00	9.31E-12	1.04E-10	1.43E-04	**2.03E+00**
Pd-107	8.11E-07	1.21E-07	--	--	--	--	--	--	--	--	--	--	--	--	--	**9.32E-07**
Pm-147	6.07E-01	7.00E+00	--	--	--	--	--	--	--	--	--	7.56E-07	--	--	--	**7.61E+00**
Po-210	9.69E-03	1.20E-02	8.50E-05	6.74E-07	1.22E-11	2.41E-05	1.76E-12	1.02E-11	1.20E-28	1.57E-10	--	7.05E-01	2.75E-06	5.16E-12	2.30E-05	**7.27E-01**
Po-211	2.67E-08	2.02E-07	2.69E-05	1.13E-10	5.63E-14	5.27E-03	1.00E-26	1.87E-02	1.27E-17	4.25E-12	--	1.81E-02	1.41E-13	2.88E-12	1.91E-05	**4.21E-02**

Table 3-8. Total CH Radionuclide Activity (Ci) on a Site Basis Decayed through CY 2020
Continued

Radionuclide	ANL	Hanford (RL)	INL	KAPL-NFS	KAPL-S	LANL	LBNL	LLNL	MFC	NNSS	NRD	ORNL	SNL	SPRU	SRS	Grand Total
Po-212	3.03E-05	3.52E-01	1.26E-03	1.32E-04	1.58E-09	2.73E+01	5.76E-11	4.93E-04	--	1.62E-15	--	1.36E+01	1.55E-05	--	4.84E-02	**4.13E+01**
Po-213	2.05E-05	2.25E-03	5.50E-05	5.25E-06	9.68E-05	1.53E-01	4.91E-19	6.15E-04	2.89E-14	7.94E-12	5.32E-13	4.52E+00	4.12E-12	6.92E-17	3.29E-02	**4.71E+00**
Po-214	2.35E-02	1.47E-01	2.82E-02	4.08E-06	5.72E-11	1.28E-01	1.34E-08	1.28E-07	1.76E-23	1.59E-09	--	1.70E+00	9.31E-12	1.04E-10	1.43E-04	**2.02E+00**
Po-215	9.70E-06	7.35E-05	9.79E-03	4.12E-08	2.05E-11	1.92E+00	3.65E-24	6.80E+00	4.61E-15	1.54E-09	--	6.57E+00	5.11E-11	1.05E-09	6.96E-03	**1.53E+01**
Po-216	4.72E-05	5.49E-01	1.97E-03	2.06E-04	2.46E-09	4.26E+01	8.99E-11	7.69E-04	--	2.52E-15	--	2.12E+01	2.42E-05	--	7.56E-02	**6.44E+01**
Po-218	2.35E-02	1.47E-01	2.82E-02	4.08E-06	5.72E-11	1.28E-01	1.34E-08	1.28E-07	1.76E-23	1.59E-09	--	1.70E+00	9.32E-12	1.04E-10	1.43E-04	**2.03E+00**
Pr-144	1.59E-03	8.41E-04	--	--	--	7.40E-08	--	--	--	--	--	1.72E-01	--	--	--	**1.75E-01**
Pr-144m	2.23E-05	1.18E-05	--	--	--	1.04E-09	--	--	--	--	--	2.41E-03	--	--	--	**2.45E-03**
Pu-236	6.08E-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**6.08E-10**
Pu-238	3.88E+00	1.16E+04	1.84E+04	4.30E-02	7.00E-01	1.85E+05	3.25E-03	2.56E+03	--	2.05E+01	--	5.71E+03	4.66E-01	2.73E-03	9.35E+04	**3.17E+05**
Pu-239	8.09E+00	4.08E+04	1.73E+04	1.41E+00	8.07E-02	4.20E+04	3.63E-04	4.56E+03	1.94E+00	2.19E+02	--	6.37E+02	9.83E+00	2.58E-01	5.09E+05	**6.14E+05**
Pu-240	4.28E+00	1.75E+04	4.00E+03	1.41E+00	--	1.30E+04	1.00E-05	1.21E+03	--	5.00E+01	--	7.77E+02	2.58E+00	--	1.72E+05	**2.08E+05**
Pu-241	2.39E+01	2.49E+05	2.10E+04	1.18E+00	--	1.95E+05	1.48E-04	7.73E+03	--	1.90E+02	--	1.25E+04	1.27E+01	2.75E-02	1.39E+06	**1.88E+06**
Pu-242	3.15E-02	8.41E+00	6.07E-01	--	--	6.61E+00	6.00E-20	1.88E-01	--	3.18E-03	--	4.35E+00	4.60E-04	6.86E-04	5.97E+01	**7.99E+01**
Pu-243	5.51E-10	4.72E-09	3.63E-11	--	--	8.96E-04	--	1.85E+00	--	--	--	2.22E-01	--	--	7.53E-03	**2.08E+00**
Pu-244	1.23E-05	4.57E-11	--	--	--	8.91E-07	6.70E-17	1.62E-10	--	--	--	5.94E-01	--	--	6.63E-13	**5.94E-01**
Pu-246	7.51E-10	--	--	--	--	--	--	--	--	--	--	3.01E-08	--	--	--	**3.09E-08**
Ra-223	9.70E-06	7.35E-05	9.79E-03	4.12E-08	2.05E-11	1.92E+00	3.65E-24	6.80E+00	4.61E-15	1.54E-09	--	6.57E+00	5.11E-11	1.05E-09	6.96E-03	**1.53E+01**
Ra-224	4.72E-05	5.49E-01	1.97E-03	2.06E-04	2.46E-09	4.26E+01	8.99E-11	7.69E-04	--	2.52E-15	--	2.12E+01	2.42E-05	--	7.56E-02	**6.44E+01**
Ra-225	2.82E-05	2.30E-03	6.75E-05	5.36E-06	9.89E-05	1.57E-01	1.35E-18	8.49E-04	7.93E-14	8.12E-12	5.43E-13	4.62E+00	4.21E-12	7.07E-17	3.37E-02	**4.81E+00**
Ra-226	2.35E-02	1.47E-01	2.83E-02	4.08E-06	5.72E-11	1.29E-01	1.34E-08	1.50E-07	2.89E-23	1.59E-09	--	1.70E+00	9.32E-12	1.04E-10	1.43E-04	**2.03E+00**
Ra-228	2.25E-05	9.77E-03	1.24E-04	2.01E-04	2.46E-09	1.61E-12	6.71E-09	4.49E-06	--	3.81E-15	--	1.42E-02	2.42E-05	--	1.33E-03	**2.57E-02**
Rb-87	1.34E-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**1.34E-10**
Rh-103m	--	--	--	--	--	--	--	--	--	--	--	1.22E-01	--	--	--	**1.22E-01**
Rh-106	3.15E-03	3.55E-05	--	--	--	2.55E-06	--	--	--	--	--	1.14E+00	--	--	5.63E-08	**1.15E+00**
Rn-219	9.70E-06	7.35E-05	9.79E-03	4.12E-08	2.05E-11	1.92E+00	3.65E-24	6.80E+00	4.61E-15	1.54E-09	--	6.57E+00	5.11E-11	1.05E-09	6.96E-03	**1.53E+01**
Rn-220	4.72E-05	5.49E-01	1.97E-03	2.06E-04	2.46E-09	4.26E+01	8.99E-11	7.69E-04	--	2.52E-15	--	2.12E+01	2.42E-05	--	7.56E-02	**6.44E+01**
Rn-222	2.35E-02	1.47E-01	2.82E-02	4.08E-06	5.72E-11	1.28E-01	1.34E-08	1.28E-07	1.76E-23	1.59E-09	--	1.70E+00	9.32E-12	1.04E-10	1.43E-04	**2.03E+00**
Ru-103	--	--	--	--	--	--	--	--	--	--	--	1.22E-01	--	--	--	**1.22E-01**
Ru-106	3.15E-03	3.55E-05	--	--	--	2.55E-06	--	--	--	--	--	1.14E+00	--	--	5.63E-08	**1.15E+00**
S-35	8.36E-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**8.36E-07**
Sb-125	6.49E-05	4.96E-03	--	--	--	5.07E-06	--	4.27E-06	--	--	--	7.43E-02	--	--	5.15E-04	**7.98E-02**
Sb-126	1.26E-07	1.02E-09	--	--	--	1.03E-06	--	--	--	--	--	2.82E-07	--	--	--	**1.44E-06**
Sb-126m	4.76E-06	7.28E-09	--	--	--	7.39E-06	--	--	--	--	--	--	--	--	--	**1.21E-05**
Se-79	1.83E-06	6.16E-05	--	--	--	--	--	--	--	--	--	--	--	--	--	**6.34E-05**
Sm-147	6.18E-13	2.11E-10	--	--	--	--	--	--	--	--	--	1.94E-13	--	--	--	**2.11E-10**
Sm-148	1.17E-35	1.01E-30	3.31E-37	--	--	1.59E-36	--	2.46E-37	--	--	--	2.77E-30	5.52E-35	--	5.83E-34	**3.78E-30**
Sm-151	--	3.57E-03	--	--	--	2.80E-06	--	--	--	--	--	1.15E+00	--	--	--	**1.16E+00**
Sn-113	--	--	--	--	--	--	--	--	--	--	--	--	5.62E-16	--	--	**5.62E-16**
Sn-119m	--	3.46E-19	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.46E-19**
Sn-121	--	5.83E-10	--	--	--	8.83E-05	--	--	--	--	--	--	--	--	--	**8.83E-05**
Sn-121m	--	7.52E-10	--	--	--	1.14E-04	--	--	--	--	--	--	--	--	--	**1.14E-04**
Sn-126	4.76E-06	7.28E-09	--	--	--	7.39E-06	--	--	--	--	--	--	--	--	--	**1.21E-05**
Sr-85	2.87E-10	--	--	--	--	--	--	--	--	--	--	--	9.33E-23	--	--	**2.87E-10**
Sr-89	--	--	--	--	--	--	--	--	--	--	--	7.59E-02	--	--	--	**7.59E-02**
Sr-90	4.60E+00	6.07E+02	5.32E+00	--	--	3.72E+00	--	5.98E-01	3.04E-01	--	--	1.50E+02	1.41E-02	1.14E-01	5.67E-01	**7.72E+02**
Ta-182	--	9.42E-13	--	--	--	--	--	--	--	--	--	--	--	--	--	**9.42E-13**
Tc-99	6.48E-03	2.13E-03	--	8.73E-03	--	--	--	--	--	--	--	1.98E+01	--	1.46E-04	1.76E-05	**1.98E+01**
Te-123	--	--	--	--	--	--	--	--	--	--	--	--	6.98E-22	--	--	**6.98E-22**
Te-123m	--	--	--	--	--	--	--	--	--	--	--	--	1.42E-16	--	--	**1.42E-16**
Te-125m	1.13E-05	1.21E-03	--	--	--	1.24E-06	--	3.52E-07	--	--	--	6.12E-03	--	--	1.26E-04	**7.47E-03**

Table 3-8. Total CH Radionuclide Activity (Ci) on a Site Basis Decayed through CY 2020
Continued

Radionuclide	ANL	Hanford (RL)	INL	KAPL-NFS	KAPL-S	LANL	LBNL	LLNL	MFC	NNSS	NRD	ORNL	SNL	SPRU	SRS	Grand Total
Th-227	9.57E-06	7.25E-05	1.40E-02	4.07E-08	2.02E-11	2.74E+00	1.04E-23	9.70E+00	1.12E-14	1.52E-09	--	8.84E+00	5.04E-11	1.03E-09	6.86E-03	**2.13E+01**
Th-228	4.72E-05	5.49E-01	2.25E-03	2.05E-04	2.46E-09	4.96E+01	1.19E-10	7.86E-04	--	2.52E-15	--	2.12E+01	2.42E-05	--	7.55E-02	**7.15E+01**
Th-229	3.44E-05	2.30E-03	9.00E-05	5.36E-06	9.89E-05	1.57E-01	4.14E-18	1.04E-03	2.44E-13	8.12E-12	5.43E-13	4.62E+00	4.21E-12	7.07E-17	3.37E-02	**4.82E+00**
Th-230	4.89E-04	1.31E-03	8.13E-05	7.87E-04	1.18E-08	3.11E-03	4.21E-16	3.47E-03	2.55E-18	7.24E-07	--	8.98E-03	7.99E-09	9.60E-08	6.82E-03	**2.51E-02**
Th-231	1.23E-04	2.04E-01	1.48E-01	9.62E-04	7.87E-08	7.09E-02	3.58E-14	9.06E-03	1.01E-05	5.13E-05	--	7.42E-03	5.53E-06	1.31E-04	8.51E-01	**1.29E+00**
Th-232	2.39E-04	1.47E-02	1.03E-02	2.62E-04	2.51E-09	2.65E-12	5.60E-07	3.75E-04	--	8.95E-15	--	6.43E-02	2.42E-05	--	2.37E-03	**9.26E-02**
Th-234	3.28E-03	5.44E+00	7.23E+00	1.24E-04	--	3.00E+00	2.54E-10	1.46E-02	4.65E-05	2.48E-03	--	8.68E-02	1.10E-05	2.26E-03	7.02E-02	**1.59E+01**
Tl-206	1.32E-08	1.88E-08	1.82E-10	8.90E-13	1.62E-17	3.55E-10	3.60E-17	1.56E-16	6.21E-33	2.07E-16	--	9.33E-07	3.62E-12	6.82E-18	3.04E-11	**9.65E-07**
Tl-207	9.68E-06	7.33E-05	9.76E-03	4.11E-08	2.04E-11	1.91E+00	3.64E-24	6.78E+00	4.60E-15	1.54E-09	--	6.55E+00	5.10E-11	1.04E-09	6.94E-03	**1.53E+01**
Tl-208	1.70E-05	1.97E-01	7.06E-04	7.39E-05	8.85E-10	1.53E+01	3.23E-11	2.76E-04	--	9.07E-16	--	7.63E+00	8.70E-06	--	2.72E-02	**2.32E+01**
Tl-209	4.40E-07	4.84E-05	1.18E-06	1.13E-07	2.08E-06	3.29E-03	1.05E-20	1.32E-05	6.21E-16	1.70E-13	1.14E-14	9.69E-02	8.84E-14	1.48E-18	7.07E-04	**1.01E-01**
U-232	1.45E-05	7.93E-01	5.69E-02	--	--	1.39E+03	--	3.89E-03	--	--	--	5.38E+01	--	--	7.80E-02	**1.45E+03**
U-233	9.53E-03	2.78E+00	5.42E+00	5.08E-03	3.41E-02	5.72E+01	1.31E-12	2.51E+00	7.75E-08	1.12E-08	1.99E-09	5.17E+01	1.92E-08	4.82E-13	7.72E+00	**1.27E+02**
U-234	1.62E-01	5.09E+00	2.09E+00	5.08E-03	7.45E-05	3.20E+01	9.17E-10	9.02E-02	7.69E-12	8.02E-03	--	1.11E+00	1.69E-04	2.09E-03	1.64E+01	**5.70E+01**
U-235	1.23E-04	2.04E-01	1.48E-01	9.62E-04	7.87E-08	7.09E-02	3.58E-14	9.06E-03	1.01E-05	5.13E-05	--	7.42E-03	5.53E-06	1.31E-04	8.51E-01	**1.29E+00**
U-236	4.45E-06	5.00E-03	1.57E-04	9.63E-04	--	1.12E-01	2.96E-14	4.24E-06	--	2.28E-05	--	6.68E-03	4.77E-07	--	3.15E-03	**1.28E-01**
U-237	5.65E-04	5.95E+00	4.93E-01	2.82E-05	--	4.55E+00	3.46E-09	1.81E-01	--	4.55E-03	--	2.99E-01	3.03E-04	6.59E-07	3.26E+01	**4.41E+01**
U-238	4.76E-03	5.44E+00	8.49E+00	1.24E-04	--	4.60E+00	3.90E-10	2.24E-02	7.15E-05	2.48E-03	--	9.75E-02	1.10E-05	2.26E-03	7.02E-02	**1.87E+01**
U-240	1.23E-05	4.56E-11	--	--	--	8.90E-07	6.69E-17	1.62E-10	--	--	--	5.93E-01	--	--	6.63E-13	**5.93E-01**
Xe-131m	--	--	--	--	--	--	--	--	--	--	--	1.72E-03	--	--	--	**1.72E-03**
Y-89m	--	--	--	--	--	--	--	--	--	--	--	7.06E-06	--	--	--	**7.06E-06**
Y-90	4.60E+00	6.07E+02	5.32E+00	--	--	3.72E+00	--	5.99E-01	3.04E-01	--	--	1.50E+02	1.42E-02	1.14E-01	5.67E-01	**7.72E+02**
Zn-65	--	5.02E-09	--	--	--	--	--	--	--	--	--	3.07E-03	--	--	--	**3.07E-03**
Zr-93	2.51E-06	3.96E-09	--	--	--	--	--	--	--	--	--	3.01E-02	--	--	--	**3.01E-02**
Zr-95	1.74E-11	3.63E-12	--	--	--	--	--	--	--	--	--	9.56E-02	--	--	--	**9.56E-02**
Grand Total	**1.30E+02**	**3.64E+05**	**8.27E+04**	**4.48E+00**	**9.09E-01**	**5.11E+05**	**1.38E-02**	**1.95E+04**	**3.20E+01**	**4.93E+02**	**3.30E+01**	**2.77E+04**	**6.65E+02**	**6.19E+00**	**2.46E+06**	**3.46E+06**

Data Source: CID Data Version D.20.00.33 (LANL-CO 2021). Note: This table only contains data for WIPP-bound waste streams at the TRU waste generator sites. Site acronyms used in this table are identified in the Acronyms and Abbreviations section of this report.

Table 3-9. Total RH Radionuclide Activity (Ci) on a Site Basis Decayed through CY 2020

Radionuclide	ANL	BAPL	Hanford (RL)	INL	LANL	MFC	ORNL	SNL	SPRU	SRS	Grand Total
Ac-225	5.50E-03	4.31E-05	9.14E-04	5.45E-04	1.78E-14	3.24E-09	1.68E-03	4.52E-10	8.97E-16	1.74E-05	**8.70E-03**
Ac-227	2.61E-01	5.02E-12	6.21E-02	1.94E-06	9.40E-08	1.49E-02	1.48E-03	1.56E-08	9.32E-09	9.57E-05	**3.40E-01**
Ac-228	2.72E-02	5.03E-16	8.14E-04	2.69E-05	5.05E-16	4.39E-14	2.40E-05	3.61E-17	2.89E-16	5.40E-15	**2.80E-02**
Ag-108	1.16E-03	--	--	--	--	4.12E-07	2.41E-08	--	--	--	**1.16E-03**
Ag-108m	1.33E-02	--	--	--	--	4.73E-06	2.77E-07	--	--	--	**1.33E-02**
Ag-109m	4.91E-01	--	--	--	--	--	1.17E-06	--	--	--	**4.91E-01**
Ag-110	1.25E-03	--	2.59E-11	--	--	4.53E-09	1.13E-03	--	--	--	**2.39E-03**
Ag-110m	9.21E-02	--	1.91E-09	--	--	3.33E-07	8.33E-02	--	--	--	**1.75E-01**
Am-241	1.01E+02	2.98E-02	2.76E+03	8.50E+02	3.32E+00	7.67E+01	3.40E+02	2.75E+01	3.54E-01	1.60E+02	**4.32E+03**
Am-242	2.70E-01	--	1.01E+00	--	--	2.13E-05	7.28E-02	--	--	2.92E-02	**1.38E+00**
Am-242m	2.72E-01	--	1.02E+00	--	--	2.14E-05	7.32E-02	--	--	2.93E-02	**1.39E+00**
Am-243	2.15E+00	1.13E-04	4.73E+00	2.31E-15	--	9.71E-03	3.41E+01	--	--	1.31E+00	**4.23E+01**
Am-245	3.14E-12	--	--	--	--	--	1.22E-09	--	--	2.46E-11	**1.25E-09**
Am-246	--	--	--	--	--	--	2.12E-13	--	--	--	**2.12E-13**
Ar-37	1.27E-09	--	--	--	--	--	--	--	--	--	**1.27E-09**
Ar-39	9.23E-03	--	--	--	--	3.55E-04	--	--	--	--	**9.59E-03**
Ar-42	2.46E-02	--	--	--	--	--	--	--	--	--	**2.46E-02**
At-217	5.50E-03	4.31E-05	9.14E-04	5.45E-04	1.78E-14	3.24E-09	1.68E-03	4.52E-10	8.97E-16	1.74E-05	**8.70E-03**
Ba-133	2.04E+00	--	--	--	--	--	6.03E-04	--	--	--	**2.04E+00**
Ba-137m	1.73E+03	4.82E+01	1.43E+05	1.25E+04	1.29E+03	2.70E+03	4.85E+03	2.87E+02	1.87E+01	2.03E+01	**1.66E+05**
Be-10	--	--	--	--	--	2.77E-09	2.21E-06	--	--	--	**2.21E-06**
Bi-210	8.97E-01	4.71E-14	1.16E+00	4.51E-09	7.32E-12	6.72E-11	4.07E-04	1.51E-10	3.17E-11	7.72E-09	**2.05E+00**
Bi-211	2.62E-01	5.02E-12	6.23E-02	1.94E-06	9.40E-08	1.49E-02	1.10E-03	1.56E-08	9.32E-09	9.57E-05	**3.40E-01**
Bi-212	3.52E+00	8.38E-03	1.33E-03	9.38E-01	2.38E-16	2.71E-05	1.51E-01	1.21E-17	1.21E-16	3.59E-15	**4.62E+00**
Bi-213	5.50E-03	4.31E-05	9.14E-04	5.45E-04	1.78E-14	3.24E-09	1.68E-03	4.52E-10	8.97E-16	1.74E-05	**8.70E-03**
Bi-214	1.65E-08	2.33E-12	2.96E+00	8.22E-08	1.24E-10	2.27E-09	2.00E-01	3.03E-09	6.38E-10	5.92E-08	**3.16E+00**
Bk-249	2.17E-07	--	--	--	--	--	8.43E-05	--	--	1.70E-06	**8.62E-05**
Bk-250	--	--	--	--	--	--	2.01E-05	--	--	--	**2.01E-05**
C-14	--	1.57E-03	3.24E-04	--	--	1.68E-02	3.48E-03	--	2.95E-05	8.02E-04	**2.30E-02**
Ca-45	5.51E-03	--	--	--	--	--	--	--	--	--	**5.51E-03**
Cd-109	4.91E-01	--	--	--	--	--	1.17E-06	--	--	--	**4.91E-01**
Cd-113	1.95E-19	--	2.14E-18	--	--	2.84E-21	1.03E-20	--	--	--	**2.35E-18**
Cd-113m	8.90E-01	--	6.11E-01	--	--	2.63E-02	2.96E-03	--	--	--	**1.53E+00**
Cd-115m	1.18E-06	--	--	--	--	--	--	--	--	--	**1.18E-06**
Ce-139	3.28E-02	--	--	--	--	--	1.22E-09	--	--	--	**3.28E-02**
Ce-141	7.07E-08	--	--	--	--	1.52E-04	7.24E-01	--	--	--	**7.24E-01**
Ce-144	9.78E+00	--	3.78E-03	--	1.98E-02	1.02E+02	5.04E+00	--	--	1.53E-07	**1.17E+02**
Cf-249	6.93E-01	--	--	1.09E-03	--	--	6.75E+00	--	--	1.15E-03	**7.44E+00**
Cf-250	3.40E-02	--	--	9.71E-03	--	--	4.25E+01	--	--	1.54E-05	**4.26E+01**
Cf-251	8.41E-09	--	--	2.83E-04	--	--	6.14E+00	--	--	7.50E-07	**6.14E+00**
Cf-252	5.88E-04	--	--	1.85E-04	--	--	1.68E+01	--	--	3.66E-03	**1.69E+01**
Cf-254	--	--	--	--	--	--	6.85E-09	--	--	--	**6.85E-09**
Cm-242	2.19E-01	--	8.37E-01	--	--	1.78E-05	1.59E+00	--	--	2.42E-02	**2.67E+00**
Cm-243	1.97E-01	--	1.81E+01	--	--	--	1.77E+00	--	--	2.09E-03	**2.01E+01**
Cm-244	6.37E+01	--	4.48E+02	1.96E+02	--	2.46E+00	5.35E+03	--	--	8.57E+01	**6.15E+03**
Cm-245	1.49E-03	--	7.94E-02	1.48E-01	--	--	8.60E-01	--	--	1.62E-02	**1.10E+00**
Cm-246	1.05E-05	--	3.54E-02	3.00E-06	--	--	4.01E+01	--	--	2.17E-02	**4.01E+01**

Table 3-9. Total RH Radionuclide Activity (Ci) on a Site Basis Decayed through CY 2020
Continued

Radionuclide	ANL	BAPL	Hanford (RL)	INL	LANL	MFC	ORNL	SNL	SPRU	SRS	Grand Total
Cm-247	6.52E-10	--	1.12E-10	2.46E-11	--	--	2.65E-05	--	--	4.09E-08	**2.66E-05**
Cm-248	3.06E-09	--	1.69E-06	9.61E-10	--	--	2.16E-01	--	--	7.85E-06	**2.16E-01**
Cm-250	--	--	--	--	--	--	8.49E-13	--	--	--	**8.49E-13**
Co-58	4.78E-04	--	2.49E-12	--	--	9.81E-10	--	--	--	--	**4.78E-04**
Co-60	2.73E+01	2.89E-01	1.83E+01	7.33E+01	1.56E-01	7.02E+01	3.90E+01	--	1.32E-05	2.70E-11	**2.28E+02**
Cr-51	9.79E-10	--	--	--	--	7.80E-16	--	--	--	--	**9.79E-10**
Cs-134	1.79E+01	4.60E-04	2.02E+00	--	--	4.19E+01	4.60E+01	--	--	9.72E-03	**1.08E+02**
Cs-135	--	--	5.47E-04	--	--	9.34E-04	4.64E-03	--	--	--	**6.12E-03**
Cs-137	1.83E+03	5.11E+01	1.51E+05	1.32E+04	1.37E+03	2.85E+03	5.14E+03	3.04E+02	1.98E+01	2.14E+01	**1.76E+05**
Dy-159	4.37E-03	--	--	--	--	--	--	--	--	--	**4.37E-03**
Es-254	--	--	--	--	--	--	2.01E-05	--	--	--	**2.01E-05**
Eu-149	4.40E-04	--	--	--	--	--	--	--	--	--	**4.40E-04**
Eu-152	8.95E-01	4.13E+00	1.59E+00	--	--	5.78E-03	4.63E+01	--	--	--	**5.29E+01**
Eu-154	1.14E+03	1.47E+00	2.68E+02	1.72E+01	4.91E-02	3.65E+01	9.03E+01	--	--	3.10E-01	**1.56E+03**
Eu-155	3.83E+00	2.49E-02	1.69E+02	8.20E+00	2.26E-01	3.07E+01	1.03E+01	--	--	3.72E-03	**2.22E+02**
Fe-55	3.97E+01	8.73E-03	3.70E-01	--	--	2.04E+01	3.17E-04	--	--	--	**6.05E+01**
Fe-59	3.77E-07	--	--	--	--	5.60E-11	--	--	--	--	**3.77E-07**
Fr-221	5.50E-03	4.31E-05	9.14E-04	5.45E-04	1.78E-14	3.24E-09	1.68E-03	4.52E-10	8.97E-16	1.74E-05	**8.70E-03**
Fr-223	3.60E-03	6.93E-14	8.57E-04	2.68E-08	1.30E-09	2.05E-04	2.04E-05	2.16E-10	1.29E-10	1.32E-06	**4.69E-03**
Gd-152	3.38E-15	1.56E-14	4.35E-14	--	--	1.07E-17	8.37E-15	--	--	--	**7.08E-14**
Gd-153	3.83E-02	--	3.56E-06	--	--	--	1.40E-07	--	--	--	**3.83E-02**
H-3	1.61E+01	1.06E-01	1.46E+03	--	--	1.27E-01	1.29E+00	--	--	4.20E-02	**1.48E+03**
Hf-175	4.01E-05	--	--	--	--	--	--	--	--	--	**4.01E-05**
Hf-181	1.49E-08	--	--	--	--	--	--	--	--	--	**1.49E-08**
I-125	6.13E-05	--	--	--	--	--	--	--	--	--	**6.13E-05**
I-129	4.15E-10	1.98E-05	2.18E-03	--	--	5.40E-02	4.14E-04	--	--	--	**5.66E-02**
I-131	--	--	--	--	--	--	3.15E-02	--	--	--	**3.15E-02**
In-113m	2.49E-03	--	--	--	--	--	2.01E+00	--	--	--	**2.01E+00**
In-114	7.84E-07	--	--	--	--	--	--	--	--	--	**7.84E-07**
In-114m	8.19E-07	--	--	--	--	--	--	--	--	--	**8.19E-07**
In-115	2.78E-17	--	--	--	--	--	--	--	--	--	**2.78E-17**
In-115m	1.30E-10	--	--	--	--	--	--	--	--	--	**1.30E-10**
Ir-194	1.07E-02	--	--	--	--	--	--	--	--	--	**1.07E-02**
K-42	2.46E-02	--	--	--	--	--	--	--	--	--	**2.46E-02**
Kr-85	4.23E+01	1.77E+00	1.99E+02	--	4.23E+02	1.60E+00	2.47E+01	--	--	5.28E-01	**6.93E+02**
La-137	--	--	--	--	--	--	6.88E-08	--	--	--	**6.88E-08**
Lu-177	2.06E-05	--	--	--	--	--	--	--	--	--	**2.06E-05**
Lu-177m	9.39E-05	--	--	--	--	--	--	--	--	--	**9.39E-05**
Mn-54	2.06E+00	--	6.89E-03	--	--	1.92E-01	--	--	--	--	**2.26E+00**
Mo-93	--	--	2.73E-05	--	--	2.81E-02	--	--	--	--	**2.81E-02**
Na-22	2.23E-02	--	3.37E-05	--	--	--	--	--	--	--	**2.23E-02**
Nb-91	1.51E-02	--	--	--	--	--	--	--	--	--	**1.51E-02**
Nb-92	--	--	--	--	--	6.12E-10	--	--	--	--	**6.12E-10**
Nb-93m	4.78E-01	2.50E-03	3.36E-04	--	--	7.25E-03	6.42E-01	--	--	--	**1.13E+00**
Nb-94	--	--	7.62E-02	--	--	1.98E-01	1.02E-01	--	--	--	**3.77E-01**
Nb-95	7.02E-03	--	2.17E-18	--	--	1.00E-03	1.66E-01	--	--	--	**1.74E-01**
Nb-95m	3.75E-05	--	1.16E-20	--	--	5.33E-06	3.18E-03	--	--	--	**3.22E-03**

Table 3-9. Total RH Radionuclide Activity (Ci) on a Site Basis Decayed through CY 2020
Continued

Radionuclide	ANL	BAPL	Hanford (RL)	INL	LANL	MFC	ORNL	SNL	SPRU	SRS	Grand Total
Nd-144	1.79E-14	--	3.67E-14	--	1.52E-15	7.59E-14	1.75E-16	--	--	3.64E-16	**1.33E-13**
Ni-59	1.22E-02	1.03E-01	2.06E-04	--	--	1.99E-01	2.16E-04	--	--	2.88E-10	**3.14E-01**
Ni-63	1.65E+00	7.92E+00	6.14E-01	--	--	3.47E+01	1.73E-02	--	--	--	**4.49E+01**
Np-235	4.13E-01	--	--	--	--	--	3.68E-08	--	--	--	**4.13E-01**
Np-237	1.26E-03	1.61E-04	2.86E-01	5.04E-04	6.61E-06	6.01E-02	3.65E-01	2.23E-05	5.74E-07	2.48E+00	**3.19E+00**
Np-238	1.22E-03	--	4.57E-03	--	--	9.63E-08	3.29E-04	--	--	1.32E-04	**6.26E-03**
Np-239	2.15E+00	1.13E-04	4.73E+00	2.31E-15	--	9.71E-03	3.41E+01	--	--	1.31E+00	**4.23E+01**
Np-240	3.16E-20	--	2.07E-09	9.95E-21	--	--	8.07E-09	--	--	1.14E-15	**1.01E-08**
Np-240m	2.64E-17	--	1.73E-06	8.30E-18	--	--	6.72E-06	--	--	9.46E-13	**8.45E-06**
Os-185	1.02E-05	--	--	--	--	--	--	--	--	--	**1.02E-05**
Os-194	1.07E-02	--	--	--	--	--	--	--	--	--	**1.07E-02**
Pa-231	3.83E-07	1.61E-10	1.58E-05	2.35E-05	1.05E-06	4.74E-01	8.92E-07	2.11E-07	1.23E-07	4.67E-04	**4.74E-01**
Pa-233	1.26E-03	1.61E-04	2.86E-01	5.04E-04	6.61E-06	6.01E-02	2.24E-01	2.20E-05	5.74E-07	2.48E+00	**3.05E+00**
Pa-234	7.75E-05	2.37E-11	1.47E-03	1.99E-03	5.30E-08	3.19E-06	3.90E-05	1.50E-06	2.06E-05	9.62E-05	**3.70E-03**
Pa-234m	5.96E-02	1.82E-08	1.13E+00	1.53E+00	4.07E-05	2.46E-03	3.00E-02	1.15E-03	1.59E-02	7.40E-02	**2.85E+00**
Pb-209	5.50E-03	4.31E-05	9.14E-04	5.45E-04	1.78E-14	3.24E-09	1.68E-03	4.52E-10	8.97E-16	1.74E-05	**8.70E-03**
Pb-210	8.96E-01	4.71E-14	1.16E+00	4.51E-09	7.32E-12	6.72E-11	5.27E-04	1.51E-10	3.17E-11	7.72E-09	**2.05E+00**
Pb-211	2.62E-01	5.02E-12	6.23E-02	1.94E-06	9.40E-08	1.49E-02	1.10E-03	1.56E-08	9.32E-09	9.57E-05	**3.40E-01**
Pb-212	3.52E+00	8.38E-03	1.33E-03	9.38E-01	2.38E-16	2.71E-05	1.51E-01	1.21E-17	1.21E-16	3.59E-15	**4.62E+00**
Pb-214	1.65E-08	2.33E-12	2.96E+00	8.22E-08	1.24E-10	2.27E-09	2.00E-01	3.03E-09	6.38E-10	5.92E-08	**3.16E+00**
Pd-107	--	--	7.64E-05	--	--	2.54E-05	1.65E-03	--	--	--	**1.75E-03**
Pm-145	5.79E-01	--	--	--	--	2.82E-03	1.85E-05	--	--	--	**5.82E-01**
Pm-146	6.32E-01	--	--	--	--	8.89E-04	2.28E-04	--	--	--	**6.34E-01**
Pm-147	5.00E+01	9.20E-02	1.85E+00	--	8.29E-05	2.09E+00	1.31E+01	--	--	2.84E-02	**6.72E+01**
Pm-148	1.85E-09	--	--	--	--	--	--	--	--	--	**1.85E-09**
Pm-148m	3.49E-08	--	--	--	--	--	--	--	--	--	**3.49E-08**
Po-210	9.27E-01	2.37E-14	1.16E+00	4.46E-09	7.32E-12	4.11E-11	2.65E-05	1.51E-10	3.17E-11	7.72E-09	**2.08E+00**
Po-211	7.19E-04	1.38E-14	1.71E-04	5.34E-09	2.59E-10	4.08E-05	3.03E-06	4.30E-11	2.56E-11	2.63E-07	**9.35E-04**
Po-212	2.26E+00	5.37E-03	8.55E-04	6.01E-01	1.52E-16	1.74E-05	9.70E-02	7.75E-18	7.78E-17	2.30E-15	**2.96E+00**
Po-213	5.39E-03	4.22E-05	8.95E-04	5.33E-04	1.74E-14	3.17E-09	1.64E-03	4.43E-10	8.78E-16	1.71E-05	**8.52E-03**
Po-214	1.65E-08	2.33E-12	2.96E+00	8.22E-08	1.24E-10	2.27E-09	2.00E-01	3.03E-09	6.38E-10	5.92E-08	**3.16E+00**
Po-215	2.62E-01	5.02E-12	6.23E-02	1.94E-06	9.40E-08	1.49E-02	1.10E-03	1.56E-08	9.32E-09	9.57E-05	**3.40E-01**
Po-216	3.52E+00	8.38E-03	1.33E-03	9.38E-01	2.38E-16	2.71E-05	1.51E-01	1.21E-17	1.21E-16	3.59E-15	**4.62E+00**
Po-218	1.65E-08	2.33E-12	2.96E+00	8.22E-08	1.24E-10	2.27E-09	2.00E-01	3.04E-09	6.38E-10	5.92E-08	**3.16E+00**
Pr-144	9.78E+00	--	3.78E-03	--	1.98E-02	1.02E+02	5.04E+00	--	--	1.53E-07	**1.17E+02**
Pr-144m	1.37E-01	--	5.29E-05	--	2.77E-04	1.43E+00	7.06E-02	--	--	2.14E-09	**1.64E+00**
Pu-236	3.79E-01	--	9.71E-07	6.29E-07	--	1.87E-04	1.26E-04	--	--	--	**3.80E-01**
Pu-238	1.41E+02	1.23E+00	1.89E+03	6.78E+02	1.50E+00	2.71E+01	1.58E+03	1.37E+01	1.74E-02	4.19E+03	**8.52E+03**
Pu-239	1.17E+02	1.03E-03	1.04E+03	6.72E+02	9.26E+01	3.70E+01	3.47E+01	3.65E+01	1.25E+00	1.11E+01	**2.04E+03**
Pu-240	6.97E+01	--	5.72E+02	3.62E+02	2.51E+00	5.99E+00	1.06E+02	2.33E+01	--	7.02E+00	**1.15E+03**
Pu-241	8.82E+02	1.53E-01	1.20E+04	2.71E+03	6.67E+01	9.44E+01	3.40E+03	2.88E+02	1.61E-01	4.34E+03	**2.38E+04**
Pu-242	5.42E-02	1.85E-05	4.92E-01	2.64E-01	1.52E-03	7.50E-03	1.11E+00	1.11E-02	7.07E-03	5.20E-01	**2.47E+00**
Pu-243	6.52E-10	--	1.12E-10	2.46E-11	--	--	2.65E-05	--	--	4.09E-08	**2.66E-05**
Pu-244	2.64E-17	--	1.73E-06	8.31E-18	--	--	6.73E-06	--	--	9.47E-13	**8.46E-06**
Pu-246	--	--	--	--	--	--	2.12E-13	--	--	--	**2.12E-13**
Ra-223	2.62E-01	5.02E-12	6.23E-02	1.94E-06	9.40E-08	1.49E-02	1.10E-03	1.56E-08	9.32E-09	9.57E-05	**3.40E-01**
Ra-224	3.52E+00	8.38E-03	1.33E-03	9.38E-01	2.38E-16	2.71E-05	1.51E-01	1.21E-17	1.21E-16	3.59E-15	**4.62E+00**

Table 3-9. Total RH Radionuclide Activity (Ci) on a Site Basis Decayed through CY 2020
Continued

Radionuclide	ANL	BAPL	Hanford (RL)	INL	LANL	MFC	ORNL	SNL	SPRU	SRS	Grand Total
Ra-225	5.50E-03	4.31E-05	9.14E-04	5.45E-04	1.78E-14	3.24E-09	1.68E-03	4.55E-10	8.97E-16	1.76E-05	**8.70E-03**
Ra-226	1.65E-08	2.33E-12	2.96E+00	8.22E-08	1.24E-10	2.27E-09	2.00E-01	3.04E-09	6.38E-10	5.92E-08	**3.16E+00**
Ra-228	2.72E-02	5.03E-16	8.14E-04	2.69E-05	5.05E-16	4.39E-14	2.40E-05	3.61E-17	2.89E-16	5.40E-15	**2.80E-02**
Rb-87	--	--	--	--	--	5.83E-11	1.81E-07	--	--	--	**1.81E-07**
Re-188	2.13E-06	--	--	--	--	--	--	--	--	--	**2.13E-06**
Rh-102	7.31E-02	--	--	--	--	--	3.62E-08	--	--	--	**7.31E-02**
Rh-103m	3.27E-06	--	--	--	--	3.77E-13	3.89E-01	--	--	--	**3.89E-01**
Rh-106	1.64E+01	--	7.11E-03	--	2.98E-01	1.48E+01	8.76E+00	--	--	2.77E-06	**4.03E+01**
Rn-219	2.62E-01	5.02E-12	6.23E-02	1.94E-06	9.40E-08	1.49E-02	1.10E-03	1.56E-08	9.32E-09	9.57E-05	**3.40E-01**
Rn-220	3.52E+00	8.38E-03	1.33E-03	9.38E-01	2.38E-16	2.71E-05	1.51E-01	1.21E-17	1.21E-16	3.59E-15	**4.62E+00**
Rn-222	1.65E-08	2.33E-12	2.96E+00	8.22E-08	1.24E-10	2.27E-09	2.00E-01	3.04E-09	6.38E-10	5.92E-08	**3.16E+00**
Ru-103	3.27E-06	--	--	--	--	3.77E-13	3.89E-01	--	--	--	**3.89E-01**
Ru-106	1.64E+01	--	7.11E-03	--	2.98E-01	1.48E+01	8.76E+00	--	--	2.77E-06	**4.03E+01**
S-35	5.18E-05	--	--	--	--	--	--	--	--	--	**5.18E-05**
Sb-124	6.36E-05	--	--	--	--	3.51E-02	--	--	--	--	**3.52E-02**
Sb-125	3.16E+01	1.76E-03	1.92E+01	--	1.07E-01	4.22E+00	1.61E+00	--	--	--	**5.67E+01**
Sb-126	2.41E-06	--	2.51E-06	--	7.90E-03	3.68E-07	1.16E-04	--	--	--	**8.02E-03**
Sb-126m	1.72E-05	--	1.80E-05	--	5.64E-02	1.33E-03	6.39E-03	--	--	--	**6.42E-02**
Sc-46	2.98E-04	--	--	--	--	--	--	--	--	--	**2.98E-04**
Se-75	1.56E-03	--	--	--	--	--	--	--	--	--	**1.56E-03**
Se-79	--	--	1.24E-01	--	--	2.79E-04	9.73E-04	--	--	1.07E-02	**1.36E-01**
Sm-145	7.62E-02	--	--	--	--	--	1.64E-09	--	--	--	**7.62E-02**
Sm-146	3.28E-09	--	--	--	--	2.17E-12	5.24E-14	--	--	--	**3.28E-09**
Sm-147	8.61E-10	1.58E-12	2.34E-09	--	7.97E-15	3.98E-11	1.20E-09	--	--	4.73E-11	**4.49E-09**
Sm-148	1.05E-19	1.39E-30	2.49E-29	--	--	4.74E-34	1.93E-17	--	--	--	**1.94E-17**
Sm-151	1.90E+00	1.55E-01	3.70E+01	--	2.20E-02	1.87E+00	4.74E+00	--	--	2.53E-01	**4.60E+01**
Sn-113	2.49E-03	--	--	--	--	--	2.01E+00	--	--	--	**2.01E+00**
Sn-119m	2.04E-01	--	3.22E-10	--	--	2.04E-07	1.58E-05	--	--	--	**2.04E-01**
Sn-121	4.06E-01	--	2.45E-04	--	7.09E-01	1.44E-04	9.61E-02	--	--	--	**1.21E+00**
Sn-121m	5.23E-01	--	3.16E-04	--	9.14E-01	1.86E-04	1.24E-01	--	--	--	**1.56E+00**
Sn-123	2.38E-02	--	--	--	--	8.41E-08	3.03E-08	--	--	--	**2.38E-02**
Sn-126	1.72E-05	--	1.80E-05	--	5.64E-02	1.33E-03	6.39E-03	--	--	--	**6.42E-02**
Sr-85	3.13E-05	--	--	--	--	--	--	--	--	--	**3.13E-05**
Sr-89	1.17E-04	--	--	--	--	1.25E-11	2.36E+00	--	--	--	**2.36E+00**
Sr-90	1.30E+03	5.05E+01	9.52E+04	1.14E+04	9.56E+02	2.73E+03	5.66E+03	2.28E+02	2.73E+00	1.54E+01	**1.18E+05**
Ta-182	4.62E+00	--	--	--	--	9.83E-08	2.40E-14	--	--	--	**4.62E+00**
Tb-157	4.11E-02	--	--	--	--	--	2.21E-10	--	--	--	**4.11E-02**
Tb-160	3.20E-05	--	--	--	--	--	--	--	--	--	**3.20E-05**
Tc-97	1.35E-08	--	--	--	--	1.70E-08	--	--	--	--	**3.05E-08**
Tc-97m	5.28E-04	--	--	--	--	--	--	--	--	--	**5.28E-04**
Tc-98	--	--	--	--	--	2.73E-10	7.92E-08	--	--	--	**7.95E-08**
Tc-99	6.10E-03	1.33E-02	5.16E+00	--	--	3.94E+01	1.97E-01	--	4.48E-03	1.12E-03	**4.48E+01**
Te-121	8.27E-03	--	--	--	--	--	--	--	--	--	**8.27E-03**
Te-121m	8.31E-03	--	--	--	--	--	--	--	--	--	**8.31E-03**
Te-123	7.04E-15	--	--	--	--	--	--	--	--	--	**7.04E-15**
Te-123m	3.93E-03	--	--	--	--	--	--	--	--	--	**3.93E-03**
Te-125m	7.71E+00	4.29E-04	4.68E+00	--	2.61E-02	1.02E+00	3.33E-01	--	--	8.56E-19	**1.38E+01**

Table 3-9. Total RH Radionuclide Activity (Ci) on a Site Basis Decayed through CY 2020
Continued

Radionuclide	ANL	BAPL	Hanford (RL)	INL	LANL	MFC	ORNL	SNL	SPRU	SRS	Grand Total
Te-127	2.58E-02	--	--	--	--	2.96E-08	1.29E-08	--	--	--	**2.58E-02**
Te-127m	2.63E-02	--	--	--	--	3.02E-08	1.32E-08	--	--	--	**2.63E-02**
Te-129	1.29E-08	--	--	--	--	--	--	--	--	--	**1.29E-08**
Te-129m	2.02E-08	--	--	--	--	--	--	--	--	--	**2.02E-08**
Th-227	2.58E-01	4.95E-12	6.14E-02	1.92E-06	9.27E-08	1.46E-02	1.20E-03	1.54E-08	9.19E-09	9.44E-05	**3.35E-01**
Th-228	3.51E+00	8.36E-03	1.33E-03	9.38E-01	2.38E-16	2.70E-05	1.51E-01	1.21E-17	1.21E-16	3.59E-15	**4.61E+00**
Th-229	5.50E-03	4.31E-05	9.14E-04	5.45E-04	1.78E-14	3.24E-09	1.68E-03	4.59E-10	8.97E-16	1.78E-05	**8.71E-03**
Th-230	1.94E-05	5.40E-09	2.00E-04	9.07E-05	9.55E-08	3.74E-06	3.40E-05	2.86E-06	5.90E-07	2.13E-05	**3.73E-04**
Th-231	9.05E-03	3.79E-06	5.37E-02	2.70E-01	8.25E-03	2.82E-03	2.98E-03	4.09E-03	1.17E-03	1.47E+00	**1.82E+00**
Th-232	2.19E-10	4.51E-15	1.23E-03	2.37E-04	1.77E-15	3.01E-13	1.12E-03	2.07E-16	1.16E-15	1.25E-14	**2.59E-03**
Th-234	5.96E-02	1.82E-08	1.13E+00	1.53E+00	4.07E-05	2.46E-03	3.00E-02	1.15E-03	1.59E-02	7.40E-02	**2.85E+00**
Tl-206	1.18E-06	6.21E-20	1.53E-06	5.95E-15	9.66E-18	8.87E-17	5.38E-10	1.99E-16	4.19E-17	1.02E-14	**2.71E-06**
Tl-207	2.61E-01	5.01E-12	6.21E-02	1.94E-06	9.38E-08	1.48E-02	1.10E-03	1.56E-08	9.29E-09	9.55E-05	**3.39E-01**
Tl-208	1.27E+00	3.01E-03	4.80E-04	3.37E-01	8.55E-17	9.75E-06	5.44E-02	4.35E-18	4.37E-17	1.29E-15	**1.66E+00**
Tl-209	1.16E-04	9.06E-07	1.92E-05	1.14E-05	3.73E-16	6.81E-11	3.53E-05	9.50E-12	1.88E-17	3.66E-07	**1.83E-04**
Tm-170	7.82E-04	--	--	--	--	--	--	--	--	--	**7.82E-04**
Tm-171	2.41E-01	--	--	--	--	--	4.27E-06	--	--	--	**2.41E-01**
U-232	1.59E+00	8.24E-03	6.16E-04	1.31E+00	--	8.45E-06	1.55E-01	--	--	--	**3.06E+00**
U-233	5.87E-05	9.86E-03	7.57E-01	4.59E+00	9.22E-11	1.26E-05	1.68E+00	2.12E-06	6.12E-12	6.73E-02	**7.11E+00**
U-234	3.18E-02	2.97E-04	1.62E+00	4.58E+00	1.74E-03	1.63E-01	1.59E-01	1.27E-01	1.28E-02	2.37E-01	**6.94E+00**
U-235	9.05E-03	3.79E-06	5.37E-02	2.70E-01	8.25E-03	2.82E-03	2.98E-03	4.09E-03	1.17E-03	1.47E+00	**1.82E+00**
U-236	4.13E-06	4.57E-05	1.71E-01	2.13E-05	6.20E-06	2.63E-03	3.38E-03	1.72E-06	4.70E-06	2.82E-05	**1.77E-01**
U-237	2.11E-02	3.65E-06	2.87E-01	6.47E-02	1.60E-03	2.26E-03	7.97E-02	6.81E-03	3.86E-06	1.04E-01	**5.67E-01**
U-238	5.96E-02	1.82E-08	1.13E+00	1.53E+00	4.07E-05	2.46E-03	3.98E-02	1.40E-03	1.59E-02	7.41E-02	**2.86E+00**
U-240	2.64E-17	--	1.73E-06	8.30E-18	--	--	6.72E-06	--	--	9.46E-13	**8.45E-06**
V-49	9.46E-01	--	--	--	--	--	--	--	--	--	**9.46E-01**
W-181	1.87E-04	--	--	--	--	--	--	--	--	--	**1.87E-04**
W-185	1.76E-05	--	--	--	--	--	--	--	--	--	**1.76E-05**
W-188	2.11E-06	--	--	--	--	--	--	--	--	--	**2.11E-06**
Xe-127	1.95E-08	--	--	--	--	--	--	--	--	--	**1.95E-08**
Xe-131m	--	--	--	--	--	--	1.26E-03	--	--	--	**1.26E-03**
Y-89m	1.09E-08	--	--	--	--	1.16E-15	2.19E-04	--	--	--	**2.19E-04**
Y-90	1.30E+03	5.05E+01	9.52E+04	1.14E+04	9.56E+02	2.73E+03	5.66E+03	2.28E+02	2.73E+00	1.54E+01	**1.18E+05**
Y-91	9.49E-04	--	--	--	--	2.64E-09	--	--	--	--	**9.49E-04**
Zn-65	1.09E-02	--	2.42E-05	--	--	1.29E-02	--	--	--	--	**2.38E-02**
Zr-93	2.92E-05	3.11E-03	4.95E-04	--	--	1.18E-03	2.29E-02	--	--	--	**2.77E-02**
Zr-95	3.19E-03	--	9.86E-19	--	--	4.53E-04	2.70E-01	--	--	--	**2.74E-01**
Grand Total	**9.02E+03**	**2.18E+02**	**5.06E+05**	**5.42E+04**	**5.17E+03**	**1.18E+04**	**3.26E+04**	**1.44E+03**	**4.59E+01**	**8.88E+03**	**6.29E+05**

Data Source: CID Data Version D.20.00.33 (LANL-CO 2021). Note: This table only contains data for WIPP-bound waste streams at the TRU waste generator sites. Site acronyms used in this table are identified in the Acronyms and Abbreviations section of this report.

Table 3-10. Total Activity by Site Decayed through CY 2020

TRU Waste Generator Site	CH Activity (Ci)	RH Activity (Ci)	Total Activity (Ci)
Argonne National Laboratory	1.30E+02	9.02E+03	9.15E+03
Bettis Atomic Power Laboratory	--	2.18E+02	2.18E+02
Hanford (Richland) Site	3.64E+05	5.06E+05	8.70E+05
Idaho National Laboratory	8.27E+04	5.42E+04	1.37E+05
Knolls Atomic Power Laboratory - Nuclear Fuel Services	4.48E+00	--	4.48E+00
Knolls Atomic Power Laboratory - Schenectady	9.09E-01	--	9.09E-01
Lawrence Berkeley National Laboratory	1.38E-02	--	1.38E-02
Lawrence Livermore National Laboratory	1.95E+04	--	1.95E+04
Los Alamos National Laboratory	5.11E+05	5.17E+03	5.16E+05
Material and Fuels Complex	3.20E+01	1.18E+04	1.18E+04
Nevada National Security Site	4.93E+02	--	4.93E+02
Nuclear Radiation Development Site	3.30E+01	--	3.30E+01
Oak Ridge National Laboratory	2.77E+04	3.26E+04	6.04E+04
Sandia National Laboratories	6.65E+02	1.44E+03	2.10E+03
Savannah River Site	2.46E+06	8.88E+03	2.46E+06
Separations Process Research Unit	6.19E+00	4.59E+01	5.21E+01
Grand Total	**3.46E+06**	**6.29E+05**	**4.09E+06**

Data Source: CID Data Version D.20.00.33 (LANL-CO 2021). Note: This table only contains data for WIPP-bound waste streams at the TRU waste generator sites.

3.3.2 Radionuclide Changes

Radionuclide activity estimates improve as additional waste is characterized. Table 3-11 presents the changes in the total activity between the ATWIR-2020 and this report. For comparison, the activities reported in this table were decay-corrected through the end of CY 2033. The net change column includes both increases and decreases in activity as reported by the TRU waste generator sites and the WDS.

As shown in Table 3-11, the total anticipated CH- and RH-TRU waste activity reported by the sites increased by ≈946,000 Ci. This increase, when combined with an increase of ≈35,800 Ci that were emplaced at the WIPP during CY 2020, results in an overall increase of ≈982,000 Ci. SRS shows the greatest increase (≈808,000 Ci), which is primarily attributed to TRU waste being reassigned from potential waste stream SR-KAC-PuOx-2 to the WIPP-bound waste stream SR-KAC-PuOx.

Table 3-11. CH/RH Activity Changes Decayed through CY 2033

TRU Waste Generator Site	ATWIR-2020 Total (Ci)	ATWIR-2021 Total (Ci)	Net Change (Ci)
Hanford (Richland) Site	6.20E+05	6.20E+05	-1.00E+01
Idaho National Laboratory	1.14E+05	1.11E+05	-3.61E+03
Los Alamos National Laboratory	2.70E+05	4.10E+05	+1.40E+05
Oak Ridge National Laboratory	4.21E+04	4.27E+04	+6.63E+02
Savannah River Site	1.05E+06	1.86E+06	+8.08E+05
Small Quantity Sites	3.17E+04	3.26E+04	+8.81E+02
Anticipated Total	**2.13E+06**	**3.07E+06**	**+9.46E+05**
WIPP (Emplaced)	1.76E+06	1.80E+06	+3.58E+04
WCS (Temporary Storage)	4.13E+03	4.13E+03	--
Emplaced/Temporary Storage Total	**1.77E+06**	**1.80E+06**	**+3.58E+04**
Grand Total	**3.90E+06**	**4.88E+06**	**+9.82E+05**

Data Source: CID Data Versions D.19.00.33 (LANL-CO 2020) and D.20.00.33 (LANL-CO 2021). Note: This table only contains data for WIPP-bound waste streams at the TRU waste generator sites.

4.0 POTENTIAL TRU WASTE AND TRU WASTE BEYOND CY 2033

This section presents the TRU waste inventory data that were collected and reported using the methodology discussed in section 2.0. Actual numerical values in this section are rounded to three significant figures for presentation purposes.

Potential waste streams have meaningful uncertainties regarding their eligibility, due to technical or legal considerations, for emplacement in the WIPP repository as of the data cutoff date for this report. As discussed in section 4.1, a site may designate waste streams as potential for many different reasons. In most cases, a waste stream is reported as potential because of technical considerations, such as the lack of characterization data; however, sites may also use this designation at the direction of the DOE. Regardless of whether a waste stream is listed as WIPP-bound or potential in this report, TRU waste must meet all WIPP requirements (e.g., WIPP WAC and HWFP) before it can be disposed of at the WIPP.

For strategic planning initiatives across the DOE complex, the sites were requested by the DOE to report defense-related TRU waste projected beyond CY 2033, where appropriate. These projected inventory estimates include information on decontamination and decommissioning (D&D) activities and all other site activities that have produced or will produce defense-related TRU waste. The DOE may use these inventory estimates as a planning basis for future TRU waste storage and disposal needs (see section 4.2).

4.1 Potential TRU Waste

As described in section 1.0, a waste stream is designated as either WIPP-bound or potential. The potential TRU waste streams identified in Table 4-1 and Table 4-2 collectively represent

≈9,840 m^3, or 19 percent, of the final form TRU waste anticipated volume reported by the TRU waste generator sites during this year's data collection.

The DOE/CBFO has listed the criteria for categorizing waste streams as potential (Patterson 2018). Below are the categories for which TRU waste generator sites would consider a waste stream to be potential TRU waste:

- TRU Determination – Waste that is categorized as "undetermined" will remain potential until the waste stream is officially determined to be TRU. If the waste stream is determined to be non-TRU, it will be removed from the inventory.

- Defense Determination – The WIPP can only accept TRU waste resulting from defense-related activities, as stated in the WIPP LWA (U.S. Congress 1992 and 1996). Waste that has an "unknown" defense determination will remain potential until the waste stream is officially determined to be defense waste. If the waste stream is determined to be non-defense, it will be removed from the inventory.

- Regulatory Restrictions – There are numerous regulatory restrictions that would prevent waste in its current form from coming to the WIPP. Examples include limits on curies and dose rates on RH canisters, limits for total emplacement curies on RH-TRU waste, and prohibited Resource Conservation and Recovery Act hazardous waste, etc. Sites must treat, repackage, or remove any restricted items before such waste can be accepted for disposal at the WIPP.

- Incomplete Data – Waste that has missing or incomplete data, such as radionuclide activities, waste material mass, final form container data, or unknown waste stream information, is deemed potential until required data are obtained.

- Directed by DOE to Move to Potential – Waste will be moved to potential at the direction of the DOE.

Three sites (BL, RP, and WV) reported only potential waste streams and no WIPP-bound waste streams. Additional detail for all potential waste streams is provided in Appendix B of this report. Table 4-1 identifies those CH- and RH-TRU waste streams that are categorized as potential as of the data cutoff date for this report.

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

Waste Stream ID[1]	Handling	Final Form Anticipated Volume (m^3)	Categories of Potential WIPP CH/RH-TRU Waste
BL-Parks	CH	9.63E+00	Incomplete Data
BL-Parks-A	RH	6.30E-01	Incomplete Data
IN-DD-001	CH	4.00E+03	Incomplete Data
IN-ID-TRU-RHNH	RH	2.52E+00	Incomplete Data
IN-IW-609	CH	5.17E+01	Incomplete Data

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

Waste Stream ID[1]	Handling	Final Form Anticipated Volume (m^3)	Categories of Potential WIPP CH/RH-TRU Waste
LA-TA-55-04	CH	5.80E+01	Incomplete Data
RL221T-01	CH	8.82E+00	Incomplete Data
RL300-11	RH	7.56E+00	Regulatory Restrictions
RLALPHA-08	RH	1.08E+03	Incomplete Data
RLCH2-08	RH	7.04E+00	TRU Waste Determination
RLDD-01	CH	9.02E+02	Incomplete Data
RLDD-08	RH	7.15E+01	Incomplete Data
RLN622FD-01	CH	4.20E-01	Incomplete Data
RLPFP-02	CH	6.30E-01	Incomplete Data
RLPRC-01	CH	1.88E+00	Defense Determination
SR-CH-PP	CH	3.13E+02	Incomplete Data
Grand Total		**6.51E+03**	

[1]See Figure 1-1 for site designators. Data Source: CID Data Version D.20.00.33 (LANL-CO 2021).

Table 4-2 identifies the CH- and RH-TRU waste streams that are categorized as potential at the direction of the DOE. Although these waste streams may have similar unmet requirements as those shown in Table 4-1, in some cases these waste streams are expected to require additional legislative action prior to being re-categorized as WIPP-bound.

Table 4-2. DOE-Directed Potential WIPP CH/RH-TRU Waste Streams

Waste Stream ID[1]	Handling	Final Form Anticipated Volume (m^3)
IN-SBW-01A	RH	9.79E+02
IN-SBW-01B	RH	8.90E+01
RP-TFC001	CH	4.47E+02
RP-W754	CH	3.29E+02
RP-W755	CH	8.09E+02
SR-KAC-HET-2	CH	4.60E+01
SR-KAC-PuOx-2	CH	4.11E+01
WV-M010a	CH	2.98E+01
WV-T004a	CH	2.10E+00
WV-T004b	RH	3.15E+00
WV-T006a	CH	2.46E+02
WV-T006b	RH	2.43E+02
WV-T017b	RH	7.56E+00
WV-W024a	CH	1.58E+01

Table 4-2. DOE-Directed Potential WIPP CH/RH-TRU Waste Streams
Continued

Waste Stream ID[1]	Handling	Final Form Anticipated Volume (m^3)
WV-W024b	RH	3.21E+01
WV-W050a	CH	3.99E+00
WV-W050b	RH	6.93E+00
Grand Total		**3.33E+03**

[1]See Figure 1-1 for site designators. Data Source: CID Data Version D.20.00.33 (LANL-CO 2021).

Upon resolution of the applicable constraints, waste streams categorized as potential may be re-categorized as WIPP-bound from one report to the next. As shown in Table 4-3, one potential waste stream from LANL was re-designated as WIPP-bound during CY 2020.

Table 4-3. Potential to WIPP-Bound Waste Streams

Waste Stream ID[1]	Reason
LA-TA-03-29	Added previously missing data

[1]See Figure 1-1 for site designators. Data Source: CID Data Version D.20.00.33 (LANL-CO 2021).

4.2 TRU Waste Projected Beyond CY 2033

Strategic planning for future TRU waste management needs is dependent upon the sites providing estimates of all their currently stored and projected TRU waste, including D&D waste. To accomplish this, the TRU waste generator sites were given direction during this collection campaign to report all projected generation estimates up to the final estimated year of generation. Table 4-4 identifies the portion of CH- and RH-TRU volume that is projected beyond the reporting term for this report (CY 2033). These volume totals are not included in any other tables throughout this report.

Table 4-4. Projected CH/RH-TRU Volume Beyond CY 2033

Waste Stream ID[1]	Handling	Final Form Volume Projected Beyond CY 2033 (m^3)	End Generation Year
AE-T001	CH	7.14E+00	2050
AE-T003	CH	4.20E-01	2050
AW-N027.531	CH	3.78E+00	2051
AW-T031.1322	RH	2.27E+01	2051
AW-T033.1325	CH	2.27E+01	2051
AW-W020.13	RH	8.82E+00	2052

Table 4-4. Projected CH/RH-TRU Volume Beyond CY 2033
Continued

Waste Stream ID[1]	Handling	Final Form Volume Projected Beyond CY 2033 (m^3)	End Generation Year
KA-T001	RH	1.26E+01	2050
KA-T002	RH	6.30E-01	2050
KA-W016	RH	6.30E-01	2050
LA-CIN01.001	CH	6.59E+01	2050
LA-MHD01-Pits	CH	3.08E+03	2070
LA-MHD01.001	CH	2.65E+03	2050
LA-MHD03.001	CH	6.37E+02	2050
LA-OS-00-01.001	CH	8.16E+00	2050
LB-T001	CH	2.10E-01	2050
LB-T002	CH	2.10E-01	2050
LL-M001	CH	3.13E+02	2050
LL-T004	CH	1.66E+00	2050
LL-W019	CH	7.14E+00	2050
OR-REDC-CH-HET	CH	3.46E+02	2062
OR-REDC-RH-HET	RH	1.56E+02	2062
OR-RF-RH-HET	RH	1.76E+01	2062
OR-TBD-RH-HET	RH	5.61E+01	2062
RL200-01	CH	5.08E+02	2037
RL200-02	CH	2.64E+03	2037
RL325-01	CH	1.93E+01	2050
RL325-03	CH	6.09E+00	2050
RL325-05	CH	1.08E+02	2050
RL325-07	RH	5.35E+01	2050
RL325-08	RH	5.35E+01	2050
RLDD-01	CH	5.29E+03	2057
RLDD-02	CH	3.03E+03	2040
RLDD-08	RH	5.78E+02	2057
RLDD-10	RH	3.33E+02	2045
RLWTP-08	RH	4.79E+01	2050
SR-CH-PP	CH	5.19E+04	2083
SR-KAC-HET	CH	7.52E+01	2039
SR-KAC-HET-2	CH	9.48E+02	2049
SR-KAC-PuOx	CH	1.88E+02	2039
SR-KAC-PuOx-2	CH	1.14E+03	2049
SR-RH-773A.01	RH	1.89E+00	2036
SR-W027-221H-HEPA	CH	1.02E+01	2036

Table 4-4. Projected CH/RH-TRU Volume Beyond CY 2033
Continued

Waste Stream ID[1]	Handling	Final Form Volume Projected Beyond CY 2033 (m^3)	End Generation Year
SR-W027-221H-HET-C	CH	1.89E+00	2036
SR-W027-773A-HET	CH	8.43E+01	2050
WV-Z001	CH	4.30E+03	2050
Grand Total		**7.87E+04**	

[1]See Figure 1-1 for site designators. Data Source: CID Data Version D.20.00.33 (LANL-CO 2021).

As shown in Table 3-3, Table 4-1, Table 4-2, and Table 4-4, the estimated TRU waste volumes are provided for the four categories of TRU waste below:

- Emplaced (~70,100 m^3): TRU waste that has been disposed in the WIPP repository, in above-ground storage at the WIPP, or in temporary storage at a designated storage location.
- WIPP-bound (~42,600 m^3): TRU waste that is stored and projected to be generated up through CY 2033.
- Potential (~9,840 m^3): TRU waste that requires resolution of a regulatory or other constraint before it may be considered for disposal at WIPP, including waste that is stored and projected to be generated up through CY 2033.
- Projected Beyond CY 2033 (~78,700 m^3): WIPP-bound and potential TRU waste that is projected to be generated after CY 2033 up through CY 2083.

The combination of these four categories of TRU waste volume estimates total approximately 201,000 m^3. Under the WIPP LWA, the WIPP is authorized to dispose of 6.2 million cubic feet (175,564 m^3) of TRU waste. An analysis was performed using historical inventory data, and it showed that uncertainties associated with the reported inventory increase as the projection date extends beyond CY 2020 (Young 2021). Based on historical trends, the total inventory, including TRU waste projected to be generated up through CY 2083, is likely to be overestimated by as much as 26.8 percent, which would result in actual total volume well below the LWA capacity limit for the WIPP.

5.0 SUMMARY

This report is an update to the inventory used in the ATWIR-2020 and focuses on data changes resulting from waste characterization, improved estimations, and continued waste generation at the TRU waste generator sites. This report provides the most current TRU waste inventory information available to the DOE/CBFO, the DOE complex, WIPP stakeholders, and regulators, as of December 31, 2020.

The TRU waste generator sites continue to report better inventory estimates using known characterization data for their stored and projected waste. The most significant changes that occurred in volume, radionuclides, waste and packaging materials, and chemical constituents in this update were primarily caused by: updates made by RL to projected TRU waste inventory; reassignment of TRU waste that was previously reported by SRS as potential into WIPP-bound waste streams; and the acquisition of new characterization data, processing information, and repackaging experience by multiple sites, resulting in more accurate TRU waste inventory estimates.

6.0 GLOSSARY

Acceptable Knowledge – 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.

Anticipated Inventory – The sum of the total stored and total projected inventory reported by the TRU waste generator sites.

Assay Year – The most recent year in which the containers in a waste stream were assayed. For waste streams containing only projected waste, the initial projected generation year is used. This "base" year for the waste stream is used for decay and buildup calculations to normalize the radionuclide inventory across the complex to a common year for reporting purposes.

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

Contact-Handled TRU Waste – Packaged TRU waste with a surface dose equivalent rate not greater than 200 millirem per hour.

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 manufacture of nuclear weapons, weapons-related research programs, the operation of naval reactors, and the decontamination of nuclear weapons production facilities.

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

Emplaced Inventory – Waste that is in above-ground storage or disposed in the WIPP repository. Emplaced inventory is tracked by the WDS, the official database of record for waste emplaced in the WIPP repository.

Final Form Waste – Form of waste in packaging approved for shipment to and emplacement in the WIPP repository.

Hazardous Waste Facility Permit – Authorizes the management, storage, and disposal of CH- and RH-TRU mixed waste at the WIPP, and establishes the general and specific standards for these activities.

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

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

Packaging Material – A non-radiological material (such as steel, plastic, cellulose, rubber, and lead) used as components of the WIPP-approved containers which hold TRU waste.

Performance Assessment – 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.

Potential Inventory – In accordance with the criteria described in section 4.1, a designation within this report for a waste stream with meaningful uncertainties regarding its eligibility, due to technical or legal considerations, for emplacement in the WIPP repository, as of the data cutoff date for this report. This designation is not intended to identify whether the waste stream will ultimately be disposed of in the WIPP repository. Regardless of its designation in this report, TRU waste must meet all WIPP requirements before it can be disposed of in the WIPP repository. Potential inventory will not be included in PA.

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

Quality Assurance Program Document – The QAPD establishes QA program requirements for achieving quality for all work sponsored by the CBFO using a graded approach. The provisions of the QAPD apply to all programs and projects managed by the CBFO which require a QA program, including those implementing activities related to compliance certification, waste characterization and certification, repository PA, waste isolation, waste transportation, nuclear safety, environmental protection, and management and operation of the WIPP.

Radioactive – Refers to an unstable atomic nucleus that decays with the spontaneous emission of ionizing radiation (see also “radionuclide”).

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

Remote-Handled TRU Waste – Packaged TRU waste with a surface dose equivalent rate equal to or exceeding 200 millirem per hour.

Stored Inventory – The part of the TRU waste inventory that currently exists (already generated, but not yet shipped to the WIPP) as of the data cutoff date.

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

Transuranic Waste – Waste containing more than 100 nanocuries of alpha-emitting TRU isotopes per gram of waste, with half-lives greater than 20 years, except for: (A) high-level radioactive waste; (B) waste that the Secretary of Energy has determined, with the concurrence of the Administrator of the U.S. Environmental Protection Agency, does not need the degree of isolation required by the disposal regulations; or (C) waste that the Nuclear Regulatory Commission has approved for disposal on a case-by-case basis in accordance with Part 61 of Title 10, Code of Federal Regulations.

TRU Waste Generator Sites – The DOE facilities throughout the United States that generate or store TRU waste. These facilities may be referred to as "sites."

Waste Acceptance Criteria – Constraints (limits) on the physical, chemical, and radiological properties of TRU waste and its packaging as determined by the WIPP's authorization basis requirements. TRU waste will not be approved for shipment to and disposal at the WIPP until it has been certified as meeting these criteria. The WAC ensures that TRU waste is managed and disposed of in a manner that protects human health and safety and the environment.

Waste Control Specialists, LLC – WCS, located in Andrews County, Texas, is a licensed commercial radioactive waste disposal facility.

Waste Data System – The DOE information system designed to verify compliance with requirements, and to track and archive TRU waste containers disposed of in the WIPP repository.

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

Waste Material – A non-radiological material that is present in TRU waste (e.g., cellulose, plastic, and rubber).

Waste Profile Report – A report presented in tabular format that is intended to provide a summary of the important final form information about a particular WIPP-bound or potential TRU waste stream.

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

WIPP-bound Inventory – A designation within this report for a waste stream that appears to meet the requirements for emplacement into the WIPP repository as of the data cutoff date. WIPP-bound inventory will be included in PA.

7.0 REFERENCES

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

Lachman, K. 2019. Amendment to Policy 19-0001, "Tracking and Reporting the Defense-Related Transuranic Waste Volume Against the Waste Isolation Pilot Plant Land Withdrawal Act Total Capacity Limit for Defense-Related Transuranic Waste," Letter to Office of National TRU Program and Office of Environmental Protection Division, June 28, 2019, CBFO:OOM:GB:GS:19-0040:UFC 1100.00. Carlsbad Field Office, Carlsbad, NM.

Los Alamos National Laboratory – Carlsbad Operations (LANL-CO) 2017a. LANL-CO Software Quality Assurance Plan, LCO-QPD-02. Los Alamos National Laboratory – Carlsbad Operations, Carlsbad, NM.

Los Alamos National Laboratory – Carlsbad Operations (LANL-CO) 2017b. Software Quality Assurance, LCO-QP19-1. Los Alamos National Laboratory – Carlsbad Operations, Carlsbad, NM.

Los Alamos National Laboratory – Carlsbad Operations (LANL-CO) 2017c. Analyses, LCO-QP9-1. Los Alamos National Laboratory – Carlsbad Operations, Carlsbad, NM.

Los Alamos National Laboratory – Carlsbad Operations (LANL-CO) 2019. Data Collection and Entry for the Comprehensive Inventory, INV-SP-01. Los Alamos National Laboratory – Carlsbad Operations, Carlsbad, NM.

Los Alamos National Laboratory – Carlsbad Operations (LANL-CO) 2020. Comprehensive Inventory Database, Data Version D.19.00.33. Los Alamos National Laboratory – Carlsbad Operations, Carlsbad, NM.

Los Alamos National Laboratory – Carlsbad Operations (LANL-CO) 2021. Comprehensive Inventory Database, Data Version D.20.00.33. Los Alamos National Laboratory – Carlsbad Operations, Carlsbad, NM.

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

Patterson, R. 2018. TRU Waste Inventory Screening Criteria Guidance – Minor Update To Screening Memorandum Dated March 29, 2010, letter to Dr. Ned Elkins, dated December 6, 2018, CBFO:OEP:MRB:AC:18-0373:UFC 5822.00. Carlsbad Field Office, Carlsbad, NM.

Patterson, R. 2020. 2021 Annual Update to the Transuranic Waste Inventory for the Waste Isolation Pilot Plant, Memorandum to Distribution, December 15, 2020, CBFO:OEP:MRB:MC:20-1509:UFC 5486.00. Carlsbad Field Office, Carlsbad, NM.

Shrader, T. 2019. Tracking and Reporting the Defense-Related Transuranic Waste Volume Against the Waste Isolation Pilot Plant Land Withdrawal Act Total Capacity Limit for Defense-Related Transuranic Waste, Letter to Office of National TRU Program and Office of Environmental Protection Division, January 16, 2019, CBFO:OOM:GB:LM:19-0001:UFC 1100.00. Carlsbad Field Office, Carlsbad, NM.

Toothman, M. 2019. Memo to the Quality Assurance File QAM-19-06 Addition of SWB w/ 3 - 85-gal Drums w/ Liner, SWB w/ 3 - 85-gal Drums w/o Liner, SWB w/ 2 -100-gal Drums w/ Liner, and SWB w/ 2 -100-gal Drums w/o Liner Container Types to the Comprehensive Inventory Database Reference Table. Los Alamos National Laboratory - Carlsbad Operations, Carlsbad, NM.

U.S. Congress 1979. Public Law 96-164, 1980, National Security and Military Applications of Nuclear Energy Authorization Act of 1980, 93 Stat. 1259 1265.

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

U.S. Department of Energy (DOE) 2017. Quality Assurance Program Document, DOE/CBFO-94-1012. Carlsbad Field Office, Carlsbad, NM.

U.S. Department of Energy (DOE) 2020. Annual Transuranic Waste Inventory Report – 2020 (Data Cutoff Date 12/31/2019), DOE/TRU-20-3425, November 2020. Carlsbad Field Office, Carlsbad, NM.

U.S. Department of Energy (DOE) 2021. Supplement Analysis for the Waste Isolation Pilot Plant Site-Wide Operations, DOE/EIS-0026-SA-12, April 2021. Carlsbad Field Office, Carlsbad, NM.

Van Soest, G. 2012. Memo to the Quality Assurance File QAM-12-17 Addition of NS15, NS30, and CCO Container Types to the CID Reference Table. Los Alamos National Laboratory-Carlsbad Operations, Carlsbad, NM.

Van Soest, G. 2021a. WDS Data Transformation for Insertion in the 2020 Inventory CID Import Template, INV-SAR-59. Los Alamos National Laboratory – Carlsbad Operations, Carlsbad, NM.

Van Soest, G. 2021b. Adjustment of 2020 Projected Inventory to 2033 Closure Year, INV-SAR-60. Los Alamos National Laboratory – Carlsbad Operations, Carlsbad, NM.

Young, J. 2021. Percent Error of Total Waste Volume Reported in the Annual Transuranic Waste Inventory Report – 2021, INV-SAR-65. Los Alamos National Laboratory – Carlsbad Operations, Carlsbad, NM.

APPENDIX A WIPP-BOUND TRU WASTE PROFILE REPORTS

The following WPRs contain final form information through CY 2033 on waste streams that are placed in the WIPP-bound category as of the inventory date, December 31, 2020.

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

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

Waste Stream ID: **AE-T001**

Appendix A

Waste Profile Report

Site	Argonne National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	ANL-E Contact-Handled Mixed Heterogeneous Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	33.2	24.6	57.8
Final Form Total	33.2	24.6	57.8

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.39E+03
Aluminum-based Metal/Alloys	4.20E+01
Other Metal/Alloys	1.91E+02
Other Inorganic Materials	2.01E+02
Cellulose	1.73E+02
Rubber	3.41E+02
Plastic	1.25E+03
Cement	0.00E+00
Solidified Inorganic Material	8.40E+01
Solidified Organic Material	4.67E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.12E+03
Packaging Material, Rubber	3.24E+01
Packaging Material, Steel	7.48E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.64E+00
Am-243	4.51E-01
Cm-244	6.31E+01
Cs-137	5.21E+00
Np-237	1.85E-02
Pu-238	5.66E-01
Pu-239	6.55E+00
Pu-240	2.88E+00
Pu-241	1.11E+01
Pu-242	1.39E-02
Pu-244	1.20E-05
Sr-90	4.47E+00
Th-229	3.44E-05
Th-230	2.32E-04
Th-232	1.73E-04
U-233	9.33E-03
U-234	1.52E-01
U-235	1.17E-04
U-236	1.56E-06
U-238	4.50E-03

Haz. Waste No(s).

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

TRUCON Code(s)

116/216, 125/225, 127/227, 133/233

Waste Stream Description

The debris waste consists primarily of organic and inorganic laboratory debris. Organic debris materials includes paper, cardboard, cloth, plastic, and rubber. Inorganic debris materials include aluminum items, glass, tools, lead (e.g., scrap, shielding), metal cans, scrap metal, and laboratory equipment.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **AE-T003**

Appendix A

Waste Profile Report

Site	Argonne National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	ANL-E Contact-Handled Solidified Organic and Inorganic Homogenous Solids					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	16.2	1.1	17.2
Final Form Total	16.2	1.1	17.2

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	1.66E+01
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	1.66E+01
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	1.46E+03
Solidified Organic Material	1.64E+02
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	6.32E+02
Packaging Material, Rubber	9.68E+00
Packaging Material, Steel	2.23E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.20E+00
Am-243	3.75E-02
Cm-244	7.86E-03
Cs-137	2.67E-01
Np-237	2.15E-03
Pu-238	3.32E+00
Pu-239	1.54E+00
Pu-240	1.41E+00
Pu-241	1.28E+01
Pu-242	1.77E-02
Pu-244	3.09E-07
Sr-90	1.32E-01
Th-229	5.32E-08
Th-230	2.57E-04
Th-232	6.58E-05
U-233	1.97E-04
U-234	9.84E-03
U-235	6.31E-06
U-236	2.89E-06
U-238	2.58E-04

Haz. Waste No(s).

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

TRUCON Code(s)

111/211, 113/213, 129/229, 132/232

Waste Stream Description

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

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **AE-T009**

Appendix A

Waste Profile Report

Site	Argonne National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	RH TRU					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	14.5	18.9	33.4
RH Lead Shielded Cntr w/ 1 - 30 gal w/o Liner	18.5	13.6	32.1
Final Form Total	33.0	32.5	65.5

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	5.07E+03
Aluminum-based Metal/Alloys	2.44E+03
Other Metal/Alloys	2.26E+03
Other Inorganic Materials	3.11E+03
Cellulose	4.00E+03
Rubber	1.11E+03
Plastic	1.98E+03
Cement	0.00E+00
Solidified Inorganic Material	2.02E+02
Solidified Organic Material	2.02E+01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.41E+02
Packaging Material, Rubber	5.32E+01
Packaging Material, Steel	1.50E+05
Packaging Material, Lead	1.26E+05

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.01E+02
Am-243	2.15E+00
Cm-244	6.37E+01
Cs-137	1.83E+03
Np-237	1.26E-03
Pu-238	1.41E+02
Pu-239	1.17E+02
Pu-240	6.97E+01
Pu-241	8.82E+02
Pu-242	5.42E-02
Pu-244	2.64E-17
Sr-90	1.30E+03
Th-229	5.50E-03
Th-230	1.94E-05
Th-232	2.19E-10
U-233	5.87E-05
U-234	3.18E-02
U-235	9.05E-03
U-236	4.13E-06
U-238	5.96E-02

Haz. Waste No(s).

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

TRUCON Code(s)

125/225, 321, 322, 325

Waste Stream Description

Waste stream consists of RH TRU debris generated by destructive and nondestructive examination of radiological materials such as fuel pins, reactor structural materials, and targets in waste cans. This waste stream consists predominantly of organic and inorganic debris generated during the destructive and nondestructive examinations. Wastes are visually inspected at packaging to ensure that the waste is compliant per the ANL Acceptable Knowledge document.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

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

Appendix A

Waste Profile Report

Site	Material and Fuels Complex	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	MFC CH-MTRU Due to RCRA Metals					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.0	2.7	2.7
Final Form Total	0.0	2.7	2.7

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	1.57E+02
Other Inorganic Materials	1.88E+01
Cellulose	5.80E+01
Rubber	0.00E+00
Plastic	4.70E+01
Cement	0.00E+00
Solidified Inorganic Material	1.03E+02
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	1.53E+00
Packaging Material, Steel	3.54E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.81E+01
Am-243	2.79E-11
Cs-137	2.38E-04
Np-237	1.20E-03
Pu-239	8.90E-01
Sr-90	2.55E-04
Th-229	5.77E-16
Th-230	2.55E-18
U-233	1.83E-10
U-234	7.69E-12
U-235	1.01E-05
U-238	7.15E-05

Haz. Waste No(s).

D006, D007, D008, F001, F002, F005

TRUCON Code(s)

125/225

Waste Stream Description

This waste stream is debris generated in the Casting Lab, Analytical Laboratory and Fuel Manufacturing Facility gloveboxes. It consists of various combinations of miscellaneous discarded equipment and process material items.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

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

Appendix A

Waste Profile Report

Site	Material and Fuels Complex	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	RH TRU Hot Cell Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	5.0	16.4	21.4
Final Form Total	5.0	16.4	21.4

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.24E+03
Aluminum-based Metal/Alloys	1.30E+03
Other Metal/Alloys	1.04E+03
Other Inorganic Materials	4.21E+01
Cellulose	3.62E+02
Rubber	0.00E+00
Plastic	5.14E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.85E+02
Packaging Material, Rubber	1.20E+01
Packaging Material, Steel	1.98E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.71E+01
Am-243	9.71E-03
Cm-244	2.46E+00
Cs-137	8.44E+02
Np-237	5.65E-02
Pu-238	1.61E+01
Pu-239	1.57E+01
Pu-240	1.02E+00
Pu-241	1.38E+01
Pu-242	5.95E-03
Sr-90	1.32E+03
Th-229	2.16E-11
Th-230	3.88E-07
Th-232	4.44E-14
U-233	3.69E-07
U-234	4.22E-02
U-235	6.38E-04
U-236	9.00E-04
U-238	2.97E-04

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

Waste Stream Description

This waste stream is remote-handled (RH) transuranic debris waste generated in the hot-cells of the Fuel Conditioning Facility (FCF), Hot Fuel Examination Facility (HFEF), and Analytical Lab (AL).

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

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

Appendix A

Waste Profile Report

Site	Material and Fuels Complex	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Analytical Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	MFC CH-TRU Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.2	16.4	16.6
Final Form Total	0.2	16.4	16.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.48E+02
Aluminum-based Metal/Alloys	3.01E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	1.60E+03
Cement	0.00E+00
Solidified Inorganic Material	1.26E+03
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	9.32E+00
Packaging Material, Steel	2.15E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-243	1.51E-10
Cs-137	2.84E-01
Np-237	5.06E-01
Pu-239	1.05E+00
Sr-90	3.03E-01
Th-229	2.43E-13
U-233	7.73E-08
U-235	1.03E-10

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Miscellaneous process material debris waste.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

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

Appendix A

Waste Profile Report

Site	Material and Fuels Complex	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	RH MTRU Hot Cell Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	1.9	5.0	6.9
Final Form Total	1.9	5.0	6.9

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.73E+02
Aluminum-based Metal/Alloys	3.69E+01
Other Metal/Alloys	1.03E+03
Other Inorganic Materials	2.13E+02
Cellulose	6.40E+02
Rubber	0.00E+00
Plastic	6.35E+02
Cement	0.00E+00
Solidified Inorganic Material	3.31E+01
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	5.97E+01
Packaging Material, Rubber	3.89E+00
Packaging Material, Steel	6.39E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.96E+01
Cs-137	2.01E+03
Np-237	3.58E-03
Pu-238	1.10E+01
Pu-239	2.13E+01
Pu-240	4.97E+00
Pu-241	8.06E+01
Pu-242	1.55E-03
Sr-90	1.41E+03
Th-229	3.22E-09
Th-230	3.36E-06
Th-232	2.57E-13
U-233	1.22E-05
U-234	1.21E-01
U-235	2.18E-03
U-236	1.73E-03
U-238	2.16E-03

Haz. Waste No(s).

D006, D007, D008, D009

TRUCON Code(s)

325

Waste Stream Description

This waste stream consists of miscellaneous FCF, HFEF and AL generated debris.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **BT-T001**

Appendix A

Waste Profile Report

Site	Bettis Atomic Power Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Irradiated TRU material waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	7.6	0.0	7.6
Final Form Total	7.6	0.0	7.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	6.71E+02
Other Inorganic Materials	0.00E+00
Cellulose	1.12E+02
Rubber	0.00E+00
Plastic	3.36E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	6.52E+01
Packaging Material, Rubber	4.25E+00
Packaging Material, Steel	6.97E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.98E-02
Am-243	1.13E-04
Cs-137	5.11E+01
Np-237	1.61E-04
Pu-238	1.23E+00
Pu-239	1.03E-03
Pu-241	1.53E-01
Pu-242	1.85E-05
Sr-90	5.05E+01
Th-229	4.31E-05
Th-230	5.40E-09
Th-232	4.51E-15
U-233	9.86E-03
U-234	2.97E-04
U-235	3.79E-06
U-236	4.57E-05
U-238	1.82E-08

No Hazardous Waste Numbers Provided

TRUCON Code(s)

322

Waste Stream Description

Equipment & materials in the shielded cells are from past operations and the cells are in the process of being emptied. Some cells need infrastructure improvements to the manipulators and visibility before the waste can be evaluated, segregated, packaged, and then generated.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-AE-102-SRP**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	SRP Combined Sludge					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	104.2	0.0	104.2
Final Form Total	104.2	0.0	104.2

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.40E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	1.35E+00
Other Inorganic Materials	4.52E+02
Cellulose	0.00E+00
Rubber	1.96E+00
Plastic	3.40E+02
Cement	0.00E+00
Solidified Inorganic Material	2.33E+04
Solidified Organic Material	4.26E+03
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.82E+03
Packaging Material, Rubber	5.85E+01
Packaging Material, Steel	1.35E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.60E+01
Am-243	3.63E-04
Cs-137	1.50E-01
Np-237	1.62E-03
Pu-238	5.87E+00
Pu-239	4.62E+01
Pu-240	1.41E+01
Pu-241	1.20E+02
Pu-242	3.01E-03
Sr-90	1.65E-01
Th-229	2.98E-07
Th-230	4.28E-09
Th-232	1.64E-04
U-233	3.39E-02
U-234	4.66E-03
U-235	3.47E-04
U-236	4.18E-08
U-238	1.32E-03

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of sludge generated from repackaging and treatment of liquid in inorganic and organic wastes at the SRP

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-AE-105-SRP**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	SRP Combined Sludge					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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	Total Mass (kg)
Iron-based Metal/Alloys	2.08E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	7.34E+01
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	1.37E+01
Cement	0.00E+00
Solidified Inorganic Material	7.49E+01
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	6.17E+01
Packaging Material, Rubber	9.44E-01
Packaging Material, Steel	2.18E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.25E+00
Cs-137	7.95E-07
Np-237	1.30E-05
Pu-238	1.66E-01
Pu-239	1.61E+00
Pu-240	7.79E-01
Pu-241	6.93E+00
Pu-242	2.25E-04
Sr-90	8.72E-07
Th-229	9.58E-15
Th-230	6.54E-11
Th-232	2.27E-18
U-233	1.10E-10
U-234	4.03E-06
U-235	9.98E-07
U-236	4.61E-08
U-238	6.99E-14

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of sludge generated from repackaging and treatment of liquid in inorganic and organic wastes at the SRP

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

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

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	MFC Retrievable ANL-E RH TRU Containers - Stage 2					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	104.6	0.0	104.6
Final Form Total	104.6	0.0	104.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	8.12E+03
Aluminum-based Metal/Alloys	6.73E+02
Other Metal/Alloys	5.67E+02
Other Inorganic Materials	2.84E+02
Cellulose	3.72E+02
Rubber	1.72E+02
Plastic	8.66E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	1.26E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	9.01E+02
Packaging Material, Rubber	5.88E+01
Packaging Material, Steel	9.64E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.79E+02
Cm-244	8.88E+00
Cs-137	2.00E+03
Np-237	1.55E-04
Pu-238	9.36E+01
Pu-239	4.24E+02
Pu-240	2.28E+02
Pu-241	1.95E+03
Pu-242	1.38E-01
Sr-90	1.66E+03
Th-229	1.07E-07
Th-230	1.39E-05
Th-232	1.67E-16
U-233	1.21E-03
U-234	1.51E+00
U-235	5.24E-02
U-236	6.76E-06
U-238	2.62E-02

Haz. Waste No(s).

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

TRUCON Code(s)

321, 322, 325

Waste Stream Description

The R&D laboratory waste contains combustible and non-combustible scrap, recoverable and non-recoverable fissile material, bonded clad material, irradiated structural material, grinding papers, fuel fines, fuel pin pieces, and fuel impregnated with epoxy, from the destructive examination of irradiated fuel pins in the Alpha-Gamma Hot Cell at ANL-E.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

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

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	RH-TRU Debris Waste From Materials and Fuels Complex Hot Fuel Examination Facility at the INL.					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	1.3	0.0	1.3
Final Form Total	1.3	0.0	1.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	2.29E+02
Other Inorganic Materials	0.00E+00
Cellulose	1.50E+01
Rubber	0.00E+00
Plastic	6.10E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.09E+01
Packaging Material, Rubber	7.08E-01
Packaging Material, Steel	1.16E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	8.09E+00
Cs-137	2.58E+02
Np-237	5.14E-06
Pu-238	5.98E+00
Pu-239	4.33E+00
Pu-240	2.46E+00
Pu-241	1.02E+02
Sr-90	4.23E+01
Th-229	1.30E-15
Th-230	5.66E-07
Th-232	7.18E-18
U-233	2.22E-11
U-234	3.08E-02
U-235	6.16E-04
U-236	1.45E-07
U-238	3.49E-04

Haz. Waste No(s).

D005, D006, D007, D008

TRUCON Code(s)

322

Waste Stream Description

MFC analytical laboratory and experiments in HFEF

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN004**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Special Setups Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	23.5	0.0	23.5
TDOP w/ 10 - 55-gal Drums w/ Liners	10.5	0.0	10.5
Final Form Total	34.0	0.0	34.0

Waste Material Parameters

Material Parameter	**Total Mass (kg)**
Iron-based Metal/Alloys	8.14E+01
Aluminum-based Metal/Alloys	1.08E+00
Other Metal/Alloys	1.14E-01
Other Inorganic Materials	0.00E+00
Cellulose	8.23E+00
Rubber	0.00E+00
Plastic	1.30E+02
Cement	7.41E+02
Solidified Inorganic Material	3.58E+04
Solidified Organic Material	0.00E+00
Soil	9.08E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.25E+03
Packaging Material, Rubber	3.34E+01
Packaging Material, Steel	1.64E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	**Total Activity (Ci)**
Am-241	6.42E+01
Am-243	4.87E-12
Cs-137	8.28E-07
Np-237	2.80E-03
Pu-238	4.80E+00
Pu-239	1.16E+02
Pu-240	2.60E+01
Pu-241	1.40E+02
Pu-242	2.68E-03
Sr-90	9.11E-07
Th-229	1.35E-15
Th-230	5.65E-10
Th-232	1.90E-19
U-233	4.28E-10
U-234	6.15E-04
U-235	1.82E-04
U-236	7.70E-08
U-238	4.16E-14

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

IN-BN004 waste was generated in support of plutonium operations at Rocky Flats from a waste treatment process that solidified process waste.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN-215**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2020
Stream Name	SRP Organic PCB Contaminated Sludge					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	22.7	0.0	22.7
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.2	0.0	0.2
TDOP w/ 10 - 55-gal Drums w/ Liners	14.7	0.0	14.7
Final Form Total	37.6	0.0	37.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.78E+01
Aluminum-based Metal/Alloys	7.08E-01
Other Metal/Alloys	1.69E+02
Other Inorganic Materials	1.48E+02
Cellulose	3.82E+01
Rubber	4.97E+01
Plastic	5.54E+02
Cement	0.00E+00
Solidified Inorganic Material	7.76E+01
Solidified Organic Material	1.23E+04
Soil	1.08E+02
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.38E+03
Packaging Material, Rubber	2.70E+01
Packaging Material, Steel	1.03E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.03E+01
Cs-137	1.84E-05
Np-237	3.41E-04
Pu-238	1.80E-01
Pu-239	4.29E+00
Pu-240	9.49E-01
Pu-241	6.37E+00
Pu-242	1.63E-04
Sr-90	2.02E-05
Th-229	1.64E-16
Th-230	9.93E-09
Th-232	6.93E-21
U-233	5.20E-11
U-234	1.08E-02
U-235	5.14E-04
U-236	2.81E-09
U-238	2.30E-02

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D026, D027, D028, D029, D030, D032, D033, D034, D036, D037, D043, F001, F002, F004, F005, F006, F007, F009

No TRUCON Codes Provided

Waste Stream Description

Solidified organics identified as Rocky Flats organic setups (RF-003 and RF-743) that was repackaged in the Sludge Reprocessing Project (SRP).

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN-215-SRP**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2020
Stream Name	SRP Combined Sludge					**Activities Decayed to CY**	2020

Waste Volume Detail (m 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	Total Mass (kg)
Iron-based Metal/Alloys	3.63E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	7.26E+00
Rubber	0.00E+00
Plastic	1.04E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	1.14E+03
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	9.25E+01
Packaging Material, Rubber	1.42E+00
Packaging Material, Steel	3.26E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.10E-02
Np-237	5.73E-07
Pu-238	1.83E-03
Pu-239	5.99E-02
Pu-240	1.27E-02
Pu-241	7.77E-02
Pu-242	2.08E-06
Th-229	2.75E-19
Th-230	2.38E-16
Th-232	9.31E-23
U-233	8.75E-14
U-234	5.18E-10
U-235	5.90E-12
U-236	3.77E-11
U-238	3.22E-17

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D026, D027, D028, D029, D030, D032, D033, D034, D036, D037, D043, F001, F002, F004, F005, F006, F007, F009

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of sludge generated from repackaging and treatment of liquid in inorganic and organic wastes at the SRP

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN-216**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	SRP PCB Contaminated Sludge					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.6	0.0	0.6
Final Form Total	1.3	0.0	1.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.54E-01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	5.20E+00
Cellulose	7.69E+00
Rubber	0.00E+00
Plastic	9.42E+00
Cement	0.00E+00
Solidified Inorganic Material	4.80E+02
Solidified Organic Material	9.95E+01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	4.63E+01
Packaging Material, Rubber	1.06E+00
Packaging Material, Steel	2.73E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	9.37E+00
Np-237	1.49E-04
Pu-238	6.04E-02
Pu-239	1.20E+00
Pu-240	3.16E-01
Pu-241	4.11E+00
Pu-242	1.13E-04
Th-229	7.18E-17
Th-230	1.92E-11
Th-232	2.31E-21
U-233	2.28E-11
U-234	2.09E-05
U-235	2.02E-06
U-236	9.34E-10
U-238	4.29E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D026, D027, D028, D029, D030, D032, D033, D034, D036, D037, D043, F001, F002, F004, F005, F006, F007, F009

No TRUCON Codes Provided

Waste Stream Description

Inorganic homogeneous solids which also may include greater than or equal to 5% RF organic setups sludge that was repackaged at SRP.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN-217**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	SRP Inorganic Homogenous Solids					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	109.0	0.0	109.0
SWB w/ 3 - 85-gal Drums w/ Liners	19.2	0.0	19.2
TDOP w/ 10 - 55-gal Drums w/ Liners	69.3	0.0	69.3
Final Form Total	197.5	0.0	197.5

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.59E+03
Aluminum-based Metal/Alloys	1.08E+00
Other Metal/Alloys	2.56E+02
Other Inorganic Materials	1.25E+02
Cellulose	1.13E+02
Rubber	1.22E+02
Plastic	2.75E+03
Cement	0.00E+00
Solidified Inorganic Material	8.46E+04
Solidified Organic Material	0.00E+00
Soil	2.16E+01
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	7.01E+03
Packaging Material, Rubber	1.42E+02
Packaging Material, Steel	5.64E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.24E+03
Am-243	3.99E-12
Cs-137	4.18E-04
Np-237	3.68E-02
Pu-238	1.73E+01
Pu-239	4.68E+02
Pu-240	1.07E+02
Pu-241	5.90E+02
Pu-242	1.53E-02
Sr-90	4.59E-04
Th-229	1.77E-14
Th-230	1.02E-08
Th-232	8.71E-07
U-233	5.62E-09
U-234	1.11E-02
U-235	5.03E-04
U-236	3.17E-07
U-238	2.37E-02

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D026, D027, D028, D029, D030, D032, D033, D034, D036, D037, D043, F001, F002, F004, F005, F006, F007, F009

No TRUCON Codes Provided

Waste Stream Description

Inorganic homogeneous solids which may include greater than or equal to 5% RF organic setups sludge that was repackaged at SRP.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN222**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Pollution Control or Waste Treatment Process	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Solidified Plutonium Recovery Incinerator Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	34.4	0.0	34.4
TDOP w/ 10 - 55-gal Drums w/ Liners	2.1	0.0	2.1
Final Form Total	36.5	0.0	36.5

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	6.96E+02
Aluminum-based Metal/Alloys	3.68E+00
Other Metal/Alloys	4.43E+01
Other Inorganic Materials	0.00E+00
Cellulose	5.06E+00
Rubber	3.17E+00
Plastic	9.12E+02
Cement	1.93E+02
Solidified Inorganic Material	1.40E+04
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.34E+03
Packaging Material, Rubber	3.62E+01
Packaging Material, Steel	1.74E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	5.38E+01
Cs-137	2.27E-07
Np-237	6.76E-03
Pu-238	9.89E+00
Pu-239	2.63E+02
Pu-240	5.90E+01
Pu-241	4.55E+02
Pu-242	4.54E-03
Sr-90	2.48E-07
Th-229	1.29E-12
Th-230	3.10E-10
Th-232	4.31E-17
U-233	2.94E-08
U-234	4.77E-05
U-235	4.19E-06
U-236	1.75E-06
U-238	7.05E-13

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

The waste is comprised of plutonium recovery incinerator waste. This waste stream includes solidified ash from the incinerator burn chamber and solidified soot and scrubber sludge from the incinerator off-gas system of the plutonium recovery incinerator.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN-500**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Newly Generated Debris (Not BN-508)					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.2	0.0	0.2
SLB2 Dir Ld	51.7	0.0	51.7
Final Form Total	51.9	0.0	51.9

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	4.30E+03
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	4.15E+00
Other Inorganic Materials	2.69E+01
Cellulose	2.08E+01
Rubber	0.00E+00
Plastic	2.28E+01
Cement	0.00E+00
Solidified Inorganic Material	2.20E+01
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	7.71E+00
Packaging Material, Rubber	5.95E+00
Packaging Material, Steel	8.60E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.00E+00
Cs-137	1.68E-05
Np-237	5.07E-05
Pu-238	3.73E-01
Pu-239	1.48E+01
Pu-240	3.38E+00
Pu-241	2.52E+01
Pu-242	3.38E-04
Sr-90	1.85E-05
Th-229	2.43E-17
Th-230	5.11E-11
Th-232	2.47E-20
U-233	7.74E-12
U-234	5.56E-05
U-235	1.44E-05
U-236	1.00E-08
U-238	5.25E-15

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D027, D028, D029, D030, D032, D033, D034, D037, D043, F001, F002, F004, F005, F006, F007, F009, P030, P098, P099, P106, U003, U108, U134, U151

No TRUCON Codes Provided

Waste Stream Description

Heterogeneous non-PCB debris waste generated by the AMWTP or RWMC.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN-501-SRP**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2020
Stream Name	SRP Combined Soils					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.3	0.0	1.3
Final Form Total	1.3	0.0	1.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.60E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	3.60E+01
Rubber	0.00E+00
Plastic	3.24E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	1.07E+03
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	4.63E+01
Packaging Material, Rubber	7.08E-01
Packaging Material, Steel	1.63E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	7.41E-01
Cs-137	4.88E-04
Np-237	3.07E-06
Pu-238	6.03E-02
Pu-239	1.50E+00
Pu-240	3.33E-01
Pu-241	1.31E+00
Pu-242	3.68E-05
Sr-90	5.35E-04
Th-229	5.57E-16
Th-230	7.87E-13
Th-232	2.43E-19
U-233	1.28E-11
U-234	1.71E-07
U-235	1.48E-09
U-236	9.85E-09
U-238	5.71E-15

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

This waste stream consists of soils generated from repackaging and treatment of wastes at the SRP

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN510**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Supercompacted Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
100-gal Drum Dir Ld w/o Liner	0.8	0.0	0.8
Final Form Total	0.8	0.0	0.8

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.73E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	2.86E+01
Rubber	2.82E+00
Plastic	2.52E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	2.36E-01
Packaging Material, Steel	8.62E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.33E-01
Np-237	2.34E-06
Pu-238	1.56E-02
Pu-239	4.84E-01
Pu-240	1.13E-01
Pu-241	3.76E-01
Pu-242	9.56E-06
Th-229	4.66E-14
Th-230	2.60E-11
Th-232	1.00E-17
U-233	1.00E-10
U-234	5.06E-07
U-235	5.24E-09
U-236	3.69E-08
U-238	1.63E-14

Haz. Waste No(s).

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

TRUCON Code(s)

121/221

Waste Stream Description

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

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

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

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Supercompacted Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
100-gal Drum Dir Ld w/o Liner	15.2	0.0	15.2
Final Form Total	15.2	0.0	15.2

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	9.39E+03
Aluminum-based Metal/Alloys	1.68E+02
Other Metal/Alloys	7.91E+01
Other Inorganic Materials	5.92E+02
Cellulose	1.57E+03
Rubber	1.10E+02
Plastic	1.20E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	5.32E+01
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	4.72E+00
Packaging Material, Steel	1.72E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.65E+01
Am-243	3.63E-03
Cs-137	9.77E-04
Np-237	3.30E-03
Pu-238	3.08E+00
Pu-239	2.40E+01
Pu-240	5.86E+00
Pu-241	2.60E+01
Pu-242	8.17E-04
Sr-90	1.06E-03
Th-229	3.01E-11
Th-230	1.90E-08
Th-232	2.10E-16
U-233	9.81E-08
U-234	3.26E-04
U-235	4.71E-05
U-236	1.21E-06
U-238	1.71E-03

Haz. Waste No(s).

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

TRUCON Code(s)

121/221

Waste Stream Description

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

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN510.2**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Supercompacted Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
100-gal Drum Dir Ld w/o Liner	11.8	0.0	11.8
Final Form Total	11.8	0.0	11.8

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	5.33E+03
Aluminum-based Metal/Alloys	6.93E+00
Other Metal/Alloys	1.95E+02
Other Inorganic Materials	4.80E+02
Cellulose	1.03E+03
Rubber	4.01E+01
Plastic	1.79E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	7.72E+00
Soil	8.88E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	3.66E+00
Packaging Material, Steel	1.34E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.78E+01
Am-243	5.60E-04
Cs-137	1.66E-02
Np-237	3.14E-03
Pu-238	4.37E+00
Pu-239	4.07E+01
Pu-240	1.57E+01
Pu-241	1.23E+02
Pu-242	2.31E-03
Sr-90	1.81E-02
Th-229	2.85E-11
Th-230	7.87E-08
Th-232	5.62E-16
U-233	9.29E-08
U-234	1.27E-03
U-235	2.17E-03
U-236	3.25E-06
U-238	4.04E-04

Haz. Waste No(s).

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

TRUCON Code(s)

121/221

Waste Stream Description

BN510.2 is a debris waste stream from supercompaction of 55-gallon containers.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN510.3**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Supercompacted Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
100-gal Drum Dir Ld w/o Liner	313.9	0.0	313.9
Final Form Total	313.9	0.0	313.9

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.74E+05
Aluminum-based Metal/Alloys	1.46E+03
Other Metal/Alloys	1.51E+03
Other Inorganic Materials	7.28E+03
Cellulose	3.21E+04
Rubber	2.73E+03
Plastic	2.95E+04
Cement	0.00E+00
Solidified Inorganic Material	4.79E+01
Solidified Organic Material	3.19E+00
Soil	3.44E+01
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	9.75E+01
Packaging Material, Steel	3.56E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.30E+02
Am-243	4.50E-02
Cm-244	1.79E+00
Cs-137	1.06E-01
Np-237	1.15E-02
Pu-238	2.97E+03
Pu-239	3.37E+02
Pu-240	8.53E+01
Pu-241	4.14E+02
Pu-242	1.37E-02
Sr-90	1.15E-01
Th-229	8.60E-06
Th-230	1.73E-06
Th-232	2.24E-15
U-233	1.63E-02
U-234	5.69E-02
U-235	3.69E-03
U-236	1.52E-05
U-238	4.35E-03

Haz. Waste No(s).

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

TRUCON Code(s)

121/221

Waste Stream Description

BN510.3 is a debris waste stream from supercompaction of 55-gallon containers.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN510.4**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Supercompacted Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
100-gal Drum Dir Ld w/o Liner	3177.9	0.0	3177.9
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.2	0.0	0.2
SWB w/ 2 - 100-gal Drums w/ Liners	11.4	0.0	11.4
Final Form Total	3189.6	0.0	3189.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.00E+06
Aluminum-based Metal/Alloys	2.39E+03
Other Metal/Alloys	2.04E+04
Other Inorganic Materials	7.12E+04
Cellulose	3.15E+05
Rubber	3.22E+04
Plastic	2.30E+05
Cement	0.00E+00
Solidified Inorganic Material	3.31E+04
Solidified Organic Material	2.72E+02
Soil	1.35E+03
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.39E+02
Packaging Material, Rubber	9.96E+02
Packaging Material, Steel	3.66E+05
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	5.21E+03
Am-243	5.33E-01
Cm-244	1.33E+00
Cs-137	3.92E+00
Np-237	1.79E-01
Pu-238	1.49E+04
Pu-239	9.58E+03
Pu-240	2.24E+03
Pu-241	1.12E+04
Pu-242	3.66E-01
Sr-90	4.31E+00
Th-229	4.65E-05
Th-230	2.38E-07
Th-232	1.02E-02
U-233	5.28E+00
U-234	2.60E-01
U-235	6.56E-02
U-236	6.64E-06
U-238	2.49E+00

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D027, D028, D029, D030, D032, D033, D034, D037, D043, F001, F002, F004, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108, U134, U151

TRUCON Code(s)

121/221

Waste Stream Description

BN510.4 waste stream is debris waste from multiple debris waste feedstock sources that has been supercompacted into pucks and packaged into 100-gallon drums.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN510.4-RH**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	RH Suspect from AMWTP Supercompacted Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	3.50E+01
Other Inorganic Materials	1.00E+00
Cellulose	0.00E+00
Rubber	1.00E+00
Plastic	1.70E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	5.43E+00
Packaging Material, Rubber	3.54E-01
Packaging Material, Steel	5.81E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.49E-03
Cs-137	3.29E+02
Np-237	8.05E-10
Pu-238	3.36E-02
Pu-239	1.97E+00
Pu-240	3.03E-04
Pu-241	7.74E-03
Pu-242	1.06E-06
Sr-90	3.01E+02
Th-229	5.23E-05
Th-230	3.03E-07
Th-232	2.37E-04
U-233	5.95E-01
U-234	3.29E-02
U-235	2.58E-06
U-236	8.98E-12
U-238	1.05E-07

Haz. Waste No(s).

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

TRUCON Code(s)

322

Waste Stream Description

Waste was generated from various facilities approved for supercompaction.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN-522**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2020
Stream Name	AMWTP Non-PCB Soil					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
SWB w/ 3 - 85-gal Drums w/ Liners	14.4	0.0	14.4
Final Form Total	14.8	0.0	14.8

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	4.93E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	1.45E+01
Rubber	0.00E+00
Plastic	7.82E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	1.22E+04
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.62E+02
Packaging Material, Rubber	1.10E+01
Packaging Material, Steel	6.05E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.48E+00
Cs-137	3.78E-06
Np-237	7.65E-05
Pu-238	2.34E+00
Pu-239	1.37E+00
Pu-240	3.04E-01
Pu-241	1.54E+00
Pu-242	5.72E-05
Sr-90	4.16E-06
Th-229	1.45E-14
Th-230	3.05E-11
Th-232	2.22E-19
U-233	3.30E-10
U-234	6.62E-06
U-235	1.35E-09
U-236	9.01E-09
U-238	8.87E-15

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

Non-PCB soil generated during retrieval, characterization, treatment, packaging and storage at the AMWTP.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN-522-SRP**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2020
Stream Name	SRP Combined Soils					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	9.08E-01
Cellulose	4.54E+00
Rubber	0.00E+00
Plastic	9.99E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	9.37E+02
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.08E+01
Packaging Material, Rubber	4.72E-01
Packaging Material, Steel	1.09E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	6.98E-02
Np-237	1.40E-06
Pu-238	1.35E-02
Pu-239	3.30E-01
Pu-240	8.14E-02
Pu-241	2.39E-01
Pu-242	6.22E-06
Th-229	2.66E-16
Th-230	1.76E-13
Th-232	5.94E-20
U-233	6.05E-12
U-234	3.83E-08
U-235	3.25E-10
U-236	2.41E-09
U-238	9.65E-16

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of soils generated from repackaging and treatment at the SRP

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN538**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Oversized Debris Items from Supercompactor Facility					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SLB2 Dir Ld	288.2	0.0	288.2
Final Form Total	288.2	0.0	288.2

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	5.61E+04
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	5.54E+03
Rubber	0.00E+00
Plastic	9.00E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	3.18E+01
Packaging Material, Steel	4.76E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	8.52E+00
Np-237	6.83E-05
Pu-238	1.19E+00
Pu-239	3.92E+01
Pu-240	8.73E+00
Pu-241	1.09E+02
Pu-242	1.14E-03
Th-229	4.95E-14
Th-230	6.31E-10
Th-232	2.55E-17
U-233	5.71E-10
U-234	3.77E-05
U-235	1.01E-05
U-236	5.17E-07
U-238	3.54E-13

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D027, D028, D029, D030, D032, D033, D034, D037, D043, F001, F002, F004, F005, F006, F007, F009, P030, P098, P099, P106, U003, U108, U134, U151

No TRUCON Codes Provided

Waste Stream Description

Oversized debris waste items from boxed waste that are transferred from the treatment facility because they are too large or cannot be size reduced by compaction.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN539**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	TRU Radioactive - Only Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SLB2 Dir Ld	51.7	0.0	51.7
Final Form Total	51.7	0.0	51.7

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	4.60E+03
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	4.03E+03
Rubber	0.00E+00
Plastic	3.90E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	5.71E+00
Packaging Material, Steel	8.54E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.69E-01
Np-237	2.35E-07
Pu-238	1.04E+01
Pu-239	1.68E+00
Pu-240	3.81E-01
Pu-241	4.64E+00
Pu-242	4.98E-05
Th-229	5.94E-17
Th-230	5.47E-10
Th-232	1.11E-18
U-233	1.02E-12
U-234	5.93E-05
U-235	3.31E-09
U-236	2.26E-08
U-238	1.55E-14

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Heterogeneous debris waste generated in WMF-676 from the treatment of RCRA-empty containers including shredded boxes.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN-599**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Analytical Laboratory Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Lab Non-PCB Homogeneous Solids Waste (Not P/U Listed)					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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	Total Mass (kg)
Iron-based Metal/Alloys	9.08E-01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	3.18E+01
Cellulose	4.54E-01
Rubber	0.00E+00
Plastic	1.14E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	1.98E+02
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.31E+01
Packaging Material, Rubber	3.54E-01
Packaging Material, Steel	8.16E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.71E-01
Cs-137	8.16E-05
Np-237	4.37E-07
Pu-238	1.21E-02
Pu-239	4.65E-01
Pu-240	1.03E-01
Pu-241	5.13E-01
Pu-242	1.35E-05
Sr-90	8.83E-05
Th-229	1.75E-15
Th-230	1.05E-11
Th-232	4.82E-18
U-233	7.47E-12
U-234	2.82E-07
U-235	3.67E-09
U-236	2.44E-08
U-238	1.67E-14

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, F004, F005, F006, F007, F009

No TRUCON Codes Provided

Waste Stream Description

This waste is comprised of analytical generated liquids that have been absorbed and that are not PCB contaminated.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN600**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	AMWTP WMF-676 PCB Contaminated Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
100-gal Drum Dir Ld w/o Liner	1.5	0.0	1.5
55-gal Drum Dir Ld w/ Liner	23.9	0.0	23.9
SLB2 Dir Ld	487.7	0.0	487.7
SWB w/ 3 - 85-gal Drums w/o Liners	49.9	0.0	49.9
Final Form Total	563.1	0.0	563.1

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.05E+04
Aluminum-based Metal/Alloys	2.89E+01
Other Metal/Alloys	3.10E+03
Other Inorganic Materials	1.60E+03
Cellulose	2.95E+03
Rubber	5.16E+01
Plastic	4.35E+03
Cement	0.00E+00
Solidified Inorganic Material	3.31E+02
Solidified Organic Material	7.29E+01
Soil	2.31E+01
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	8.79E+02
Packaging Material, Rubber	1.05E+02
Packaging Material, Steel	1.05E+05
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.42E+01
Am-243	7.53E-05
Cs-137	3.72E-02
Np-237	2.76E-04
Pu-238	2.08E+00
Pu-239	3.96E+01
Pu-240	8.83E+00
Pu-241	5.48E+01
Pu-242	8.52E-04
Sr-90	4.10E-02
Th-229	1.07E-07
Th-230	4.67E-10
Th-232	4.26E-07
U-233	1.22E-02
U-234	5.08E-04
U-235	6.31E-05
U-236	2.61E-08
U-238	2.63E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D027, D028, D029, D030, D032, D034, D037, D043, F001, F002, F004, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108, U134

No TRUCON Codes Provided

Waste Stream Description

Newly generated PCB contaminated debris waste from the remediation of prohibited PCB waste within the Advanced Mixed Waste Treatment Facility (WMF-676).

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN-602**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	P/U-listed Lab Non-PCB Homogeneous Solids Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m 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	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	3.63E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	1.40E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	2.11E+02
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.54E+01
Packaging Material, Rubber	2.36E-01
Packaging Material, Steel	5.44E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.32E+00
Cs-137	4.74E-06
Np-237	3.87E-06
Pu-238	3.05E-03
Pu-239	1.17E-01
Pu-240	2.60E-02
Pu-241	1.28E-01
Pu-242	3.41E-06
Sr-90	5.15E-06
Th-229	1.98E-14
Th-230	3.36E-12
Th-232	1.54E-18
U-233	7.51E-11
U-234	8.03E-08
U-235	1.04E-09
U-236	6.94E-09
U-238	4.76E-15

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, F004, F005, F006, F007, F009, U151

No TRUCON Codes Provided

Waste Stream Description

P/U-listed secondary waste comprised of analytical generated liquids that have been absorbed and that are not PCB contaminated.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN650**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	AMWTP Sludge Repackaging Project (SRP) Combined Sludge Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1385.6	0.0	1385.6
TDOP w/ 10 - 55-gal Drums w/ Liners	884.1	0.0	884.1
Final Form Total	2269.7	0.0	2269.7

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.43E+03
Aluminum-based Metal/Alloys	1.09E+01
Other Metal/Alloys	7.75E+02
Other Inorganic Materials	7.60E+03
Cellulose	1.99E+03
Rubber	1.21E+03
Plastic	2.86E+04
Cement	0.00E+00
Solidified Inorganic Material	6.00E+05
Solidified Organic Material	4.06E+05
Soil	5.14E+03
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	8.33E+04
Packaging Material, Rubber	1.62E+03
Packaging Material, Steel	6.17E+05
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	6.80E+03
Am-243	4.83E-03
Cm-244	2.23E-01
Cs-137	5.56E-01
Np-237	1.06E-01
Pu-238	1.01E+02
Pu-239	2.89E+03
Pu-240	6.51E+02
Pu-241	3.51E+03
Pu-242	7.91E-02
Sr-90	6.12E-01
Th-229	8.20E-08
Th-230	2.19E-07
Th-232	5.29E-06
U-233	9.32E-03
U-234	2.38E-01
U-235	1.30E-02
U-236	1.93E-06
U-238	6.44E-01

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D026, D027, D028, D029, D030, D032, D034, D036, D037, F001, F002, F005, F006, F007, F009

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of sludge generated from repackaging of Rocky Flats inorganic and organic wastes at the SRP.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN835**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Solidified Acid/Caustic Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	0.8	0.0	0.8
TDOP w/ 10 - 55-gal Drums w/ Liners	14.7	0.0	14.7
Final Form Total	15.5	0.0	15.5

Waste Material Parameters

Material Parameter	**Total Mass (kg)**
Iron-based Metal/Alloys	1.26E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	7.93E-01
Other Inorganic Materials	6.69E+00
Cellulose	2.98E+01
Rubber	2.94E+00
Plastic	4.26E+01
Cement	0.00E+00
Solidified Inorganic Material	7.49E+03
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	5.70E+02
Packaging Material, Rubber	1.48E+01
Packaging Material, Steel	7.68E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	**Total Activity (Ci)**
Am-241	1.81E+00
Cs-137	1.25E-06
Np-237	2.02E-04
Pu-238	1.68E+02
Pu-239	2.68E-01
Pu-240	1.74E-01
Pu-241	6.88E-01
Pu-242	1.96E-04
Sr-90	1.38E-06
Th-229	9.72E-17
Th-230	2.54E-11
Th-232	1.27E-21
U-233	3.09E-11
U-234	5.13E-05
U-235	2.64E-11
U-236	5.16E-10
U-238	6.49E-05

Haz. Waste No(s).

D007, D008, D009, F001, F002

No TRUCON Codes Provided

Waste Stream Description

This waste stream, generated at Mound consists of drums containing solidified acid and caustic wastes combined with nonhazardous absorbent.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN836**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Pollution Control or Waste Treatment Process	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Cemented Sludge					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	33.6	0.0	33.6
TDOP w/ 10 - 55-gal Drums w/ Liners	6.3	0.0	6.3
Final Form Total	39.9	0.0	39.9

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	8.99E-01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	2.27E+00
Cement	4.54E-01
Solidified Inorganic Material	4.29E+04
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.46E+03
Packaging Material, Rubber	3.94E+01
Packaging Material, Steel	1.91E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.80E-02
Cs-137	1.05E-06
Np-237	4.85E-05
Pu-238	7.91E+00
Pu-239	1.22E-02
Pu-240	8.31E-03
Pu-241	9.39E-03
Pu-242	9.54E-06
Sr-90	1.15E-06
Th-229	2.33E-17
Th-230	1.05E-11
Th-232	6.07E-23
U-233	7.42E-12
U-234	1.25E-05
U-235	1.51E-06
U-236	2.46E-11
U-238	1.48E-16

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 consists of drums containing Mound cemented sludge. The sludge was originally generated from the treatment of alpha-contaminated wastewaters at the Waste Disposal Building. The sludge was solidified with Portland Cement. Florco, a non-hazardous absorbent, may have been also added to the waste stream.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BNINW216**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Pollution Control or Waste Treatment Process	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	First/Second Stage Sludge					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	16.0	0.0	16.0
TDOP w/ 10 - 55-gal Drums w/ Liners	37.8	0.0	37.8
Final Form Total	53.8	0.0	53.8

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.02E+02
Aluminum-based Metal/Alloys	1.60E-01
Other Metal/Alloys	1.34E+02
Other Inorganic Materials	0.00E+00
Cellulose	3.21E+01
Rubber	8.99E+00
Plastic	1.40E+02
Cement	3.57E+02
Solidified Inorganic Material	4.70E+04
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.97E+03
Packaging Material, Rubber	5.19E+01
Packaging Material, Steel	2.63E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	7.07E+02
Cs-137	6.94E-07
Np-237	9.24E-03
Pu-238	4.93E+00
Pu-239	4.92E+01
Pu-240	1.26E+01
Pu-241	1.63E+02
Pu-242	6.08E-03
Sr-90	7.63E-07
Th-229	4.44E-15
Th-230	1.49E-09
Th-232	9.17E-20
U-233	1.41E-09
U-234	1.62E-03
U-235	3.33E-04
U-236	3.72E-08
U-238	8.63E-03

Haz. Waste No(s).

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

TRUCON Code(s)

111/211

Waste Stream Description

This waste stream, generated at Rocky Flats, consists of aqueous sludges generated from wastewater treatment processes in Building 774.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BNINW216-SRP**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	SRP Combined Sludge					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	10.9	0.0	10.9
Final Form Total	10.9	0.0	10.9

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	4.70E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	2.57E+00
Rubber	5.13E-01
Plastic	4.68E+01
Cement	2.15E+02
Solidified Inorganic Material	1.10E+04
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	4.01E+02
Packaging Material, Rubber	6.14E+00
Packaging Material, Steel	1.41E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.80E+01
Am-243	1.61E-05
Np-237	8.78E-04
Pu-238	5.56E-01
Pu-239	3.58E+00
Pu-240	1.00E+00
Pu-241	1.75E+01
Pu-242	6.40E-04
Th-229	4.21E-16
Th-230	5.71E-10
Th-232	7.30E-21
U-233	1.34E-10
U-234	6.21E-04
U-235	1.26E-04
U-236	2.96E-09
U-238	3.45E-03

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

This waste stream consists of sludge generated from repackaging and treatment of liquid in inorganic and organic wastes at the SRP

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BNINW218**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Building 374 Sludge					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 4 - 55-gal Drums w/ Liners	15.1	0.0	15.1
TDOP w/ 10 - 55-gal Drums w/ Liners	33.6	0.0	33.6
Final Form Total	48.7	0.0	48.7

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.33E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	6.84E-01
Rubber	2.18E+00
Plastic	1.17E+02
Cement	9.46E+02
Solidified Inorganic Material	3.77E+04
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.79E+03
Packaging Material, Rubber	4.70E+01
Packaging Material, Steel	2.38E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	5.53E+00
Np-237	5.14E-05
Pu-238	7.66E-01
Pu-239	4.13E+00
Pu-240	8.87E-01
Pu-241	7.06E+00
Pu-242	1.36E-04
Th-229	2.46E-17
Th-230	5.92E-08
Th-232	1.29E-06
U-233	7.83E-12
U-234	6.44E-02
U-235	4.97E-03
U-236	2.63E-09
U-238	4.04E-01

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

Building 374 sludge, generated at Rocky Flats, consists of drums containing Building 374 dry sludge, Solidified Direct Cementation Process (DCP) sludge, or Building 374 solidified bypass sludge.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BNINW218-SRP**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	SRP Combined Sludge					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	19.3	0.0	19.3
Final Form Total	19.3	0.0	19.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	7.13E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	2.72E+02
Other Inorganic Materials	0.00E+00
Cellulose	5.19E+01
Rubber	9.39E-02
Plastic	2.14E+02
Cement	1.91E+02
Solidified Inorganic Material	1.77E+04
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	7.09E+02
Packaging Material, Rubber	1.09E+01
Packaging Material, Steel	2.50E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.48E+01
Cs-137	1.57E-04
Np-237	2.75E-04
Pu-238	8.37E-01
Pu-239	2.48E+01
Pu-240	5.48E+00
Pu-241	2.87E+01
Pu-242	6.13E-04
Sr-90	1.73E-04
Th-229	5.17E-14
Th-230	2.09E-08
Th-232	4.00E-18
U-233	1.18E-09
U-234	2.27E-03
U-235	1.97E-04
U-236	1.62E-07
U-238	1.83E-02

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of sludge generated from repackaging and treatment of liquid in inorganic and organic wastes at the SRP

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN-RF003**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2020
Stream Name	Rocky Flats Building 774 Organic Setups (IN-BN-RF003)					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
SWB w/ 3 - 85-gal Drums w/ Liners	2.9	0.0	2.9
Final Form Total	3.1	0.0	3.1

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	8.81E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	1.36E+01
Other Inorganic Materials	1.14E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	3.75E+00
Cement	0.00E+00
Solidified Inorganic Material	1.14E+00
Solidified Organic Material	1.59E+03
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	7.70E+01
Packaging Material, Rubber	2.27E+00
Packaging Material, Steel	1.23E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	7.00E+01
Np-237	8.03E-04
Pu-238	4.53E-01
Pu-239	1.09E+01
Pu-240	2.58E+00
Pu-241	9.86E+00
Pu-242	2.17E-04
Th-229	3.85E-16
Th-230	2.23E-11
Th-232	2.82E-07
U-233	1.22E-10
U-234	2.44E-05
U-235	7.85E-06
U-236	7.63E-09
U-238	3.36E-15

Haz. Waste No(s).

D008, D022, D026, D027, D028, D029, D030, D032, D034, D036, D037, F001, F002, F005

No TRUCON Codes Provided

Waste Stream Description

This waste, generated at Rocky Flats, consists of various organic liquid waste that were immobilized in Building 774.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN-RF-003-SRP**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2020
Stream Name	SRP Combined Sludge					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	3.8	0.0	3.8
Final Form Total	3.8	0.0	3.8

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	6.54E+00
Rubber	0.00E+00
Plastic	8.04E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	3.00E+03
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.39E+02
Packaging Material, Rubber	2.12E+00
Packaging Material, Steel	4.90E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.57E-02
Np-237	2.36E-07
Pu-238	1.84E-03
Pu-239	6.80E-02
Pu-240	1.51E-02
Pu-241	9.54E-02
Pu-242	1.97E-06
Th-229	1.13E-19
Th-230	2.00E-12
Th-232	1.10E-22
U-233	3.60E-14
U-234	2.18E-06
U-235	7.01E-07
U-236	4.48E-11
U-238	3.06E-17

Haz. Waste No(s).

D008, D022, D026, D027, D028, D029, D030, D032, D034, D036, D037, F001, F002, F005

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of sludge generated from repackaging and treatment of liquid in inorganic and organic wastes at the SRP

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN-RF290**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Filtered Sludge					**Activities Decayed to CY**	2020

Waste Volume Detail (m 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	Total Mass (kg)
Iron-based Metal/Alloys	4.54E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	5.72E-01
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	5.90E+00
Cement	0.00E+00
Solidified Inorganic Material	3.41E+01
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	7.71E+00
Packaging Material, Rubber	1.18E-01
Packaging Material, Steel	2.72E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	8.03E-02
Np-237	1.26E-06
Pu-238	1.24E-02
Pu-239	3.06E-01
Pu-240	7.00E-02
Pu-241	2.14E-01
Pu-242	5.73E-06
Th-229	2.08E-15
Th-230	1.47E-12
Th-232	4.60E-19
U-233	1.59E-11
U-234	1.06E-07
U-235	9.04E-10
U-236	6.21E-09
U-238	2.67E-15

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

The sludge, generated at Rocky Flats, is from the incinerator off-gas system or from filter plenums during a filter change and may also be from Nash pumps.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN-RF311**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	RF Miscellaneous Heels					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final 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	0.2	0.0	0.2
Final Form Total	0.6	0.0	0.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.26E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	1.63E+02
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	2.45E+01
Cement	0.00E+00
Solidified Inorganic Material	3.81E-01
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.31E+01
Packaging Material, Rubber	4.72E-01
Packaging Material, Steel	1.18E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.22E+00
Cs-137	6.60E-07
Np-237	4.41E-05
Pu-238	2.11E+00
Pu-239	1.48E+01
Pu-240	1.23E+01
Pu-241	1.11E+01
Pu-242	2.75E-04
Sr-90	7.09E-07
Th-229	1.45E-12
Th-230	6.66E-09
Th-232	2.03E-15
U-233	2.37E-09
U-234	9.47E-05
U-235	2.19E-07
U-236	5.48E-06
U-238	6.40E-13

Haz. Waste No(s).

D007, F002

No TRUCON Codes Provided

Waste Stream Description

This waste stream generated at Rocky Flats, includes insoluble process residues (heels).

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN-RF409-SRP**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Salt Waste			**Inventory Date**	12/31/2020
Stream Name	SRP Combined Salts					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	15.1	0.0	15.1
Final Form Total	15.1	0.0	15.1

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.60E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	1.67E+03
Other Inorganic Materials	2.87E+03
Cellulose	2.98E+02
Rubber	0.00E+00
Plastic	3.74E+01
Cement	0.00E+00
Solidified Inorganic Material	3.73E+01
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	5.55E+02
Packaging Material, Rubber	8.50E+00
Packaging Material, Steel	1.96E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.60E+02
Np-237	3.41E-03
Pu-238	1.07E+01
Pu-239	2.21E+02
Pu-240	5.19E+01
Pu-241	3.34E+02
Pu-242	8.37E-03
Th-229	1.64E-15
Th-230	1.39E-12
Th-232	3.79E-19
U-233	5.20E-10
U-234	3.02E-06
U-235	2.18E-08
U-236	1.54E-07
U-238	1.30E-13

Haz. Waste No(s).

D007, D008, D009, D028, F001, F002, F005

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of salts generated from repackaging and treatment at the SRP

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN-RF420**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Miscellaneous Incinerator Ash and Soot					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final 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	0.4	0.0	0.4
Final Form Total	0.6	0.0	0.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.88E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	2.50E+00
Other Inorganic Materials	3.15E+01
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	1.19E+01
Cement	0.00E+00
Solidified Inorganic Material	1.44E+02
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.31E+01
Packaging Material, Rubber	5.90E-01
Packaging Material, Steel	1.55E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	5.43E-01
Np-237	9.33E-06
Pu-238	1.16E-01
Pu-239	2.56E+00
Pu-240	5.21E-01
Pu-241	2.33E+00
Pu-242	4.09E-05
Th-229	2.88E-13
Th-230	3.19E-10
Th-232	7.46E-17
U-233	4.92E-10
U-234	4.86E-06
U-235	3.53E-08
U-236	2.16E-07
U-238	8.88E-14

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

This waste generated at Rocky Flats, consists of ash from the plutonium recovery incinerator and is a mixture of coarse, granular, fine and very fine particulate.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN-RF432**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2020
Stream Name	RF Leached Cemented Resins					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	3.2	0.0	3.2
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.8	0.0	0.8
Final Form Total	4.0	0.0	4.0

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.14E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	3.19E+02
Other Inorganic Materials	0.00E+00
Cellulose	1.59E+00
Rubber	0.00E+00
Plastic	8.35E+01
Cement	3.21E+01
Solidified Inorganic Material	4.86E+00
Solidified Organic Material	1.26E+03
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.46E+02
Packaging Material, Rubber	2.71E+00
Packaging Material, Steel	6.64E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	7.63E+01
Np-237	8.82E-04
Pu-238	8.81E-01
Pu-239	2.96E+01
Pu-240	6.67E+00
Pu-241	3.17E+01
Pu-242	5.68E-04
Th-229	1.66E-13
Th-230	1.15E-11
Th-232	4.87E-18
U-233	3.78E-09
U-234	2.50E-06
U-235	2.92E-08
U-236	1.98E-07
U-238	8.81E-14

Haz. Waste No(s).

D007, D008, D022, D028, D029, F001, F002, F003, F005

No TRUCON Codes Provided

Waste Stream Description

Spent anion and cation exchange resins

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN-RF801**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2020
Stream Name	Building 774 Solidified Organics					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.3	0.0	1.3
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.4	0.0	0.4
Final Form Total	1.7	0.0	1.7

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.99E-01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	1.25E-01
Rubber	0.00E+00
Plastic	5.76E+00
Cement	4.37E-01
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	1.60E+03
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	6.17E+01
Packaging Material, Rubber	1.18E+00
Packaging Material, Steel	2.91E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.49E-01
Am-243	3.14E-13
Np-237	9.91E-06
Pu-238	1.06E-01
Pu-239	2.57E+00
Pu-240	5.83E-01
Pu-241	5.28E+00
Pu-242	5.00E-05
Th-229	1.88E-15
Th-230	1.68E-11
Th-232	4.25E-19
U-233	4.28E-11
U-234	1.98E-06
U-235	5.45E-07
U-236	1.72E-08
U-238	7.76E-15

Haz. Waste No(s).

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

No TRUCON Codes Provided

Waste Stream Description

The waste consists of various organic liquids immobilized into a solid monolith by the Organic and Sludge Immobilization System (OASIS) process in Building 774.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-BN-RF990**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Spill Clean-ups/Emergency Response Actions	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Soils					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.2	0.0	0.2
Final Form Total	0.2	0.0	0.2

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	9.08E-01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	3.81E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	4.54E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	1.24E+02
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	7.71E+00
Packaging Material, Rubber	2.36E-01
Packaging Material, Steel	6.39E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.05E-02
Np-237	5.89E-07
Pu-238	4.37E-04
Pu-239	1.67E-02
Pu-240	3.71E-03
Pu-241	1.88E-02
Pu-242	4.86E-07
Th-229	3.72E-15
Th-230	5.91E-10
Th-232	9.75E-20
U-233	1.44E-11
U-234	1.07E-05
U-235	3.19E-06
U-236	6.59E-10
U-238	1.44E-05

Haz. Waste No(s).

F001, F002

No TRUCON Codes Provided

Waste Stream Description

This waste stream generated at Rocky Flats, consists of dry dirt or soil.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-IC-603**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Analytical Laboratory Waste	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2020
Stream Name	Laboratory Homogeneous Solids Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	3.6	0.0	3.6
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.2	0.0	0.2
Final Form Total	3.8	0.0	3.8

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	4.25E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	5.88E+01
Other Inorganic Materials	9.81E+01
Cellulose	2.27E+00
Rubber	0.00E+00
Plastic	4.32E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	5.57E+02
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.39E+02
Packaging Material, Rubber	2.24E+00
Packaging Material, Steel	5.26E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.06E-01
Cs-137	6.31E-06
Np-237	3.59E-06
Pu-238	2.17E-02
Pu-239	6.78E-01
Pu-240	1.68E-01
Pu-241	8.57E-01
Pu-242	1.60E-05
Sr-90	6.93E-06
Th-229	2.65E-15
Th-230	1.14E-12
Th-232	4.92E-19
U-233	3.04E-11
U-234	1.24E-07
U-235	1.34E-09
U-236	9.97E-09
U-238	4.95E-15

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D027, D028, D029, D030, D032, D033, D034, D037, D043, F001, F002, F004, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108, U134, U151

No TRUCON Codes Provided

Waste Stream Description

This waste was generated during analysis of TRU waste samples at INTEC and may contain sample residues and returned unused sample material.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-ID-ANLE-BIN**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	RH TRU Debris Waste from ANL-E stored at INL					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.00E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	2.78E+01
Other Inorganic Materials	1.31E+01
Cellulose	7.10E+00
Rubber	0.00E+00
Plastic	1.28E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	5.43E+00
Packaging Material, Rubber	3.54E-01
Packaging Material, Steel	5.81E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	5.81E-02
Cs-137	5.62E-02
Np-237	7.53E-08
Pu-238	7.25E-03
Pu-239	2.21E-02
Pu-240	1.30E-02
Pu-241	5.91E-02
Pu-242	4.21E-04
Sr-90	4.99E-02
Th-229	1.81E-07
Th-230	2.83E-09
Th-232	1.52E-19
U-233	5.15E-04
U-234	7.70E-05
U-235	2.44E-06
U-236	1.54E-09
U-238	4.40E-07

Haz. Waste No(s).

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

TRUCON Code(s)

321, 325

Waste Stream Description

This waste stream consists of two 55 gallon drums generated from repackaging of six bins of general plant waste generated at ANL-E during D&D operations.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-ID-ANLW-W269-RH**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	RH Laboratory Waste from INL					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.72E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	3.27E+00
Rubber	1.36E-01
Plastic	9.97E+00
Cement	0.00E+00
Solidified Inorganic Material	7.20E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	5.43E+00
Packaging Material, Rubber	3.54E-01
Packaging Material, Steel	5.81E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.32E+00
Cs-137	2.00E-01
Np-237	6.48E-06
Pu-238	3.17E-01
Pu-239	1.76E+01
Pu-240	3.70E+00
Pu-242	4.06E-02
Sr-90	5.20E-02
Th-229	2.18E-10
Th-230	2.45E-09
Th-232	9.72E-17
U-233	4.14E-07
U-234	4.71E-05
U-235	7.87E-07
U-236	6.57E-07
U-238	1.39E-08

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, F002, F004, F005

TRUCON Code(s)

327

Waste Stream Description

This waste stream consists of three drums that contains one, one gallon plastic bottles full of dissolved fuel solutions absorbed on vermiculite or Oil -Dri.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

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

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Solidified Waste Sludge from Bettis Atomic Power Lab.					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	1.3	0.0	1.3
Final Form Total	1.3	0.0	1.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.08E+02
Aluminum-based Metal/Alloys	3.20E+01
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	1.00E+00
Cellulose	4.42E+00
Rubber	1.87E+00
Plastic	9.16E+00
Cement	6.68E+01
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.09E+01
Packaging Material, Rubber	7.08E-01
Packaging Material, Steel	1.16E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.51E-02
Cs-137	1.09E+01
Np-237	2.96E-08
Pu-238	3.54E-01
Pu-239	1.98E-01
Pu-240	4.18E-03
Pu-242	7.19E-04
Sr-90	1.77E+01
Th-229	1.23E-06
Th-230	1.12E-07
Th-232	1.10E-19
U-233	2.33E-03
U-234	2.03E-03
U-235	4.57E-05
U-236	7.43E-10
U-238	3.16E-05

Haz. Waste No(s).

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

TRUCON Code(s)

327

Waste Stream Description

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

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

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

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Uncategorized Metal Waste			**Inventory Date**	12/31/2020
Stream Name	RH-TRU Debris Waste From Experimental Breeder Reactor					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	5.01E+02
Aluminum-based Metal/Alloys	6.01E+01
Other Metal/Alloys	3.57E+03
Other Inorganic Materials	0.00E+00
Cellulose	1.99E+00
Rubber	1.99E+00
Plastic	4.48E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	9.96E-02
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.80E+01
Packaging Material, Rubber	2.48E+00
Packaging Material, Steel	4.07E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	5.57E-06
Cs-137	1.19E+02
Np-237	1.07E-11
Pu-238	7.45E-04
Pu-239	1.47E+01
Pu-240	5.34E-03
Pu-241	1.39E-05
Pu-242	2.60E-13
Sr-90	1.09E+01
Th-229	4.23E-11
Th-230	1.07E-08
Th-232	1.40E-19
U-233	8.02E-08
U-234	2.05E-04
U-235	5.81E-02
U-236	9.49E-10
U-238	1.25E+00

No Hazardous Waste Numbers Provided

TRUCON Code(s)

321, 322, 325

Waste Stream Description

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

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-ID-HFEF-S3000-RP**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2020
Stream Name	Sodium contaminated RH TRU Waste from Materials and Fuels Complex at INL.					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	3.8	0.0	3.8
Final Form Total	3.8	0.0	3.8

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.76E+02
Aluminum-based Metal/Alloys	5.53E+00
Other Metal/Alloys	1.03E+02
Other Inorganic Materials	9.95E+00
Cellulose	5.53E+00
Rubber	3.32E+00
Plastic	5.53E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	5.97E+02
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.26E+01
Packaging Material, Rubber	2.12E+00
Packaging Material, Steel	3.49E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.39E+01
Cm-244	4.89E-02
Cs-137	5.07E+01
Np-237	4.47E-06
Pu-238	7.18E+00
Pu-239	1.32E+01
Pu-240	9.51E+00
Pu-241	1.20E+02
Pu-242	6.10E-03
Sr-90	5.10E+01
Th-229	6.54E-11
Th-230	1.77E-07
Th-232	6.94E-18
U-233	7.43E-07
U-234	1.92E-02
U-235	5.34E-05
U-236	2.81E-07
U-238	7.11E-03

Haz. Waste No(s).

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

TRUCON Code(s)

321

Waste Stream Description

This waste stream consists of treated sodium contaminated waste from Materials and Fuels complex

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-ID-HFEF-S5000-RP**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Sodium contaminated RH TRU Waste from Materials and Fuels Complex at INL.					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	20.2	0.0	20.2
Final Form Total	20.2	0.0	20.2

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	4.02E+03
Aluminum-based Metal/Alloys	6.37E+01
Other Metal/Alloys	1.08E+03
Other Inorganic Materials	1.27E+02
Cellulose	6.37E+01
Rubber	6.37E+01
Plastic	6.37E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	9.56E+02
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.74E+02
Packaging Material, Rubber	1.13E+01
Packaging Material, Steel	1.86E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.52E+01
Cm-244	1.34E-01
Cs-137	1.15E+02
Np-237	1.46E-05
Pu-238	2.55E+01
Pu-239	8.69E+01
Pu-240	4.16E+01
Pu-241	3.05E+02
Pu-242	1.46E-02
Sr-90	1.54E+02
Th-229	2.03E-10
Th-230	1.38E-06
Th-232	3.04E-17
U-233	2.31E-06
U-234	1.50E-01
U-235	5.75E-03
U-236	1.23E-06
U-238	4.48E-03

Haz. Waste No(s).

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

TRUCON Code(s)

321, 322, 325

Waste Stream Description

This waste consists of 55-gallon drums of treated waste.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

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

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	RH-TRU Debris Waste From Materials and Fuels Complex Hot Fuel Examination Facility at the INL.					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	18.3	0.0	18.3
Final Form Total	18.3	0.0	18.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.71E+03
Aluminum-based Metal/Alloys	1.98E+01
Other Metal/Alloys	5.92E+01
Other Inorganic Materials	2.37E+02
Cellulose	2.57E+02
Rubber	1.98E+02
Plastic	5.15E+02
Cement	0.00E+00
Solidified Inorganic Material	8.15E+00
Solidified Organic Material	1.98E+01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.57E+02
Packaging Material, Rubber	1.03E+01
Packaging Material, Steel	1.68E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	5.36E-01
Cs-137	7.42E+02
Np-237	1.05E-06
Pu-238	3.30E-01
Pu-239	6.51E+01
Pu-240	5.28E+01
Pu-241	2.05E-02
Pu-242	7.82E-03
Sr-90	3.28E+02
Th-229	6.83E-05
Th-230	5.59E-05
Th-232	1.39E-15
U-233	1.29E-01
U-234	1.01E+00
U-235	1.07E-01
U-236	9.38E-06
U-238	2.21E-01

Haz. Waste No(s).

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

TRUCON Code(s)

321, 322, 325

Waste Stream Description

Some of the containers in this waste stream have hazardous waste codes applied by the generator.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

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

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Analytical Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	RH-TRU Waste From Materials and Fuels Complex at the INL.					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	1.3	0.0	1.3
Final Form Total	1.3	0.0	1.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.29E+01
Aluminum-based Metal/Alloys	1.45E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	2.03E+00
Cellulose	5.80E-01
Rubber	0.00E+00
Plastic	2.03E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.09E+01
Packaging Material, Rubber	7.08E-01
Packaging Material, Steel	1.16E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	9.70E-02
Cs-137	1.50E+01
Np-237	1.26E-07
Pu-238	2.94E-02
Pu-239	1.71E-01
Pu-240	4.40E-02
Pu-242	8.19E-04
Sr-90	1.66E+01
Th-229	4.88E-09
Th-230	6.52E-07
Th-232	5.15E-19
U-233	1.39E-05
U-234	1.77E-02
U-235	1.00E-03
U-236	5.21E-09
U-238	1.35E-04

Haz. Waste No(s).

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

TRUCON Code(s)

321, 325

Waste Stream Description

This waste stream consists of 5 55-gallon drums of repackaged waste from Four 24-inch diameter by 148-inch long carbon steel liners each containing 2 to 3 1-liter bottle of solidified sample solution and debris from Analytical Laboratory hot cells.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-ID-MISC-RH**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Analytical Laboratory waste from MFC (formerly know as ANL-W)					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

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

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.00E+02
Aluminum-based Metal/Alloys	3.04E+01
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	3.80E+00
Cellulose	8.80E-01
Rubber	1.90E+00
Plastic	4.28E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	3.04E+01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	5.43E+00
Packaging Material, Rubber	3.54E-01
Packaging Material, Steel	5.81E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.15E-02
Cs-137	1.13E-01
Np-237	5.40E-08
Pu-238	2.62E-03
Pu-239	2.40E-02
Pu-240	3.43E-03
Pu-242	2.21E-03
Sr-90	3.41E-01
Th-229	4.76E-08
Th-230	4.98E-09
Th-232	4.00E-20
U-233	1.35E-04
U-234	1.35E-04
U-235	7.50E-06
U-236	4.06E-10
U-238	5.34E-07

Haz. Waste No(s).

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

TRUCON Code(s)

321, 325

Waste Stream Description

This waste stream consists of one drum that contains sample holder, Nalgene bottles, sample solution absorbed in vermiculite and debris from analytical laboratory.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

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

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2020
Stream Name	Organic Setups					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB w/ 3 - 85-gal Drums w/ Liners	1.9	0.0	1.9
Final Form Total	1.9	0.0	1.9

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	4.54E-03
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	9.31E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	4.06E+02
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	4.62E+01
Packaging Material, Rubber	1.43E+00
Packaging Material, Steel	8.00E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.53E-02
Np-237	1.91E-07
Pu-238	7.56E-04
Pu-239	2.90E-02
Pu-240	6.43E-03
Pu-241	3.20E-02
Pu-242	8.45E-07
Th-229	3.12E-16
Th-230	1.31E-11
Th-232	4.23E-20
U-233	2.40E-12
U-234	4.77E-07
U-235	1.52E-07
U-236	5.71E-10
U-238	3.93E-16

Haz. Waste No(s).

D008, D022, D026, D027, D028, D029, D030, D032, D034, D036, D037, F001, F002, F005

TRUCON Code(s)

112/212

Waste Stream Description

This waste, generated at Rocky Flats, consists of various organic liquids transferred to Building 774 for immobilization. This process was shutdown in 1985 and replaced by the Organic and Sludge Immobilization System (OASIS) process.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-ID-RF-S5000-RH**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Rocky Flats Generated Suspect RH TRU waste received from AMWTP					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	1.3	0.0	1.3
Final Form Total	1.3	0.0	1.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.20E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	2.77E+01
Cellulose	4.86E+01
Rubber	4.40E-01
Plastic	9.64E+00
Cement	1.47E+02
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.09E+01
Packaging Material, Rubber	7.08E-01
Packaging Material, Steel	1.16E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.01E+02
Cs-137	7.64E-02
Np-237	1.97E-04
Pu-238	3.19E-02
Pu-239	1.62E+00
Pu-240	3.56E-01
Pu-242	7.03E-04
Sr-90	4.65E-03
Th-229	1.62E-07
Th-230	9.53E-08
Th-232	9.36E-18
U-233	3.07E-04
U-234	1.73E-03
U-235	5.70E-04
U-236	6.32E-08
U-238	4.23E-04

Haz. Waste No(s).

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

TRUCON Code(s)

321, 322

Waste Stream Description

This waste stream generated at Rocky Flats plant, consists of various types of filter media and insulation processed with Portland cement to absorb liquids and neutralize acids, plastics such as Teflon, polyethylene, polyvinyl chloride, latex and nonleaded rubber.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-ID-Sample Fuel**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	RH TRU Waste from INL.					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	2.5	0.0	2.5
Final Form Total	2.5	0.0	2.5

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	5.17E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	2.52E+02
Other Inorganic Materials	2.72E+01
Cellulose	2.10E+00
Rubber	2.10E+00
Plastic	3.57E+01
Cement	0.00E+00
Solidified Inorganic Material	9.69E+01
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.17E+01
Packaging Material, Rubber	1.42E+00
Packaging Material, Steel	2.32E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	9.51E+00
Cs-137	1.13E+01
Np-237	1.84E-05
Pu-238	9.39E-01
Pu-239	3.26E+01
Pu-240	1.09E+01
Pu-241	1.79E+01
Pu-242	2.31E-02
Sr-90	2.29E+01
Th-229	9.90E-05
Th-230	1.24E-06
Th-232	2.87E-16
U-233	1.88E-01
U-234	2.25E-02
U-235	8.86E-04
U-236	1.94E-06
U-238	1.35E-02

Haz. Waste No(s).

D004, D005, D006, D007, D008, D010, D011, D019

TRUCON Code(s)

321, 322, 325

Waste Stream Description

This waste consists of debris waste generated at TRA. The waste consists of either solutions of dissolved fuel or remains of the fuel after the destructive examination performed for Research and Development

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

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

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	ICP Retrieved Debris Waste (Filters/Graphite)					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	600.4	0.0	600.4
Final Form Total	600.4	0.0	600.4

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	7.14E+02
Aluminum-based Metal/Alloys	8.16E+01
Other Metal/Alloys	7.46E+01
Other Inorganic Materials	1.42E+05
Cellulose	5.51E+04
Rubber	3.91E+02
Plastic	3.81E+03
Cement	1.74E+02
Solidified Inorganic Material	2.49E+04
Solidified Organic Material	3.31E+02
Soil	1.74E+04
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.20E+04
Packaging Material, Rubber	3.37E+02
Packaging Material, Steel	7.78E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.85E+02
Cs-137	8.56E-04
Np-237	8.25E-03
Pu-238	3.84E+01
Pu-239	1.11E+03
Pu-240	2.49E+02
Pu-241	9.95E+02
Pu-242	2.58E-02
Sr-90	9.33E-04
Th-229	3.36E-06
Th-230	1.21E-05
Th-232	3.55E-10
U-233	6.36E-03
U-234	2.20E-01
U-235	5.65E-03
U-236	4.41E-05
U-238	3.30E-01

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D027, D028, D029, D030, D032, D033, D034, D037, D038, D043, F001, F002, F004, F005, F006, F007, F009, P098, P106

TRUCON Code(s)

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

Waste Stream Description

Pre-1970 buried waste retrieved for the Idaho Cleanup Project

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

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

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	ICP Retrieved Sludge Waste (Inorganic/Organic Sludge/Roaster Oxide)					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	2958.9	0.0	2958.9
Final Form Total	2958.9	0.0	2958.9

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	7.15E+02
Aluminum-based Metal/Alloys	1.71E+01
Other Metal/Alloys	1.29E+02
Other Inorganic Materials	1.19E+05
Cellulose	2.55E+03
Rubber	5.52E+02
Plastic	1.32E+03
Cement	4.06E+02
Solidified Inorganic Material	7.00E+05
Solidified Organic Material	7.97E+05
Soil	7.96E+04
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.09E+05
Packaging Material, Rubber	1.66E+03
Packaging Material, Steel	3.83E+05
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.85E+03
Cm-244	6.70E-02
Cs-137	3.63E-02
Np-237	8.26E-02
Pu-238	6.40E+01
Pu-239	1.55E+03
Pu-240	3.48E+02
Pu-241	2.20E+03
Pu-242	6.13E-02
Sr-90	3.96E-02
Th-229	3.03E-05
Th-230	5.79E-05
Th-232	9.14E-15
U-233	5.74E-02
U-234	1.05E+00
U-235	2.77E-02
U-236	6.18E-05
U-238	4.05E+00

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D027, D028, D029, D030, D032, D033, D034, D037, D038, D043, F001, F002, F004, F005, F006, F007, F009, P098, P106

TRUCON Code(s)

112/212, 122/222, 127/227

Waste Stream Description

Pre-1970 buried waste retrieved for the Idaho Cleanup Project

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

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

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2020
Stream Name	ICP Retrieved Soils					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	495.0	0.0	495.0
Final Form Total	495.0	0.0	495.0

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.81E+02
Aluminum-based Metal/Alloys	8.22E+00
Other Metal/Alloys	6.29E+01
Other Inorganic Materials	8.87E+03
Cellulose	8.22E+03
Rubber	1.60E+02
Plastic	2.58E+03
Cement	8.86E+01
Solidified Inorganic Material	2.27E+04
Solidified Organic Material	2.30E+03
Soil	2.54E+05
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.82E+04
Packaging Material, Rubber	2.78E+02
Packaging Material, Steel	6.41E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.64E+02
Cs-137	7.29E-03
Np-237	7.77E-03
Pu-238	1.27E+01
Pu-239	3.40E+02
Pu-240	7.56E+01
Pu-241	3.83E+02
Pu-242	1.10E-02
Sr-90	7.95E-03
Th-229	8.09E-07
Th-230	8.76E-06
Th-232	2.00E-07
U-233	1.53E-03
U-234	1.59E-01
U-235	2.28E-02
U-236	1.34E-05
U-238	4.84E-01

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D027, D028, D029, D030, D032, D033, D034, D037, D038, D043, F001, F002, F004, F005, F006, F007, F009, P098, P106

TRUCON Code(s)

112/212, 122/222, 127/227

Waste Stream Description

Pre-1970 buried waste retrieved for the Idaho Cleanup Project

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-ID-Source Material**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Discarding Excess/Expired Materials	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Miscellaneous Source Material					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	4.50E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	1.00E+00
Other Inorganic Materials	1.00E+01
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	5.00E+00
Cement	0.00E+00
Solidified Inorganic Material	1.90E+01
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	5.43E+00
Packaging Material, Rubber	3.54E-01
Packaging Material, Steel	5.81E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.76E+01
Cs-137	1.51E-04
Np-237	2.29E-05
Pu-238	3.71E-02
Pu-239	1.20E+00
Pu-240	3.07E-01
Pu-241	6.26E-01
Pu-242	2.97E-05
Sr-90	1.30E-04
Th-229	2.28E-14
Th-230	1.96E-10
Th-232	3.59E-18
U-233	1.94E-10
U-234	5.55E-06
U-235	5.20E-08
U-236	3.63E-08
U-238	1.18E-09

No Hazardous Waste Numbers Provided

TRUCON Code(s)

320

Waste Stream Description

This waste stream consists of one 55 gallon drum that was retrieved by AMWTP. This drum was generated at Bendix Plant. It contains 12 miscellaneous sources

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-ID-SRP-S3000**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	INL Sludge Repackage Project Combined Sludge Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.8	0.0	0.8
TDOP w/ 10 - 55-gal Drums w/ Liners	6.3	0.0	6.3
Final Form Total	7.1	0.0	7.1

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.52E+00
Aluminum-based Metal/Alloys	1.04E-01
Other Metal/Alloys	1.04E-01
Other Inorganic Materials	0.00E+00
Cellulose	4.97E+00
Rubber	1.45E+01
Plastic	7.04E+01
Cement	0.00E+00
Solidified Inorganic Material	3.69E+03
Solidified Organic Material	3.12E+02
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.62E+02
Packaging Material, Rubber	6.47E+00
Packaging Material, Steel	3.23E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	5.74E-01
Np-237	1.39E-05
Pu-238	6.26E-03
Pu-239	2.36E-01
Pu-240	5.25E-02
Pu-241	2.83E-01
Pu-242	6.88E-06
Th-229	2.64E-15
Th-230	1.28E-09
Th-232	3.84E-20
U-233	6.01E-11
U-234	1.39E-04
U-235	3.00E-05
U-236	1.55E-09
U-238	7.53E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D026, D027, D028, D029, D030, D032, D034, D036, D037, F001, F002, F005, F006, F007, F009

TRUCON Code(s)

111/211, 112/212

Waste Stream Description

This waste stream consists of sludge generated from repackaging of Rocky Flats inorganic and organic wastes at the SRP.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-ID-TRA-W345-RH**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	RH-TRU Debris from TRA at the INL					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.00E+01
Aluminum-based Metal/Alloys	3.00E+00
Other Metal/Alloys	1.50E+01
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	2.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	5.43E+00
Packaging Material, Rubber	3.54E-01
Packaging Material, Steel	5.81E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	8.37E-05
Cm-244	1.86E+02
Np-237	5.59E-11
Pu-240	3.29E+00
Pu-241	1.67E-02
Th-229	3.90E-20
Th-232	8.43E-17
U-233	3.65E-16
U-236	5.73E-07

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, F002, F004, F005

TRUCON Code(s)

322

Waste Stream Description

This waste stream consists of one container of debris waste. This drum contains small volume of curium oxide cross section samples packaged in 1973 and sent to RWMC for interim storage. This drum was retrieved by AMWTP in 2009 and was sent to INTEC for characterization as suspect RH TRU Waste

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-IW-603**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Analytical Laboratory Waste	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2020
Stream Name	Laboratory Homogeneous Solids Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	1.36E+01
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	9.19E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	1.14E+02
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.08E+01
Packaging Material, Rubber	4.72E-01
Packaging Material, Steel	1.09E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.69E-02
Cs-137	5.78E-06
Np-237	3.20E-07
Pu-238	6.45E-04
Pu-239	2.43E-02
Pu-240	5.42E-03
Pu-241	2.94E-02
Pu-242	7.11E-07
Sr-90	6.33E-06
Th-229	8.59E-16
Th-230	1.37E-13
Th-232	6.34E-20
U-233	5.02E-12
U-234	7.40E-09
U-235	9.59E-11
U-236	6.42E-10
U-238	4.41E-16

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D027, D028, D029, D030, D032, D033, D034, D037, D043, F001, F002, F004, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108, U134, U151

No TRUCON Codes Provided

Waste Stream Description

This waste was generated during analysis of TRU waste samples and may contain sample residues and returned unused sample material.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-IW-608**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Heterogeneous Debris from Large Item Repackaging					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SLB2 Dir Ld	59.1	0.0	59.1
SWB Dir Ld w/ Liner	39.5	0.0	39.5
Final Form Total	98.6	0.0	98.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.80E+04
Aluminum-based Metal/Alloys	1.60E+01
Other Metal/Alloys	6.00E+01
Other Inorganic Materials	1.60E+02
Cellulose	1.10E+03
Rubber	1.60E+01
Plastic	1.10E+03
Cement	0.00E+00
Solidified Inorganic Material	4.70E+01
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	4.77E+01
Packaging Material, Rubber	1.42E+01
Packaging Material, Steel	1.59E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	5.77E+00
Am-243	2.42E-05
Np-237	6.48E-05
Pu-238	6.15E+01
Pu-239	1.56E+01
Pu-240	3.52E+00
Pu-241	4.63E+01
Pu-242	4.60E-04
Th-229	3.11E-17
Th-230	7.98E-12
Th-232	2.57E-20
U-233	9.89E-12
U-234	1.73E-05
U-235	1.54E-09
U-236	1.04E-08
U-238	7.14E-15

Haz. Waste No(s).

D004, D008, D009, D010, D011, D030, D032, D033, D034, D037, D043, F001, F002, F003, F004, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108, U134, U151

No TRUCON Codes Provided

Waste Stream Description

Heterogeneous debris resulting from repackaging of large items. Waste may include secondary debris from decontamination and reprocessing activities.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-MD-811**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Evaporator and Dissolver Sludge					**Activities Decayed to CY**	2020

Waste Volume Detail (m 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	Total Mass (kg)
Iron-based Metal/Alloys	9.08E-01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	8.72E-01
Rubber	9.99E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	1.10E+02
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.54E+01
Packaging Material, Rubber	2.36E-01
Packaging Material, Steel	5.44E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	8.30E-02
Np-237	2.62E-06
Pu-238	2.67E+01
Pu-239	7.19E-02
Pu-240	3.55E-02
Pu-241	4.17E-01
Pu-242	3.40E-05
Th-229	8.87E-14
Th-230	7.35E-08
Th-232	5.08E-18
U-233	1.48E-10
U-234	1.12E-03
U-235	9.91E-10
U-236	1.47E-08
U-238	2.99E-05

Haz. Waste No(s).

D009, F001, F002

No TRUCON Codes Provided

Waste Stream Description

Waste consists of dry evaporator and dissolver sludge from various processing and recovery operations. The consistency of the sludge or insoluble residue ranges from a powder to sand-like particles.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-MO-545**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Discarding Excess/Expired Materials	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Monsanto					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can NS15 w/o Liner	0.4	0.0	0.4
Final Form Total	0.4	0.0	0.4

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	4.50E+01
Aluminum-based Metal/Alloys	1.39E+00
Other Metal/Alloys	3.00E+00
Other Inorganic Materials	2.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	8.40E+02
Packaging Material, Rubber	0.00E+00
Packaging Material, Steel	1.05E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	7.24E+01
Am-243	2.31E-15
Np-237	4.70E-05
Pu-238	1.20E+02
Pu-239	9.84E-02
Pu-240	5.44E-03
Pu-241	4.08E-02
Pu-242	3.04E-05
Pu-244	8.31E-18
Th-229	1.20E-14
Th-230	6.32E-09
Th-232	1.59E-20
U-233	2.05E-10
U-234	6.85E-04
U-235	1.94E-10
U-236	3.22E-10
U-238	9.44E-15

Haz. Waste No(s).

D006, D007, D008, D011

TRUCON Code(s)

320

Waste Stream Description

Neutron sources from Monsanto

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

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

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	RH-TRU Debris Waste from the Naval Nuclear Propulsion Program (NNPP)					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	46.6	0.0	46.6
Final Form Total	46.6	0.0	46.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	9.31E+03
Aluminum-based Metal/Alloys	1.36E+03
Other Metal/Alloys	8.91E+00
Other Inorganic Materials	3.18E+02
Cellulose	1.85E+02
Rubber	7.34E+00
Plastic	2.35E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	4.02E+02
Packaging Material, Rubber	2.62E+01
Packaging Material, Steel	4.30E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	9.90E+01
Cm-244	1.16E+00
Cs-137	9.59E+03
Np-237	3.21E-05
Pu-238	4.24E+02
Pu-239	8.52E+00
Pu-240	8.55E+00
Pu-241	2.12E+02
Pu-242	2.93E-02
Sr-90	8.83E+03
Th-229	3.23E-04
Th-230	1.63E-05
Th-232	6.24E-18
U-233	3.68E+00
U-234	1.78E+00
U-235	4.33E-02
U-236	2.53E-07
U-238	6.12E-03

Haz. Waste No(s).

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

TRUCON Code(s)

322

Waste Stream Description

Waste stream includes debris waste generated during analysis of post-irradiated nuclear fuel from Naval Reactors programs using destructive examination methods.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-RF-005-SRP**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Salt Waste			**Inventory Date**	12/31/2020
Stream Name	SRP Combined Salts					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	4.2	0.0	4.2
Final Form Total	4.2	0.0	4.2

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.00E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	8.17E+01
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	3.18E+01
Cement	0.00E+00
Solidified Inorganic Material	3.28E+03
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.54E+02
Packaging Material, Rubber	2.36E+00
Packaging Material, Steel	5.44E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.94E+01
Np-237	4.66E-04
Pu-238	1.29E-01
Pu-239	4.56E+00
Pu-240	1.01E+00
Pu-241	4.74E+00
Pu-242	1.29E-04
Th-229	7.70E-13
Th-230	8.37E-10
Th-232	6.62E-18
U-233	5.90E-09
U-234	3.09E-05
U-235	7.08E-06
U-236	8.95E-08
U-238	1.28E-04

Haz. Waste No(s).

F001, F002, F005, F006, F007, F009

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of salts generated from repackaging and treatment wastes at the SRP

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-RF-750**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	IDR/EWR Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.8	0.0	0.8
Final Form Total	0.8	0.0	0.8

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	7.03E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	9.08E-01
Other Inorganic Materials	4.54E-03
Cellulose	2.27E+00
Rubber	0.00E+00
Plastic	3.55E+01
Cement	0.00E+00
Solidified Inorganic Material	2.29E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.08E+01
Packaging Material, Rubber	9.44E-01
Packaging Material, Steel	2.56E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	9.19E-02
Np-237	1.52E-06
Pu-238	1.12E-02
Pu-239	4.60E-01
Pu-240	1.01E-01
Pu-241	4.98E-01
Pu-242	1.29E-05
Th-229	4.29E-15
Th-230	2.37E-12
Th-232	1.18E-18
U-233	2.47E-11
U-234	1.28E-07
U-235	1.81E-09
U-236	1.19E-08
U-238	8.00E-15

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

Debris waste generated at RFP prior to October 1972 and retrieved during the Early Waste Retrieval and the Initial Drum Retrieval Projects.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-RF-806**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Solidified Process Solids					**Activities Decayed to CY**	2020

Waste Volume Detail (m 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	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	2.27E+00
Cement	3.48E+01
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	7.71E+00
Packaging Material, Rubber	1.18E-01
Packaging Material, Steel	2.72E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.19E-01
Np-237	3.39E-06
Pu-238	3.69E-02
Pu-239	2.17E+00
Pu-240	5.30E-01
Pu-241	1.78E+00
Pu-242	3.67E-05
Th-229	2.02E-14
Th-230	1.78E-11
Th-232	1.39E-17
U-233	7.93E-11
U-234	6.40E-07
U-235	1.28E-08
U-236	9.41E-08
U-238	3.42E-14

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

Various sludges, particulates (for example, ash, or resins), and dissolution heels immobilized into solid monoliths.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-RF-990-SRP**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2020
Stream Name	SRP Combined Soils					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	3.22E+01
Cellulose	1.04E+01
Rubber	0.00E+00
Plastic	1.04E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	2.30E+01
Soil	6.33E+03
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.85E+02
Packaging Material, Rubber	2.83E+00
Packaging Material, Steel	6.53E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.18E-01
Np-237	6.66E-06
Pu-238	5.53E-03
Pu-239	1.05E-01
Pu-240	2.42E-02
Pu-241	1.51E-01
Pu-242	4.44E-06
Th-229	2.96E-14
Th-230	6.23E-09
Th-232	4.42E-19
U-233	1.36E-10
U-234	1.36E-04
U-235	2.99E-05
U-236	3.58E-09
U-238	6.94E-04

Haz. Waste No(s).

F001, F002

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of soils generated from repackaging of soils at the SRP

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-SD-178-SRP**

Appendix A

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2020
Stream Name	SRP Combined Soils					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	3.8	0.0	3.8
Final Form Total	3.8	0.0	3.8

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.51E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	5.22E+00
Cement	0.00E+00
Solidified Inorganic Material	1.75E+02
Solidified Organic Material	0.00E+00
Soil	4.15E+03
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.39E+02
Packaging Material, Rubber	2.12E+00
Packaging Material, Steel	4.90E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.47E+01
Np-237	2.09E-04
Pu-238	8.39E-03
Pu-239	3.01E-01
Pu-240	6.68E-02
Pu-241	5.05E-01
Pu-242	8.69E-06
Th-229	3.94E-14
Th-230	2.25E-11
Th-232	4.88E-20
U-233	8.99E-10
U-234	2.46E-06
U-235	2.96E-10
U-236	1.98E-09
U-238	9.30E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D027, D028, D029, D030, D032, D034, D036, D037, D043, F001, F002, F003, F004, F005, F006, F007, F009

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of soils generated from repackaging and treatment of liquid in inorganic and organic wastes at the SRP

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **KA-T003**

Appendix A

Waste Profile Report

Site	Knolls Atomic Power Laboratory - Schenectady	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Discarding Excess/Expired Materials	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Transuranic Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal POC - 6" w/ Liner	0.0	0.0	0.0
Final Form Total	0.0	0.0	0.0

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	9.70E+00
Aluminum-based Metal/Alloys	6.00E-02
Other Metal/Alloys	1.00E-02
Other Inorganic Materials	2.30E-01
Cellulose	7.99E+00
Rubber	7.20E-01
Plastic	6.41E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	1.34E+02
Packaging Material, Plastic	2.31E+01
Packaging Material, Rubber	3.54E-01
Packaging Material, Steel	2.00E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	9.14E-02
Np-237	6.35E-04
Pu-238	7.00E-01
Pu-239	8.07E-02
Th-229	9.89E-05
Th-230	1.18E-08
Th-232	2.51E-09
U-233	3.41E-02
U-234	7.45E-05
U-235	7.87E-08

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

This transuranic waste has not yet been generated. It consists of organic and inorganic particulate and debris.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **KN-B234TRU**

Appendix A

Waste Profile Report

Site	Knolls Atomic Power Laboratory - Nuclear Fuel Services	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Building 234 TRU Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	43.3	4.2	47.5
Final Form Total	43.3	4.2	47.5

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.49E+01
Aluminum-based Metal/Alloys	4.54E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	5.86E+01
Cellulose	8.92E+00
Rubber	5.27E-01
Plastic	5.51E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	2.72E+02
Soil	2.52E+03
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.74E+03
Packaging Material, Rubber	2.67E+01
Packaging Material, Steel	6.15E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.07E-01
Np-237	1.54E-06
Pu-238	4.30E-02
Pu-239	1.41E+00
Pu-240	1.41E+00
Pu-241	1.18E+00
Th-229	5.36E-06
Th-230	7.87E-04
Th-232	2.62E-04
U-233	5.08E-03
U-234	5.08E-03
U-235	9.62E-04
U-236	9.63E-04
U-238	1.24E-04

Haz. Waste No(s).

F002

TRUCON Code(s)

111/211, 127/227

Waste Stream Description

This waste is non-hazardous soil and debris from Building 234 decommissioning. The majority of the waste to be generated, estimated 90%, will be soil. All process equipment and glove boxes were removed in the early 1990s and are not part of this waste stream. The remaining debris consists of concrete block, metal, PPE, plywood, plexiglass, plastic, HEPA filters, piping, duct work, glass, cheese cloth, paper, rubber and small tools.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-CIN01.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Cemented TRU Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	184.4	219.2	403.6
55-gal POC - 12" w/ Liner	0.5	0.0	0.5
SWB Dir Ld w/ Liner	84.6	0.0	84.6
SWB w/ 4 - 55-gal Drums w/ Liners	7.6	0.0	7.6
Final Form Total	277.0	219.2	496.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.82E+04
Aluminum-based Metal/Alloys	3.02E+00
Other Metal/Alloys	5.61E+03
Other Inorganic Materials	2.74E+03
Cellulose	1.73E+02
Rubber	5.18E+02
Plastic	8.58E+03
Cement	3.63E+05
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	6.24E+02
Vitrified	0.00E+00
Packaging Material, Cellulose	2.81E+02
Packaging Material, Plastic	1.53E+04
Packaging Material, Rubber	2.52E+02
Packaging Material, Steel	7.00E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.79E+04
Am-243	1.59E+00
Cs-137	9.75E-04
Np-237	3.17E-01
Pu-238	3.84E+03
Pu-239	5.22E+03
Pu-240	1.45E+03
Pu-241	3.11E+04
Pu-242	1.76E+00
Pu-244	6.06E-07
Sr-90	9.17E-04
Th-229	2.43E-06
Th-230	5.27E-07
Th-232	6.26E-16
U-233	2.76E-01
U-234	5.73E-01
U-235	6.55E-03
U-236	1.29E-04
U-238	2.53E-01

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)

114/214, 125/225, 126/226

Waste Stream Description

Inorganic homogenous solid waste (cemented TRU waste) generated in TA-55.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-CIN02.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Cemented TRU Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	17.9	0.0	17.9
SWB Dir Ld w/ Liner	101.5	0.0	101.5
Final Form Total	119.4	0.0	119.4

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	8.29E+03
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	1.69E+00
Cellulose	6.33E+01
Rubber	3.61E+00
Plastic	5.92E+02
Cement	6.20E+04
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	7.78E+02
Packaging Material, Rubber	2.96E+01
Packaging Material, Steel	1.80E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.94E+02
Am-243	1.64E-03
Cs-137	6.82E-05
Np-237	1.77E-03
Pu-238	2.87E+01
Pu-239	3.74E+02
Pu-240	1.97E+01
Pu-241	1.38E+02
Pu-242	2.78E-03
Sr-90	6.82E-05
Th-229	8.48E-16
Th-230	3.08E-09
Th-232	1.44E-19
U-233	2.70E-10
U-234	3.35E-03
U-235	7.81E-04
U-236	5.83E-08
U-238	4.19E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F005

TRUCON Code(s)

111/211, 114/214, 125/225

Waste Stream Description

Homogeneous cemented inorganics generated in the TA-50-01 RLWTF pretreatment process.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-CIN03.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Cemented TRU Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	2.1	0.0	2.1
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Final Form Total	4.0	0.0	4.0

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	5.43E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	2.61E+01
Cement	2.33E+03
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	7.94E+01
Packaging Material, Rubber	1.54E+00
Packaging Material, Steel	5.62E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	8.35E-02
Am-243	6.74E-05
Cs-137	2.64E-04
Np-237	4.15E-05
Pu-238	1.30E+00
Pu-239	6.38E-01
Pu-240	1.01E-01
Pu-241	1.36E+00
Pu-242	5.81E-05
Sr-90	2.64E-04
Th-229	5.96E-07
Th-230	7.22E-10
Th-232	7.39E-22
U-233	6.34E-12
U-234	7.85E-04
U-235	1.94E-05
U-236	3.00E-10
U-238	1.12E-03

Haz. Waste No(s).

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

TRUCON Code(s)

114/214, 126/226

Waste Stream Description

Cemented TRU waste generated in the CMR during facility and equipment operations and maintenance processes.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-LA225D**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Cemented TRU Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	4.6	0.0	4.6
Final Form Total	4.6	0.0	4.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.72E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	3.05E+00
Cement	4.80E+02
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.70E+02
Packaging Material, Rubber	2.60E+00
Packaging Material, Steel	5.98E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.07E-01
Am-243	3.53E-04
Cs-137	2.78E-05
Np-237	3.59E-05
Pu-238	3.07E-01
Pu-239	8.75E-01
Pu-240	1.69E-01
Pu-241	1.17E+00
Pu-242	1.18E-05
Sr-90	2.76E-05
Th-229	1.80E-06
Th-230	4.15E-09
Th-232	2.66E-17
U-233	9.11E-10
U-234	7.78E-05
U-235	6.58E-07
U-236	1.05E-07
U-238	5.10E-09

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F003, F005

TRUCON Code(s)

125/225

Waste Stream Description

Cemented TRU waste generated in the CMR during facility and equipment operations and maintenance processes.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-LANHD01**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	TRU METAL WASTE					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SLB2 Dir Ld	14.8	0.0	14.8
SWB Dir Ld w/ Liner	15.0	0.0	15.0
Final Form Total	29.8	0.0	29.8

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.01E+04
Aluminum-based Metal/Alloys	4.08E+01
Other Metal/Alloys	1.21E+03
Other Inorganic Materials	6.55E+03
Cellulose	8.36E+02
Rubber	1.25E+03
Plastic	3.87E+03
Cement	0.00E+00
Solidified Inorganic Material	1.61E+02
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.82E+01
Packaging Material, Rubber	4.54E+00
Packaging Material, Steel	4.76E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.61E+00
Np-237	2.83E-06
Pu-238	7.91E-01
Pu-239	2.34E+01
Pu-240	1.94E+00
Pu-241	2.94E+01
Pu-242	1.14E-02
Pu-244	1.25E-08
Th-229	6.05E-15
Th-230	4.83E-09
Th-232	5.11E-17
U-233	3.50E-11
U-234	9.43E-05
U-235	4.34E-07
U-236	3.45E-07
U-238	1.06E-11

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F005

TRUCON Code(s)

117/217

Waste Stream Description

ALL OTHER NON-COMBUSTIBLE WASTE

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-MHD01.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Heterogeneous Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	273.0	1692.6	1965.6
55-gal POC - 12" w/ Liner	27.0	0.0	27.0
SWB Dir Ld w/ Liner	112.8	0.0	112.8
SWB w/ 4 - 55-gal Drums w/ Liners	13.4	0.0	13.4
Final Form Total	426.2	1692.6	2118.8

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.61E+05
Aluminum-based Metal/Alloys	3.57E+03
Other Metal/Alloys	1.80E+04
Other Inorganic Materials	1.83E+04
Cellulose	4.18E+04
Rubber	1.59E+04
Plastic	3.64E+04
Cement	0.00E+00
Solidified Inorganic Material	5.42E+04
Solidified Organic Material	5.35E+01
Soil	1.98E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	1.55E+04
Packaging Material, Plastic	7.71E+04
Packaging Material, Rubber	1.20E+03
Packaging Material, Steel	3.39E+05
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.66E+03
Am-243	1.18E-01
Cm-244	1.63E-01
Cs-137	4.19E-04
Np-237	2.96E-02
Pu-238	7.84E+04
Pu-239	7.07E+03
Pu-240	1.97E+03
Pu-241	2.88E+04
Pu-242	2.15E+00
Pu-244	1.46E-07
Sr-90	4.18E-04
Th-229	5.84E-07
Th-230	8.35E-06
Th-232	8.75E-16
U-233	6.64E-02
U-234	9.10E+00
U-235	7.86E-04
U-236	1.80E-04
U-238	1.37E-02

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F003, F005

TRUCON Code(s)

112/212, 115/215, 116/216, 117/217, 118/218, 119/219, 122/222, 123/223, 124/224, 125/225, 133/233, 154

Waste Stream Description

Mixed heterogeneous debris waste generated in TA-55.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-MHD01-Pits**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Heterogeneous Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.0	2066.0	2066.0
Final Form Total	0.0	2066.0	2066.0

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.08E+05
Aluminum-based Metal/Alloys	8.42E+02
Other Metal/Alloys	2.50E+04
Other Inorganic Materials	1.35E+05
Cellulose	1.72E+04
Rubber	2.59E+04
Plastic	7.97E+04
Cement	0.00E+00
Solidified Inorganic Material	3.32E+03
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	7.59E+04
Packaging Material, Rubber	1.16E+03
Packaging Material, Steel	2.68E+05
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	8.76E+03
Am-243	6.92E-01
Cm-244	1.03E+02
Cs-137	8.19E-03
Np-237	2.02E-01
Pu-238	3.72E+04
Pu-239	2.48E+04
Pu-240	8.25E+03
Pu-241	1.25E+05
Pu-242	2.32E+00
Sr-90	8.70E-03
Th-229	1.35E-04
Th-230	9.17E-06
Th-232	5.46E-13
U-233	1.54E+01
U-234	9.97E+00
U-235	2.81E-02
U-236	1.11E-01
U-238	4.31E+00

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F003, F005

TRUCON Code(s)

112/212, 115/215, 116/216, 117/217, 118/218, 119/219, 122/222, 123/223, 124/224, 125/225, 133/233, 154

Waste Stream Description

Mixed heterogeneous debris waste generated during pit production

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-MHD03.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Heterogeneous Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	99.1	157.5	256.6
55-gal POC - 12" w/ Liner	0.1	0.0	0.1
SLB2 Dir Ld	0.0	473.0	473.0
SWB Dir Ld w/ Liner	24.4	0.0	24.4
Final Form Total	123.7	630.5	754.1

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	6.41E+04
Aluminum-based Metal/Alloys	1.13E+03
Other Metal/Alloys	2.73E+03
Other Inorganic Materials	6.42E+03
Cellulose	2.24E+04
Rubber	1.15E+03
Plastic	9.21E+03
Cement	0.00E+00
Solidified Inorganic Material	1.70E+04
Solidified Organic Material	1.32E+01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	5.62E+01
Packaging Material, Plastic	9.47E+03
Packaging Material, Rubber	2.01E+02
Packaging Material, Steel	1.15E+05
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.67E+01
Am-243	3.52E-02
Cm-244	9.84E+02
Cs-137	3.82E+00
Np-237	1.58E-02
Pu-238	4.47E+02
Pu-239	8.24E+01
Pu-240	2.16E+01
Pu-241	2.20E+02
Pu-242	6.72E-03
Sr-90	3.59E+00
Th-229	7.59E-15
Th-230	5.03E-08
Th-232	7.01E-18
U-233	2.41E-09
U-234	5.48E-02
U-235	3.25E-04
U-236	1.45E-06
U-238	1.33E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D026, D027, D028, D029, D030, D035, D036, D037, D038, D039, D040, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

112/212, 115/215, 116/216, 117/217, 118/218, 119/219, 120/220, 123/223, 125/225, 154

Waste Stream Description

Mixed heterogeneous combustible and non-combustible debris.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-MHD04.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Heterogeneous Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.8	0.0	0.8
SWB Dir Ld w/ Liner	77.1	0.0	77.1
TDOP Dir Ld	22.5	0.0	22.5
Final Form Total	100.4	0.0	100.4

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	8.09E+03
Aluminum-based Metal/Alloys	2.90E+02
Other Metal/Alloys	1.29E+02
Other Inorganic Materials	5.10E+01
Cellulose	2.00E+03
Rubber	3.22E+02
Plastic	8.54E+02
Cement	0.00E+00
Solidified Inorganic Material	4.93E+02
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.24E+02
Packaging Material, Rubber	1.94E+01
Packaging Material, Steel	1.59E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.41E+01
Am-243	2.60E-04
Cs-137	8.90E-06
Np-237	7.07E-04
Pu-238	2.17E+02
Pu-239	1.14E+02
Pu-240	3.68E+01
Pu-241	1.96E+02
Pu-242	5.57E-03
Sr-90	8.86E-06
Th-229	6.54E-07
Th-230	9.15E-07
Th-232	2.42E-16
U-233	2.48E-03
U-234	3.41E-02
U-235	2.08E-05
U-236	3.27E-06
U-238	2.59E-12

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F005

TRUCON Code(s)

115/215, 116/216, 117/217, 118/218, 119/219, 123/223, 125/225, 154

Waste Stream Description

Mixed heterogeneous combustible and non-combustible debris generated at TA-21 DP West Facility during plutonium processing and associated operations.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-MHD05-ITRI.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Heterogeneous Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	2.7	0.0	2.7
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Final Form Total	4.6	0.0	4.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.37E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	8.27E+01
Other Inorganic Materials	7.82E+01
Cellulose	2.12E+01
Rubber	2.04E+01
Plastic	9.00E+01
Cement	0.00E+00
Solidified Inorganic Material	3.23E+01
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.03E+02
Packaging Material, Rubber	1.90E+00
Packaging Material, Steel	6.44E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.90E+01
Am-243	7.77E-02
Cm-244	3.77E+00
Cs-137	5.70E-07
Np-237	1.19E-04
Pu-238	3.69E-02
Pu-239	7.75E-01
Pu-240	1.50E-01
Pu-241	1.47E+00
Pu-242	8.72E-06
Sr-90	5.70E-07
Th-229	5.70E-17
Th-230	4.78E-15
Th-232	1.10E-21
U-233	1.81E-11
U-234	1.04E-08
U-235	7.63E-11
U-236	4.44E-10
U-238	1.35E-16

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F005

TRUCON Code(s)

125/225, 154

Waste Stream Description

Mixed CH-TRU waste and consists of dry heterogeneous organic and inorganic debris stored at LANL resulting from the preparation of aerosols of TRU isotopes for inhalation studies performed at the LRRI.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-MHD08.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Heterogeneous Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
55-gal POC - 12" w/ Liner	0.1	0.0	0.1
SWB Dir Ld w/ Liner	3.8	0.0	3.8
Final Form Total	4.1	0.0	4.1

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.86E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	2.75E+01
Other Inorganic Materials	1.90E+00
Cellulose	4.04E+00
Rubber	4.32E+00
Plastic	9.50E+00
Cement	0.00E+00
Solidified Inorganic Material	5.56E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	5.62E+01
Packaging Material, Plastic	2.77E+01
Packaging Material, Rubber	1.08E+00
Packaging Material, Steel	8.27E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	8.53E-01
Am-243	2.96E-02
Cs-137	9.31E-05
Np-237	6.74E-05
Pu-238	3.88E-02
Pu-239	3.21E-02
Pu-240	1.74E-02
Pu-241	3.72E-01
Pu-242	5.03E-04
Sr-90	9.22E-05
Th-229	4.49E-13
Th-230	1.89E-10
Th-232	4.58E-19
U-233	1.71E-09
U-234	3.76E-06
U-235	1.90E-10
U-236	3.10E-09
U-238	4.68E-13

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F005

TRUCON Code(s)

115/215, 116/216, 117/217, 118/218, 119/219, 120/220, 123/223, 125/225, 154

Waste Stream Description

Mixed heterogeneous combustible and non-combustible debris generated during plutonium and uranium R&D processes in the TA48 Alpha Facility.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-MHD09.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Heterogeneous Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	3.2	0.0	3.2
SWB Dir Ld w/ Liner	16.9	0.0	16.9
TDOP Dir Ld	4.5	0.0	4.5
Final Form Total	24.6	0.0	24.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	6.60E+03
Aluminum-based Metal/Alloys	1.75E+01
Other Metal/Alloys	1.27E+02
Other Inorganic Materials	3.33E+01
Cellulose	4.53E+02
Rubber	7.02E+01
Plastic	4.56E+02
Cement	0.00E+00
Solidified Inorganic Material	3.22E+02
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.36E+02
Packaging Material, Rubber	5.85E+00
Packaging Material, Steel	3.79E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.30E+00
Am-243	3.57E-05
Cs-137	5.16E-06
Np-237	8.21E-05
Pu-238	3.64E+00
Pu-239	2.05E+00
Pu-240	6.89E-01
Pu-241	8.73E+00
Pu-242	5.13E-04
Sr-90	5.11E-06
Th-229	5.27E-13
Th-230	3.58E-08
Th-232	6.74E-17
U-233	2.03E-09
U-234	6.80E-04
U-235	4.26E-06
U-236	2.89E-07
U-238	1.14E-08

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D027, D028, D029, D030, D035, D037, D038, D039, D040, D043, F001, F002, F003, F004, F005, F006, F007, F009

TRUCON Code(s)

115/215, 116/216, 117/217, 118/218, 119/219, 120/220, 123/223, 125/225, 154

Waste Stream Description

Mixed heterogeneous combustible and non-combustible debris from TA-50.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-MIN02-V.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Absorbed Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	3.8	0.0	3.8
SWB Dir Ld w/ Liner	3.8	0.0	3.8
Final Form Total	7.5	0.0	7.5

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	4.94E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	1.01E+02
Other Inorganic Materials	6.23E-01
Cellulose	2.26E+01
Rubber	8.63E+00
Plastic	7.06E+01
Cement	0.00E+00
Solidified Inorganic Material	1.35E+03
Solidified Organic Material	1.17E+01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.43E+02
Packaging Material, Rubber	2.85E+00
Packaging Material, Steel	1.07E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.79E+00
Am-243	1.53E-03
Cs-137	9.46E-07
Np-237	1.66E-04
Pu-238	4.83E+01
Pu-239	3.37E+01
Pu-240	8.09E+00
Pu-241	8.80E+01
Pu-242	5.45E-04
Sr-90	9.46E-07
Th-229	7.96E-17
Th-230	7.95E-09
Th-232	5.90E-20
U-233	2.53E-11
U-234	8.65E-03
U-235	3.20E-05
U-236	2.39E-08
U-238	1.05E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F005

TRUCON Code(s)

112/212, 113/213, 125/225, 126/226, 129/229

Waste Stream Description

Inorganic particulate waste generated in TA-55.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-MIN03-NC.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Homogeneous Inorganic Solids					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	53.3	0.0	53.3
SWB Dir Ld w/ Liner	5.6	0.0	5.6
Final Form Total	59.0	0.0	59.0

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	5.00E+02
Aluminum-based Metal/Alloys	4.26E+01
Other Metal/Alloys	1.24E+01
Other Inorganic Materials	3.55E+01
Cellulose	1.46E+02
Rubber	2.42E+01
Plastic	9.82E+02
Cement	0.00E+00
Solidified Inorganic Material	4.57E+04
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.97E+03
Packaging Material, Rubber	3.11E+01
Packaging Material, Steel	7.78E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.24E+01
Am-243	1.12E-03
Cs-137	2.24E-03
Np-237	2.48E-04
Pu-238	6.50E+00
Pu-239	1.82E+01
Pu-240	1.87E+00
Pu-241	1.72E+01
Pu-242	4.22E-04
Sr-90	2.22E-03
Th-229	5.28E-07
Th-230	2.22E-09
Th-232	7.54E-19
U-233	3.78E-11
U-234	2.42E-03
U-235	8.92E-05
U-236	1.56E-07
U-238	8.45E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D028, D035, D037, D038, D039, D040, F001, F002, F003, F004, F005, F006, F007, F009

TRUCON Code(s)

111/211, 125/225

Waste Stream Description

Homogeneous dewatered sludge generated in the TA-50-01 RLWTF main treatment process.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-MIN04-S.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Salt Waste			**Inventory Date**	12/31/2020
Stream Name	Salt Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.8	0.0	0.8
55-gal POC - 12" w/ Liner	0.2	0.0	0.2
SWB Dir Ld w/ Liner	1.9	0.0	1.9
SWB w/ 4 - 55-gal Drums w/ Liners	0.8	0.0	0.8
Final Form Total	3.8	0.0	3.8

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.24E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	2.40E+01
Other Inorganic Materials	1.12E+01
Cellulose	3.44E-01
Rubber	0.00E+00
Plastic	1.33E+01
Cement	0.00E+00
Solidified Inorganic Material	2.37E+02
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	1.12E+02
Packaging Material, Plastic	9.48E+01
Packaging Material, Rubber	2.14E+00
Packaging Material, Steel	1.24E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.91E+01
Am-243	2.37E-02
Cs-137	2.89E-04
Np-237	3.51E-04
Pu-238	1.99E+00
Pu-239	6.45E+01
Pu-240	1.59E+01
Pu-241	1.38E+02
Pu-242	1.17E-03
Sr-90	2.93E-04
Th-229	1.68E-16
Th-230	1.74E-10
Th-232	1.16E-19
U-233	5.35E-11
U-234	1.89E-04
U-235	5.10E-06
U-236	4.72E-08
U-238	1.81E-14

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F003, F005

TRUCON Code(s)

124/224, 125/225

Waste Stream Description

Consists primarily of inorganic homogeneous solid waste (salt waste) generated in TA-55.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-MIN05-V.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Absorbed TRU Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.3	0.0	1.3
SWB Dir Ld w/ Liner	1.9	0.0	1.9
Final Form Total	3.1	0.0	3.1

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	4.61E+01
Aluminum-based Metal/Alloys	7.76E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	3.24E-01
Cellulose	2.61E+01
Rubber	3.24E+00
Plastic	3.89E+01
Cement	0.00E+00
Solidified Inorganic Material	5.56E+02
Solidified Organic Material	2.89E+02
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	4.85E+01
Packaging Material, Rubber	1.07E+00
Packaging Material, Steel	4.53E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.30E+00
Am-243	1.48E-05
Cs-137	6.20E-06
Np-237	6.16E-03
Pu-238	3.86E-01
Pu-239	9.44E+00
Pu-240	2.21E+00
Pu-241	2.01E+01
Pu-242	1.38E-04
Sr-90	3.96E-06
Th-229	4.17E-11
Th-230	2.68E-08
Th-232	5.80E-17
U-233	1.58E-07
U-234	4.89E-04
U-235	1.19E-05
U-236	3.92E-07
U-238	1.29E-13

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F005

TRUCON Code(s)

125/225

Waste Stream Description

Mixed homogeneous solids

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-MIN06-NS.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Treated Legacy Nitrate Salt Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	40.1	0.0	40.1
55-gal POC - 12" w/ Liner	0.0	0.0	0.0
Final Form Total	40.2	0.0	40.2

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	9.03E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	3.84E+00
Other Inorganic Materials	0.00E+00
Cellulose	9.60E-02
Rubber	0.00E+00
Plastic	2.53E+01
Cement	0.00E+00
Solidified Inorganic Material	3.26E+04
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	2.81E+01
Packaging Material, Plastic	1.48E+03
Packaging Material, Rubber	2.27E+01
Packaging Material, Steel	5.31E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	6.32E+02
Am-243	3.89E-02
Cs-137	3.34E-05
Np-237	7.37E-03
Pu-238	3.15E+00
Pu-239	9.93E+01
Pu-240	1.93E+01
Pu-241	1.88E+02
Pu-242	2.18E-03
Sr-90	3.34E-05
Th-229	3.54E-15
Th-230	1.65E-09
Th-232	1.41E-19
U-233	1.12E-09
U-234	1.80E-03
U-235	3.93E-05
U-236	5.71E-08
U-238	5.62E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F005

TRUCON Code(s)

125/225, 126/226

Waste Stream Description

Inorganic homogeneous solids generated in TA-55 and treated at TA-50

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-MSG04.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Spill Clean-ups/Emergency Response Actions	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Contaminated Soil					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	8.0	0.0	8.0
SWB Dir Ld w/ Liner	30.1	0.0	30.1
Final Form Total	38.1	0.0	38.1

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	8.25E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	6.61E+00
Other Inorganic Materials	4.96E+00
Cellulose	9.91E-01
Rubber	0.00E+00
Plastic	1.24E+02
Cement	0.00E+00
Solidified Inorganic Material	3.30E+01
Solidified Organic Material	0.00E+00
Soil	1.90E+04
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.29E+02
Packaging Material, Rubber	1.03E+01
Packaging Material, Steel	5.67E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.98E-01
Cs-137	5.69E-07
Np-237	3.71E-07
Pu-238	1.75E-02
Pu-239	2.02E+00
Pu-240	1.49E-01
Pu-241	1.47E+00
Pu-242	8.68E-06
Sr-90	5.64E-07
Th-229	8.21E-16
Th-230	5.08E-08
Th-232	3.93E-18
U-233	4.70E-12
U-234	9.20E-04
U-235	2.28E-05
U-236	2.65E-08
U-238	1.80E-04

Haz. Waste No(s).

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

TRUCON Code(s)

111/211

Waste Stream Description

Mixed contaminated soil generated at the TA-21 DP West Facility.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-OS-00-01.001**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Discarding Excess/Expired Materials	**Waste Matrix Code Group**	Uncategorized Metal Waste			**Inventory Date**	12/31/2020
Stream Name	Defense Sealed Sources					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal POC - 12" w/ Liner	0.5	0.0	0.5
55-gal POC - 6" w/ Liner	0.2	6.0	6.1
55-gal S100 POC - 6" w/ Liner	0.1	0.0	0.1
55-gal S300 POC - 12" w/ Liner	0.0	0.0	0.0
Final Form Total	0.7	6.0	6.7

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	4.66E+03
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	8.23E+02
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	2.38E+04
Packaging Material, Plastic	9.48E+03
Packaging Material, Rubber	6.66E+01
Packaging Material, Steel	3.86E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.27E+03
Cs-137	4.44E+00
Np-237	7.34E-04
Pu-238	2.08E+02
Pu-239	2.21E+03
Pu-240	5.90E+02
Pu-241	1.09E+03
Pu-242	1.11E-02
Sr-90	1.13E-04
Th-229	5.31E-11
Th-230	2.05E-07
Th-232	4.31E-16
U-233	6.05E-07
U-234	2.26E-02
U-235	2.18E-06
U-236	1.75E-05
U-238	1.08E-09

No Hazardous Waste Numbers Provided

TRUCON Code(s)

120/220

Waste Stream Description

Manufactured sealed sources in metal or Lexan containers placed inside POCs. Sealed sources are encapsulated in various metals and contain varying amounts/combinations of Pu, Am, or other TRU nuclides, and may contain Be, Li, or other light elements.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-OS-00-04**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Discarding Excess/Expired Materials	**Waste Matrix Code Group**	Uncategorized Metal Waste			**Inventory Date**	12/31/2020
Stream Name	Mixed Waste Sealed Sources					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal POC - 6" w/ Liner	0.0	0.0	0.0
Final Form Total	0.0	0.0	0.0

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	6.12E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	1.08E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	4.47E+01
Packaging Material, Plastic	7.71E+00
Packaging Material, Rubber	1.18E-01
Packaging Material, Steel	6.67E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.10E-01
Np-237	4.78E-07
Pu-239	2.90E-05
Pu-240	1.84E-05
Pu-241	3.21E-05
Th-229	1.36E-13
Th-232	6.58E-22
U-233	2.26E-10
U-235	1.27E-12
U-236	3.81E-12

Haz. Waste No(s).

D006, D008

TRUCON Code(s)

120/220

Waste Stream Description

Manufactured sealed sources in metal or Lexan containers which are placed inside 55-gallon metal POC configuration drums.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-00-01**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	TA-39 Heterogeneous Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	8.6	0.0	8.6
SWB Dir Ld w/ Liner	73.3	0.0	73.3
Final Form Total	81.9	0.0	81.9

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	8.61E+03
Aluminum-based Metal/Alloys	1.54E+03
Other Metal/Alloys	1.54E+03
Other Inorganic Materials	4.75E+03
Cellulose	1.69E+02
Rubber	1.52E+02
Plastic	1.52E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	4.05E+02
Packaging Material, Rubber	1.90E+01
Packaging Material, Steel	1.24E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	7.55E-01
Am-243	2.33E-06
Cs-137	7.99E-06
Np-237	2.11E-03
Pu-238	1.57E+00
Pu-239	1.25E+00
Pu-240	5.38E-02
Pu-241	6.78E-01
Pu-242	5.12E-06
Sr-90	7.98E-06
Th-229	4.05E-13
Th-230	1.53E-10
Th-232	3.93E-20
U-233	9.20E-09
U-234	1.89E-05
U-235	3.59E-07
U-236	1.59E-09
U-238	7.94E-16

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F005

TRUCON Code(s)

115/215, 116/216, 117/217, 118/218, 119/219, 120/220, 123/223, 125/225, 154

Waste Stream Description

Mixed heterogeneous debris generated during plutonium and uranium R&D operations in the TA-39, Building 69, Two-Stage Gas Gun Facility.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-00-03**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	NON-PN EQUIPMENT					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid - Dir Ld	2.7	0.0	2.7
Final Form Total	2.7	0.0	2.7

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	6.53E-01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	3.46E+01
Cement	0.00E+00
Solidified Inorganic Material	6.50E+03
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	0.00E+00
Packaging Material, Steel	1.50E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Pu-239	1.24E+01
U-235	4.89E-07

Haz. Waste No(s).

D008

No TRUCON Codes Provided

Waste Stream Description

LAMPRE REACTOR VESSEL SEALED IN CASK VESSEL

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-03-10**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Combined Combustible and NonCombustible					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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	Total Mass (kg)
Iron-based Metal/Alloys	1.81E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	5.92E+00
Other Inorganic Materials	2.87E+01
Cellulose	2.31E+01
Rubber	2.34E+00
Plastic	6.79E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	4.54E-01
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.31E+01
Packaging Material, Rubber	3.54E-01
Packaging Material, Steel	8.16E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	8.74E-02
Am-243	8.96E-07
Np-237	8.05E-04
Pu-238	1.24E-02
Pu-239	4.49E-01
Pu-240	1.03E-01
Pu-241	1.16E+00
Pu-242	6.04E-06
Th-229	5.45E-12
Th-230	1.02E-08
Th-232	4.06E-16
U-233	2.07E-08
U-234	1.85E-04
U-235	8.42E-06
U-236	1.38E-06
U-238	6.87E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F005

TRUCON Code(s)

115/215, 116/216, 117/217, 118/218, 119/219, 120/220, 123/223, 125/225, 154

Waste Stream Description

CMR TRU Inline or Subaccountable Packaged Waste

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-03-14**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Debris and Metal					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/ Liner	9.4	0.0	9.4
Final Form Total	9.4	0.0	9.4

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	5.32E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	1.74E+02
Other Inorganic Materials	8.44E+02
Cellulose	6.80E+02
Rubber	6.90E+01
Plastic	2.00E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	1.34E+01
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.13E+01
Packaging Material, Rubber	1.81E+00
Packaging Material, Steel	1.45E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Pu-238	2.56E+00
Pu-239	6.20E-03
Th-230	8.99E-08
U-234	4.01E-04
U-235	2.81E-10

Haz. Waste No(s).

D008

TRUCON Code(s)

115/215, 116/216, 117/217, 118/218, 119/219, 120/220, 123/223, 125/225, 154

Waste Stream Description

Metals and Miscellaneous Equipment Debris

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-03-27**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Cell fuel cans and hot trash					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Fxd Lid - Dir Ld	0.9	0.0	0.9
RH Can w/ Remov Lid - Dir Ld	76.5	0.0	76.5
Final Form Total	77.4	0.0	77.4

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.81E+04
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	5.91E+03
Other Inorganic Materials	2.87E+04
Cellulose	2.31E+04
Rubber	2.34E+03
Plastic	6.78E+04
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	4.54E+02
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	0.00E+00
Packaging Material, Steel	4.33E+04
Packaging Material, Lead	4.13E+02

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.32E+00
Cs-137	1.37E+03
Np-237	6.61E-06
Pu-238	1.50E+00
Pu-239	8.02E+01
Pu-240	2.51E+00
Pu-241	6.67E+01
Pu-242	1.52E-03
Sr-90	9.56E+02
Th-229	1.78E-14
Th-230	9.55E-08
Th-232	1.77E-15
U-233	9.22E-11
U-234	1.74E-03
U-235	8.25E-03
U-236	6.20E-06
U-238	4.07E-05

No Hazardous Waste Numbers Provided

TRUCON Code(s)

117/217

Waste Stream Description

Combined combustible and noncombustible debris waste (RH-TRU) of the CMR facility

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-03-28**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Cement paste from CMR building (mixed)					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.1	0.0	1.1
Final Form Total	1.1	0.0	1.1

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	3.18E+00
Cement	1.06E+03
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.85E+01
Packaging Material, Rubber	5.90E-01
Packaging Material, Steel	1.36E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Pu-238	2.45E+00
Th-230	9.03E-08
U-234	3.94E-04

Haz. Waste No(s).

D007, F001, F002

TRUCON Code(s)

114/214, 126/226

Waste Stream Description

Cement paste solidified aqueous waste and cemented sludge generated from facility and equipment operations and maintenance. Sludge is a residue from numerous treatment and filtration operations, involving aqueous liquid radioactive waste, that produces thin alkaline sludge (~25% solids) compatible with Portland cement. Final cemented waste monoliths are produced by mixing waste in 55-GAL steel drums containing empirically determined quantities of sludge, Portland cement, vermiculite, and sodium silicate.

Waste Stream ID: **LA-TA-03-29**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	CMR soil waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	6.3	0.0	6.3
SWB Dir Ld w/ Liner	3.8	0.0	3.8
Final Form Total	10.1	0.0	10.1

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.64E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	5.36E+01
Other Inorganic Materials	2.60E+02
Cellulose	2.09E+02
Rubber	2.12E+01
Plastic	6.15E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	4.11E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.36E+02
Packaging Material, Rubber	4.27E+00
Packaging Material, Steel	1.40E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.85E-02
Np-237	9.04E-09
Pu-238	6.75E-03
Pu-239	2.31E-01
Pu-240	5.40E-02
Pu-241	7.82E-01
Pu-242	3.13E-06
Th-229	5.70E-19
Th-230	4.63E-12
Th-232	3.95E-20
U-233	1.95E-14
U-234	5.13E-07
U-235	8.81E-09
U-236	1.60E-09
U-238	4.85E-16

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Soils contaminated with TRU resulting from facility and equipment operations/maintenance

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-03-30**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2020
Stream Name	SILICON-BASED OIL - LIQUID					**Activities Decayed to CY**	2020

Waste Volume Detail (m 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	Total Mass (kg)
Iron-based Metal/Alloys	8.30E+00
Aluminum-based Metal/Alloys	1.57E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	3.25E+00
Rubber	3.37E-01
Plastic	4.71E+00
Cement	0.00E+00
Solidified Inorganic Material	4.70E+01
Solidified Organic Material	4.70E+01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	7.71E+00
Packaging Material, Rubber	1.18E-01
Packaging Material, Steel	2.72E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Pu-238	4.77E-02
Th-230	1.67E-09
U-234	7.46E-06

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Absorbed Organics on Vermiculite

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-21-05**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Graphite Waste			**Inventory Date**	12/31/2020
Stream Name	Graphite					**Activities Decayed to CY**	2020

Waste Volume Detail (m 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	Total Mass (kg)
Iron-based Metal/Alloys	2.04E+01
Aluminum-based Metal/Alloys	7.77E+00
Other Metal/Alloys	1.56E+01
Other Inorganic Materials	4.44E+00
Cellulose	1.32E+01
Rubber	1.02E+01
Plastic	7.61E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.54E+01
Packaging Material, Rubber	2.36E-01
Packaging Material, Steel	5.44E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.32E-01
Np-237	3.00E-06
Pu-238	2.28E-02
Pu-239	1.05E+00
Pu-240	2.50E-01
Pu-241	4.28E-01
Pu-242	1.69E-05
Th-229	3.53E-13
Th-230	1.85E-09
Th-232	3.88E-16
U-233	2.77E-10
U-234	6.04E-06
U-235	1.95E-05
U-236	3.41E-07
U-238	1.21E-13

No Hazardous Waste Numbers Provided

TRUCON Code(s)

115/215, 116/216, 117/217, 118/218, 119/219, 123/223, 125/225, 154

Waste Stream Description

Graphite and Incinerator solids

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-21-06**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Combustible debris waste (mixed)					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	329.3	0.0	329.3
Final Form Total	329.3	0.0	329.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	8.60E+03
Aluminum-based Metal/Alloys	3.28E+03
Other Metal/Alloys	6.59E+03
Other Inorganic Materials	1.87E+03
Cellulose	5.59E+03
Rubber	4.32E+03
Plastic	3.21E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.21E+04
Packaging Material, Rubber	1.85E+02
Packaging Material, Steel	4.26E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	8.01E+01
Np-237	9.81E-04
Pu-238	1.28E+04
Pu-239	2.03E+02
Pu-240	6.17E+01
Pu-241	1.70E+02
Pu-242	1.15E-02
Th-229	1.05E-10
Th-230	5.37E-04
Th-232	8.75E-14
U-233	8.61E-08
U-234	2.23E+00
U-235	9.31E-04
U-236	8.05E-05
U-238	7.84E-11

Haz. Waste No(s).

F001, F002

TRUCON Code(s)

115/215, 116/216, 117/217, 118/218, 119/219, 123/223, 125/225, 154

Waste Stream Description

Combustible waste that includes debris, plastic-based waste, cellulose-based waste , and may also contain a smaller fraction of non-combustible solids and a small fraction of homogenous solids, salts, leached solids, ash, hydroxide cakes, crucibles, and impure oxides.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-21-07**

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Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Debris and Metal					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	143.4	0.0	143.4
SWB Dir Ld w/ Liner	492.6	0.0	492.6
Final Form Total	636.0	0.0	636.0

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.45E+04
Aluminum-based Metal/Alloys	9.36E+03
Other Metal/Alloys	1.88E+04
Other Inorganic Materials	5.35E+03
Cellulose	1.59E+04
Rubber	1.23E+04
Plastic	9.17E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	5.86E+03
Packaging Material, Rubber	1.76E+02
Packaging Material, Steel	9.46E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.72E+01
Np-237	4.59E-04
Pu-238	9.77E+03
Pu-239	1.78E+02
Pu-240	3.75E+01
Pu-241	7.67E+01
Pu-242	3.35E-03
Th-229	4.93E-11
Th-230	3.23E-04
Th-232	5.32E-14
U-233	4.04E-08
U-234	1.48E+00
U-235	1.33E-05
U-236	4.90E-05
U-238	2.29E-11

Haz. Waste No(s).

D008

TRUCON Code(s)

115/215, 116/216, 117/217, 118/218, 119/219, 123/223, 125/225, 154

Waste Stream Description

Equipment, Debris, and Metal Parts

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-21-08**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Glass					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	4.2	0.0	4.2
Final Form Total	4.2	0.0	4.2

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.34E+02
Aluminum-based Metal/Alloys	5.09E+01
Other Metal/Alloys	1.02E+02
Other Inorganic Materials	2.91E+01
Cellulose	8.68E+01
Rubber	6.70E+01
Plastic	4.99E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.54E+02
Packaging Material, Rubber	2.36E+00
Packaging Material, Steel	5.44E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	8.90E-01
Np-237	1.12E-05
Pu-238	8.30E+01
Pu-239	2.67E+00
Pu-240	7.50E-01
Pu-241	1.78E+00
Pu-242	1.12E-04
Th-229	1.25E-12
Th-230	2.78E-06
Th-232	1.11E-15
U-233	1.00E-09
U-234	1.27E-02
U-235	2.17E-07
U-236	1.00E-06
U-238	7.84E-13

No Hazardous Waste Numbers Provided

TRUCON Code(s)

115/215, 116/216, 117/217, 118/218, 119/219, 123/223, 125/225, 154

Waste Stream Description

Glass and Glass Residues

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-21-09**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Hepa Filters					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	14.3	0.0	14.3
Final Form Total	14.3	0.0	14.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	4.23E+02
Aluminum-based Metal/Alloys	1.61E+02
Other Metal/Alloys	3.24E+02
Other Inorganic Materials	9.21E+01
Cellulose	2.75E+02
Rubber	2.12E+02
Plastic	1.58E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	5.24E+02
Packaging Material, Rubber	8.02E+00
Packaging Material, Steel	1.85E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	7.53E-02
Np-237	9.76E-07
Pu-238	1.35E+03
Pu-239	3.59E-01
Pu-240	8.36E-02
Pu-241	1.38E-01
Pu-242	4.86E-06
Th-229	1.15E-13
Th-230	4.75E-05
Th-232	1.30E-16
U-233	9.01E-11
U-234	2.12E-01
U-235	2.96E-08
U-236	1.14E-07
U-238	3.47E-14

No Hazardous Waste Numbers Provided

TRUCON Code(s)

115/215, 116/216, 117/217, 118/218, 119/219, 123/223, 125/225, 154

Waste Stream Description

Filter cells, filter trash, and graphite glass filters

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-21-12**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Non-combustible and combustible debris waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	338.7	0.0	338.7
SWB Dir Ld w/ Liner	7.5	0.0	7.5
Final Form Total	346.3	0.0	346.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	8.83E+03
Aluminum-based Metal/Alloys	3.37E+03
Other Metal/Alloys	6.77E+03
Other Inorganic Materials	1.93E+03
Cellulose	5.74E+03
Rubber	4.43E+03
Plastic	3.30E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.24E+04
Packaging Material, Rubber	1.92E+02
Packaging Material, Steel	4.50E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.50E+02
Np-237	1.80E-03
Pu-238	4.05E+04
Pu-239	2.73E+02
Pu-240	9.18E+01
Pu-241	3.24E+02
Pu-242	2.49E-02
Th-229	1.57E-01
Th-230	2.09E-03
Th-232	1.24E-13
U-233	4.15E+01
U-234	8.04E+00
U-235	1.96E-03
U-236	1.17E-04
U-238	1.66E-10

No Hazardous Waste Numbers Provided

TRUCON Code(s)

115/215, 116/216, 117/217, 118/218, 119/219, 123/223, 125/225, 154

Waste Stream Description

COMBINED COMBUSTIBLE/NON-COMBUSTIBLE LAB TRASH

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-21-13**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Cemented wastewater treatment sludge (mixed)					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	15.3	0.0	15.3
SWB Dir Ld w/ Liner	443.7	0.0	443.7
Final Form Total	459.0	0.0	459.0

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.52E+04
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	6.26E+03
Cement	9.85E+05
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.10E+03
Packaging Material, Rubber	9.43E+01
Packaging Material, Steel	7.04E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.03E+04
Cs-137	1.63E-01
Np-237	3.37E-02
Pu-238	2.94E+01
Pu-239	6.26E+01
Pu-240	4.77E-04
Pu-241	3.43E-02
Pu-242	2.75E-08
Sr-90	1.13E-01
Th-229	2.14E-10
Th-230	5.71E-07
Th-232	4.09E-14
U-233	7.28E-07
U-234	6.63E-03
U-235	2.14E-02
U-236	8.29E-05
U-238	1.08E-02

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

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.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-21-15**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2020
Stream Name	Solidified organics					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	3.4	0.0	3.4
Final Form Total	3.4	0.0	3.4

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	9.27E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	9.11E+01
Cement	0.00E+00
Solidified Inorganic Material	1.60E+03
Solidified Organic Material	2.11E+02
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.23E+02
Packaging Material, Rubber	1.89E+00
Packaging Material, Steel	4.35E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	7.28E-01
Np-237	9.21E-06
Pu-238	7.17E-02
Pu-239	4.71E+00
Pu-240	8.10E-01
Pu-241	1.41E+00
Pu-242	4.71E-05
Th-229	1.04E-12
Th-230	5.47E-09
Th-232	1.20E-15
U-233	8.31E-10
U-234	1.84E-05
U-235	3.38E-07
U-236	1.08E-06
U-238	3.29E-13

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Contaminated oil absorbed in vermiculite

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-21-16**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	SOLIDIFIED INORGANIC PROCESS SOLID					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	55.0	0.0	55.0
Final Form Total	55.0	0.0	55.0

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	4.25E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	7.56E+01
Cement	1.19E+04
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.02E+03
Packaging Material, Rubber	3.09E+01
Packaging Material, Steel	7.13E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	8.14E+01
Am-243	4.40E-06
Cs-137	4.99E-07
Np-237	2.63E-06
Pu-238	2.67E+01
Pu-239	6.34E+02
Pu-240	1.52E+02
Pu-241	2.47E+03
Pu-242	1.25E-02
Sr-90	4.99E-07
Th-229	3.29E-19
Th-230	1.93E-09
Th-232	1.11E-18
U-233	1.44E-13
U-234	2.10E-03
U-235	3.26E-03
U-236	4.48E-07
U-238	1.93E-13

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

LEACHED PROCESS RESIDUES

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-21-17**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Source Information Not Compiled	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Process solids					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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	Total Mass (kg)
Iron-based Metal/Alloys	1.85E+01
Aluminum-based Metal/Alloys	7.04E+00
Other Metal/Alloys	1.41E+01
Other Inorganic Materials	4.02E+00
Cellulose	1.20E+01
Rubber	9.26E+00
Plastic	6.89E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.31E+01
Packaging Material, Rubber	3.54E-01
Packaging Material, Steel	8.16E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	5.49E-03
Np-237	7.12E-08
Pu-238	5.36E-04
Pu-239	2.62E-02
Pu-240	6.10E-03
Pu-241	1.01E-02
Pu-242	3.55E-07
Th-229	8.39E-15
Th-230	4.25E-11
Th-232	9.46E-18
U-233	6.57E-12
U-234	1.40E-07
U-235	2.16E-09
U-236	8.33E-09
U-238	2.53E-15

No Hazardous Waste Numbers Provided

TRUCON Code(s)

115/215, 116/216, 117/217, 118/218, 119/219, 123/223, 125/225, 154

Waste Stream Description

Special items (precious metals) requiring tracking by CST-7

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-50-18**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Cemented caustic liquid waste (mixed)					**Activities Decayed to CY**	2020

Waste Volume Detail (m 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	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	4.28E-01
Cement	4.27E+02
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.54E+01
Packaging Material, Rubber	2.36E-01
Packaging Material, Steel	5.44E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.93E-01
Np-237	4.54E-06
Pu-239	5.70E-03
Th-229	6.22E-13
U-233	4.59E-10
U-235	2.59E-10

Haz. Waste No(s).

D007, F001, F002

TRUCON Code(s)

111/211, 114/214

Waste Stream Description

Cemented Caustic Liquid Waste Solidified (through cementation) caustic aqueous waste from TA-55. The sludge is a residue from numerous treatment and filtration operations involving aqueous liquid radioactive waste.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-50-19**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Homogeneous Inorganic Solids					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	63.0	0.0	63.0
Final Form Total	63.0	0.0	63.0

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	5.34E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	2.83E+02
Cement	0.00E+00
Solidified Inorganic Material	5.31E+04
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.31E+03
Packaging Material, Rubber	3.54E+01
Packaging Material, Steel	8.16E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.12E+01
Np-237	2.99E-04
Pu-238	1.38E+00
Pu-239	1.39E+00
Th-229	3.41E-11
Th-230	3.95E-08
U-233	2.76E-08
U-234	1.94E-04
U-235	5.73E-08

Haz. Waste No(s).

F001

TRUCON Code(s)

111/211

Waste Stream Description

Homogeneous dewatered sludge generated in the TA-50-01 RLWTF main treatment process.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-55-19**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Combustible debris waste (mixed)					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	41.8	0.0	41.8
SLB2 Dir Ld	14.8	0.0	14.8
Final Form Total	56.6	0.0	56.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.24E+03
Aluminum-based Metal/Alloys	1.31E+01
Other Metal/Alloys	3.88E+02
Other Inorganic Materials	2.10E+03
Cellulose	2.68E+02
Rubber	4.02E+02
Plastic	1.24E+03
Cement	0.00E+00
Solidified Inorganic Material	5.16E+01
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.53E+03
Packaging Material, Rubber	2.51E+01
Packaging Material, Steel	7.85E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.40E+02
Np-237	4.10E-03
Pu-238	1.29E+02
Pu-239	2.47E+02
Pu-240	1.23E+02
Pu-241	6.18E+02
Pu-242	7.04E-02
Th-229	6.99E-10
Th-230	8.20E-05
Th-232	1.78E-12
U-233	4.69E-07
U-234	2.26E-01
U-235	5.99E-03
U-236	9.55E-04
U-238	1.40E-03

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F005

TRUCON Code(s)

115/215, 116/216, 117/217, 118/218, 119/219, 122/222, 123/223, 125/225, 133/233, 154

Waste Stream Description

Combustible waste that includes debris, plastic-based waste, cellulose-based waste, and may also contain a smaller fraction of non-combustible solids and a small fraction of homogenous solids, salts, leached solids, ash, hydroxide cakes, crucibles, and impure oxides.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-55-21**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Metal debris waste (mixed)					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	2.3	0.0	2.3
Final Form Total	2.3	0.0	2.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.77E+02
Aluminum-based Metal/Alloys	1.12E+00
Other Metal/Alloys	3.32E+01
Other Inorganic Materials	1.80E+02
Cellulose	2.29E+01
Rubber	3.44E+01
Plastic	1.06E+02
Cement	0.00E+00
Solidified Inorganic Material	4.41E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	8.48E+01
Packaging Material, Rubber	1.30E+00
Packaging Material, Steel	2.99E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.29E-01
Np-237	3.72E-06
Pu-238	2.29E+01
Pu-239	5.81E-01
Pu-240	2.07E-01
Pu-241	8.21E-01
Pu-242	5.51E-05
Th-229	3.44E-13
Th-230	1.97E-06
Th-232	2.55E-16
U-233	3.04E-10
U-234	6.69E-03
U-235	4.49E-08
U-236	2.52E-07
U-238	2.02E-06

Haz. Waste No(s).

D008

TRUCON Code(s)

115/215, 116/216, 117/217, 118/218, 119/219, 122/222, 123/223, 125/225, 133/233, 154

Waste Stream Description

Metal Noncombustible metal waste that may also contain some glass, ceramic, porcelain, as well as some small fraction of combustible waste.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-55-30**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Non-combustible and combustible debris waste (mixed)					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	66.8	0.0	66.8
SLB2 Dir Ld	155.2	0.0	155.2
Final Form Total	222.0	0.0	222.0

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.17E+04
Aluminum-based Metal/Alloys	4.74E+01
Other Metal/Alloys	1.41E+03
Other Inorganic Materials	7.61E+03
Cellulose	9.71E+02
Rubber	1.46E+03
Plastic	4.49E+03
Cement	0.00E+00
Solidified Inorganic Material	1.87E+02
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.45E+03
Packaging Material, Rubber	5.47E+01
Packaging Material, Steel	3.43E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.76E+02
Am-243	2.08E-05
Np-237	2.14E-04
Pu-238	2.21E+02
Pu-239	1.71E+02
Pu-240	1.05E+02
Pu-241	3.96E+03
Pu-242	2.17E-01
Pu-244	1.27E-07
Th-229	2.08E-13
Th-230	1.41E-06
Th-232	6.03E-15
U-233	1.78E-09
U-234	3.97E-02
U-235	5.81E-04
U-236	3.68E-05
U-238	8.39E-03

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F005

TRUCON Code(s)

115/215, 116/216, 117/217, 118/218, 119/219, 122/222, 123/223, 125/225, 133/233, 154

Waste Stream Description

Non-combustible and combustible waste generated from facility and equipment operations and maintenance. This waste includes, but may not be limited to non-combustible solids and may also contain a smaller fraction of combustible solids and a small fraction of homogeneous solids.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-55-38**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	LEACHED PROCESS RESIDUES					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

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	Total Mass (kg)
Iron-based Metal/Alloys	5.49E-01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	9.76E-02
Cement	1.54E+01
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.08E+01
Packaging Material, Rubber	4.72E-01
Packaging Material, Steel	1.09E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.71E-02
Np-237	3.89E-07
Pu-238	2.13E+01
Pu-239	1.71E-02
Pu-240	8.59E-03
Pu-241	1.06E-01
Pu-242	7.09E-06
Th-229	3.11E-14
Th-230	1.62E-06
Th-232	9.08E-18
U-233	2.95E-11
U-234	5.90E-03
U-235	1.51E-09
U-236	9.68E-09
U-238	4.18E-14

Haz. Waste No(s).

D008

TRUCON Code(s)

114/214, 126/226

Waste Stream Description

Cemented Inorganics and Spent Samples Solidified inorganic process solids generated from facility and equipment operations and maintenance. This waste includes process leached solids, ash, filter cakes, salts, metal oxides, fines, evaporator bottoms, and sample residues (received from the CMR building) stabilized in Portland or gypsum cement.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TRU-Empty-110**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Empty containers					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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	Total Mass (kg)
Iron-based Metal/Alloys	7.68E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	2.09E-01
Plastic	1.37E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.27E+00
Packaging Material, Rubber	3.63E-01
Packaging Material, Steel	2.90E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.24E-02
Am-243	4.38E-08
Np-237	1.73E-07
Pu-239	4.52E-05
Pu-240	1.06E-05
Pu-241	1.22E-04
Th-229	1.83E-14
Th-232	1.00E-20
U-233	1.55E-11
U-235	1.61E-12
U-236	1.13E-11

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

Empty containers identified as TRU resulting from repackaging/remediation of debris waste streams

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TRU-Empty-55**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Empty containers					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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	**Total Mass (kg)**
Iron-based Metal/Alloys	1.76E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	7.69E-01
Plastic	4.98E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.27E+00
Packaging Material, Rubber	3.63E-01
Packaging Material, Steel	2.90E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	**Total Activity (Ci)**
Am-241	9.94E-02
Am-243	1.07E-05
Cs-137	8.08E-08
Np-237	1.26E-06
Pu-238	9.03E-03
Pu-239	1.93E-02
Pu-240	1.19E-03
Pu-241	1.04E-01
Pu-242	3.94E-09
Sr-90	8.08E-08
Th-229	6.04E-19
Th-230	1.30E-12
Th-232	8.71E-24
U-233	1.92E-13
U-234	1.41E-06
U-235	2.19E-12
U-236	3.53E-12
U-238	6.11E-20

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F003, F005

TRUCON Code(s)

125/225

Waste Stream Description

Empty containers identified as TRU resulting from repackaging/remediation of debris waste streams

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TRU-Empty-85**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Empty containers					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/ Liner	90.2	0.0	90.2
Final Form Total	90.2	0.0	90.2

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.01E+04
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	1.12E+02
Plastic	3.63E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.09E+02
Packaging Material, Rubber	1.74E+01
Packaging Material, Steel	1.39E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.37E+02
Am-243	2.29E-02
Cs-137	1.32E-03
Np-237	4.58E-03
Pu-238	2.19E+01
Pu-239	4.76E+01
Pu-240	1.04E+01
Pu-241	2.27E+02
Pu-242	3.83E-04
Pu-244	3.66E-11
Sr-90	1.32E-03
Th-229	2.80E-06
Th-230	4.59E-09
Th-232	4.21E-18
U-233	6.99E-10
U-234	5.00E-03
U-235	1.48E-05
U-236	8.70E-07
U-238	4.17E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D035, D038, D039, D040, F001, F002, F005

TRUCON Code(s)

116/216, 117/217, 123/223, 125/225

Waste Stream Description

Empty containers identified as TRU resulting from repackaging/remediation of debris waste streams

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TRU-Empty-SWB**

Appendix A

Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Empty containers					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/ Liner	16.9	0.0	16.9
Final Form Total	16.9	0.0	16.9

Waste Material Parameters

Material Parameter	**Total Mass (kg)**
Iron-based Metal/Alloys	1.53E+03
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	1.63E+00
Plastic	1.02E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.04E+01
Packaging Material, Rubber	3.27E+00
Packaging Material, Steel	2.61E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	**Total Activity (Ci)**
Am-241	3.72E-01
Am-243	1.08E-05
Cs-137	1.06E-06
Np-237	5.36E-06
Pu-238	1.87E+01
Pu-239	4.07E-01
Pu-240	9.62E-02
Pu-241	7.11E-01
Pu-242	4.31E-06
Sr-90	1.04E-06
Th-229	1.20E-13
Th-230	3.91E-07
Th-232	1.01E-17
U-233	2.40E-10
U-234	3.87E-03
U-235	2.15E-07
U-236	3.42E-08
U-238	8.02E-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

Empty containers identified as TRU resulting from repackaging/remediation of debris waste streams

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LB-T001**

Appendix A

Waste Profile Report

Site	Lawrence Berkeley National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	LBL-Non Mixed Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m 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	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	2.02E+00
Other Inorganic Materials	7.40E-01
Cellulose	1.09E+00
Rubber	0.00E+00
Plastic	6.40E-01
Cement	0.00E+00
Solidified Inorganic Material	6.00E-02
Solidified Organic Material	4.00E-03
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	7.71E+00
Packaging Material, Rubber	1.18E-01
Packaging Material, Steel	2.72E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	5.37E-03
Am-243	8.99E-04
Cm-244	6.97E-04
Cs-137	7.71E-08
Np-237	8.54E-06
Pu-238	3.25E-03
Pu-239	3.08E-04
Pu-240	1.00E-05
Pu-241	1.04E-04
Pu-242	6.00E-20
Pu-244	6.70E-17
Th-229	4.11E-18
Th-230	4.21E-16
Th-232	5.60E-07
U-233	1.31E-12
U-234	9.17E-10
U-235	3.03E-14
U-236	2.96E-14
U-238	3.90E-10

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Heterogeneous transuranic, non mixed waste

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LB-T002**

Appendix A

Waste Profile Report

Site	Lawrence Berkeley National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	LBL - Mixed Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m 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	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	3.10E-04
Other Inorganic Materials	1.10E-01
Cellulose	3.70E-01
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	5.50E-03
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	7.71E+00
Packaging Material, Rubber	1.18E-01
Packaging Material, Steel	2.72E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	8.78E-06
Am-243	1.20E-08
Np-237	5.80E-08
Pu-239	5.50E-05
Pu-241	4.36E-05
Th-229	2.79E-20
U-233	8.87E-15
U-235	5.42E-15

Haz. Waste No(s).

D007

TRUCON Code(s)

125/225

Waste Stream Description

Heterogeneous transuranic mixed waste

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LL-M001**

Appendix A

Waste Profile Report

Site	Lawrence Livermore National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	R&D Glovebox Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	38.9	199.5	238.4
55-gal POC - 12" w/ Liner	2.3	10.2	12.6
SWB Dir Ld w/o Liner	7.5	52.6	60.2
Final Form Total	48.7	262.4	311.1

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.29E+04
Aluminum-based Metal/Alloys	3.59E+03
Other Metal/Alloys	8.40E+03
Other Inorganic Materials	5.70E+03
Cellulose	8.98E+03
Rubber	4.74E+03
Plastic	1.92E+04
Cement	5.90E+03
Solidified Inorganic Material	3.68E+02
Solidified Organic Material	4.62E+02
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	7.25E+03
Packaging Material, Plastic	1.99E+03
Packaging Material, Rubber	1.76E+02
Packaging Material, Steel	6.85E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.96E+03
Am-243	1.43E-01
Cm-244	1.50E+00
Cs-137	5.62E-01
Np-237	9.27E-02
Pu-238	2.16E+03
Pu-239	4.16E+03
Pu-240	1.11E+03
Pu-241	6.98E+03
Pu-242	1.74E-01
Pu-244	1.62E-10
Sr-90	5.62E-01
Th-229	1.02E-03
Th-230	2.04E-04
Th-232	3.33E-04
U-233	3.41E-01
U-234	8.63E-02
U-235	8.61E-03
U-236	3.30E-06
U-238	1.50E-02

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D028, D029, F001, F002, F005

TRUCON Code(s)

116/216

Waste Stream Description

Specific waste items in this waste stream may include paper cartons, cardboard, Kimwipes, cotton swabs, tissues, cheesecloth, grinding paper, plastic (e.g., bags, sheet, tape, containers, pipette tips, and glovebox windows), Neoprene and Hypalon gloves (leaded and non-leaded), aluminum foil, tin cans, hardware (e.g., nuts, bolts, washers, fittings, gauges, fixtures, thermocouples), metal tools (e.g., screwdrivers and pliers), metal parts, equipment (with or without circuit boards), copper (wire, tubing, flanges, rods, and molds), sealed sources, aerosol cans, glass (e.g., beakers, vials, and ion exchange columns with resin), graphite molds , crucibles (magnesium oxide, tantalum), epoxy resin chunks, lead metal (e.g., bricks, foil), Kaufman cans (lead seams), lead-lined and cadmium-lined steel cans, mercury batteries, fluorescent and incandescent light bulbs, and small quantities of pyrochemical salts and solidified aqueous or organic liquids (individual drums contain less than 50 percent, by volume, solidified liquids, and/or salts).

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LL-T004**

Appendix A

Waste Profile Report

Site	Lawrence Livermore National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Salt Waste			**Inventory Date**	12/31/2020
Stream Name	Pyrochemical salt waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.2	0.0	0.2
55-gal POC - 12" w/ Liner	1.8	1.9	3.7
Final Form Total	2.0	1.9	3.9

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	8.03E+01
Aluminum-based Metal/Alloys	1.59E+01
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	5.43E+02
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	4.95E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	2.11E+03
Packaging Material, Plastic	5.78E+02
Packaging Material, Rubber	8.97E+00
Packaging Material, Steel	8.28E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.91E+02
Cm-244	3.76E-03
Np-237	3.44E-04
Pu-238	1.49E+02
Pu-239	2.39E+02
Pu-240	5.14E+01
Pu-241	3.14E+02
Pu-242	6.59E-03
Th-229	1.63E-16
Th-230	1.93E-11
Th-232	5.93E-07
U-233	5.21E-11
U-234	4.20E-05
U-235	2.35E-08
U-236	1.52E-07
U-238	1.02E-13

Haz. Waste No(s).

F005

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.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LL-W018-S5100**

Appendix A

Waste Profile Report

Site	Lawrence Livermore National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Combined metal scrap & incidental combust					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SLB2 Dir Ld	155.2	0.0	155.2
Final Form Total	155.2	0.0	155.2

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	7.46E+03
Aluminum-based Metal/Alloys	4.68E+02
Other Metal/Alloys	1.85E+03
Other Inorganic Materials	7.79E+01
Cellulose	2.05E+03
Rubber	3.86E+02
Plastic	2.94E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	3.67E+02
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	1.71E+01
Packaging Material, Steel	2.56E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.95E+00
Cm-244	4.50E-03
Np-237	1.95E-05
Pu-238	3.52E-01
Pu-239	6.95E+00
Pu-240	1.74E+00
Pu-241	2.84E+01
Pu-242	3.21E-04
Th-229	2.00E-13
Th-230	8.27E-10
Th-232	2.15E-16
U-233	5.34E-10
U-234	1.36E-05
U-235	8.91E-08
U-236	6.70E-07
U-238	6.47E-13

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011

TRUCON Code(s)

425

Waste Stream Description

This waste stream is composed primarily of objects which, because of physical size, cannot be packaged in a 55-gallon drum. Typical objects include decommissioned gloveboxes, hoods, and large pieces of equipment (lathes, mills, etc.). This waste stream may contain lead metal (e.g., bricks, foil), Kaufman cans (lead seams), lead-lined and cadmium-lined steel cans, mercury batteries, fluorescent and incandescent light bulbs. The void space in boxes may be filled with other TRU waste items or with foam in plastic bags.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LL-W018-SS**

Appendix A

Waste Profile Report

Site	Lawrence Livermore National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Sealed Sources					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	4.2	0.0	4.2
Final Form Total	4.2	0.0	4.2

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.96E+01
Aluminum-based Metal/Alloys	6.34E+00
Other Metal/Alloys	1.79E+01
Other Inorganic Materials	1.57E+01
Cellulose	6.41E+00
Rubber	0.00E+00
Plastic	1.40E-01
Cement	0.00E+00
Solidified Inorganic Material	3.87E+01
Solidified Organic Material	2.05E+01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	2.36E+00
Packaging Material, Steel	5.44E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	7.76E+01
Am-243	1.04E-05
Cm-244	5.53E-04
Cs-137	1.18E-02
Np-237	3.37E-04
Pu-238	1.18E+01
Pu-239	6.00E-01
Pu-240	1.92E-03
Pu-241	2.33E-01
Pu-244	7.25E-22
Sr-90	3.63E-02
Th-229	3.77E-12
Th-230	2.78E-08
Th-232	2.37E-19
U-233	9.69E-09
U-234	4.57E-04
U-235	4.36E-07
U-236	7.38E-10

No Hazardous Waste Numbers Provided

TRUCON Code(s)

117/217

Waste Stream Description

Specific waste items in this waste stream include sealed sources composed primarily of metal or metal encapsulated in a plastic or resin disk. Other waste items consist of packaging including cans, ice cream cartons, and plastic bags, sheet, and tape, bentonite clay or other inorganic absorbents such as Floor Dry

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LL-W019**

Appendix A

Waste Profile Report

Site	Lawrence Livermore National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Solidified Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	17.4	15.8	33.2
Final Form Total	17.4	15.8	33.2

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	4.09E+02
Aluminum-based Metal/Alloys	3.96E+01
Other Metal/Alloys	1.28E+02
Other Inorganic Materials	0.00E+00
Cellulose	4.42E+02
Rubber	1.95E+02
Plastic	2.07E+03
Cement	1.03E+02
Solidified Inorganic Material	9.43E+03
Solidified Organic Material	1.47E+03
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	1.86E+01
Packaging Material, Steel	4.30E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	5.93E+01
Am-243	3.37E-05
Cm-244	1.26E-02
Cs-137	8.17E-05
Np-237	4.22E-03
Pu-238	2.39E+02
Pu-239	1.56E+02
Pu-240	4.03E+01
Pu-241	4.08E+02
Pu-242	7.40E-03
Sr-90	8.75E-05
Th-229	1.90E-05
Th-230	3.26E-03
Th-232	4.08E-05
U-233	2.16E+00
U-234	3.44E-03
U-235	4.50E-04
U-236	1.19E-07
U-238	7.40E-03

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)

111/211, 113/213

Waste Stream Description

This waste stream consists of drums classified as homogeneous solids; predominately solidified inorganics with a small percentage of solidified organics.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **ND-T001**

Appendix A

Waste Profile Report

Site	Nuclear Radiation Development Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	AmO2 Bagout/ Silver Bagout					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

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	Total Mass (kg)
Iron-based Metal/Alloys	8.80E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	4.42E+00
Other Inorganic Materials	2.25E+00
Cellulose	8.80E+01
Rubber	1.32E+01
Plastic	2.20E+01
Cement	0.00E+00
Solidified Inorganic Material	2.21E+02
Solidified Organic Material	4.42E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	2.36E-01
Packaging Material, Steel	5.44E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.93E+01
Np-237	8.60E-05
Th-229	4.41E-13
U-233	1.67E-09

Haz. Waste No(s).

D008, D011, 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).

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **ND-T002**

Appendix A

Waste Profile Report

Site	Nuclear Radiation Development Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Discarding Excess/Expired Materials	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Returned Smoke Detector Sources					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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	Total Mass (kg)
Iron-based Metal/Alloys	5.29E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	5.29E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	9.44E-01
Packaging Material, Steel	2.18E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.71E+00
Np-237	1.34E-05
Th-229	1.03E-13
U-233	3.18E-10

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Sealed sources returned from smoke detector manufacturers or other end users.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **NT-JAS-01**

Appendix A

Waste Profile Report

Site	Nevada National Security Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Combined metal scrap and incidental combustibles					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/o Liner	69.6	101.5	171.1
Final Form Total	69.6	101.5	171.1

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.18E+05
Aluminum-based Metal/Alloys	6.05E+02
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	6.05E+02
Cellulose	0.00E+00
Rubber	6.05E+02
Plastic	6.05E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	3.30E+01
Packaging Material, Steel	2.64E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.21E+01
Np-237	1.52E-04
Pu-238	1.93E+01
Pu-239	1.68E+02
Pu-240	3.83E+01
Pu-241	1.48E+02
Pu-242	2.14E-03
Th-229	6.27E-12
Th-230	7.90E-08
Th-232	8.09E-15
U-233	9.03E-09
U-234	9.89E-04
U-235	2.82E-06
U-236	1.93E-05
U-238	5.64E-12

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Waste stream consists of spent Primary Target Chambers from Jasper gas gun experiments. PTCs are metal chambers used to contain debris from the impact of a sabot on a disk of plutonium metal.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **NT-W021**

Appendix A

Waste Profile Report

Site	Nevada National Security Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	V3XA Spheres					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/o Liner	15.0	0.0	15.0
Final Form Total	15.0	0.0	15.0

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.51E+03
Aluminum-based Metal/Alloys	5.29E+00
Other Metal/Alloys	8.43E+00
Other Inorganic Materials	6.80E+01
Cellulose	8.13E+00
Rubber	0.00E+00
Plastic	5.50E-02
Cement	1.20E+01
Solidified Inorganic Material	3.70E+02
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	2.90E+00
Packaging Material, Steel	2.32E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	8.57E-01
Np-237	1.51E-06
Pu-238	1.26E+00
Pu-239	5.10E+01
Pu-240	1.17E+01
Pu-241	4.20E+01
Pu-242	1.04E-03
Th-229	1.85E-12
Th-230	6.45E-07
Th-232	8.55E-16
U-233	2.12E-09
U-234	7.03E-03
U-235	4.85E-05
U-236	3.47E-06
U-238	2.48E-03

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

The two steel vessels are 1-inch thick by 3-feet diameter, weighing about 3300 lbs. each. The vessels contain heterogeneous mixtures of the following materials: Plutonium, D-38 (Depleted Uranium), 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 (Depleted Uranium) 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.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-CHEM-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Analytical Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	ORNL Analytical Chemistry CH-TRU Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	36.8	0.0	36.8
55-gal POC - 6" w/ Liner	0.0	0.0	0.0
Final Form Total	36.8	0.0	36.8

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.35E+03
Aluminum-based Metal/Alloys	1.06E+01
Other Metal/Alloys	1.10E+02
Other Inorganic Materials	5.89E+02
Cellulose	2.02E+02
Rubber	6.74E+01
Plastic	1.21E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	7.09E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	4.47E+01
Packaging Material, Plastic	7.71E+00
Packaging Material, Rubber	2.08E+01
Packaging Material, Steel	4.83E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.29E+01
Am-243	3.23E-02
Cm-244	1.30E+01
Cs-137	9.35E+01
Np-237	2.61E-04
Pu-238	2.02E+01
Pu-239	4.69E+00
Pu-240	2.00E+00
Pu-241	2.89E+01
Pu-242	2.08E-03
Pu-244	3.04E-20
Sr-90	4.55E+00
Th-229	1.44E-05
Th-230	9.55E-09
Th-232	4.00E-07
U-233	1.56E+00
U-234	1.04E-02
U-235	2.00E-04
U-236	5.93E-09
U-238	6.90E-03

Haz. Waste No(s).

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

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from analytical chemistry operations at ORNL

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-CHEM-RH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Analytical Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	ORNL Analytical Chemistry Laboratory Operations RH-TRU Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.05E+02
Aluminum-based Metal/Alloys	8.27E-01
Other Metal/Alloys	8.82E+00
Other Inorganic Materials	4.57E+01
Cellulose	1.57E+01
Rubber	5.24E+00
Plastic	9.40E+01
Cement	0.00E+00
Solidified Inorganic Material	2.76E-01
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.00E+02
Packaging Material, Rubber	2.48E+00
Packaging Material, Steel	4.07E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.33E+00
Am-243	9.50E-14
Cm-244	1.24E+01
Cs-137	2.22E+00
Np-237	4.32E-08
Pu-238	3.95E+00
Pu-239	4.77E-02
Pu-240	2.36E-01
Pu-241	2.09E-08
Pu-242	3.13E-03
Pu-244	2.74E-11
Sr-90	3.22E+00
Th-229	6.33E-08
Th-230	3.33E-09
Th-232	1.72E-21
U-233	7.19E-03
U-234	3.62E-03
U-235	1.39E-04
U-236	6.99E-10
U-238	2.59E-03

Haz. Waste No(s).

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

TRUCON Code(s)

325

Waste Stream Description

Waste consists of RH-TRU debris from analytical chemistry operations at ORNL

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-CRF-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Curium Recovery Facility CH-TRU Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	3.6	0.0	3.6
Final Form Total	3.6	0.0	3.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	4.47E+02
Aluminum-based Metal/Alloys	8.29E-01
Other Metal/Alloys	1.41E+01
Other Inorganic Materials	1.74E+01
Cellulose	8.29E+01
Rubber	1.57E+01
Plastic	3.23E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	2.18E+02
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	2.01E+00
Packaging Material, Steel	4.62E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.17E-01
Am-243	8.48E-03
Cm-244	2.14E+00
Cs-137	5.07E-02
Np-237	9.94E-06
Pu-238	4.80E-01
Pu-239	7.66E-03
Pu-240	3.58E-02
Pu-241	9.28E-01
Pu-242	2.50E-04
Pu-244	6.81E-16
Sr-90	3.66E-02
Th-229	1.95E-08
Th-230	5.97E-12
Th-232	4.52E-19
U-233	2.22E-03
U-234	6.56E-06
U-235	1.14E-07
U-236	9.17E-08
U-238	3.09E-08

Haz. Waste No(s).

D006, D008, D009, D011

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from the Curium Recovery Facility at ORNL

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-GENR-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	ORNL General Research & Development CH-TRU Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	30.7	0.0	30.7
Final Form Total	30.7	0.0	30.7

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	5.93E+02
Aluminum-based Metal/Alloys	1.47E+02
Other Metal/Alloys	1.47E+02
Other Inorganic Materials	5.93E+02
Cellulose	1.09E+03
Rubber	7.19E+02
Plastic	2.98E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	3.60E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	1.72E+01
Packaging Material, Steel	3.97E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	7.36E+00
Am-243	4.75E-01
Cm-244	8.85E+00
Cs-137	2.73E-03
Np-237	1.25E-01
Pu-238	3.69E+00
Pu-239	2.78E+00
Pu-240	2.92E+00
Pu-241	4.59E+01
Pu-242	5.97E-01
Pu-244	5.86E-01
Sr-90	4.14E-03
Th-229	8.97E-06
Th-230	3.95E-10
Th-232	6.96E-06
U-233	3.57E-04
U-234	4.30E-04
U-235	1.07E-04
U-236	1.06E-04
U-238	4.81E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D028, F002, F005

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from general R&D at ORNL

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-GENR-RH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	ORNL General Research & Development RH-TRU Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	9.07E+00
Aluminum-based Metal/Alloys	2.25E+00
Other Metal/Alloys	2.25E+00
Other Inorganic Materials	9.07E+00
Cellulose	1.67E+01
Rubber	1.10E+01
Plastic	4.57E+00
Cement	0.00E+00
Solidified Inorganic Material	5.50E-02
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.85E+01
Packaging Material, Rubber	3.54E-01
Packaging Material, Steel	5.81E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.76E-02
Am-243	2.75E-03
Cm-244	1.87E-05
Cs-137	1.01E-05
Np-237	1.64E-04
Pu-239	1.36E-02
Pu-240	4.11E-09
Pu-241	4.47E-07
Pu-242	2.41E-13
Pu-244	3.56E-18
Sr-90	1.01E-05
Th-229	1.25E-13
Th-230	1.25E-34
Th-232	4.08E-27
U-233	1.42E-09
U-234	3.39E-29
U-235	2.68E-11
U-236	1.23E-16
U-238	2.52E-23

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D028, F002, F005

TRUCON Code(s)

325

Waste Stream Description

Waste consists of RH-TRU debris from general R&D at ORNL

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-GRSC-RH-HOM**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	RH-TRU from ORGR Storage Canal Cleanup					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	3.2	0.0	3.2
Final Form Total	3.2	0.0	3.2

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	6.65E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	6.65E+00
Rubber	0.00E+00
Plastic	6.65E+00
Cement	0.00E+00
Solidified Inorganic Material	8.60E+02
Solidified Organic Material	6.65E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.43E+02
Packaging Material, Rubber	1.77E+00
Packaging Material, Steel	2.91E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.78E-01
Cm-244	4.73E-02
Cs-137	3.94E+01
Np-237	1.55E-08
Pu-238	7.91E-02
Pu-239	3.16E-01
Pu-240	2.51E-02
Pu-241	2.34E-01
Pu-242	2.11E-05
Sr-90	1.59E+00
Th-229	6.15E-09
Th-230	5.07E-09
Th-232	1.83E-22
U-233	6.99E-04
U-234	5.52E-03
U-235	2.38E-04
U-236	7.42E-11
U-238	5.51E-03

Haz. Waste No(s).

D006, D008

TRUCON Code(s)

311

Waste Stream Description

Waste consists of RH-TRU generated by the cleanout of Graphite Reactor storage canal

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-IFEL-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Irradiated Fuels Examination Laboratory CH-TRU Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	9.0	0.0	9.0
Final Form Total	9.0	0.0	9.0

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.96E+02
Aluminum-based Metal/Alloys	7.19E+01
Other Metal/Alloys	1.80E+02
Other Inorganic Materials	3.60E+01
Cellulose	3.06E+02
Rubber	2.52E+02
Plastic	4.68E+02
Cement	0.00E+00
Solidified Inorganic Material	8.99E+01
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	5.07E+00
Packaging Material, Steel	1.17E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.29E-01
Am-243	2.45E-03
Cm-244	1.35E+00
Cs-137	6.37E-01
Np-237	1.22E-04
Pu-238	2.74E-01
Pu-239	2.17E-01
Pu-240	9.12E-02
Pu-241	2.23E+00
Pu-242	1.63E-04
Sr-90	2.34E-01
Th-229	3.32E-08
Th-230	9.02E-10
Th-232	6.66E-22
U-233	3.77E-03
U-234	9.81E-04
U-235	2.61E-05
U-236	2.70E-10
U-238	5.75E-05

Haz. Waste No(s).

D006, D007, D008, D009, D011, D019, F001, F002, F005

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from the Irradiated Fuels Examination Laboratory at ORNL

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-ISTP-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	ORNL Isotopes Facilities CH-TRU Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	104.6	0.0	104.6
55-gal POC - 12" w/ Liner	0.2	0.0	0.2
Final Form Total	104.8	0.0	104.8

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	5.91E+03
Aluminum-based Metal/Alloys	3.10E+02
Other Metal/Alloys	1.70E+03
Other Inorganic Materials	3.65E+02
Cellulose	2.95E+03
Rubber	1.62E+03
Plastic	5.34E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	3.65E+01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	1.12E+02
Packaging Material, Plastic	3.08E+01
Packaging Material, Rubber	5.92E+01
Packaging Material, Steel	1.40E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.10E+02
Am-243	8.89E-01
Cm-244	1.15E+03
Cs-137	1.08E-02
Np-237	8.81E-02
Pu-238	4.03E+02
Pu-239	2.76E+01
Pu-240	2.37E+01
Pu-241	4.38E+02
Pu-242	8.38E-01
Pu-244	3.58E-07
Sr-90	1.08E-02
Th-229	2.65E-04
Th-230	6.72E-07
Th-232	5.85E-08
U-233	1.42E+00
U-234	7.37E-02
U-235	5.83E-04
U-236	1.39E-04
U-238	7.10E-04

Haz. Waste No(s).

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

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from isotopes production at ORNL

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-ISTP-RH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	ORNL Isotopes Facilities RH-TRU Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can NS30 w/ Liner	0.3	0.0	0.3
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	2.5	0.0	2.5
Final Form Total	2.9	0.0	2.9

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	7.47E+01
Aluminum-based Metal/Alloys	3.92E+00
Other Metal/Alloys	2.14E+01
Other Inorganic Materials	4.61E+00
Cellulose	3.73E+01
Rubber	2.05E+01
Plastic	6.75E+01
Cement	0.00E+00
Solidified Inorganic Material	4.61E-01
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.70E+02
Packaging Material, Rubber	1.42E+00
Packaging Material, Steel	2.87E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.43E+01
Am-243	4.36E-04
Cm-244	2.50E+02
Cs-137	1.69E-04
Np-237	2.95E-04
Pu-239	2.03E+00
Pu-240	4.08E+00
Sr-90	1.81E-04
Th-229	1.42E-16
Th-230	1.28E-09
Th-232	1.00E-03
U-233	4.50E-11
U-234	1.39E-03
U-235	3.00E-05
U-236	1.21E-08

Haz. Waste No(s).

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

TRUCON Code(s)

325

Waste Stream Description

Waste consists of RH-TRU debris from isotopes production at ORNL

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-LWT-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	ORNL-Liquid Waste Treatment CH-TRU Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	5.7	0.0	5.7
Final Form Total	5.7	0.0	5.7

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.65E+02
Aluminum-based Metal/Alloys	1.72E+00
Other Metal/Alloys	8.60E-01
Other Inorganic Materials	3.44E+00
Cellulose	1.72E+01
Rubber	8.60E-01
Plastic	5.50E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	3.19E+00
Packaging Material, Steel	7.34E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.70E-01
Am-243	7.41E-04
Cm-244	4.99E-02
Cs-137	1.76E+00
Np-237	1.49E-04
Pu-238	1.20E-01
Pu-239	1.01E+00
Pu-240	5.60E-03
Pu-241	3.47E-02
Pu-242	1.59E-05
Sr-90	3.05E-02
Th-229	8.77E-05
Th-230	3.96E-05
Th-232	6.84E-05
U-233	2.83E-03
U-234	2.37E-03
U-235	3.59E-05
U-236	3.15E-05
U-238	7.80E-05

Haz. Waste No(s).

D006, D007, D008, D009, D010

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from ORNL liquids waste system.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-MRF-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	ORNL Metal Recovery Facility CH-TRU Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	8.8	0.0	8.8
Final Form Total	8.8	0.0	8.8

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	5.98E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	2.39E+01
Cellulose	6.70E+02
Rubber	2.39E+02
Plastic	3.35E+02
Cement	0.00E+00
Solidified Inorganic Material	4.79E+02
Solidified Organic Material	4.79E+01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	4.96E+00
Packaging Material, Steel	1.14E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	8.80E-01
Am-243	1.42E-03
Cm-244	1.21E-01
Cs-137	1.66E+00
Np-237	5.18E-05
Pu-238	1.22E-01
Pu-239	1.62E+00
Pu-240	3.36E-01
Pu-241	7.26E-01
Pu-242	1.18E-04
Sr-90	1.08E+01
Th-229	7.49E-08
Th-230	2.64E-10
Th-232	2.46E-19
U-233	8.52E-04
U-234	2.89E-05
U-235	9.57E-07
U-236	9.96E-09
U-238	1.93E-05

Haz. Waste No(s).

D007, D008, D009, D011

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from ORNL metal recovery facility activities

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-MRF-RH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	ORNL Metal Recovery Facility RH-TRU Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	1.9	0.0	1.9
Final Form Total	1.9	0.0	1.9

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	6.43E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	2.57E+00
Cellulose	7.20E+01
Rubber	2.57E+01
Plastic	3.60E+01
Cement	0.00E+00
Solidified Inorganic Material	5.14E+01
Solidified Organic Material	5.14E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	8.55E+01
Packaging Material, Rubber	1.06E+00
Packaging Material, Steel	1.74E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	5.14E-02
Cm-244	9.76E-03
Cs-137	2.00E+00
Np-237	1.67E-09
Pu-238	3.70E-02
Pu-239	3.70E-01
Pu-240	4.67E-02
Pu-241	3.75E-01
Pu-242	4.07E-06
Sr-90	3.20E+00
Th-229	1.23E-10
Th-230	3.48E-09
Th-232	3.41E-22
U-233	1.40E-05
U-234	3.79E-03
U-235	1.79E-04
U-236	1.38E-10
U-238	3.81E-03

Haz. Waste No(s).

D007, D008

TRUCON Code(s)

325

Waste Stream Description

Waste consists of RH-TRU debris from ORNL metal recovery facility activities

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-NBL-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	New Brunswick Laboratory CH-TRU Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	11.8	0.0	11.8
Final Form Total	11.8	0.0	11.8

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.27E+02
Aluminum-based Metal/Alloys	2.14E+01
Other Metal/Alloys	4.23E+02
Other Inorganic Materials	7.22E+02
Cellulose	1.28E+02
Rubber	2.29E+02
Plastic	1.28E+02
Cement	0.00E+00
Solidified Inorganic Material	4.27E+00
Solidified Organic Material	1.54E+02
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	6.61E+00
Packaging Material, Steel	1.52E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.69E+00
Am-243	4.77E-04
Cm-244	5.10E-02
Cs-137	7.71E-04
Np-237	6.15E-05
Pu-238	3.21E-01
Pu-239	2.97E+00
Pu-240	1.20E+00
Pu-241	9.45E+00
Pu-242	2.96E-04
Sr-90	7.71E-04
Th-229	8.73E-08
Th-230	2.00E-09
Th-232	8.73E-21
U-233	5.16E-03
U-234	2.17E-03
U-235	5.42E-05
U-236	3.54E-09
U-238	8.85E-05

Haz. Waste No(s).

D004, D005, D007, D008, D009, D011, D022, F002, F005

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from NBL

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-NFS-CH-HET-A**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Nuclear Fuel Services CH-TRU Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	101.6	0.0	101.6
Final Form Total	101.6	0.0	101.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	6.10E+03
Aluminum-based Metal/Alloys	5.38E+02
Other Metal/Alloys	4.93E+02
Other Inorganic Materials	3.27E+04
Cellulose	1.26E+03
Rubber	2.69E+02
Plastic	3.45E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	4.48E+01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	5.71E+01
Packaging Material, Steel	1.32E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.00E+01
Am-243	2.27E-04
Cm-244	4.67E-01
Cs-137	6.11E-04
Np-237	6.71E-04
Pu-238	1.54E+01
Pu-239	1.25E+02
Pu-240	4.11E+01
Pu-241	3.03E+02
Pu-242	7.64E-03
Sr-90	6.11E-04
Th-229	1.09E-04
Th-230	5.98E-10
Th-232	1.14E-04
U-233	1.72E-01
U-234	6.53E-04
U-235	6.96E-05
U-236	1.22E-07
U-238	3.40E-03

Haz. Waste No(s).

D006, D008, D009, D011, F002

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from NFS

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-NFS-CH-HOM-A**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Nuclear Fuel Services CH-TRU Homogeneous Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	8.8	0.0	8.8
55-gal POC - 12" w/ Liner	0.1	0.0	0.1
Final Form Total	8.9	0.0	8.9

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	6.12E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	1.22E+02
Cement	1.00E+02
Solidified Inorganic Material	6.21E+02
Solidified Organic Material	9.83E+01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	5.62E+01
Packaging Material, Plastic	1.54E+01
Packaging Material, Rubber	5.19E+00
Packaging Material, Steel	1.36E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	6.33E+01
Am-243	5.26E-03
Cs-137	2.22E-04
Np-237	5.26E-04
Pu-238	1.28E+01
Pu-239	1.01E+02
Pu-240	3.40E+01
Pu-241	2.62E+02
Pu-242	6.37E-03
Sr-90	2.22E-04
Th-229	8.25E-05
Th-230	9.67E-10
Th-232	1.56E-05
U-233	5.47E-03
U-234	1.23E-04
U-235	4.54E-06
U-236	1.01E-06
U-238	2.12E-04

Haz. Waste No(s).

D006, D009

TRUCON Code(s)

127/227

Waste Stream Description

Waste consists of homogeneous waste from NFS

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-NFS-CH-SOIL**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Nuclear Fuel Services CH-TRU Soil Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	4.6	0.0	4.6
Final Form Total	4.6	0.0	4.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	1.16E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	7.70E+01
Soil	3.76E+03
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.70E+02
Packaging Material, Rubber	2.60E+00
Packaging Material, Steel	5.98E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.14E-01
Am-243	1.79E-06
Cs-137	8.07E-06
Np-237	1.56E-06
Pu-238	1.79E-02
Pu-239	3.53E-01
Pu-240	1.04E-01
Pu-241	4.01E-01
Pu-242	1.25E-05
Sr-90	8.07E-06
Th-229	6.03E-11
Th-230	1.06E-05
Th-232	2.22E-07
U-233	6.85E-06
U-234	1.03E-05
U-235	7.52E-07
U-236	3.09E-10
U-238	1.55E-05

Haz. Waste No(s).

F002

TRUCON Code(s)

111/211

Waste Stream Description

Waste consists of soils from NFS

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-OXIDE-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	ORNL Oxide CH-TRU Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal POC - 6" w/ Liner	0.6	0.0	0.6
Final Form Total	0.6	0.0	0.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.80E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	5.59E+02
Cellulose	9.32E+01
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	2.41E+03
Packaging Material, Plastic	4.16E+02
Packaging Material, Rubber	6.37E+00
Packaging Material, Steel	3.60E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.96E+03
Am-243	1.58E-03
Cs-137	3.11E-05
Np-237	1.69E-02
Pu-238	5.80E+02
Pu-239	2.17E+02
Pu-240	5.62E+02
Pu-241	1.07E+04
Pu-242	2.53E+00
Sr-90	3.10E-05
Th-229	1.84E-04
Th-230	1.27E-05
Th-232	5.86E-13
U-233	2.09E+00
U-234	6.95E-02
U-235	6.04E-05
U-236	6.03E-04
U-238	1.11E-03

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from ORNL oxide handling, packaging, and production activities

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-PGDP-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Paducah Gaseous Diffusion Plant CH-TRU Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	6.1	0.0	6.1
Final Form Total	6.1	0.0	6.1

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.79E+03
Aluminum-based Metal/Alloys	5.04E+01
Other Metal/Alloys	4.27E+02
Other Inorganic Materials	2.40E+02
Cellulose	7.12E+01
Rubber	5.34E+01
Plastic	2.49E+02
Cement	0.00E+00
Solidified Inorganic Material	1.78E+01
Solidified Organic Material	7.12E+01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	3.42E+00
Packaging Material, Steel	7.89E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.37E-01
Am-243	2.56E-05
Cs-137	1.68E-04
Np-237	1.14E-01
Pu-238	1.27E-01
Pu-239	9.26E-01
Pu-240	1.99E-01
Pu-241	2.34E+00
Pu-242	2.04E-05
Sr-90	1.68E-04
Th-229	5.71E-08
Th-230	3.58E-09
Th-232	1.46E-21
U-233	6.49E-03
U-234	3.89E-03
U-235	6.74E-04
U-236	5.90E-10
U-238	1.68E-02

Haz. Waste No(s).

D005, D007, D008, D011

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from PGDP

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-RADP-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	ORNL Radiochemical Processing Research & Development CH-TRU Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	29.8	0.0	29.8
Final Form Total	29.8	0.0	29.8

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.23E+03
Aluminum-based Metal/Alloys	4.61E+01
Other Metal/Alloys	1.71E+02
Other Inorganic Materials	1.42E+02
Cellulose	7.11E+02
Rubber	1.75E+02
Plastic	7.87E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	2.63E+01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	1.68E+01
Packaging Material, Steel	3.86E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.36E+01
Am-243	2.21E-01
Cm-244	3.07E+01
Cs-137	1.51E+02
Np-237	1.94E-02
Pu-238	6.61E+00
Pu-239	1.17E+01
Pu-240	6.18E+00
Pu-241	2.68E+01
Pu-242	1.84E-03
Pu-244	5.80E-04
Sr-90	1.85E+01
Th-229	4.35E-04
Th-230	1.78E-07
Th-232	2.25E-04
U-233	6.83E-01
U-234	2.80E-03
U-235	5.59E-05
U-236	6.17E-08
U-238	4.61E-04

Haz. Waste No(s).

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

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from radiochemical processing R&D at ORNL

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-RADP-RH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	ORNL Radiochemical Processing Research & Development RH-TRU Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can NS30 w/ Liner	0.3	0.0	0.3
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	2.5	0.0	2.5
Final Form Total	2.9	0.0	2.9

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.86E+02
Aluminum-based Metal/Alloys	6.93E+00
Other Metal/Alloys	2.57E+01
Other Inorganic Materials	2.13E+01
Cellulose	1.07E+02
Rubber	2.62E+01
Plastic	1.18E+02
Cement	0.00E+00
Solidified Inorganic Material	3.96E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.70E+02
Packaging Material, Rubber	1.42E+00
Packaging Material, Steel	2.87E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.17E-02
Cm-244	1.37E-01
Cs-137	6.81E+01
Np-237	3.77E-09
Pu-238	2.08E-02
Pu-239	1.28E-01
Pu-240	9.80E-04
Pu-241	1.19E-01
Pu-242	7.20E-06
Sr-90	8.32E+00
Th-229	5.38E-07
Th-230	2.60E-09
Th-232	1.04E-04
U-233	6.12E-03
U-234	2.83E-04
U-235	5.76E-06
U-236	2.88E-11
U-238	1.52E-04

Haz. Waste No(s).

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

TRUCON Code(s)

325

Waste Stream Description

Waste consists of RH-TRU debris from radiochemical processing R&D at ORNL

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-REDC-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Radiochemical Engineering Development Center CH-TRU Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	149.1	116.6	265.7
55-gal POC - 12" w/ Liner	0.6	0.0	0.6
55-gal POC - 6" w/ Liner	0.0	0.0	0.0
SWB Dir Ld w/o Liner	0.0	13.2	13.2
Final Form Total	149.8	129.7	279.5

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.01E+04
Aluminum-based Metal/Alloys	4.89E+02
Other Metal/Alloys	3.05E+02
Other Inorganic Materials	3.91E+03
Cellulose	1.47E+03
Rubber	3.97E+02
Plastic	1.39E+04
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	4.55E+02
Packaging Material, Plastic	1.16E+02
Packaging Material, Rubber	1.54E+02
Packaging Material, Steel	3.80E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.28E+02
Am-243	3.26E+00
Cm-244	2.70E+03
Cs-137	5.97E+00
Np-237	1.94E+00
Pu-238	4.42E+03
Pu-239	2.70E+01
Pu-240	4.30E+01
Pu-241	2.59E+02
Pu-242	3.49E-01
Pu-244	6.61E-03
Sr-90	7.24E+01
Th-229	1.68E-03
Th-230	5.77E-03
Th-232	8.80E-08
U-233	4.40E-01
U-234	7.94E-02
U-235	8.84E-05
U-236	2.74E-05
U-238	1.96E-04

Haz. Waste No(s).

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

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from REDC at ORNL

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-REDC-RH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Radiochemical Engineering Development Center RH-TRU Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can NS15 w/ Liner	3.7	0.0	3.7
RH Can NS30 w/ Liner	4.0	4.3	8.3
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	46.0	65.5	111.5
Final Form Total	53.7	69.8	123.5

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.05E+04
Aluminum-based Metal/Alloys	5.15E+00
Other Metal/Alloys	3.05E+03
Other Inorganic Materials	8.65E+03
Cellulose	3.44E+03
Rubber	8.55E+02
Plastic	4.44E+03
Cement	0.00E+00
Solidified Inorganic Material	6.24E+02
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.99E+04
Packaging Material, Rubber	6.27E+01
Packaging Material, Steel	1.27E+05
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.14E+02
Am-243	3.34E+01
Cm-244	4.97E+03
Cs-137	1.92E+02
Np-237	3.60E-01
Pu-238	1.41E+03
Pu-239	2.06E+01
Pu-240	8.22E+01
Pu-241	9.11E+02
Pu-242	1.03E+00
Pu-244	3.28E-07
Sr-90	2.86E+03
Th-229	8.48E-09
Th-230	3.34E-08
Th-232	9.14E-19
U-233	9.64E-04
U-234	3.66E-02
U-235	4.55E-04
U-236	3.07E-07
U-238	1.07E-02

Haz. Waste No(s).

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

TRUCON Code(s)

325

Waste Stream Description

Waste consists of RH-TRU debris from REDC at ORNL

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-RF-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	ORNL Reactor Fuels Research & Development CH-TRU Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	61.3	0.0	61.3
55-gal POC - 6" w/ Liner	0.0	0.0	0.0
Final Form Total	61.3	0.0	61.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.55E+03
Aluminum-based Metal/Alloys	2.81E+02
Other Metal/Alloys	7.03E+02
Other Inorganic Materials	1.41E+02
Cellulose	1.20E+03
Rubber	9.85E+02
Plastic	1.83E+03
Cement	0.00E+00
Solidified Inorganic Material	3.52E+02
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	4.47E+01
Packaging Material, Plastic	7.71E+00
Packaging Material, Rubber	3.46E+01
Packaging Material, Steel	8.01E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	5.00E+01
Am-243	1.28E-02
Cm-244	4.98E+00
Cs-137	1.09E-02
Np-237	1.02E-03
Pu-238	4.44E+01
Pu-239	8.34E+01
Pu-240	3.83E+01
Pu-241	4.13E+02
Pu-242	1.17E-02
Sr-90	7.64E-03
Th-229	1.06E-02
Th-230	3.13E-07
Th-232	1.46E-04
U-233	2.68E+01
U-234	3.41E-01
U-235	5.21E-04
U-236	1.84E-06
U-238	5.98E-04

Haz. Waste No(s).

D006, D007, D008, D009, D011, D019, F001, F002, F005

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from reactor fuels R&D at ORNL

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-RF-RH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	ORNL Reactor Fuels Research & Development RH-TRU Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	18.9	8.8	27.7
Final Form Total	18.9	8.8	27.7

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.08E+03
Aluminum-based Metal/Alloys	7.00E+02
Other Metal/Alloys	6.30E+02
Other Inorganic Materials	6.30E+02
Cellulose	9.80E+02
Rubber	2.10E+02
Plastic	5.60E+02
Cement	0.00E+00
Solidified Inorganic Material	1.40E+02
Solidified Organic Material	7.00E+01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.25E+03
Packaging Material, Rubber	1.56E+01
Packaging Material, Steel	2.56E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	7.38E+01
Am-243	6.38E-01
Cm-244	1.20E+02
Cs-137	1.90E+03
Np-237	3.17E-03
Pu-238	7.57E+01
Pu-239	9.52E+00
Pu-240	1.86E+01
Pu-241	2.35E+03
Pu-242	7.25E-02
Pu-244	1.65E-12
Sr-90	9.87E+02
Th-229	4.64E-06
Th-230	8.98E-07
Th-232	2.08E-05
U-233	5.28E-01
U-234	3.40E-02
U-235	4.95E-04
U-236	1.69E-03
U-238	4.92E-03

Haz. Waste No(s).

D008, D009, D011

TRUCON Code(s)

325

Waste Stream Description

Waste consists of RH-TRU debris from reactor fuels R&D at ORNL

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-SOURCE-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Contact-Handled Transuranic Sources at ORNL					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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	Total Mass (kg)
Iron-based Metal/Alloys	8.33E+02
Aluminum-based Metal/Alloys	7.31E+00
Other Metal/Alloys	2.63E+02
Other Inorganic Materials	1.17E+02
Cellulose	4.39E+01
Rubber	7.31E+00
Plastic	1.90E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	3.89E+00
Packaging Material, Steel	8.98E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.09E+01
Am-243	2.26E-04
Cm-244	2.86E-01
Cs-137	9.43E-03
Np-237	7.62E-03
Pu-238	2.15E+01
Pu-239	4.37E+00
Pu-240	2.08E+00
Pu-241	6.59E+00
Pu-242	6.34E-04
Sr-90	2.13E-04
Th-229	1.41E-07
Th-230	3.87E-09
Th-232	1.47E-17
U-233	1.60E-02
U-234	4.21E-03
U-235	1.78E-04
U-236	2.99E-06
U-238	1.72E-03

Haz. Waste No(s).

D006, D008, D009, D011

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU obsolete sources that have been removed from service.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-SWSA-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	ORNL Solid Waste Storage Area 5 North 7802N Trench Area Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	5.06E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	1.25E+02
Cellulose	6.66E-01
Rubber	0.00E+00
Plastic	6.66E-01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	1.33E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	3.54E-01
Packaging Material, Steel	8.16E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.91E-01
Am-243	1.90E-04
Cm-244	2.51E-01
Cs-137	1.18E-04
Np-237	7.91E-05
Pu-238	6.94E-03
Pu-239	1.99E-03
Pu-240	6.13E-04
Pu-241	2.42E-03
Pu-242	4.62E-08
Sr-90	1.17E-04
Th-229	7.13E-06
Th-230	5.09E-09
Th-232	6.28E-21
U-233	1.71E-02
U-234	1.38E-04
U-235	7.84E-12
U-236	6.59E-11
U-238	2.87E-17

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D028, F001, F002, F005

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from SWSA 5 7802N Trench area

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-SWSA-CH-SOIL**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2020
Stream Name	ORNL Solid Waste Storage Area 5 North 7802N Trench Area Soil Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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	Total Mass (kg)
Iron-based Metal/Alloys	7.98E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	3.99E+00
Other Inorganic Materials	1.80E+01
Cellulose	7.98E+00
Rubber	0.00E+00
Plastic	4.39E+01
Cement	0.00E+00
Solidified Inorganic Material	3.23E+02
Solidified Organic Material	7.98E+00
Soil	1.58E+03
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.00E+02
Packaging Material, Rubber	1.53E+00
Packaging Material, Steel	3.54E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.70E-01
Am-243	1.64E-04
Cm-244	2.19E+01
Cs-137	1.46E-05
Np-237	7.74E-06
Pu-238	1.15E-01
Pu-239	7.06E-02
Pu-240	3.35E-02
Pu-241	1.82E-01
Pu-242	1.28E-05
Sr-90	1.45E-05
Th-229	1.23E-06
Th-230	4.66E-10
Th-232	1.01E-06
U-233	1.29E-10
U-234	1.33E-05
U-235	2.59E-07
U-236	3.39E-09
U-238	7.49E-15

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D028, F001, F002, F005

TRUCON Code(s)

111/211

Waste Stream Description

Waste consists of CH-TRU soils from SWSA 5 7802N Trench area

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-TBD-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	TBD CH-TRU Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	17.9	0.0	17.9
Final Form Total	17.9	0.0	17.9

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	4.88E+02
Aluminum-based Metal/Alloys	8.88E+01
Other Metal/Alloys	2.22E+02
Other Inorganic Materials	4.44E+01
Cellulose	3.77E+02
Rubber	3.11E+02
Plastic	5.77E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	1.11E+02
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	1.00E+01
Packaging Material, Steel	2.31E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	6.89E+01
Am-243	1.16E-03
Cm-244	2.48E-02
Cs-137	4.86E+01
Np-237	2.99E-02
Pu-238	1.75E+02
Pu-239	2.33E+01
Pu-240	1.97E+01
Pu-241	2.11E+01
Pu-242	1.08E-02
Pu-244	1.10E-03
Sr-90	4.33E+01
Th-229	6.17E-02
Th-230	5.04E-04
Th-232	4.98E-04
U-233	1.25E+01
U-234	3.09E-01
U-235	1.18E-03
U-236	4.15E-04
U-238	2.33E-03

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, F001, F002, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

CH-TRU Debris Waste Needing Further Evaluation

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-TBD-RH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	TBD RH-TRU Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	8.8	8.2	17.0
Final Form Total	8.8	8.2	17.0

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	5.63E+03
Aluminum-based Metal/Alloys	1.28E+03
Other Metal/Alloys	1.15E+03
Other Inorganic Materials	1.28E+03
Cellulose	1.79E+03
Rubber	3.84E+02
Plastic	1.02E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	2.56E+02
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	7.70E+02
Packaging Material, Rubber	9.56E+00
Packaging Material, Steel	1.57E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.28E+00
Am-243	9.46E-05
Cm-244	2.42E+00
Cs-137	2.93E+03
Np-237	1.36E-03
Pu-238	8.90E+01
Pu-239	2.50E-02
Pu-240	2.75E-02
Pu-241	6.23E+00
Pu-242	4.80E-05
Pu-244	6.40E-06
Sr-90	1.80E+03
Th-229	1.57E-03
Th-230	3.27E-05
Th-232	2.93E-12
U-233	4.50E-01
U-234	5.24E-02
U-235	1.06E-03
U-236	1.70E-03
U-238	5.28E-06

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011

TRUCON Code(s)

325

Waste Stream Description

RH-TRU Debris Waste Needing Further Evaluation

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-W1A-CH-SOIL**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2020
Stream Name	ER CH TRU Soils					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	9.0	0.0	9.0
Final Form Total	9.0	0.0	9.0

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	4.73E+00
Rubber	0.00E+00
Plastic	4.73E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	1.89E+01
Soil	2.34E+03
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.32E+02
Packaging Material, Rubber	5.07E+00
Packaging Material, Steel	1.17E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.94E+00
Am-243	6.73E-04
Cm-244	2.05E-02
Cs-137	2.42E+01
Np-237	2.25E-03
Pu-238	4.20E-01
Pu-239	1.07E+00
Pu-240	3.80E-03
Pu-241	5.61E+00
Pu-242	5.91E-04
Sr-90	2.28E-01
Th-229	4.55E+00
Th-230	2.65E-03
Th-232	6.32E-02
U-233	5.95E+00
U-234	2.06E-01
U-235	3.51E-03
U-236	5.35E-03
U-238	6.17E-02

No Hazardous Waste Numbers Provided

TRUCON Code(s)

111/211

Waste Stream Description

This waste is made up of soils.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-W1A-RH-SOIL**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2020
Stream Name	ER RH TRU Soils					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	10.1	0.0	10.1
Final Form Total	10.1	0.0	10.1

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	1.98E+01
Rubber	0.00E+00
Plastic	1.98E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	7.91E+01
Soil	9.76E+03
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	4.56E+02
Packaging Material, Rubber	5.66E+00
Packaging Material, Steel	9.30E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.88E+00
Cm-244	3.30E-01
Cs-137	7.23E+00
Np-237	3.03E-06
Pu-238	1.27E-01
Pu-239	1.42E+00
Pu-240	7.98E-01
Pu-241	1.30E+02
Pu-242	7.61E-04
Sr-90	2.16E+00
Th-229	1.09E-04
Th-230	3.76E-07
Th-232	2.33E-18
U-233	6.20E-01
U-234	2.04E-02
U-235	3.42E-04
U-236	4.73E-08
U-238	1.00E-02

No Hazardous Waste Numbers Provided

TRUCON Code(s)

311

Waste Stream Description

This waste is made up of soils.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-WC14-RH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Radiochemical Processing Research and Development RH-TRU Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	1.9	0.0	1.9
Final Form Total	1.9	0.0	1.9

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.73E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	3.39E+00
Rubber	4.63E+00
Plastic	2.85E+00
Cement	0.00E+00
Solidified Inorganic Material	1.26E+02
Solidified Organic Material	1.44E+01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	8.55E+01
Packaging Material, Rubber	1.06E+00
Packaging Material, Steel	1.74E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.12E-01
Cm-244	3.78E-02
Cs-137	7.01E-01
Np-237	6.88E-09
Pu-238	2.83E-02
Pu-239	2.34E-01
Pu-240	1.24E-01
Pu-241	7.38E-01
Pu-242	4.33E-04
Sr-90	2.61E-01
Th-229	6.09E-07
Th-230	1.04E-09
Th-232	9.07E-22
U-233	6.92E-02
U-234	1.13E-03
U-235	3.98E-05
U-236	3.68E-10
U-238	2.09E-03

Haz. Waste No(s).

D006, D007, D008, D009

TRUCON Code(s)

325

Waste Stream Description

Waste consists of RH-TRU generated by the cleanout and closure of tank WC-14

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **OR-Y12-CH-HET**

Appendix A

Waste Profile Report

Site	Oak Ridge National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Oak Ridge Y-12 CH-TRU Debris Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.38E+01
Aluminum-based Metal/Alloys	2.51E+00
Other Metal/Alloys	6.28E+00
Other Inorganic Materials	1.26E+00
Cellulose	1.07E+01
Rubber	8.79E+00
Plastic	1.63E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	3.14E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	3.54E-01
Packaging Material, Steel	8.16E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Np-237	6.34E-03
Pu-238	2.57E-04
Pu-239	3.10E-02
Pu-240	1.30E-05
Th-229	1.89E-11
Th-230	2.02E-08
Th-232	1.52E-22
U-233	1.07E-07
U-234	5.49E-04
U-235	7.47E-05
U-236	1.54E-12
U-238	6.14E-04

Haz. Waste No(s).

D008

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from Y-12

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL100D-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	RH-TRU Non Mixed Debris Waste from 100-D					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	0.6	0.0	0.6
Final Form Total	0.6	0.0	0.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.07E+03
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	4.76E+01
Packaging Material, Rubber	5.90E-01
Packaging Material, Steel	2.05E+03
Packaging Material, Lead	2.16E+03

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	8.85E-03
Am-243	1.34E-05
Cs-137	3.78E-01
Np-237	2.26E-06
Pu-238	5.67E-03
Pu-239	8.37E-03
Pu-240	1.08E-02
Pu-241	5.69E-01
Pu-242	4.21E-06
Sr-90	2.69E-01
Th-229	2.72E-14
Th-230	4.92E-12
Th-232	5.05E-19
U-233	7.75E-11
U-234	1.32E-07
U-235	2.19E-06
U-236	2.56E-09
U-238	1.62E-05

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

RH TRU Aluminum capsules from swelling test experiments. Waste was generated by Washington Closure Hanford during reactor burial ground remediation.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL105-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	105-C, 105KE, and 105-N Bldg. TRU CH Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	38.2	0.0	38.2
SWB Dir Ld w/ Liner	5.6	7.5	13.2
Final Form Total	43.9	7.5	51.4

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	9.38E+03
Aluminum-based Metal/Alloys	4.78E+02
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	3.11E+03
Cellulose	1.91E+03
Rubber	1.67E+03
Plastic	3.54E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.42E+03
Packaging Material, Rubber	2.40E+01
Packaging Material, Steel	6.98E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.91E+00
Cs-137	1.79E-01
Np-237	6.22E-06
Pu-238	3.21E-01
Pu-239	1.72E+00
Pu-240	8.26E-01
Pu-241	1.71E+01
Pu-242	3.73E-05
Sr-90	3.37E-01
Th-229	4.51E-14
Th-230	1.77E-09
Th-232	7.30E-17
U-233	1.42E-10
U-234	2.26E-05
U-235	3.23E-07
U-236	2.69E-07
U-238	6.51E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D027, D028, D029, D030, D034, D037, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

CH TRU Combustible and noncombustible debris from Hanford production reactor storage basin operations. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, cartridge-type water filters from the Primary Recirculation System, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL105-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	NLOP sludge					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	68.5	0.0	68.5
Final Form Total	68.5	0.0	68.5

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.47E+03
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	8.61E+02
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	6.37E+04
Solidified Inorganic Material	4.25E+04
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.51E+03
Packaging Material, Rubber	3.85E+01
Packaging Material, Steel	8.87E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.11E+01
Cs-137	8.97E+01
Np-237	7.35E-04
Pu-238	4.30E+00
Pu-239	2.31E+01
Pu-240	1.27E+01
Pu-241	3.40E+02
Pu-242	6.06E-03
Sr-90	4.42E+02
Th-229	1.73E-11
Th-230	4.51E-06
Th-232	5.36E-14
U-233	3.41E-08
U-234	4.10E-02
U-235	1.54E-03
U-236	9.27E-05
U-238	3.29E-02

No Hazardous Waste Numbers Provided

TRUCON Code(s)

111/211

Waste Stream Description

Solidified inorganic CH TRU waste generated from Facility/Equipment Operation and Maintenance activities at the Reactor facility.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL105-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	105-C, 105KE, and 105-N Bldg RH-TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	115.9	41.5	157.4
Final Form Total	115.9	41.5	157.4

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.34E+04
Aluminum-based Metal/Alloys	1.19E+03
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	7.74E+03
Cellulose	4.76E+03
Rubber	4.17E+03
Plastic	8.34E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.36E+04
Packaging Material, Rubber	1.69E+02
Packaging Material, Steel	5.85E+05
Packaging Material, Lead	6.17E+05

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.28E+01
Cm-244	1.75E-02
Cs-137	2.01E+02
Np-237	5.71E-05
Pu-238	2.83E+00
Pu-239	1.06E+01
Pu-240	5.67E+00
Pu-241	7.67E+01
Pu-242	1.58E-04
Sr-90	9.62E+01
Th-229	7.71E-13
Th-230	5.15E-08
Th-232	9.33E-16
U-233	1.79E-09
U-234	4.36E-04
U-235	2.87E-05
U-236	2.52E-06
U-238	6.11E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D027, D028, D029, D030, D034, D037, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

The 105-KE RH waste stream is composed solely of cartridge-type water filters from the Primary Recirculation System. The waste stream includes water filters, accumulated waste and associated packaging. Other 100 area drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters. The waste stream ranges from contaminated clothing to process equipment. The waste is generated from Reactor Facility/Equipment Operation and Maintenance Waste activities.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL105-09**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	105KE TRU RH Non-mixed solidified inorganics					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	687.5	0.0	687.5
Final Form Total	687.5	0.0	687.5

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.65E+03
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	9.90E+01
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	7.19E+02
Solidified Inorganic Material	6.49E+03
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	5.95E+04
Packaging Material, Rubber	7.38E+02
Packaging Material, Steel	2.56E+06
Packaging Material, Lead	2.69E+06

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	7.39E+02
Cs-137	2.99E+03
Np-237	6.13E-02
Pu-238	7.86E+01
Pu-239	4.07E+02
Pu-240	2.36E+02
Pu-241	2.40E+03
Pu-242	9.85E-02
Sr-90	4.12E+03
Th-229	2.20E-09
Th-230	1.56E-04
Th-232	1.07E-10
U-233	3.61E-06
U-234	1.21E+00
U-235	4.91E-02
U-236	1.55E-01
U-238	1.07E+00

No Hazardous Waste Numbers Provided

TRUCON Code(s)

111/211

Waste Stream Description

Solidified inorganic RH TRU waste generated from Facility/Equipment Operation and Maintenance activities at the K Basin facility.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL170-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	1706-KEL facility TRU RH Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	0.3	0.0	0.3
Final Form Total	0.3	0.0	0.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.25E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	1.73E+02
Cellulose	5.63E+00
Rubber	0.00E+00
Plastic	1.41E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.86E+01
Packaging Material, Rubber	3.54E-01
Packaging Material, Steel	1.23E+03
Packaging Material, Lead	1.29E+03

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.03E-02
Cs-137	3.16E-03
Np-237	3.15E-08
Pu-238	1.60E-03
Pu-239	6.89E-03
Pu-240	3.89E-03
Pu-241	7.09E-02
Pu-242	1.56E-07
Sr-90	2.83E-03
Th-229	1.92E-16
Th-230	2.19E-12
Th-232	2.84E-19
U-233	6.63E-13
U-234	4.69E-08
U-235	6.79E-11
U-236	1.15E-09
U-238	2.42E-16

Haz. Waste No(s).

D008

TRUCON Code(s)

125/225

Waste Stream Description

RH 1706-KEL Facility waste originated from the laboratory portion. The containers are likely from a small-scale cleanout of the 1706-KEL developmental laboratory after various studies (e.g., corrosion, decontamination, etc.).Piping, Tubing, Test equipment components, mineral sorbent and lead shielding - metal 85% other absorbent 15%.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL200-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Misc 200 Area TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	90.7	0.0	90.7
SWB Dir Ld w/ Liner	5.6	321.5	327.1
Final Form Total	96.4	321.5	417.8

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.67E+05
Aluminum-based Metal/Alloys	8.31E+04
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	2.17E+04
Cellulose	1.59E+04
Rubber	5.49E+03
Plastic	2.18E+04
Cement	0.00E+00
Solidified Inorganic Material	3.49E+03
Solidified Organic Material	0.00E+00
Soil	1.88E+03
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.73E+03
Packaging Material, Rubber	1.14E+02
Packaging Material, Steel	6.22E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.88E+01
Cs-137	3.90E-02
Np-237	8.05E-05
Pu-238	1.55E+00
Pu-239	6.54E+01
Pu-240	1.49E+01
Pu-241	8.93E+01
Pu-242	1.27E-03
Sr-90	2.87E-03
Th-229	9.64E-13
Th-230	5.32E-09
Th-232	2.13E-15
U-233	2.38E-09
U-234	7.32E-05
U-235	1.11E-06
U-236	6.18E-06
U-238	4.43E-06

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Containers with both combustible and noncombustible waste items from various general operations/maintenance/evaporator in 200 area. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL200-02**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Soil from Groundwater projects and contaminated soil from PFP operable units PW-1, PW-3, PW-6, CW-5					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	10.1	4846.6	4856.7
SWB Dir Ld w/ Liner	0.0	135.4	135.4
Final Form Total	10.1	4982.0	4992.0

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.85E+04
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	2.64E+06
Cellulose	2.44E+04
Rubber	1.13E+04
Plastic	4.76E+04
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	2.80E+06
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.78E+05
Packaging Material, Rubber	2.76E+03
Packaging Material, Steel	6.50E+05
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.11E+03
Cs-137	4.20E+00
Np-237	1.35E-02
Pu-238	6.15E+01
Pu-239	1.08E+03
Pu-240	3.24E+02
Pu-241	1.65E+03
Pu-242	2.56E-02
Sr-90	6.31E+01
Th-229	3.72E-08
Th-230	1.06E-04
Th-232	4.59E-05
U-233	4.25E-05
U-234	7.54E-03
U-235	2.80E-04
U-236	3.94E-04
U-238	5.62E-03

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D027, D028, D030, D039, D040, D043, F001, F002, F003, F005

TRUCON Code(s)

125/225

Waste Stream Description

Crib and soil characterization and remediation wastes

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL200-10**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Groundwater TRU RH Soils					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	0.2	0.0	0.2
Final Form Total	0.2	0.0	0.2

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	1.00E+02
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.90E+01
Packaging Material, Rubber	2.36E-01
Packaging Material, Steel	8.18E+02
Packaging Material, Lead	8.62E+02

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.73E-04
Cs-137	1.10E-04
Np-237	6.07E-10
Pu-239	1.70E-03
Pu-240	1.70E-03
Sr-90	4.42E-04
Th-229	9.49E-19
Th-230	8.92E-12
Th-232	1.04E-18
U-233	6.47E-15
U-234	1.94E-07
U-235	7.89E-09
U-236	4.33E-09
U-238	1.90E-07

No Hazardous Waste Numbers Provided

TRUCON Code(s)

111/211

Waste Stream Description

RH soils from Groundwater projects.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL201-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	201C TRU Mixed Solid Inorganic					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	13.7	0.0	13.7
Final Form Total	13.7	0.0	13.7

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	3.74E+02
Other Inorganic Materials	1.24E+02
Cellulose	8.72E+02
Rubber	1.61E+03
Plastic	4.36E+02
Cement	0.00E+00
Solidified Inorganic Material	1.26E+01
Solidified Organic Material	0.00E+00
Soil	4.25E+03
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	5.01E+02
Packaging Material, Rubber	7.67E+00
Packaging Material, Steel	1.77E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.80E+01
Cs-137	2.19E+00
Np-237	8.22E-05
Pu-238	8.65E-04
Pu-239	1.88E+00
Pu-240	4.63E-01
Pu-241	3.05E-02
Pu-242	6.76E-07
Sr-90	5.60E+01
Th-229	4.22E-13
Th-230	8.23E-12
Th-232	2.74E-17
U-233	1.60E-09
U-234	1.99E-07
U-235	1.67E-08
U-236	1.23E-07
U-238	7.00E-03

Haz. Waste No(s).

D007, D010

TRUCON Code(s)

122/222

Waste Stream Description

Generated from tank CX-70 sludge cleanout/remediation. A vacuuming process loaded sludge waste into cloth lined 16 gal drums. A 16 gal drum was placed into each 55 gal drum. Diatomaceous earth was added to ensure no free liquid process waste.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL202S-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	202S TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.3	0.0	1.3
Final Form Total	1.3	0.0	1.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.85E+00
Aluminum-based Metal/Alloys	9.49E-01
Other Metal/Alloys	7.97E-01
Other Inorganic Materials	0.00E+00
Cellulose	3.47E+00
Rubber	7.97E-01
Plastic	5.52E+01
Cement	0.00E+00
Solidified Inorganic Material	3.73E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	4.63E+01
Packaging Material, Rubber	7.08E-01
Packaging Material, Steel	1.63E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	5.00E-02
Cs-137	9.37E-08
Np-237	2.07E-06
Pu-238	1.05E-02
Pu-239	6.54E-02
Pu-240	2.45E-02
Pu-241	1.03E-01
Pu-242	2.81E-06
Sr-90	8.36E-08
Th-229	3.72E-14
Th-230	1.43E-11
Th-232	1.79E-18
U-233	8.57E-11
U-234	3.08E-07
U-235	6.44E-10
U-236	7.24E-09
U-238	4.36E-15

Haz. Waste No(s).

D006, D007, D008, D009

TRUCON Code(s)

125/225

Waste Stream Description

Generated from investigations at the North Sample Gallery of the 202-S Canyon (REDOX CANYON AND SERVICE FACILITY).Debris waste of personal protective equipment, sharp metal objects, and cleanup material generated in S canyon investigation, waste characterization samples. Predominant debris waste consists of over 80% plastic.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL209E-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	209E TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	14.3	0.0	14.3
SWB Dir Ld w/ Liner	88.4	0.0	88.4
Final Form Total	102.6	0.0	102.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.48E+04
Aluminum-based Metal/Alloys	1.11E+01
Other Metal/Alloys	2.52E+02
Other Inorganic Materials	3.00E+03
Cellulose	1.38E+04
Rubber	5.27E+03
Plastic	1.20E+04
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	6.31E+02
Packaging Material, Rubber	2.51E+01
Packaging Material, Steel	1.55E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.72E+03
Cs-137	4.39E-06
Np-237	2.92E-02
Pu-238	5.04E+02
Pu-239	3.83E+03
Pu-240	1.40E+03
Pu-241	1.05E+04
Pu-242	2.05E-01
Sr-90	3.93E-06
Th-229	3.67E-10
Th-230	6.95E-06
Th-232	8.27E-14
U-233	9.78E-07
U-234	9.06E-02
U-235	2.86E-03
U-236	3.72E-04
U-238	7.24E-03

Haz. Waste No(s).

D006, D007, D008, D018, D019, D043, F002, F003, F005

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible debris waste generated during operations, cleanout, and D&D of the 209-E Critical Mass Laboratory (CML) at Hanford. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL209E-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	209E TRU RH Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	0.2	0.0	0.2
Final Form Total	0.2	0.0	0.2

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.50E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	5.00E-01
Cellulose	1.50E+01
Rubber	2.00E+00
Plastic	1.44E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.90E+01
Packaging Material, Rubber	2.36E-01
Packaging Material, Steel	8.18E+02
Packaging Material, Lead	8.62E+02

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.69E+00
Np-237	2.91E-05
Pu-238	4.88E-01
Pu-239	3.49E+00
Pu-240	1.22E+00
Pu-241	8.02E+00
Pu-242	1.52E-04
Th-229	6.97E-13
Th-230	1.15E-09
Th-232	1.51E-16
U-233	1.32E-09
U-234	1.89E-05
U-235	4.47E-08
U-236	4.70E-07
U-238	3.07E-13

Haz. Waste No(s).

D006, D007, D018, D019, F002, F003, F005

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible debris waste generated during operations, cleanout, and D&D of the 209-E CML. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL216Z-02**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2020
Stream Name	216-Z-9 TRU Mixed Soil					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	342.3	0.0	342.3
Final Form Total	342.3	0.0	342.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	6.56E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	5.31E+03
Cellulose	1.09E+02
Rubber	0.00E+00
Plastic	3.28E+02
Cement	0.00E+00
Solidified Inorganic Material	5.83E+03
Solidified Organic Material	0.00E+00
Soil	5.83E+03
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.26E+04
Packaging Material, Rubber	1.92E+02
Packaging Material, Steel	4.43E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.47E+03
Np-237	4.49E-03
Pu-238	3.51E+02
Pu-239	4.49E+03
Pu-240	1.06E+03
Pu-241	1.08E+04
Pu-242	6.32E-02
Th-229	2.69E-11
Th-230	3.87E-07
Th-232	6.25E-14
U-233	9.40E-08
U-234	9.23E-03
U-235	3.98E-05
U-236	2.82E-04
U-238	8.83E-11

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D039, F001, F002, F003, F005

TRUCON Code(s)

125/225

Waste Stream Description

Soil contaminated with large quantities of plutonium, americium, organics, and neutralized acid waste solutions that were removed from the 216-Z-9 Crib. Original packaging material (e.g., 10-L stainless steel slip-lid cans, plastic bags, and vermiculite) now waste due to deterioration and TRU contamination.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL221U-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	221U Solidified sludge					**Activities Decayed to CY**	2020

Waste Volume Detail (m 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	Total Mass (kg)
Iron-based Metal/Alloys	2.06E+00
Aluminum-based Metal/Alloys	2.86E-01
Other Metal/Alloys	8.61E-02
Other Inorganic Materials	3.82E-01
Cellulose	2.20E-01
Rubber	5.21E-02
Plastic	1.94E-01
Cement	0.00E+00
Solidified Inorganic Material	3.64E-02
Solidified Organic Material	7.14E-05
Soil	3.86E-02
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.54E+01
Packaging Material, Rubber	2.36E-01
Packaging Material, Steel	5.44E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.25E-04
Cs-137	2.53E-04
Np-237	3.51E-10
Pu-238	1.50E-05
Pu-239	6.79E-04
Pu-240	1.55E-04
Pu-241	6.28E-04
Pu-242	1.32E-08
Sr-90	2.28E-04
Th-229	1.75E-18
Th-230	1.65E-14
Th-232	9.16E-21
U-233	6.70E-15
U-234	3.95E-10
U-235	6.02E-12
U-236	4.13E-11
U-238	1.84E-17

Haz. Waste No(s).

D006, D007, D008, D009, D011, D027, D030, D032, D033, D034, D036, D037, F001, F002

TRUCON Code(s)

122/222

Waste Stream Description

Solidified sludge and laboratory sample debris (e.g., glass sample bottles, plastic, and tape) from characterization efforts of U Plant.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL221U-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	U Plant Tank 10 Waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	30.3	0.0	30.3
Final Form Total	30.3	0.0	30.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	6.90E+03
Solidified Organic Material	6.97E+01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.62E+03
Packaging Material, Rubber	3.24E+01
Packaging Material, Steel	1.12E+05
Packaging Material, Lead	1.19E+05

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.30E+01
Am-243	1.72E-06
Cm-244	5.18E-01
Cs-137	4.25E+02
Np-237	6.30E-02
Pu-238	6.11E+00
Pu-239	4.86E+01
Pu-240	1.38E+01
Pu-241	4.35E+02
Pu-242	1.40E-03
Sr-90	3.22E+02
Th-229	2.21E-09
Th-230	2.55E-05
Th-232	9.46E-06
U-233	3.78E-06
U-234	2.52E-01
U-235	2.64E-04
U-236	4.50E-06
U-238	4.94E-03

Haz. Waste No(s).

D007, D008, D010

TRUCON Code(s)

125/225

Waste Stream Description

RH-TRU Nitrate Salts in the heel of U Plant Tank 10. Waste is under a CERCLA ROD to dispose of TRU constituents at WIPP.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL222S-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	222S TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	68.0	0.0	68.0
SWB Dir Ld w/ Liner	5.6	0.0	5.6
Final Form Total	73.7	0.0	73.7

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	6.43E+04
Aluminum-based Metal/Alloys	1.28E+04
Other Metal/Alloys	1.51E+00
Other Inorganic Materials	4.28E+03
Cellulose	6.50E+03
Rubber	2.57E+03
Plastic	7.21E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	1.07E+03
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.50E+03
Packaging Material, Rubber	3.93E+01
Packaging Material, Steel	9.68E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.41E+01
Am-243	2.44E-05
Cs-137	7.87E-02
Np-237	1.83E-03
Pu-238	1.03E+00
Pu-239	6.33E+00
Pu-240	2.70E+00
Pu-241	4.81E+01
Pu-242	1.85E-04
Sr-90	6.94E-02
Th-229	1.63E-05
Th-230	2.26E-09
Th-232	1.97E-16
U-233	1.85E-02
U-234	3.96E-05
U-235	3.88E-07
U-236	8.00E-07
U-238	8.07E-03

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D030, D039, F001, F002, F003, F005

TRUCON Code(s)

125/225

Waste Stream Description

Combustible waste and Noncombustible waste - TRU wastes were generated from multiple operations, primarily from the hot cells, the hoods, or from within the gloveboxes (for standards laboratory tasks) located in the Analytical laboratory.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL222S-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	222S TRU RH Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	1.3	0.0	1.3
Final Form Total	1.3	0.0	1.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	9.48E+02
Aluminum-based Metal/Alloys	1.50E+02
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	7.32E+01
Cellulose	1.80E+02
Rubber	7.67E+01
Plastic	1.84E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	2.63E+01
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.14E+02
Packaging Material, Rubber	1.42E+00
Packaging Material, Steel	4.91E+03
Packaging Material, Lead	5.17E+03

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.38E-01
Am-243	1.89E-02
Cs-137	1.63E-01
Np-237	2.07E-03
Pu-238	4.02E-02
Pu-239	4.67E+00
Pu-240	1.20E-01
Pu-241	7.39E+00
Pu-242	4.17E-04
Pu-244	1.73E-06
Sr-90	2.66E-01
Th-229	4.01E-04
Th-230	1.11E-10
Th-232	1.72E-17
U-233	3.26E-01
U-234	1.69E-06
U-235	7.93E-06
U-236	4.97E-08
U-238	2.92E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D039, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Combustible waste and Noncombustible waste- TRU wastes were generated from multiple operations, primarily from the hot cells, the hoods, or from within the gloveboxes (for standards laboratory tasks) located in the Analytical laboratory.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL231Z-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	231-Z TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	176.2	0.0	176.2
SWB Dir Ld w/ Liner	426.8	0.0	426.8
Final Form Total	603.0	0.0	603.0

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.58E+05
Aluminum-based Metal/Alloys	6.80E+02
Other Metal/Alloys	2.53E+03
Other Inorganic Materials	2.39E+04
Cellulose	3.09E+04
Rubber	5.66E+03
Plastic	4.06E+04
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	6.98E+03
Packaging Material, Rubber	1.81E+02
Packaging Material, Steel	8.87E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.39E+02
Am-243	5.32E-05
Cs-137	1.91E-02
Np-237	6.92E-03
Pu-238	5.61E+01
Pu-239	4.70E+02
Pu-240	1.50E+02
Pu-241	2.16E+03
Pu-242	1.28E-02
Sr-90	1.68E-02
Th-229	1.18E-10
Th-230	5.31E-06
Th-232	9.06E-05
U-233	2.75E-07
U-234	5.86E-02
U-235	1.09E-03
U-236	4.44E-05
U-238	4.59E-02

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D034, D035, D037, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible debris waste generated during operations, cleanout, and D&D activities of the 231-Z Building at Hanford. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. The 231-Z Building has also been called the 231-W Building, the Concentration Building, the Isolation Building, the Plutonium Metallurgical Laboratory, and the 231-Z Materials Engineering Laboratory.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL231Z-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	231Z TRU Mixed Solid Inorganic					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	6.55E+01
Other Inorganic Materials	1.20E-01
Cellulose	4.10E+00
Rubber	9.75E-01
Plastic	1.28E+01
Cement	0.00E+00
Solidified Inorganic Material	5.83E+01
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.31E+01
Packaging Material, Rubber	3.54E-01
Packaging Material, Steel	8.16E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.15E-01
Np-237	1.50E-06
Pu-238	7.73E-05
Pu-239	3.09E-01
Pu-240	1.07E-01
Pu-241	8.43E-02
Pu-242	9.52E-06
Th-229	1.57E-13
Th-230	2.10E-12
Th-232	1.31E-16
U-233	1.32E-10
U-234	1.06E-08
U-235	1.25E-08
U-236	1.30E-07
U-238	6.06E-14

Haz. Waste No(s).

D006, D007, D008, D009, F001, F002, F003, F005

TRUCON Code(s)

122/222

Waste Stream Description

Solidified inorganic waste generated during operations, cleanout, and D&D activities of the 231-Z Building, which has also been called the 231-W Building, the Concentration Building, the Isolation Building, the Plutonium Metallurgical Laboratory, and the 231-Z Materials Engineering Laboratory.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL233S-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	233S TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	10.3	0.0	10.3
SWB Dir Ld w/ Liner	33.8	0.0	33.8
Final Form Total	44.1	0.0	44.1

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	8.68E+03
Aluminum-based Metal/Alloys	3.64E+01
Other Metal/Alloys	7.92E+01
Other Inorganic Materials	1.98E+02
Cellulose	5.93E+02
Rubber	1.28E+02
Plastic	7.04E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	2.31E+01
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	4.19E+02
Packaging Material, Rubber	1.23E+01
Packaging Material, Steel	6.55E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.44E+01
Cs-137	2.37E-03
Np-237	3.06E-03
Pu-238	2.16E+00
Pu-239	1.60E+01
Pu-240	7.14E+00
Pu-241	7.79E+01
Pu-242	1.46E-03
Sr-90	2.13E-03
Th-229	5.74E-11
Th-230	5.77E-09
Th-232	5.22E-16
U-233	1.31E-07
U-234	9.41E-05
U-235	1.18E-06
U-236	2.11E-06
U-238	1.53E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F002, F003

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible debris waste generated during cleanout, stabilization, and D&D activities of the 233-S Building (Plutonium Concentration Facility) at Hanford. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL233S-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	233S solidified inorganic waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	5.5	0.0	5.5
Final Form Total	5.5	0.0	5.5

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.00E-01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	2.67E+03
Cellulose	0.00E+00
Rubber	2.00E-01
Plastic	3.40E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.00E+02
Packaging Material, Rubber	3.07E+00
Packaging Material, Steel	7.07E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.88E-01
Cs-137	4.90E-06
Np-237	3.13E-04
Pu-238	8.57E-02
Pu-239	3.65E-01
Pu-240	1.47E-01
Pu-241	5.21E-01
Pu-242	9.33E-05
Sr-90	4.03E-06
Th-229	7.16E-12
Th-230	1.43E-10
Th-232	1.30E-17
U-233	1.48E-08
U-234	2.78E-06
U-235	3.96E-09
U-236	4.79E-08
U-238	1.59E-13

Haz. Waste No(s).

D007

TRUCON Code(s)

122/222

Waste Stream Description

Solidified inorganic CH TRU waste generated from 233 Facility/Equipment Operation and Maintenance activities

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL300-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	300 Area TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	31.1	0.0	31.1
SWB Dir Ld w/ Liner	63.9	0.0	63.9
Final Form Total	95.0	0.0	95.0

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.09E+04
Aluminum-based Metal/Alloys	1.50E+01
Other Metal/Alloys	1.18E+03
Other Inorganic Materials	4.84E+03
Cellulose	1.76E+03
Rubber	3.67E+02
Plastic	3.13E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.22E+03
Packaging Material, Rubber	2.98E+01
Packaging Material, Steel	1.39E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.59E+02
Am-243	3.35E-02
Cm-244	3.03E+00
Cs-137	1.64E+02
Np-237	4.34E-03
Pu-238	7.95E+01
Pu-239	1.21E+03
Pu-240	3.85E+02
Pu-241	4.43E+03
Pu-242	1.29E-01
Sr-90	1.85E-02
Th-229	6.36E-05
Th-230	1.18E-05
Th-232	6.23E-03
U-233	8.04E-02
U-234	9.93E-02
U-235	4.28E-03
U-236	1.03E-04
U-238	3.68E-02

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D027, D028, D029, D030, D034, D037, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible debris waste generated from operations, including fuel fabrication, reactor studies, research and development, maintenance, and laboratory operations in the Hanford 300 Area. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL300-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	300 Area Mixed Solidified Inorganics					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	5.3	0.0	5.3
Final Form Total	5.3	0.0	5.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.08E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	1.14E+02
Cement	2.12E+03
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.93E+02
Packaging Material, Rubber	2.95E+00
Packaging Material, Steel	6.80E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.31E+01
Cs-137	1.76E-03
Np-237	1.09E-04
Pu-238	2.66E+00
Pu-239	1.50E+01
Pu-240	7.67E+00
Pu-241	7.90E+01
Pu-242	1.27E-03
Sr-90	2.16E-03
Th-229	1.29E-12
Th-230	1.78E-08
Th-232	4.54E-16
U-233	3.48E-09
U-234	2.50E-04
U-235	6.42E-06
U-236	2.04E-06
U-238	1.09E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, D027, D028, D029, D030, D034, D037, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

122/222

Waste Stream Description

Solidified inorganic CH TRU waste generated from operations, including fuel fabrication, reactor studies, research and development, maintenance, and laboratory operations in the Hanford 300 Area.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL300-07**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	300 Area RH TRU Non-Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	113.4	0.0	113.4
Final Form Total	113.4	0.0	113.4

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.83E+04
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	1.40E+05
Cellulose	4.58E+03
Rubber	0.00E+00
Plastic	1.14E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	5.13E+03
Packaging Material, Rubber	6.37E+01
Packaging Material, Steel	1.05E+05
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	6.10E+02
Am-243	3.41E+00
Cm-244	1.96E+02
Cs-137	3.87E+04
Np-237	2.68E-02
Pu-238	2.04E+02
Pu-239	5.85E+01
Pu-240	6.89E+01
Pu-241	2.58E+03
Pu-242	2.53E-01
Pu-244	2.69E-13
Sr-90	1.83E+04
Th-229	3.12E-04
Th-230	1.41E-05
Th-232	1.55E-11
U-233	1.77E-01
U-234	8.27E-02
U-235	1.38E-03
U-236	1.57E-02
U-238	4.37E-02

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

Waste Stream Description

RH TRUM 300 Area debris waste generated from operations, including fuel fabrication, reactor studies, research and development, maintenance, and laboratory operations.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL300-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	300 Area TRU RH Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	114.7	0.0	114.7
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	268.4	0.0	268.4
Final Form Total	383.1	0.0	383.1

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	5.17E+03
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	3.96E+04
Cellulose	1.29E+03
Rubber	0.00E+00
Plastic	3.23E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.84E+04
Packaging Material, Rubber	3.52E+02
Packaging Material, Steel	1.10E+06
Packaging Material, Lead	1.05E+06

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.55E+02
Am-243	1.87E-03
Cm-244	1.78E+02
Cs-137	1.08E+05
Np-237	1.50E-03
Pu-238	3.13E+01
Pu-239	9.27E+00
Pu-240	9.40E+00
Pu-241	2.32E+02
Pu-242	1.26E-02
Pu-244	2.95E-11
Sr-90	6.83E+04
Th-229	9.79E-12
Th-230	4.36E-08
Th-232	1.35E-15
U-233	3.29E-08
U-234	9.27E-04
U-235	5.67E-05
U-236	4.11E-06
U-238	1.06E-03

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D027, D028, D029, D030, D033, D034, D036, D039, D040, D043, F001, F002, F003, F005

TRUCON Code(s)

125/225, 325

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL308-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	308 TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	35.5	0.0	35.5
SWB Dir Ld w/ Liner	338.4	0.0	338.4
Final Form Total	373.9	0.0	373.9

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.12E+05
Aluminum-based Metal/Alloys	1.07E+02
Other Metal/Alloys	2.10E+03
Other Inorganic Materials	1.98E+03
Cellulose	3.95E+03
Rubber	8.79E+02
Plastic	4.54E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.71E+03
Packaging Material, Rubber	8.53E+01
Packaging Material, Steel	5.68E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.09E+04
Am-243	1.85E-03
Cs-137	1.55E-01
Np-237	6.26E-02
Pu-238	5.58E+03
Pu-239	9.47E+03
Pu-240	6.13E+03
Pu-241	8.64E+04
Pu-242	5.80E+00
Sr-90	1.38E-01
Th-229	5.92E-05
Th-230	1.79E-05
Th-232	5.30E-04
U-233	7.48E-02
U-234	2.89E-01
U-235	1.41E-02
U-236	1.63E-03
U-238	2.03E-01

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D030, D034, D037, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Debris waste stream associated with the 308 Bldg. fuel development laboratory, fuel fabrication capabilities, and deactivation. Waste items include plutonium alloys, casting skulls, clad plates, plastic mounts, plutonium-aluminum scrap, metal mounts, Pu pellets, rags, wipes, HEPA filters, batteries, stainless steel tubing, tape, thermometers, electrical wire, and a variety of other solid debris items.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL308-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	308 Building TRU Solid Inorganics					**Activities Decayed to CY**	2020

Waste Volume Detail (m 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	Total Mass (kg)
Iron-based Metal/Alloys	3.95E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	2.00E+00
Rubber	0.00E+00
Plastic	3.00E+00
Cement	9.53E+01
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.54E+01
Packaging Material, Rubber	2.36E-01
Packaging Material, Steel	5.44E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.57E-01
Np-237	2.59E-06
Pu-238	4.47E-02
Pu-239	3.34E-01
Pu-240	1.27E-01
Pu-241	4.26E-01
Pu-242	1.53E-05
Th-229	1.72E-13
Th-230	7.52E-10
Th-232	1.01E-16
U-233	1.81E-10
U-234	4.75E-06
U-235	1.09E-08
U-236	1.24E-07
U-238	7.85E-14

No Hazardous Waste Numbers Provided

TRUCON Code(s)

122/222

Waste Stream Description

Waste materials consist of absorbed liquids, including oils or hydraulic fluids, and inorganic debris (such as iron-based metal containers). Materials associated with waste packaging include plastic liners and various absorbents (including Cleanup-IV, Nochar A610, vermiculite, diatomaceous earth, and Radsorb). A limited amount of debris waste materials (glassware, rags, wipes, etc.) may also be present in the containers.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL308-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	308 Building TRU RH Non-Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	2.2	0.0	2.2
Final Form Total	2.2	0.0	2.2

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.02E+01
Aluminum-based Metal/Alloys	2.44E-02
Other Metal/Alloys	1.56E+00
Other Inorganic Materials	1.40E+00
Cellulose	1.80E+00
Rubber	5.74E-01
Plastic	3.91E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.90E+02
Packaging Material, Rubber	2.36E+00
Packaging Material, Steel	8.18E+03
Packaging Material, Lead	8.62E+03

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.43E-03
Cm-244	1.16E-04
Cs-137	2.92E+00
Np-237	1.43E-08
Pu-238	3.29E-03
Pu-239	2.37E-03
Pu-240	2.54E-03
Pu-241	4.20E-02
Pu-242	7.75E-07
Sr-90	5.16E+00
Th-229	1.03E-16
Th-230	5.47E-12
Th-232	2.25E-19
U-233	3.27E-13
U-234	1.07E-07
U-235	3.00E-09
U-236	8.29E-10
U-238	1.01E-06

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Debris waste stream associated with the 308 Bldg. fuel development laboratory, fuel fabrication capabilities, and deactivation. Examples of waste items in this waste stream include plutonium alloys, casting skulls, clad plates, plastic mounts, metal mounts, Pu pellets, rags, wipes, HEPA filters, batteries, stainless steel tubing, tape, thermometers, electrical wire, and a variety of other solid debris items.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL325-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	325 TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	646.2	16.4	662.6
SWB Dir Ld w/ Liner	167.3	0.0	167.3
Final Form Total	813.5	16.4	829.9

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	4.13E+04
Aluminum-based Metal/Alloys	1.62E+02
Other Metal/Alloys	1.84E+03
Other Inorganic Materials	1.32E+04
Cellulose	7.30E+03
Rubber	1.89E+03
Plastic	1.27E+04
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	1.42E+02
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.45E+04
Packaging Material, Rubber	4.05E+02
Packaging Material, Steel	1.12E+05
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	5.59E+02
Am-243	3.91E-02
Cm-244	3.23E+00
Cs-137	5.20E+00
Np-237	3.22E-02
Pu-238	1.15E+02
Pu-239	4.80E+02
Pu-240	2.19E+02
Pu-241	3.96E+03
Pu-242	3.06E-02
Sr-90	1.41E+01
Th-229	1.17E-04
Th-230	6.67E-05
Th-232	7.58E-03
U-233	1.48E-01
U-234	8.07E-01
U-235	2.38E-02
U-236	5.85E-05
U-238	4.96E-01

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Debris waste stream containing waste materials associated with the 325 Bldg. laboratory operations, sample analysis, facility cleanout, and facility waste treatment. Operations waste includes any discarded item used in laboratory analysis (e.g., glass beakers, tweezers, latex gloves, plastic tape, glass pipettes) and facility cleanout (e.g., glassware, wipes, and equipment). Maintenance waste may include filters, wipes, and various types of gloves. Small amounts of solid sample residues (unused samples) generated during lab operations are present in the waste.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL325-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	325 TRU Mixed Solid Inorganic					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	15.3	5.5	20.8
Final Form Total	15.3	5.5	20.8

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	5.60E+02
Aluminum-based Metal/Alloys	5.26E+00
Other Metal/Alloys	1.40E+01
Other Inorganic Materials	2.89E+03
Cellulose	1.05E+03
Rubber	7.97E+01
Plastic	5.02E+02
Cement	4.85E+03
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	1.32E+03
Soil	4.74E+02
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	7.63E+02
Packaging Material, Rubber	1.17E+01
Packaging Material, Steel	2.69E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.26E+01
Am-243	1.65E-01
Cm-244	5.97E+01
Cs-137	1.52E-01
Np-237	5.72E-03
Pu-238	1.21E+01
Pu-239	3.36E+01
Pu-240	1.31E+01
Pu-241	3.15E+02
Pu-242	3.68E-03
Sr-90	1.52E-01
Th-229	8.68E-11
Th-230	5.06E-08
Th-232	7.84E-16
U-233	2.20E-07
U-234	7.69E-04
U-235	2.33E-05
U-236	3.50E-06
U-238	3.01E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D033, D034, D036, D037, D038, D039, D040, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

122/222

Waste Stream Description

The mixed solid inorganic portion of the 325 waste stream from liquid laboratory samples neutralized and solidified using nonhazardous absorbents. Small amounts of neutralized and solidified liquids from hazardous waste treatment may also be present in the waste. Corrosive liquids, such as hydrochloric acid and sodium hydroxide were neutralized and solidified in cement before being packaged as waste.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL325-05**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	325 TRU Non-Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	28.1	38.2	66.4
SWB Dir Ld w/ Liner	45.1	48.9	94.0
Final Form Total	73.3	87.1	160.4

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	5.97E+03
Aluminum-based Metal/Alloys	1.09E+01
Other Metal/Alloys	6.66E+03
Other Inorganic Materials	3.25E+03
Cellulose	1.09E+03
Rubber	4.62E+02
Plastic	3.34E+03
Cement	1.14E+03
Solidified Inorganic Material	9.04E+01
Solidified Organic Material	0.00E+00
Soil	1.42E+02
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.55E+03
Packaging Material, Rubber	5.54E+01
Packaging Material, Steel	2.31E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.73E+01
Am-243	1.72E-01
Cm-244	4.81E+01
Cs-137	4.51E+00
Np-237	2.79E-02
Pu-238	1.07E+03
Pu-239	1.02E+02
Pu-240	2.11E+01
Pu-241	3.01E+02
Pu-242	5.90E-03
Pu-244	2.30E-11
Sr-90	1.69E+01
Th-229	2.69E-05
Th-230	1.54E-07
Th-232	3.33E-07
U-233	1.76E-05
U-234	1.02E-02
U-235	3.94E-05
U-236	1.06E-05
U-238	1.26E-04

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

CH 325 building debris with a solid inorganic waste component. Waste generated from liquid laboratory samples neutralized and solidified using nonhazardous absorbents. Small amounts of neutralized and solidified liquids from hazardous waste treatment may also be present in the waste. Corrosive liquids, such as hydrochloric acid and sodium hydroxide were neutralized and solidified in cement before being packaged as waste.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL325-07**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	325 TRU RH Non-Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	40.7	65.3	106.0
Final Form Total	40.7	65.3	106.0

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.16E+04
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	1.46E+01
Other Inorganic Materials	3.18E+03
Cellulose	1.62E+03
Rubber	2.34E+02
Plastic	1.69E+01
Cement	9.43E+02
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	1.72E+01
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	9.18E+03
Packaging Material, Rubber	1.14E+02
Packaging Material, Steel	3.94E+05
Packaging Material, Lead	4.15E+05

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.62E+02
Am-243	1.26E+00
Cm-244	6.03E+01
Cs-137	3.13E+02
Np-237	1.31E-02
Pu-238	1.44E+03
Pu-239	3.68E+01
Pu-240	3.72E+01
Pu-241	3.32E+03
Pu-242	7.24E-02
Sr-90	1.71E+03
Th-229	8.71E-11
Th-230	7.86E-07
Th-232	6.34E-14
U-233	3.31E-07
U-234	2.66E-02
U-235	9.15E-04
U-236	2.17E-04
U-238	2.67E-03

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

RH 325 Building debris waste stream. Waste generated from associated laboratory operations, sample analysis, facility cleanout, and facility waste treatment. Operations waste includes any discarded item used in laboratory analysis (e.g., glass beakers, tweezers, latex gloves, plastic tape, glass pipettes) and facility cleanout (e.g., glassware, wipes, and equipment). Maintenance waste may include filters, wipes, and various types of gloves. Small amounts of solid sample residues (unused samples) generated during lab operations are present in the waste.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL325-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	325 TRU RH Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	207.5	55.4	262.9
Final Form Total	207.5	55.4	262.9

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.90E+04
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	1.62E+05
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	4.06E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.28E+04
Packaging Material, Rubber	2.82E+02
Packaging Material, Steel	9.78E+05
Packaging Material, Lead	1.03E+06

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	7.09E+01
Am-243	1.15E-03
Cm-244	1.64E+00
Cs-137	1.90E+02
Np-237	1.11E-01
Pu-238	6.40E+00
Pu-239	5.11E+01
Pu-240	2.10E+01
Pu-241	2.44E+02
Pu-242	3.82E-03
Sr-90	1.21E+03
Th-229	2.00E-04
Th-230	3.40E-06
Th-232	1.22E-03
U-233	2.52E-01
U-234	4.11E-02
U-235	1.68E-03
U-236	4.60E-05
U-238	3.19E-03

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D027, D028, D029, D030, D032, D033, D034, D036, D037, D038, D039, D040, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters. The waste is generated from R&D/R&D Laboratory Waste activities at the RADIOCHEMISTRY BUILDING.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL325-09**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	B325 Solidified sludges					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	2.4	0.0	2.4
Final Form Total	2.4	0.0	2.4

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.17E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	2.20E-01
Other Inorganic Materials	3.52E+01
Cellulose	4.62E+00
Rubber	0.00E+00
Plastic	3.14E+00
Cement	1.48E+01
Solidified Inorganic Material	5.31E-01
Solidified Organic Material	1.05E+01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.09E+02
Packaging Material, Rubber	2.60E+00
Packaging Material, Steel	9.00E+03
Packaging Material, Lead	9.48E+03

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	8.84E-01
Am-243	8.85E-03
Cm-244	4.42E-01
Cs-137	7.33E+01
Np-237	6.74E-05
Pu-238	6.41E-01
Pu-239	6.96E-02
Pu-240	1.24E-01
Pu-241	5.54E+00
Pu-242	5.98E-04
Sr-90	7.59E+02
Th-229	2.21E-12
Th-230	1.34E-08
Th-232	1.48E-14
U-233	5.05E-09
U-234	2.49E-04
U-235	2.73E-06
U-236	5.00E-05
U-238	7.78E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D028, D029, D030, D033, D034, D036, D038, D039, D040, D043, F001, F002, F004, F005

TRUCON Code(s)

111/211

Waste Stream Description

Waste materials consist of absorbed liquids, including oils or hydraulic fluids, and inorganic debris (such as iron-based metal containers). Materials associated with waste packaging include plastic liners and various absorbents (including Cleanup-IV, Nochar A610, vermiculite, diatomaceous earth, and Radsorb). A limited amount of debris waste materials (glassware, rags, wipes, etc.) may also be present in the containers.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL618-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	618 - 10&11 Burial Grounds TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

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	Total Mass (kg)
Iron-based Metal/Alloys	4.02E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	7.23E+00
Other Inorganic Materials	6.96E+00
Cellulose	5.35E-01
Rubber	1.07E+00
Plastic	1.07E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	2.68E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	5.40E+01
Packaging Material, Rubber	8.26E-01
Packaging Material, Steel	1.90E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.18E+00
Am-243	4.34E-04
Cs-137	7.60E-02
Np-237	3.95E-04
Pu-238	1.08E+00
Pu-239	6.54E+00
Pu-240	2.52E+00
Pu-241	1.07E+01
Pu-242	2.90E-04
Sr-90	8.71E-02
Th-229	1.44E-11
Th-230	2.97E-09
Th-232	3.61E-16
U-233	2.35E-08
U-234	4.53E-05
U-235	9.64E-05
U-236	1.05E-06
U-238	7.64E-04

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Retrieved containerized debris waste from Burial Grounds 618 - 10 and 11

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL618-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	618 - 10&11 Burial Grounds TRU RH Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	18.7	0.0	18.7
Final Form Total	18.7	0.0	18.7

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.37E+03
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	2.47E+03
Other Inorganic Materials	2.64E+03
Cellulose	1.82E+02
Rubber	3.65E+02
Plastic	3.65E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	9.12E+02
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.62E+03
Packaging Material, Rubber	2.01E+01
Packaging Material, Steel	6.95E+04
Packaging Material, Lead	7.33E+04

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.41E+00
Cs-137	2.46E+02
Np-237	6.35E-06
Pu-238	2.03E-01
Pu-239	1.23E+00
Pu-240	4.72E-01
Pu-241	1.78E+00
Sr-90	2.82E+02
Th-229	7.85E-14
Th-230	5.63E-10
Th-232	6.76E-17
U-233	1.92E-10
U-234	8.60E-06
U-235	1.84E-04
U-236	1.96E-07
U-238	3.50E-03

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Retrieved containerized debris waste from Burial Grounds 618 - 10 and 11.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLALE-02**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2020
Stream Name	TRU Soils/Absorbents from the Arid Lands Ecology Reserve					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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	Total Mass (kg)
Iron-based Metal/Alloys	1.60E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	2.00E+00
Plastic	5.08E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	2.38E+02
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.31E+01
Packaging Material, Rubber	3.54E-01
Packaging Material, Steel	8.16E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.01E-04
Cs-137	2.81E-07
Np-237	5.05E-10
Pu-238	2.45E-05
Pu-239	5.30E-02
Pu-240	1.71E-03
Pu-241	3.53E-03
Pu-242	1.68E-07
Pu-244	2.27E-11
Sr-90	2.52E-07
Th-229	2.35E-18
Th-230	2.70E-14
Th-232	1.01E-19
U-233	9.20E-15
U-234	6.44E-10
U-235	4.69E-10
U-236	4.57E-10
U-238	2.34E-16

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Soils and debris from the 6652H building.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLARG-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Argonne Nat Lab TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	13.9	0.0	13.9
Final Form Total	13.9	0.0	13.9

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	6.37E+03
Aluminum-based Metal/Alloys	8.65E+02
Other Metal/Alloys	1.06E+02
Other Inorganic Materials	4.27E+02
Cellulose	1.04E+03
Rubber	4.47E+02
Plastic	1.06E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	2.81E+02
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	5.09E+02
Packaging Material, Rubber	7.79E+00
Packaging Material, Steel	1.80E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	6.32E+01
Cs-137	6.86E-07
Np-237	6.56E-04
Pu-238	2.15E+02
Pu-239	4.56E+01
Pu-240	2.32E+01
Pu-241	1.49E+02
Pu-242	8.11E-04
Sr-90	6.04E-07
Th-229	4.87E-11
Th-230	1.17E-05
Th-232	1.45E-05
U-233	4.81E-08
U-234	4.80E-02
U-235	1.07E-03
U-236	2.41E-05
U-238	1.51E-03

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters. The waste is generated from R&D/R&D Laboratory Waste activities at the Argonne National Laboratory - East (IL).

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLBART-07**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Bartlesville RH-TRU Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	0.3	0.0	0.3
Final Form Total	0.3	0.0	0.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.58E+02
Aluminum-based Metal/Alloys	2.49E+01
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	1.22E+01
Cellulose	3.00E+01
Rubber	1.28E+01
Plastic	3.07E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	4.39E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.86E+01
Packaging Material, Rubber	3.54E-01
Packaging Material, Steel	1.23E+03
Packaging Material, Lead	1.29E+03

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.40E-01
Np-237	5.74E-06
Pu-238	3.98E-07
Pu-239	3.38E-06
Pu-240	1.63E-06
Pu-241	2.85E-06
Pu-242	4.72E-10
Th-229	5.64E-13
Th-230	9.68E-15
Th-232	1.82E-21
U-233	4.91E-10
U-234	5.13E-11
U-235	1.30E-13
U-236	1.89E-12
U-238	2.86E-18

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Drums contains noncombustible waste items. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLBAT-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Battelle Columbus TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	19.1	0.0	19.1
SWB Dir Ld w/ Liner	9.4	0.0	9.4
Final Form Total	28.5	0.0	28.5

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.54E+04
Aluminum-based Metal/Alloys	5.34E+03
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	1.61E+03
Cellulose	1.94E+03
Rubber	7.24E+02
Plastic	2.27E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	3.42E+02
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	7.13E+02
Packaging Material, Rubber	1.26E+01
Packaging Material, Steel	3.93E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.53E+01
Np-237	1.12E-03
Pu-238	8.56E+01
Pu-239	1.49E+01
Pu-240	6.68E+00
Pu-241	1.29E+02
Pu-242	3.22E-04
Th-229	2.06E-11
Th-230	1.92E-06
Th-232	4.04E-06
U-233	4.71E-08
U-234	2.21E-02
U-235	6.82E-04
U-236	1.98E-06
U-238	3.52E-03

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, F001, F002, F003, F005

TRUCON Code(s)

125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLBAT-07**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	BATCO TRU RH Non-Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	6.8	0.0	6.8
Final Form Total	6.8	0.0	6.8

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	6.68E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	2.25E+02
Cellulose	7.42E+01
Rubber	2.65E+01
Plastic	4.58E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	1.50E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	5.90E+02
Packaging Material, Rubber	7.32E+00
Packaging Material, Steel	2.54E+04
Packaging Material, Lead	2.67E+04

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.36E+00
Am-243	2.52E-02
Cm-244	1.38E+00
Cs-137	4.49E+01
Np-237	2.31E-05
Pu-238	2.85E+00
Pu-239	4.21E-01
Pu-240	6.90E-01
Pu-241	2.32E+01
Pu-242	1.83E-03
Sr-90	2.86E+01
Th-229	1.82E-11
Th-230	7.26E-08
Th-232	6.19E-14
U-233	1.21E-08
U-234	5.15E-04
U-235	1.66E-05
U-236	6.99E-05
U-238	3.23E-04

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Typically, drums contain metals. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLBAT-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	BATCO TRU RH Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	0.3	0.0	0.3
Final Form Total	0.3	0.0	0.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	1.52E+03
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.86E+01
Packaging Material, Rubber	3.54E-01
Packaging Material, Steel	1.23E+03
Packaging Material, Lead	1.29E+03

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.05E-06
Np-237	5.47E-12
Pu-238	1.35E-07
Pu-239	5.91E-06
Pu-240	1.34E-06
Pu-241	6.62E-06
Pu-242	1.15E-10
Th-229	1.04E-19
Th-230	6.23E-16
Th-232	3.18E-22
U-233	2.03E-16
U-234	7.36E-12
U-235	1.05E-13
U-236	7.16E-13
U-238	3.21E-19

Haz. Waste No(s).

D006, D008, P015

TRUCON Code(s)

125/225

Waste Stream Description

Boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Boxes may be used for disposal of high-efficiency particulate air filters.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLBET-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Bettis TRU Non-Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	0.2	0.0	0.2
Final Form Total	0.2	0.0	0.2

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	6.76E+01
Aluminum-based Metal/Alloys	1.07E+01
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	5.27E+00
Cellulose	1.29E+01
Rubber	5.51E+00
Plastic	1.31E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	1.84E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.90E+01
Packaging Material, Rubber	2.36E-01
Packaging Material, Steel	8.18E+02
Packaging Material, Lead	8.62E+02

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	5.94E-03
Cs-137	7.73E-05
Np-237	1.65E-08
Pu-238	1.94E-03
Pu-239	9.83E-03
Pu-240	5.53E-03
Pu-241	3.83E-02
Pu-242	2.20E-07
Sr-90	6.93E-05
Th-229	8.20E-17
Th-230	1.33E-08
Th-232	3.28E-19
U-233	3.14E-13
U-234	1.61E-04
U-235	5.91E-06
U-236	1.48E-09
U-238	6.25E-08

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. Drums may be used for disposal of high-efficiency particulate air filters.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLBW-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Babcock and Wilcox TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	47.9	0.0	47.9
SWB Dir Ld w/ Liner	86.5	0.0	86.5
Final Form Total	134.4	0.0	134.4

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	9.82E+03
Aluminum-based Metal/Alloys	4.23E+01
Other Metal/Alloys	9.89E+02
Other Inorganic Materials	6.52E+03
Cellulose	4.75E+03
Rubber	1.02E+03
Plastic	5.17E+03
Cement	0.00E+00
Solidified Inorganic Material	1.68E+02
Solidified Organic Material	2.90E+01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.86E+03
Packaging Material, Rubber	4.36E+01
Packaging Material, Steel	1.95E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.90E+02
Cs-137	1.81E-01
Np-237	1.27E-03
Pu-238	4.87E+01
Pu-239	2.50E+02
Pu-240	1.25E+02
Pu-241	2.21E+03
Pu-242	1.12E-02
Sr-90	1.62E-01
Th-229	1.11E-11
Th-230	8.69E-07
Th-232	7.41E-15
U-233	3.32E-08
U-234	1.11E-02
U-235	2.63E-04
U-236	3.34E-05
U-238	1.15E-02

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D030, D035, F001, F002, F003, F005

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible debris waste generated from operations and decontamination and decommissioning of the Babcock and Wilcox Parks Township Site Plutonium Facility. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLBW-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Babcock & Wilcox solidified inorganics					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	9.5	0.0	9.5
Final Form Total	9.5	0.0	9.5

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.32E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	1.89E+03
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	5.30E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.47E+02
Packaging Material, Rubber	5.31E+00
Packaging Material, Steel	1.22E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.10E+01
Cs-137	2.77E-06
Np-237	2.57E-04
Pu-238	7.21E+00
Pu-239	4.28E+01
Pu-240	2.16E+01
Pu-241	2.34E+02
Pu-242	2.90E-03
Sr-90	2.49E-06
Th-229	3.24E-12
Th-230	8.32E-08
Th-232	1.58E-15
U-233	8.28E-09
U-234	1.01E-03
U-235	2.93E-05
U-236	6.41E-06
U-238	4.79E-04

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D035, F001, F002, F003, F005

TRUCON Code(s)

122/222

Waste Stream Description

Solidified inorganic CH TRU waste generated from operations and decontamination and decommissioning of the Babcock and Wilcox Parks Township Site Plutonium Facility.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLBW-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Babcock and Wilcox TRU RH Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	0.4	0.0	0.4
Final Form Total	0.4	0.0	0.4

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	5.09E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	2.55E-01
Other Inorganic Materials	2.55E+00
Cellulose	3.41E+01
Rubber	3.82E-01
Plastic	2.29E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.81E+01
Packaging Material, Rubber	4.72E-01
Packaging Material, Steel	1.64E+03
Packaging Material, Lead	1.72E+03

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.11E+00
Np-237	4.24E-06
Pu-238	1.80E-01
Pu-239	7.59E-01
Pu-240	4.29E-01
Pu-241	8.82E+00
Pu-242	1.73E-05
Th-229	4.27E-14
Th-230	4.23E-10
Th-232	5.30E-17
U-233	1.14E-10
U-234	6.97E-06
U-235	9.72E-09
U-236	1.65E-07
U-238	3.49E-14

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, F001, F002, F003, F005

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible debris waste generated from operations and decontamination and decommissioning of the Babcock and Wilcox Parks Township Site Plutonium Facility. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLCFF-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Kerr McGee TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	3.6	0.0	3.6
Final Form Total	3.6	0.0	3.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.59E+03
Aluminum-based Metal/Alloys	7.43E+00
Other Metal/Alloys	1.57E+00
Other Inorganic Materials	1.60E+02
Cellulose	1.79E+02
Rubber	3.88E+01
Plastic	2.53E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	3.88E-01
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.31E+02
Packaging Material, Rubber	2.01E+00
Packaging Material, Steel	4.62E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.74E+00
Np-237	1.46E-05
Pu-238	8.15E-01
Pu-239	4.12E+00
Pu-240	2.17E+00
Pu-241	3.69E+01
Pu-242	2.41E-04
Th-229	9.19E-14
Th-230	1.75E-09
Th-232	1.58E-16
U-233	3.12E-10
U-234	3.09E-05
U-235	2.75E-07
U-236	6.41E-07
U-238	3.50E-06

Haz. Waste No(s).

D007, D008, D009, D040, F001, F002, F003

TRUCON Code(s)

125/225

Waste Stream Description

The CFFD (KM) waste stream consists of heterogeneous debris waste generated at the Cimarron Plutonium Fuel Fabrication Facility, operated by the Kerr-McGee Nuclear Corporation. This facility was a MOX fuel fabrication facility. The waste was generated during D&D activities at the facility. The waste includes typical D&D waste, e.g., paper, plastic, leaded rubber gloves, rags, glass, equipment, disassembled gloveboxes, and HEPA filters.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLCFF-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Kerr McGee TRU Mixed Solid Inorganic					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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	Total Mass (kg)
Iron-based Metal/Alloys	1.55E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	1.11E+02
Other Inorganic Materials	2.28E+03
Cellulose	4.10E+01
Rubber	4.95E+00
Plastic	1.70E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.77E+02
Packaging Material, Rubber	2.71E+00
Packaging Material, Steel	6.26E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	6.18E+00
Np-237	1.92E-05
Pu-238	1.66E+01
Pu-239	7.17E+00
Pu-240	3.52E+00
Pu-241	3.10E+01
Pu-242	4.45E-04
Th-229	1.19E-13
Th-230	2.75E-08
Th-232	2.57E-16
U-233	4.08E-10
U-234	5.40E-04
U-235	2.36E-06
U-236	1.04E-06
U-238	4.90E-05

Haz. Waste No(s).

D007, D008, D009, F001, F002, F003

TRUCON Code(s)

122/222

Waste Stream Description

Waste generated from R&D/R&D Laboratory Waste activities at the Kerr McGee.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLCH2-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Tank Farms TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	5.3	5.5
Final Form Total	0.2	5.3	5.5

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.17E+03
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	1.04E+03
Other Inorganic Materials	6.03E+02
Cellulose	8.76E+01
Rubber	4.39E-01
Plastic	1.04E+02
Cement	0.00E+00
Solidified Inorganic Material	2.54E-01
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.00E+02
Packaging Material, Rubber	3.07E+00
Packaging Material, Steel	7.07E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.05E-01
Cs-137	1.15E+00
Np-237	6.61E-07
Pu-238	1.78E-02
Pu-239	1.43E-01
Pu-240	3.66E-02
Pu-241	2.17E-01
Sr-90	1.03E+00
Th-229	4.17E-15
Th-230	2.44E-11
Th-232	2.68E-18
U-233	1.42E-11
U-234	5.23E-07
U-235	1.41E-09
U-236	1.08E-08

Haz. Waste No(s).

D004, D006, D007, D008, D009, D010, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

CH waste- Equipment removed from waste tanks (instrument trees, pumps, circulators, agitators, heaters, sluicers, steam coils, air lances, cameras). The waste stream ranges from contaminated clothing to process equipment contaminated with RCRA constituents.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLCH2-09**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2020
Stream Name	Tank Farms Absorbed Oils					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	0.2	0.0	0.2
Final Form Total	0.2	0.0	0.2

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	4.50E-01
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	2.27E+01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.90E+01
Packaging Material, Rubber	2.36E-01
Packaging Material, Steel	8.18E+02
Packaging Material, Lead	8.62E+02

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.53E-03
Cs-137	9.36E-02
Np-237	3.50E-09
Pu-238	2.15E-05
Pu-239	7.19E-04
Pu-240	1.54E-04
Sr-90	8.75E-01
Th-229	1.08E-17
Th-230	1.42E-14
Th-232	5.51E-21
U-233	5.26E-14
U-234	4.36E-10
U-235	4.96E-12
U-236	3.19E-11

Haz. Waste No(s).

D007, F001, F002, F003, F004, F005

TRUCON Code(s)

114/214

Waste Stream Description

Solidified organic waste generated during Tank Farms operations.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLESG-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Energy Systems Group TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	17.0	0.0	17.0
Final Form Total	17.0	0.0	17.0

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	8.19E+03
Aluminum-based Metal/Alloys	2.41E+01
Other Metal/Alloys	2.61E+02
Other Inorganic Materials	1.08E+03
Cellulose	1.02E+03
Rubber	6.83E+02
Plastic	1.39E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	6.25E+02
Packaging Material, Rubber	9.56E+00
Packaging Material, Steel	2.20E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.06E+01
Cs-137	1.74E+00
Np-237	9.04E-05
Pu-238	4.40E+00
Pu-239	2.63E+01
Pu-240	1.28E+01
Pu-241	2.19E+02
Pu-242	3.22E-03
Sr-90	1.66E+00
Th-229	9.97E-08
Th-230	2.26E-06
Th-232	7.59E-16
U-233	1.26E-04
U-234	2.74E-02
U-235	5.18E-04
U-236	3.42E-06
U-238	3.59E-04

Haz. Waste No(s).

D006, D007, D008, F001, F002, F003

TRUCON Code(s)

125/225

Waste Stream Description

RLETECD waste is composed of heterogeneous debris consisting of organic and inorganic debris material generated from glove box operations at the Energy Technology Engineering Center. Examples of waste items in this waste stream include cardboard tubes, cladding material, plastic, paper, glove port flanges, rubber air hoses, electrical connectors, wooden broom handles, plexiglas windows, steel plates, glove box ventilation piping and valves, lead, stainless steel, nickel-cadmium batteries, paint brushes and rollers, full-face respirators, sphincter cans, tools, copper, poly bottles, shoe covers, aluminum, vermiculite, soda ash, mixer components, glass, rags, molybdenum plates, drying ovens, MOX ash, gloves, fittings, gas line hookups, balance weights, cloth, pumps, castings, small quantities of neutralized/solidified liquids, and concrete.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLESG-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Energy Systems Group TRU Solid Inorganics					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.3	0.0	1.3
Final Form Total	1.3	0.0	1.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.09E+01
Aluminum-based Metal/Alloys	3.09E+01
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	3.09E+01
Rubber	3.09E+01
Plastic	3.09E+01
Cement	2.33E+01
Solidified Inorganic Material	6.50E+01
Solidified Organic Material	0.00E+00
Soil	1.31E+02
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	4.63E+01
Packaging Material, Rubber	7.08E-01
Packaging Material, Steel	1.63E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.99E-02
Cs-137	3.15E-03
Np-237	7.66E-08
Pu-238	8.25E-03
Pu-239	1.82E-01
Pu-240	4.91E-02
Pu-241	4.59E-01
Pu-242	5.39E-05
Sr-90	2.83E-03
Th-229	3.62E-16
Th-230	1.71E-09
Th-232	2.90E-18
U-233	1.41E-12
U-234	2.08E-05
U-235	7.59E-07
U-236	1.31E-08
U-238	8.01E-09

No Hazardous Waste Numbers Provided

TRUCON Code(s)

122/222

Waste Stream Description

Absorbed/solidified liquids from operations and decommissioning of the Nuclear Materials Development Facility.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLESG-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Energy Systems Group RH TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	22.8	0.0	22.8
Final Form Total	22.8	0.0	22.8

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	4.72E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	6.30E+01
Other Inorganic Materials	1.78E+04
Cellulose	1.97E+03
Rubber	4.30E+00
Plastic	8.00E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.97E+03
Packaging Material, Rubber	2.44E+01
Packaging Material, Steel	8.47E+04
Packaging Material, Lead	8.92E+04

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.60E+00
Cs-137	1.53E+00
Np-237	9.92E-06
Pu-238	5.21E-01
Pu-239	2.52E+00
Pu-240	1.34E+00
Pu-241	2.61E+01
Pu-242	5.01E-05
Sr-90	4.34E-01
Th-229	4.91E-14
Th-230	5.74E-10
Th-232	7.91E-17
U-233	1.88E-10
U-234	1.37E-05
U-235	2.23E-08
U-236	3.56E-07
U-238	7.00E-14

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-09**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Energy Systems Group RH TRU Homogenous solids					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	17.4	0.0	17.4
Final Form Total	17.4	0.0	17.4

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	4.37E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	9.49E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	1.95E+03
Cement	0.00E+00
Solidified Inorganic Material	1.41E+04
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.50E+03
Packaging Material, Rubber	1.86E+01
Packaging Material, Steel	6.46E+04
Packaging Material, Lead	6.81E+04

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	9.22E-01
Cs-137	2.53E-02
Np-237	2.49E-06
Pu-238	1.60E-01
Pu-239	6.57E-01
Pu-240	3.71E-01
Pu-241	8.95E+00
Pu-242	1.50E-05
Sr-90	2.27E-02
Th-229	1.21E-14
Th-230	1.76E-10
Th-232	2.20E-17
U-233	4.68E-11
U-234	4.21E-06
U-235	5.83E-09
U-236	9.89E-08
U-238	2.09E-14

Haz. Waste No(s).

D006, D007, D008, F001, F002, F003

TRUCON Code(s)

122/222

Waste Stream Description

Homogenous solids generated from R&D/R&D Laboratory Waste activities at the Rockwell International, Energy Systems Group (CA).

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLEXX-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Exxon TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	55.0	0.0	55.0
Final Form Total	55.0	0.0	55.0

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	5.19E+03
Aluminum-based Metal/Alloys	2.10E+01
Other Metal/Alloys	1.03E+03
Other Inorganic Materials	3.37E+03
Cellulose	6.17E+02
Rubber	1.42E+02
Plastic	6.59E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.02E+03
Packaging Material, Rubber	3.09E+01
Packaging Material, Steel	7.13E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.10E+02
Np-237	1.74E-03
Pu-238	1.15E+02
Pu-239	7.69E+01
Pu-240	6.57E+01
Pu-241	1.32E+03
Pu-242	8.00E-02
Th-229	1.76E-11
Th-230	7.46E-07
Th-232	3.89E-15
U-233	5.02E-08
U-234	1.05E-02
U-235	9.93E-05
U-236	1.75E-05
U-238	3.94E-03

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011

TRUCON Code(s)

125/225

Waste Stream Description

RLEXXOD waste is comprised of heterogeneous debris consisting of organic and inorganic debris material generated from processing, cleanout, and D&D of the Mixed Oxide Fuel Fabrication Plant. Examples of waste items in this waste stream include unirradiated MOX fuel pellets, MOX powder and scrap, cladding material, MOX standards, plastic, paper, gloves and glove rings, filters, cans, HEPA filters, cardboard, electrical components, tools, scales and scale parts, screens, paint brushes, bags, floor sweepings, pots and pans, tool boxes, steel plates and racks, grinder parts, pellet trays, conduit pipe, motors, filter and vacuum hoses, and rags.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLFFTF-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	FFTF TRU Non-Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.1	0.0	1.1
Final Form Total	1.1	0.0	1.1

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.21E+02
Aluminum-based Metal/Alloys	4.92E-01
Other Metal/Alloys	2.40E+01
Other Inorganic Materials	7.87E+01
Cellulose	1.44E+01
Rubber	3.32E+00
Plastic	1.60E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.85E+01
Packaging Material, Rubber	5.90E-01
Packaging Material, Steel	1.36E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.29E-02
Cs-137	9.42E-03
Np-237	3.63E-08
Pu-238	3.38E-03
Pu-239	1.10E-02
Pu-240	9.51E-03
Pu-241	6.30E-02
Sr-90	6.31E-03
Th-229	1.82E-16
Th-230	3.72E-12
Th-232	5.63E-19
U-233	6.94E-13
U-234	8.89E-08
U-235	9.79E-11
U-236	2.54E-09

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible debris from Fast Flux Test Reactor operations, maintenance, and clean out. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLFFTF-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	FFTF RH-TRU Non-Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	0.3	0.0	0.3
Final Form Total	0.3	0.0	0.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.65E+00
Aluminum-based Metal/Alloys	6.68E-03
Other Metal/Alloys	3.26E-01
Other Inorganic Materials	1.07E+00
Cellulose	1.96E-01
Rubber	4.51E-02
Plastic	2.07E-01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.86E+01
Packaging Material, Rubber	3.54E-01
Packaging Material, Steel	1.23E+03
Packaging Material, Lead	1.29E+03

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.02E-03
Am-243	2.87E-11
Cs-137	4.32E-01
Np-237	9.92E-09
Pu-238	7.25E-04
Pu-239	2.35E-03
Pu-240	2.02E-03
Pu-241	2.43E-02
Sr-90	4.59E-04
Th-229	7.23E-17
Th-230	1.21E-12
Th-232	1.78E-19
U-233	2.28E-13
U-234	2.35E-08
U-235	2.55E-11
U-236	6.57E-10

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible debris from Fast Flux Test Reactor operations, maintenance, and clean out. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLGEV-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	GE San Jose and Vallecitos TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	23.5	0.0	23.5
SWB Dir Ld w/ Liner	80.8	0.0	80.8
Final Form Total	104.4	0.0	104.4

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	5.19E+04
Aluminum-based Metal/Alloys	5.82E+01
Other Metal/Alloys	1.03E+03
Other Inorganic Materials	5.52E+03
Cellulose	4.64E+03
Rubber	1.15E+03
Plastic	1.16E+04
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	9.61E+02
Packaging Material, Rubber	2.88E+01
Packaging Material, Steel	1.55E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.18E+02
Cs-137	2.49E-05
Np-237	7.83E-04
Pu-238	2.50E+01
Pu-239	1.42E+02
Pu-240	6.17E+01
Pu-241	6.79E+02
Pu-242	9.74E-03
Sr-90	2.24E-05
Th-229	8.59E-12
Th-230	5.55E-06
Th-232	3.65E-15
U-233	2.38E-08
U-234	6.74E-02
U-235	1.42E-03
U-236	1.64E-05
U-238	4.85E-02

Haz. Waste No(s).

D006, D007, D008, D011, D035

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible debris waste from decontamination and decommissioning of Building 102 at the GE-Vallecitos Nuclear Center. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLGEV-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	GE Vallecitos TRU Homogeneous Solids					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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	Total Mass (kg)
Iron-based Metal/Alloys	8.84E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	4.54E-01
Cellulose	1.01E+01
Rubber	8.12E-02
Plastic	1.76E+01
Cement	0.00E+00
Solidified Inorganic Material	7.99E+02
Solidified Organic Material	1.23E+01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	7.71E+01
Packaging Material, Rubber	1.18E+00
Packaging Material, Steel	2.72E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	9.83E+00
Cs-137	6.02E-08
Np-237	2.93E-05
Pu-238	1.71E+00
Pu-239	7.02E+00
Pu-240	3.96E+00
Pu-241	9.40E+01
Pu-242	1.60E-04
Sr-90	5.51E-08
Th-229	1.78E-13
Th-230	5.86E-08
Th-232	2.90E-16
U-233	6.14E-10
U-234	6.62E-04
U-235	2.04E-05
U-236	1.17E-06
U-238	3.06E-04

Haz. Waste No(s).

D006, D007, D008, D011, D035

TRUCON Code(s)

122/222

Waste Stream Description

Homogeneous solids from decontamination and decommissioning of Building 102 at the GE-Vallecitos Nuclear Center.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLGEV-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	GE San Jose and Vallecitos TRU RH Non-Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	6.5	0.0	6.5
Final Form Total	6.5	0.0	6.5

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	7.29E+03
Aluminum-based Metal/Alloys	1.15E+03
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	5.63E+02
Cellulose	1.38E+03
Rubber	5.90E+02
Plastic	1.42E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	2.03E+02
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	5.62E+02
Packaging Material, Rubber	6.96E+00
Packaging Material, Steel	2.41E+04
Packaging Material, Lead	2.54E+04

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.26E+01
Cs-137	7.64E+00
Np-237	1.35E-04
Pu-238	1.27E+00
Pu-239	6.48E+01
Pu-240	1.47E+01
Pu-241	2.90E+01
Pu-242	1.26E-03
Sr-90	5.67E+00
Th-229	1.07E-11
Th-230	2.92E-07
Th-232	1.47E-14
U-233	1.02E-08
U-234	9.31E-04
U-235	3.79E-05
U-236	1.61E-05
U-238	1.10E-03

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible debris waste from decontamination and decommissioning of Building 102 at the GE-Vallecitos Nuclear Center. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLHAN-01A**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Unidentifiable Debris Waste from Trench 218E12B					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	11.3	0.0	11.3
SWB Dir Ld w/ Liner	180.5	0.0	180.5
SWB w/ 4 - 55-gal Drums w/ Liners	12.6	0.0	12.6
Final Form Total	204.4	0.0	204.4

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.06E+04
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	2.73E+01
Cellulose	8.75E+03
Rubber	0.00E+00
Plastic	7.76E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	7.96E+01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.10E+03
Packaging Material, Rubber	5.37E+01
Packaging Material, Steel	3.53E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.24E+01
Am-243	1.18E-05
Cs-137	6.04E-01
Np-237	3.73E-03
Pu-238	4.24E+00
Pu-239	1.57E+01
Pu-240	8.85E+00
Pu-241	2.10E+02
Pu-242	3.57E-04
Sr-90	4.65E-01
Th-229	1.54E-04
Th-230	2.11E-07
Th-232	3.51E-05
U-233	1.75E-01
U-234	2.35E-03
U-235	7.53E-05
U-236	2.62E-06
U-238	1.13E-03

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D034, D035, D037, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible TRU debris waste retrieved from the Hanford low-level burial grounds that cannot be identified or assigned to an original generator. Combustible waste may include wood, plastics, paper, absorbents, rubber, and rags. Noncombustible waste may include failed machinery, tools, glass, concrete, plumbing, and fixtures.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLHAN-01B**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Trench Designation waste stream					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	152.0	0.0	152.0
SWB Dir Ld w/ Liner	133.5	0.0	133.5
Final Form Total	285.5	0.0	285.5

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	4.72E+03
Aluminum-based Metal/Alloys	5.38E+01
Other Metal/Alloys	3.61E+03
Other Inorganic Materials	5.01E+03
Cellulose	4.44E+03
Rubber	4.54E+03
Plastic	1.57E+04
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	5.74E+03
Packaging Material, Rubber	1.11E+02
Packaging Material, Steel	4.03E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.28E+02
Am-243	6.97E-03
Cm-244	7.57E-01
Cs-137	2.07E+00
Np-237	8.52E-03
Pu-238	7.87E+01
Pu-239	3.68E+02
Pu-240	1.69E+02
Pu-241	3.18E+03
Pu-242	1.28E-02
Sr-90	1.90E+00
Th-229	9.07E-05
Th-230	2.22E-06
Th-232	4.11E-05
U-233	4.02E-02
U-234	2.53E-02
U-235	8.23E-04
U-236	5.01E-05
U-238	1.25E-02

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D032, D033, D034, D035, D037, D038, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible TRU debris waste retrieved from the Hanford low-level burial grounds that cannot be identified or assigned to an original generator. Combustible waste may include wood, plastics, paper, absorbents, rubber, and rags. Noncombustible waste may include failed machinery, tools, glass, concrete, plumbing, and fixtures.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLHAN-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Trench Designation waste stream					**Activities Decayed to CY**	2020

Waste Volume Detail (m 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	Total Mass (kg)
Iron-based Metal/Alloys	3.84E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	2.31E+01
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	1.54E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	7.71E+00
Packaging Material, Rubber	1.18E-01
Packaging Material, Steel	2.72E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.44E-02
Np-237	9.59E-08
Pu-238	3.68E-03
Pu-239	1.50E-02
Pu-240	8.46E-03
Pu-241	2.10E-01
Th-229	4.78E-16
Th-230	4.05E-12
Th-232	5.01E-19
U-233	1.83E-12
U-234	9.68E-08
U-235	1.33E-10
U-236	2.26E-09

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D034, D035, D037, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

114/214

Waste Stream Description

Homogeneous solids waste items from retrievable storage that could not be identified.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLHAN-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Trench Designation waste stream					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	17.6	0.0	17.6
Final Form Total	17.6	0.0	17.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	7.59E+02
Aluminum-based Metal/Alloys	2.64E+00
Other Metal/Alloys	1.77E+02
Other Inorganic Materials	2.50E+02
Cellulose	6.60E+02
Rubber	2.23E+02
Plastic	7.97E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.52E+03
Packaging Material, Rubber	1.89E+01
Packaging Material, Steel	6.54E+04
Packaging Material, Lead	6.90E+04

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.46E+01
Am-243	6.30E-05
Cs-137	1.90E+00
Np-237	1.09E-04
Pu-238	1.69E+00
Pu-239	9.53E+00
Pu-240	3.69E+00
Pu-241	9.18E+01
Pu-242	1.48E-04
Sr-90	1.54E+00
Th-229	1.58E-06
Th-230	1.87E-09
Th-232	2.18E-16
U-233	2.00E-03
U-234	4.46E-05
U-235	8.45E-08
U-236	9.83E-07
U-238	2.07E-13

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D034, D035, D037, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible RH-TRU debris waste retrieved from the Hanford low-level burial grounds that cannot be identified or assigned to an original generator. Combustible waste may include wood, plastics, paper, absorbents, rubber, and rags. Noncombustible waste may include failed machinery, tools, glass, concrete, plumbing, and fixtures.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLIAEA-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	International Atomic Energy Agency TRU Non-Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ^{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	Total Mass (kg)
Iron-based Metal/Alloys	2.30E+02
Aluminum-based Metal/Alloys	3.62E+01
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	1.79E+01
Cellulose	4.37E+01
Rubber	1.87E+01
Plastic	4.45E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	6.24E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.54E+01
Packaging Material, Rubber	2.36E-01
Packaging Material, Steel	5.44E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	7.93E-01
Cs-137	1.43E-05
Np-237	2.55E-06
Pu-238	3.94E-01
Pu-239	2.21E-01
Pu-240	2.84E-01
Pu-241	1.15E+00
Pu-242	4.19E-04
Sr-90	1.28E-05
Th-229	1.61E-14
Th-230	5.38E-10
Th-232	2.07E-17
U-233	5.49E-11
U-234	1.16E-05
U-235	2.18E-09
U-236	8.40E-08
U-238	6.50E-13

No Hazardous Waste Numbers Provided

TRUCON Code(s)

122/222

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLMLB-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Lawrence Berkeley Nat Lab TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	0.2	0.0	0.2
Final Form Total	0.2	0.0	0.2

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.50E+02
Aluminum-based Metal/Alloys	3.95E+01
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	1.95E+01
Cellulose	4.76E+01
Rubber	2.04E+01
Plastic	4.85E+01
Cement	0.00E+00
Solidified Inorganic Material	6.80E+00
Solidified Organic Material	0.00E+00
Soil	8.16E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.90E+01
Packaging Material, Rubber	2.36E-01
Packaging Material, Steel	8.18E+02
Packaging Material, Lead	8.62E+02

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	8.68E-02
Cm-244	9.36E+00
Np-237	9.62E-07
Pu-238	1.01E-02
Pu-239	5.20E-02
Pu-240	1.14E-01
Pu-241	1.81E-01
Pu-242	1.19E-06
Th-229	8.07E-14
Th-230	2.33E-10
Th-232	7.17E-17
U-233	7.51E-11
U-234	1.27E-06
U-235	1.95E-09
U-236	9.18E-08
U-238	6.99E-15

Haz. Waste No(s).

D005, D007, D008, D009, D011, D019, 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. Drums may be used for disposal of high-efficiency particulate air filters.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLMLL-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Lawrence Livermore TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.1	0.0	1.1
Final Form Total	1.1	0.0	1.1

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	4.10E+02
Aluminum-based Metal/Alloys	6.46E+01
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	3.19E+01
Cellulose	7.79E+01
Rubber	3.34E+01
Plastic	7.94E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	1.11E+01
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.85E+01
Packaging Material, Rubber	5.90E-01
Packaging Material, Steel	1.36E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.45E-01
Np-237	3.40E-06
Pu-238	2.53E-02
Pu-239	4.58E-01
Pu-240	1.39E-01
Pu-241	3.32E-01
Pu-242	9.27E-06
Th-229	4.36E-13
Th-230	2.08E-07
Th-232	2.25E-16
U-233	3.28E-10
U-234	4.84E-04
U-235	2.19E-05
U-236	1.94E-07
U-238	6.76E-04

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.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLP11-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	P11 Criticality Facility TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/ Liner	24.4	0.0	24.4
Final Form Total	24.4	0.0	24.4

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.45E+03
Aluminum-based Metal/Alloys	7.28E+02
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	1.45E+03
Cellulose	7.25E+02
Rubber	0.00E+00
Plastic	7.25E+02
Cement	7.28E+02
Solidified Inorganic Material	6.20E+00
Solidified Organic Material	6.20E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.95E+01
Packaging Material, Rubber	4.72E+00
Packaging Material, Steel	3.77E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.69E+00
Np-237	5.01E-06
Pu-238	2.91E-01
Pu-239	1.20E+00
Pu-240	6.76E-01
Pu-241	1.61E+01
Pu-242	2.73E-05
Th-229	3.01E-14
Th-230	3.98E-10
Th-232	4.94E-17
U-233	1.04E-10
U-234	8.55E-06
U-235	1.18E-08
U-236	2.00E-07
U-238	4.23E-14

Haz. Waste No(s).

D005, D006, D007

TRUCON Code(s)

125/225

Waste Stream Description

Misc. demolition debris.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLPFP-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	2345Z TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1847.4	1.3	1848.6
SLB2 Dir Ld	140.4	44.3	184.8
SWB Dir Ld w/ Liner	1908.2	0.0	1908.2
Final Form Total	3896.0	45.6	3941.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.89E+05
Aluminum-based Metal/Alloys	2.54E+01
Other Metal/Alloys	2.34E+04
Other Inorganic Materials	2.80E+05
Cellulose	1.61E+04
Rubber	8.38E+03
Plastic	4.88E+04
Cement	6.12E+03
Solidified Inorganic Material	3.23E+02
Solidified Organic Material	3.31E+03
Soil	5.60E+02
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	7.02E+04
Packaging Material, Rubber	1.43E+03
Packaging Material, Steel	5.64E+05
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.97E+03
Am-243	8.36E-02
Cs-137	3.35E-01
Np-237	1.05E-01
Pu-238	9.45E+02
Pu-239	6.04E+03
Pu-240	2.50E+03
Pu-241	3.85E+04
Pu-242	3.77E-01
Sr-90	3.07E-01
Th-229	4.59E-04
Th-230	1.59E-05
Th-232	1.70E-04
U-233	5.80E-01
U-234	2.05E-01
U-235	5.35E-03
U-236	6.66E-04
U-238	9.04E-02

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D032, D034, D035, D036, D037, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225, 425

Waste Stream Description

Combustible and noncombustible debris waste generated from operations, maintenance, and D&D activities at the Plutonium Finishing Plant (PFP), which includes the 234-5Z, 232-Z, 236-Z, 2736-ZB, 242-Z, and 291-Z Buildings. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLPFP-01A**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	2345Z TRU HMOX					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	9.2	0.0	9.2
Final Form Total	9.2	0.0	9.2

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	5.33E+02
Aluminum-based Metal/Alloys	5.24E+01
Other Metal/Alloys	3.99E+03
Other Inorganic Materials	8.34E+02
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	7.89E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.39E+02
Packaging Material, Rubber	5.19E+00
Packaging Material, Steel	1.20E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.18E+03
Np-237	6.28E-03
Pu-238	4.22E+02
Pu-239	8.13E+02
Pu-240	6.30E+02
Pu-241	6.55E+03
Pu-242	5.63E-01
Th-229	3.22E-11
Th-230	4.65E-07
Th-232	3.73E-14
U-233	1.22E-07
U-234	1.11E-02
U-235	4.83E-04
U-236	1.68E-04
U-238	4.99E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D030

TRUCON Code(s)

125/225

Waste Stream Description

Waste containers from PFP which contain mixed oxides (HMOX).

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLPFP-01B**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	2345Z TRU with RADPRO and or Aspigel					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	13.2	0.0	13.2
Final Form Total	13.2	0.0	13.2

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.60E+02
Aluminum-based Metal/Alloys	2.82E+00
Other Metal/Alloys	1.00E+00
Other Inorganic Materials	4.53E+02
Cellulose	2.48E+02
Rubber	6.39E+01
Plastic	5.07E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	4.86E+02
Packaging Material, Rubber	7.43E+00
Packaging Material, Steel	1.71E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.09E+01
Np-237	1.08E-04
Pu-238	2.39E+00
Pu-239	1.93E+01
Pu-240	5.93E+00
Pu-241	4.64E+01
Pu-242	1.47E-03
Th-229	1.34E-12
Th-230	6.20E-09
Th-232	3.51E-16
U-233	3.60E-09
U-234	1.06E-04
U-235	1.76E-06
U-236	1.58E-06
U-238	1.68E-08

Haz. Waste No(s).

D007, D008

TRUCON Code(s)

125/225

Waste Stream Description

PFP Combustible and noncombustible debris waste generated from operations, maintenance, and D&D activities at the Plutonium Finishing Plant (PFP) (which includes the 234-5Z, 232-Z, 236-Z, 2736-ZB, 242-Z, and 291-Z Buildings) that contain RADPRO and or Aspigel. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLPFP-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	PFP Absorbed Plutonium Nitrate Solutions					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	16.0	0.0	16.0
Final Form Total	16.0	0.0	16.0

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	5.07E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	1.05E-01
Other Inorganic Materials	3.53E+00
Cellulose	5.99E+01
Rubber	6.32E-01
Plastic	1.69E+02
Cement	0.00E+00
Solidified Inorganic Material	6.02E+03
Solidified Organic Material	2.88E+02
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	5.86E+02
Packaging Material, Rubber	8.97E+00
Packaging Material, Steel	2.07E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.28E+02
Cs-137	4.45E-05
Np-237	8.97E-04
Pu-238	2.69E+01
Pu-239	2.13E+02
Pu-240	6.84E+01
Pu-241	6.25E+02
Pu-242	1.36E-02
Sr-90	3.99E-05
Th-229	1.00E-11
Th-230	1.27E-06
Th-232	4.05E-15
U-233	2.77E-08
U-234	1.57E-02
U-235	8.47E-05
U-236	1.82E-05
U-238	7.22E-04

Haz. Waste No(s).

D004, D006, D007, D008, D010, D011

TRUCON Code(s)

114/214

Waste Stream Description

Solidified inorganic waste generated from operations, maintenance, and D&D activities at the 325 Laboratory, the 209-E Critical Mass Laboratory, and the Plutonium Reclamation Facility (Bldg. 236-Z) at the Plutonium Finishing Plant (PFP).

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLPFP-04**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2020
Stream Name	PFP Comprehensive Homogenous Solids					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	40.3	0.0	40.3
Final Form Total	40.3	0.0	40.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.81E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	7.79E+00
Other Inorganic Materials	0.00E+00
Cellulose	1.83E+02
Rubber	3.58E+00
Plastic	2.60E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	1.41E+03
Soil	6.43E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.48E+03
Packaging Material, Rubber	2.27E+01
Packaging Material, Steel	5.22E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.36E+02
Cs-137	2.57E-03
Np-237	2.13E-03
Pu-238	7.16E+01
Pu-239	7.10E+02
Pu-240	2.47E+02
Pu-241	3.42E+03
Pu-242	2.22E-02
Sr-90	2.31E-03
Th-229	2.02E-11
Th-230	3.96E-07
Th-232	1.46E-14
U-233	5.88E-08
U-234	5.72E-03
U-235	1.34E-04
U-236	6.58E-05
U-238	1.91E-03

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D030, D032, D033, F001, F002, F003, F005

TRUCON Code(s)

112/212

Waste Stream Description

Homogenous solids generated from operations, maintenance, and D&D activities at the Plutonium Finishing Plant (PFP), which includes the 234-5Z, 232-Z, 236-Z, 2736-ZB, 242-Z, and 291-Z Buildings.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLPFP-04J**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	PFP PRF J-Pan Homogenous Solids					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	19.5	0.0	19.5
Final Form Total	19.5	0.0	19.5

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.22E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	8.91E-01
Other Inorganic Materials	0.00E+00
Cellulose	2.10E+01
Rubber	4.10E-01
Plastic	2.98E+01
Cement	0.00E+00
Solidified Inorganic Material	1.62E+02
Solidified Organic Material	0.00E+00
Soil	7.35E-01
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	7.17E+02
Packaging Material, Rubber	1.10E+01
Packaging Material, Steel	2.53E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.03E+01
Np-237	4.72E-04
Pu-238	8.35E+00
Pu-239	1.33E+02
Pu-240	3.21E+01
Pu-241	2.09E+02
Pu-242	5.74E-03
Th-229	6.07E-12
Th-230	9.20E-09
Th-232	1.90E-15
U-233	1.61E-08
U-234	2.20E-04
U-235	1.18E-06
U-236	8.56E-06
U-238	8.01E-12

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D030, D032, D033, F001, F002, F003, F005

TRUCON Code(s)

112/212

Waste Stream Description

Homogenous solids generated from D&D activities at the Plutonium Finishing Plant (PFP) Plutonium Recovery Facility (PRF) which includes the material collected from Pan-J.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLPFP-04NJ**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	PFP PRF non-J-Pan Homogenous Solids					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	14.7	0.0	14.7
Final Form Total	14.7	0.0	14.7

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.83E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	1.06E+00
Other Inorganic Materials	0.00E+00
Cellulose	2.50E+01
Rubber	4.88E-01
Plastic	3.55E+01
Cement	0.00E+00
Solidified Inorganic Material	1.92E+02
Solidified Organic Material	0.00E+00
Soil	8.75E-01
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	5.40E+02
Packaging Material, Rubber	8.26E+00
Packaging Material, Steel	1.90E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	7.36E+01
Np-237	7.20E-04
Pu-238	1.72E+01
Pu-239	2.11E+02
Pu-240	6.23E+01
Pu-241	3.58E+02
Pu-242	1.30E-02
Th-229	8.89E-12
Th-230	1.90E-08
Th-232	3.69E-15
U-233	2.38E-08
U-234	4.54E-04
U-235	1.28E-05
U-236	1.66E-05
U-238	3.16E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D030, D032, D033, F001, F002, F003, F005

TRUCON Code(s)

112/212

Waste Stream Description

Homogenous solids generated from D&D activities at the Plutonium Finishing Plant (PFP) Plutonium Recovery Facility (PRF) which includes the material collected from the other pans, not including Pan-J.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLPFP-05**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	PFP TRU Non-Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	295.1	0.6	295.7
SLB2 Dir Ld	450.8	110.9	561.6
SWB Dir Ld w/ Liner	1699.5	5.6	1705.2
Final Form Total	2445.4	117.1	2562.5

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.08E+05
Aluminum-based Metal/Alloys	1.51E+03
Other Metal/Alloys	6.64E+03
Other Inorganic Materials	4.90E+04
Cellulose	7.67E+04
Rubber	4.35E+04
Plastic	1.21E+05
Cement	0.00E+00
Solidified Inorganic Material	1.05E+02
Solidified Organic Material	1.07E+02
Soil	8.85E+02
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.29E+04
Packaging Material, Rubber	5.57E+02
Packaging Material, Steel	3.94E+05
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.51E+03
Am-243	3.64E-05
Cs-137	5.22E-05
Np-237	5.57E-02
Pu-238	2.98E+02
Pu-239	2.90E+03
Pu-240	8.42E+02
Pu-241	9.00E+03
Pu-242	1.88E-01
Sr-90	4.81E-05
Th-229	9.44E-11
Th-230	3.63E-08
Th-232	5.53E-15
U-233	7.18E-07
U-234	2.59E-03
U-235	5.40E-04
U-236	7.47E-05
U-238	8.18E-04

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225, 425

Waste Stream Description

CH Plutonium Finishing Plant (PFP) generated combustible and noncombustible debris waste generated from operations, maintenance, and D&D activities. Buildings include the 234-5Z, 232-Z, 236-Z, 2736-ZB, 242-Z, and 291-Z. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLPFP-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	2345Z RH-TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	29.8	0.0	29.8
Final Form Total	29.8	0.0	29.8

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	9.55E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	2.17E+02
Other Inorganic Materials	3.07E+03
Cellulose	2.74E+02
Rubber	1.86E+02
Plastic	1.42E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.58E+03
Packaging Material, Rubber	3.20E+01
Packaging Material, Steel	1.11E+05
Packaging Material, Lead	1.17E+05

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	6.32E+02
Am-243	4.60E-12
Cs-137	4.27E-04
Np-237	6.45E-03
Pu-238	1.16E+02
Pu-239	3.11E+02
Pu-240	1.52E+02
Pu-241	2.42E+03
Pu-242	4.47E-02
Sr-90	3.83E-04
Th-229	8.04E-11
Th-230	1.69E-07
Th-232	8.99E-15
U-233	2.15E-07
U-234	3.55E-03
U-235	2.07E-05
U-236	4.05E-05
U-238	1.18E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D030, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible debris waste generated from operations, maintenance, and D&D activities at the Plutonium Finishing Plant (PFP), which includes the 234-5Z, 232-Z, 236-Z, 2736-ZB, 242-Z, and 291-Z Buildings. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLPFP-09**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	2345Z RH-TRU Homogenous solids					**Activities Decayed to CY**	2020

Waste Volume Detail (m ^{3})

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	7.5	0.0	7.5
Final Form Total	7.5	0.0	7.5

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	5.25E+02
Cellulose	6.39E+01
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	6.47E+02
Packaging Material, Rubber	8.02E+00
Packaging Material, Steel	2.78E+04
Packaging Material, Lead	2.93E+04

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.19E+01
Np-237	6.95E-05
Pu-238	1.56E+00
Pu-239	1.44E+01
Pu-240	5.12E+00
Pu-241	5.15E+01
Pu-242	6.78E-04
Th-229	7.18E-13
Th-230	3.05E-08
Th-232	3.03E-16
U-233	2.03E-09
U-234	3.89E-04
U-235	1.29E-05
U-236	1.36E-06
U-238	1.35E-07

No Hazardous Waste Numbers Provided

TRUCON Code(s)

122/222

Waste Stream Description

Homogenous solids generated from operations, maintenance, and D&D activities at the Plutonium Finishing Plant (PFP), which includes the 234-5Z, 232-Z, 236-Z, 2736-ZB, 242-Z, and 291-Z Buildings. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLPURX-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	202A and 202AL TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	384.3	0.0	384.3
SWB Dir Ld w/ Liner	88.4	0.0	88.4
Final Form Total	472.7	0.0	472.7

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.70E+04
Aluminum-based Metal/Alloys	9.71E+01
Other Metal/Alloys	3.15E+02
Other Inorganic Materials	8.38E+03
Cellulose	1.08E+04
Rubber	1.03E+04
Plastic	1.83E+04
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	1.05E+01
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.42E+04
Packaging Material, Rubber	2.33E+02
Packaging Material, Steel	6.34E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.68E+03
Am-243	4.50E-04
Cs-137	9.01E+00
Np-237	1.58E-02
Pu-238	1.27E+03
Pu-239	7.00E+03
Pu-240	2.67E+03
Pu-241	5.67E+04
Pu-242	6.27E-01
Sr-90	8.09E+00
Th-229	1.31E-03
Th-230	1.72E-06
Th-232	1.58E-13
U-233	1.66E+00
U-234	3.72E-02
U-235	1.90E-04
U-236	7.11E-04
U-238	2.10E-03

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D034, D035, D037, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible debris waste generated from facility/equipment operation and maintenance, and analytical laboratory waste activities at the Plutonium Uranium Extraction Facility. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLPURX-08**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	202A & 202AL TRU RH Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	23.9	0.0	23.9
Final Form Total	23.9	0.0	23.9

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	6.72E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	1.68E+01
Other Inorganic Materials	5.04E+02
Cellulose	3.36E+02
Rubber	1.14E+03
Plastic	8.39E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.07E+03
Packaging Material, Rubber	2.56E+01
Packaging Material, Steel	8.88E+04
Packaging Material, Lead	9.35E+04

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	7.94E-01
Np-237	7.26E-06
Pu-238	2.98E-02
Pu-239	1.08E-01
Pu-240	2.57E-02
Pu-241	3.78E+00
Pu-242	1.45E-06
Th-229	5.12E-13
Th-230	8.54E-10
Th-232	3.32E-17
U-233	5.09E-10
U-234	4.19E-06
U-235	4.48E-09
U-236	3.20E-08
U-238	9.46E-15

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible debris waste generated from facility/equipment operation and maintenance, and analytical laboratory waste activities at the Plutonium Uranium Extraction Facility. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLRFET-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Rocky Flats TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	255.6	0.0	255.6
Final Form Total	255.6	0.0	255.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	9.18E+04
Aluminum-based Metal/Alloys	1.28E+04
Other Metal/Alloys	3.84E+03
Other Inorganic Materials	1.71E+04
Cellulose	9.80E+03
Rubber	2.33E+03
Plastic	8.65E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	3.19E+00
Soil	1.62E+03
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	9.38E+03
Packaging Material, Rubber	1.44E+02
Packaging Material, Steel	3.31E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.02E+02
Np-237	1.18E-03
Pu-238	3.25E+00
Pu-239	1.27E+02
Pu-240	3.03E+01
Pu-241	7.36E+01
Pu-242	2.50E-03
Th-229	9.58E-11
Th-230	1.04E-03
Th-232	2.88E-14
U-233	9.14E-08
U-234	3.16E+00
U-235	1.44E-01
U-236	3.24E-05
U-238	4.41E+00

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLSAN-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	GE San Jose TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	4.2	0.0	4.2
Final Form Total	4.2	0.0	4.2

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	9.71E+02
Aluminum-based Metal/Alloys	9.54E-01
Other Metal/Alloys	2.32E+01
Other Inorganic Materials	9.09E+01
Cellulose	7.89E+01
Rubber	1.93E+01
Plastic	2.07E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.54E+02
Packaging Material, Rubber	2.36E+00
Packaging Material, Steel	5.44E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	5.50E+01
Np-237	5.92E-04
Pu-238	6.49E+00
Pu-239	3.30E+01
Pu-240	1.86E+01
Pu-241	1.20E+02
Pu-242	7.46E-04
Th-229	4.71E-11
Th-230	2.12E-06
Th-232	1.86E-14
U-233	4.50E-08
U-234	6.59E-03
U-235	2.54E-04
U-236	2.04E-05
U-238	6.24E-04

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible debris waste from decontamination and decommissioning at the GE-San Jose Nuclear Center. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLSWO-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	SWOC TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	35.7	6.3	42.0
SWB Dir Ld w/ Liner	54.5	9.4	63.9
Final Form Total	90.2	15.7	105.9

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	4.44E+04
Aluminum-based Metal/Alloys	4.82E+03
Other Metal/Alloys	8.61E+01
Other Inorganic Materials	1.92E+02
Cellulose	1.01E+03
Rubber	1.39E+03
Plastic	6.89E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	7.69E+01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.62E+03
Packaging Material, Rubber	3.59E+01
Packaging Material, Steel	1.53E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.42E+02
Am-243	2.80E-06
Cs-137	4.22E-01
Np-237	7.16E-04
Pu-238	5.02E+01
Pu-239	1.93E+02
Pu-240	1.03E+02
Pu-241	2.28E+03
Pu-242	1.46E-01
Sr-90	5.21E-04
Th-229	1.14E-06
Th-230	7.30E-08
Th-232	6.12E-15
U-233	1.44E-03
U-234	1.54E-03
U-235	9.37E-06
U-236	2.75E-05
U-238	2.59E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D034, D035, D037, D039, D043, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible debris waste generated from operations, maintenance, and clean up at the Hanford Solid Waste Operations Complex facilities. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLSWO-05**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	SWOC TRU Non-Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	10.3	5.7	16.0
SWB Dir Ld w/ Liner	120.3	9.4	129.7
Final Form Total	130.6	15.1	145.7

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	8.77E+04
Aluminum-based Metal/Alloys	4.11E+03
Other Metal/Alloys	1.59E+02
Other Inorganic Materials	5.87E+01
Cellulose	7.71E+02
Rubber	7.34E+01
Plastic	1.77E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	7.43E+02
Packaging Material, Rubber	3.40E+01
Packaging Material, Steel	2.21E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	9.56E+00
Am-243	9.64E-12
Cs-137	5.33E-05
Np-237	9.47E-04
Pu-238	3.59E+00
Pu-239	2.50E+01
Pu-240	7.87E+00
Pu-241	4.42E+01
Pu-242	7.55E-04
Sr-90	5.28E-05
Th-229	1.02E-06
Th-230	1.62E-09
Th-232	3.58E-08
U-233	3.87E-03
U-234	7.39E-05
U-235	1.56E-06
U-236	6.99E-07
U-238	2.12E-05

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

CH Hanford Solid Waste Operations Complex facilities Non-mixed combustible and noncombustible debris waste generated from operations, maintenance, and clean. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLWAR-01**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Ward TRU Mixed Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	37.2	0.0	37.2
SWB Dir Ld w/ Liner	118.4	0.0	118.4
Final Form Total	155.6	0.0	155.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.97E+04
Aluminum-based Metal/Alloys	1.79E+02
Other Metal/Alloys	8.67E+02
Other Inorganic Materials	6.47E+03
Cellulose	8.40E+03
Rubber	2.20E+03
Plastic	1.24E+04
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	3.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.51E+03
Packaging Material, Rubber	4.38E+01
Packaging Material, Steel	2.31E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	6.32E+01
Cs-137	1.60E-07
Np-237	1.12E-02
Pu-238	1.25E+01
Pu-239	4.59E+01
Pu-240	2.39E+01
Pu-241	4.42E+02
Pu-242	4.82E-03
Sr-90	1.44E-07
Th-229	1.69E-10
Th-230	1.50E-06
Th-232	1.41E-15
U-233	4.29E-07
U-234	1.82E-02
U-235	6.39E-04
U-236	6.36E-06
U-238	2.90E-03

Haz. Waste No(s).

D007, D008, D009, D035, F001, F002, F003, F005

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible debris waste generated during decontamination and decommissioning of the Westinghouse Advanced Reactors Division facility in Cheswick, PA. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste may include metals, glass, concrete, and absorbed liquids.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLWAR-03**

Appendix A

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	WARD solidified inorganics					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	7.4	0.0	7.4
SWB Dir Ld w/ Liner	26.3	0.0	26.3
Final Form Total	33.7	0.0	33.7

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	5.82E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	7.77E-01
Other Inorganic Materials	0.00E+00
Cellulose	2.33E+01
Rubber	0.00E+00
Plastic	3.01E+02
Cement	2.92E+03
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.02E+02
Packaging Material, Rubber	9.21E+00
Packaging Material, Steel	5.01E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.26E+02
Cs-137	6.14E-07
Np-237	4.81E-04
Pu-238	2.36E+01
Pu-239	5.90E+01
Pu-240	3.89E+01
Pu-241	5.60E+02
Pu-242	3.16E-02
Th-229	4.48E-12
Th-230	1.32E-07
Th-232	4.10E-15
U-233	1.25E-08
U-234	1.61E-03
U-235	3.87E-05
U-236	1.38E-05
U-238	3.64E-05

Haz. Waste No(s).

D007, D008, D009, D035, F001, F002, F003, F005

TRUCON Code(s)

122/222

Waste Stream Description

Solidified inorganic waste generated during decontamination and decommissioning of the Westinghouse Advanced Reactors Division facility in Cheswick, PA.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SA-W134**

Appendix A

Waste Profile Report

Site	Sandia National Laboratories	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	CH TRU Project Generated Waste (PGW)					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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	Total Mass (kg)
Iron-based Metal/Alloys	2.08E+02
Aluminum-based Metal/Alloys	4.71E+01
Other Metal/Alloys	9.40E+00
Other Inorganic Materials	1.03E+01
Cellulose	7.40E+00
Rubber	2.50E+00
Plastic	1.31E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	8.26E-01
Packaging Material, Steel	1.90E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.89E-02
Cs-137	3.18E-01
Np-237	4.53E-08
Pu-238	1.16E-02
Pu-239	5.82E-02
Pu-240	3.28E-02
Pu-241	2.51E-01
Pu-242	8.45E-06
Sr-90	1.41E-02
Th-229	1.37E-12
Th-230	6.90E-09
Th-232	2.42E-05
U-233	3.12E-09
U-234	1.50E-04
U-235	5.05E-06
U-236	4.85E-09
U-238	1.84E-06

Haz. Waste No(s).

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

TRUCON Code(s)

125/225

Waste Stream Description

CH PGW TRU waste from repackaging RH

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SA-W135**

Appendix A

Waste Profile Report

Site	Sandia National Laboratories	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	TRU Waste from SNL/NM - Remote Handled					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	3.2	0.0	3.2
Final Form Total	3.2	0.0	3.2

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.94E+02
Aluminum-based Metal/Alloys	5.61E+01
Other Metal/Alloys	2.39E+01
Other Inorganic Materials	2.61E+01
Cellulose	1.89E+01
Rubber	4.95E+00
Plastic	2.83E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.71E+01
Packaging Material, Rubber	1.77E+00
Packaging Material, Steel	2.91E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.40E+01
Cs-137	1.41E+02
Np-237	2.19E-05
Pu-238	6.62E+00
Pu-239	1.77E+01
Pu-240	1.13E+01
Pu-241	1.25E+02
Pu-242	5.48E-03
Sr-90	1.05E+02
Th-229	4.50E-10
Th-230	2.80E-06
Th-232	2.07E-16
U-233	1.02E-06
U-234	6.10E-02
U-235	1.96E-03
U-236	1.68E-06
U-238	6.90E-04

Haz. Waste No(s).

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

TRUCON Code(s)

321

Waste Stream Description

Heterogeneous RH fuel pieces from accident scenarios R&D and experimental vessels, includes Project Generated Waste (PGW) from repackaging

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SA-W136**

Appendix A

Waste Profile Report

Site	Sandia National Laboratories	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Uncategorized Metal Waste			**Inventory Date**	12/31/2020
Stream Name	CH TRU Debris waste from Z-machine					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/o Liner	16.9	71.4	88.4
Final Form Total	16.9	71.4	88.4

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.46E+04
Aluminum-based Metal/Alloys	2.06E+02
Other Metal/Alloys	1.79E+02
Other Inorganic Materials	8.23E-01
Cellulose	0.00E+00
Rubber	3.34E+01
Plastic	2.06E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	3.53E+01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	1.71E+01
Packaging Material, Steel	1.36E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	6.37E+02
Np-237	1.24E-03
Pu-238	2.85E-01
Pu-239	9.22E+00
Pu-240	2.33E+00
Pu-241	1.11E+01
Pu-242	2.50E-04
Th-229	2.81E-12
Th-230	1.37E-10
Th-232	6.14E-17
U-233	1.60E-08
U-234	4.94E-06
U-235	5.45E-08
U-236	4.14E-07
U-238	2.33E-13

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

CH debris waste from the Z-machine, Pu ICE experiments. Waste generated at SNL/NM, but is LANL waste

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SA-W137**

Appendix A

Waste Profile Report

Site	Sandia National Laboratories	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	CH TRU solidified waste					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	1.05E+01
Other Inorganic Materials	1.25E+01
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	5.00E-03
Solidified Inorganic Material	5.80E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	4.72E-01
Packaging Material, Steel	1.09E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.26E-01
Cs-137	6.03E-03
Np-237	9.24E-07
Pu-238	1.70E-01
Pu-239	4.91E-01
Pu-240	2.17E-01
Pu-241	1.34E+00
Pu-242	2.02E-04
Th-229	4.64E-15
Th-230	9.50E-10
Th-232	1.28E-17
U-233	1.77E-11
U-234	1.37E-05
U-235	4.27E-07
U-236	5.78E-08
U-238	9.11E-06

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Solidified PuNO3 sample used for instrumental analysis, Pu sources, and Am-241 salt standards.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SA-W138M**

Appendix A

Waste Profile Report

Site	Sandia National Laboratories	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	CH TRU sealed source					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	1.50E+00
Other Metal/Alloys	6.19E+00
Other Inorganic Materials	9.91E+01
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	1.18E-01
Packaging Material, Steel	2.72E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.36E+00
Cs-137	1.62E-07
Np-237	3.99E-06
Pu-238	8.02E-08
Pu-239	6.13E-02
Th-229	2.05E-14
Th-230	8.84E-17
U-233	7.74E-11
U-234	2.11E-12
U-235	5.43E-10

Haz. Waste No(s).

D006, D007, D008, D009, D011

TRUCON Code(s)

125/225

Waste Stream Description

Sealed sources from instrumentation and on circuit boards.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SA-W139**

Appendix A

Waste Profile Report

Site	Sandia National Laboratories	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Composite Filter Waste			**Inventory Date**	12/31/2020
Stream Name	D&D from AHCF					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/o Liner	0.0	0.7	0.7
Final Form Total	0.0	0.7	0.7

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	4.00E+01
Aluminum-based Metal/Alloys	9.50E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	4.00E-01
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	1.00E-01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.09E+00
Packaging Material, Rubber	7.08E-01
Packaging Material, Steel	2.45E+03
Packaging Material, Lead	2.59E+03

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.35E+01
Cs-137	1.64E+02
Np-237	4.38E-07
Pu-238	7.09E+00
Pu-239	1.88E+01
Pu-240	1.20E+01
Pu-241	1.63E+02
Pu-242	5.63E-03
Sr-90	1.23E+02
Th-229	9.68E-12
Th-230	6.08E-08
Th-232	8.76E-20
U-233	1.10E-06
U-234	6.61E-02
U-235	2.13E-03
U-236	3.55E-08
U-238	7.12E-04

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Filter and associated PGW from AHCF

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SP-CHHD**

Appendix A

Waste Profile Report

Site	Separations Process Research Unit	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	D&D Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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	5.6	0.0	5.6
Final Form Total	6.3	0.0	6.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.30E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	8.77E+02
Other Inorganic Materials	1.59E+02
Cellulose	3.05E+02
Rubber	0.00E+00
Plastic	1.55E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.99E+01
Packaging Material, Rubber	1.44E+00
Packaging Material, Steel	9.52E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.80E-02
Cs-137	2.90E+00
Np-237	4.53E-08
Pu-238	2.73E-03
Pu-239	2.58E-01
Pu-241	2.75E-02
Pu-242	6.86E-04
Sr-90	1.14E-01
Th-229	7.07E-17
Th-230	9.60E-08
U-233	4.82E-13
U-234	2.09E-03
U-235	1.31E-04
U-238	2.26E-03

Haz. Waste No(s).

D007, D008, D011

TRUCON Code(s)

111/211

Waste Stream Description

Process components, inorganic solids, Wastelock, piping, asbestos insulation, PPE, herculite and poly sheets, absorbent pads, and miscellaneous debris.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SP-RHHD**

Appendix A

Waste Profile Report

Site	Separations Process Research Unit	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	D&D Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	1.9	0.0	1.9
Final Form Total	1.9	0.0	1.9

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.00E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	1.71E+03
Other Inorganic Materials	3.12E+02
Cellulose	6.85E+01
Rubber	0.00E+00
Plastic	3.20E+00
Cement	5.66E+02
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	8.55E+01
Packaging Material, Rubber	1.06E+00
Packaging Material, Steel	1.74E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.08E-01
Cs-137	8.20E+00
Np-237	5.01E-07
Pu-238	1.12E-02
Pu-239	6.93E-01
Pu-241	6.23E-02
Pu-242	2.80E-03
Sr-90	2.48E+00
Th-229	7.83E-16
Th-230	4.03E-07
Th-232	1.16E-15
U-233	5.34E-12
U-234	8.77E-03
U-235	8.54E-04
U-236	4.70E-06
U-238	9.59E-03

Haz. Waste No(s).

D007, D008, D009, D011

TRUCON Code(s)

317

Waste Stream Description

Process components, inorganic solids, piping, miscellaneous debris, lead, PPE, herculite and poly sheets, plastic bags, Wastelock, absorbent pads, and paper towels.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SP-RHIN**

Appendix A

Waste Profile Report

Site	Separations Process Research Unit	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Process cell and sump cleanout sediment					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	6.50E+00
Cement	0.00E+00
Solidified Inorganic Material	1.20E+02
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.85E+01
Packaging Material, Rubber	3.54E-01
Packaging Material, Steel	5.81E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.56E-02
Cs-137	1.17E+01
Np-237	7.35E-08
Pu-238	6.18E-03
Pu-239	5.54E-01
Pu-241	9.88E-02
Pu-242	4.27E-03
Sr-90	2.58E-01
Th-229	1.14E-16
Th-230	1.86E-07
U-233	7.81E-13
U-234	4.06E-03
U-235	3.12E-04
U-238	6.27E-03

Haz. Waste No(s).

D007, D008, D011

TRUCON Code(s)

311

Waste Stream Description

Inorganic solids with Aquaset IIG added to absorb free water

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-221H-EUOx**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Discarding Excess/Expired Materials	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	221H U Oxide CH TRU Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal POC - 12" w/ Liner	1.5	0.0	1.5
Final Form Total	1.5	0.0	1.5

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	6.12E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	2.30E+03
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	1.53E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	8.43E+02
Packaging Material, Plastic	2.31E+02
Packaging Material, Rubber	3.54E+00
Packaging Material, Steel	3.30E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	7.64E-03
Am-243	2.80E-09
Cm-244	1.48E-03
Cs-137	1.64E-03
Np-237	1.93E-03
Pu-238	7.31E-03
Pu-239	5.06E-01
Pu-240	1.25E-06
Pu-242	1.93E-03
Sr-90	1.63E-03
Th-229	3.34E-02
Th-230	6.47E-03
Th-232	1.93E-03
U-233	7.27E+00
U-234	1.06E+01
U-235	8.48E-01
U-236	1.35E-13
U-238	2.51E-02

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

The uranium oxide material is being blended and packaged specifically for disposal at WIPP.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-AGNS-HOM**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	SR-AGNS-HOM					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
SWB w/ 4 - 55-gal Drums w/ Liners	0.8	0.0	0.8
Final Form Total	1.3	0.0	1.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.53E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	2.03E+03
Solidified Inorganic Material	2.18E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	4.62E+01
Packaging Material, Rubber	1.07E+00
Packaging Material, Steel	4.53E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	6.45E-01
Np-237	6.72E-04
Pu-238	7.53E-01
Pu-239	1.34E+00
Pu-240	3.17E-01
Pu-241	9.87E+00
Pu-242	5.52E-05
Th-229	8.12E-12
Th-230	7.05E-09
Th-232	1.48E-17
U-233	2.31E-08
U-234	1.05E-04
U-235	4.33E-06
U-236	7.51E-08
U-238	9.27E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D011, F005

TRUCON Code(s)

111/211, 154

Waste Stream Description

This waste is comprised of aqueous liquids solidified with lime and cement in a 55-gallon drum and aqueous liquid that had been absorbed using Florco-X and then later solidified with cement and water inside a 55-gallon drum.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-BCLDP.003.001**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Discarding Excess/Expired Materials	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2020
Stream Name	BCL JN-1 CH TRU Homogeneous Sludge					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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	Total Mass (kg)
Iron-based Metal/Alloys	3.35E-01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	5.03E-02
Cellulose	3.92E-01
Rubber	0.00E+00
Plastic	1.28E+00
Cement	0.00E+00
Solidified Inorganic Material	1.94E+01
Solidified Organic Material	3.45E+01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	1.18E-01
Packaging Material, Steel	2.72E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.99E-02
Am-243	2.28E-05
Cm-244	1.53E-03
Cs-137	7.10E-03
Np-237	3.43E-07
Pu-238	2.37E-02
Pu-239	3.24E-03
Pu-240	5.30E-03
Pu-241	3.03E-01
Pu-242	1.58E-05
Sr-90	7.03E-03
Th-229	2.34E-14
Th-230	3.02E-10
Th-232	7.15E-17
U-233	4.28E-11
U-234	4.93E-06
U-235	7.74E-08
U-236	2.08E-07
U-238	4.58E-07

Haz. Waste No(s).

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

TRUCON Code(s)

127/227

Waste Stream Description

This waste consists of CH Hydraulic Sludge and Debris

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-BCLDP.004.004**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Discarding Excess/Expired Materials	**Waste Matrix Code Group**	Composite Filter Waste			**Inventory Date**	12/31/2020
Stream Name	CH Mixed TRU Cartridge Water Filters(S5000)					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	1.97E+01
Cellulose	1.88E+01
Rubber	7.22E-01
Plastic	3.61E+00
Cement	0.00E+00
Solidified Inorganic Material	5.49E+00
Solidified Organic Material	7.16E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	1.18E-01
Packaging Material, Steel	2.72E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.00E-02
Am-243	2.75E-05
Cs-137	9.32E-04
Np-237	3.94E-06
Pu-238	4.61E-02
Pu-239	8.24E-04
Pu-240	1.35E-03
Pu-242	1.61E-08
Sr-90	9.08E-04
Th-229	7.39E-13
Th-230	1.66E-09
Th-232	2.86E-19
U-233	6.39E-10
U-234	1.18E-05
U-235	1.69E-07
U-236	6.82E-10
U-238	3.26E-06

Haz. Waste No(s).

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

TRUCON Code(s)

119/219

Waste Stream Description

This waste consists of CH Cartridge Water Filters

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-BCLDP-HET**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	BCL JN-4 CH TRU Heterogeneous Debris					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/o Liner	3.8	0.0	3.8
Final Form Total	3.8	0.0	3.8

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	7.50E+02
Aluminum-based Metal/Alloys	7.67E+00
Other Metal/Alloys	3.84E+00
Other Inorganic Materials	1.53E+01
Cellulose	2.00E+02
Rubber	4.41E+01
Plastic	3.07E+02
Cement	0.00E+00
Solidified Inorganic Material	5.93E+02
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	7.26E-01
Packaging Material, Steel	5.80E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.02E-01
Np-237	2.22E-07
Pu-238	2.81E+01
Pu-239	1.00E-01
Pu-240	4.64E-02
Pu-241	7.64E-01
Pu-242	1.43E-05
Th-229	6.67E-16
Th-230	1.85E-08
Th-232	1.66E-18
U-233	3.28E-12
U-234	5.70E-04
U-235	6.90E-10
U-236	9.61E-09
U-238	1.55E-14

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, F002, F005

TRUCON Code(s)

121/221

Waste Stream Description

Heterogeneous debris waste from the D&D of Battelle Columbus Lab Building JN-4

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-DWPF-HET**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Analytical Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	CH TRU - Heterogeneous debris from the DWPF laboratory					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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	Total Mass (kg)
Iron-based Metal/Alloys	1.47E+00
Aluminum-based Metal/Alloys	7.33E-01
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	2.93E+00
Cellulose	7.09E+00
Rubber	0.00E+00
Plastic	1.22E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	1.18E-01
Packaging Material, Steel	2.72E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	9.46E-02
Cs-137	2.50E-03
Np-237	1.17E-06
Pu-238	1.86E-02
Pu-239	3.10E-03
Pu-240	4.88E-02
Pu-241	5.34E-02
Sr-90	2.45E-03
Th-229	3.64E-06
Th-230	5.10E-11
Th-232	6.99E-18
U-233	2.96E-03
U-234	7.78E-07
U-235	4.10E-07
U-236	2.02E-08
U-238	1.16E-05

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225, 154

Waste Stream Description

CH TRU waste consisting of contaminated laboratory debris

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-HBL-235F-HET**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Commingled waste from HBL and 235F.					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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/o Liner	1.9	0.0	1.9
Final Form Total	2.5	0.0	2.5

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	4.31E+02
Aluminum-based Metal/Alloys	2.97E+01
Other Metal/Alloys	4.76E+01
Other Inorganic Materials	4.76E+01
Cellulose	7.10E+01
Rubber	4.47E+00
Plastic	5.29E+01
Cement	0.00E+00
Solidified Inorganic Material	3.44E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.31E+01
Packaging Material, Rubber	7.17E-01
Packaging Material, Steel	3.72E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.67E-04
Np-237	1.72E-04
Pu-238	1.29E+00
Pu-239	9.42E-04
Pu-240	5.15E-04
Pu-241	2.01E-02
Pu-242	6.13E-07
Th-229	1.59E-12
Th-230	8.50E-10
Th-232	1.84E-20
U-233	5.17E-09
U-234	2.62E-05
U-235	6.49E-12
U-236	1.07E-10
U-238	6.66E-16

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D029, D043, F002, F005, U133

TRUCON Code(s)

125/225, 154

Waste Stream Description

This waste consists of repackaged waste from a large steel box that was originally loaded from two separate SRS generator facilities (i.e. H-B line and 235F)

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-KAC-HET**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	CH TRU Heterogeneous debris from the K-Area downblend of the 6 MT and 7.1 MT materials					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	2.7	319.4	322.1
Final Form Total	2.7	319.4	322.1

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	7.85E+03
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	7.26E+02
Rubber	6.72E+03
Plastic	5.06E+04
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	1.81E+02
Packaging Material, Steel	4.17E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.36E+02
Np-237	1.62E-03
Pu-238	7.75E+01
Pu-239	6.46E+02
Pu-240	1.67E+02
Pu-241	1.71E+03
Pu-242	5.52E-02
Th-229	3.00E-13
Th-230	1.01E-09
Th-232	1.22E-16
U-233	6.87E-09
U-234	2.20E-04
U-235	1.23E-03
U-236	4.95E-06
U-238	4.32E-05

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225, 154

Waste Stream Description

This waste stream consists of plutonium contaminated debris resulting from destructive and non-destructive containers used to store plutonium material

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-KAC-HET-A**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	CH Mixed TRU Heterogeneous debris from the K Area Plutonium surveillance program					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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	Total Mass (kg)
Iron-based Metal/Alloys	5.12E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	4.73E-01
Rubber	4.38E+00
Plastic	3.30E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	1.18E-01
Packaging Material, Steel	2.72E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.62E-01
Np-237	1.36E-06
Pu-238	4.82E-02
Pu-239	4.21E-01
Pu-240	1.09E-01
Pu-241	8.32E-01
Pu-242	3.60E-05
Th-229	1.04E-14
Th-230	3.18E-11
Th-232	3.90E-18
U-233	3.54E-11
U-234	9.79E-07
U-235	8.02E-07
U-236	2.26E-08
U-238	2.81E-08

Haz. Waste No(s).

D006, D008

TRUCON Code(s)

125/225, 154

Waste Stream Description

This waste stream consists of plutonium contaminated debris resulting from destructive and non-destructive containers used to store plutonium material

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-KAC-PuOx**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Discarding Excess/Expired Materials	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	K-Area Pu Oxide waste associated with the 6 MT and 7.1 MT materials					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal CCO w/ Liner	0.0	408.3	408.3
Final Form Total	0.0	408.3	408.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.44E+05
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	4.13E+04
Other Inorganic Materials	5.16E+04
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	6.88E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	7.37E+05
Packaging Material, Plastic	2.46E+05
Packaging Material, Rubber	3.76E+03
Packaging Material, Steel	2.58E+06
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.87E+05
Np-237	9.28E-03
Pu-238	6.93E+04
Pu-239	5.08E+05
Pu-240	1.71E+05
Pu-241	1.39E+06
Pu-242	5.92E+01
Th-229	1.16E-15
Th-230	8.99E-09
Th-232	1.25E-15
U-233	5.07E-10
U-234	1.95E-02
U-235	5.00E-05
U-236	5.07E-04
U-238	9.18E-10

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

The plutonium oxide material is being blended and packaged specifically for disposal at WIPP.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-LA-PAD1**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	CH TRU Heterogeneous debris from the Los Alamos Scientific Laboratory (LASL)					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	4.6	0.0	4.6
Final Form Total	4.6	0.0	4.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.95E+02
Aluminum-based Metal/Alloys	2.41E-01
Other Metal/Alloys	5.32E+00
Other Inorganic Materials	3.07E+01
Cellulose	3.57E+01
Rubber	3.02E+01
Plastic	3.61E+01
Cement	0.00E+00
Solidified Inorganic Material	8.31E-01
Solidified Organic Material	3.01E-02
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	2.60E+00
Packaging Material, Steel	5.98E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.33E+00
Am-243	1.74E-06
Cs-137	1.05E-05
Np-237	2.20E-04
Pu-238	1.81E+03
Pu-239	2.16E+00
Pu-240	3.42E+00
Pu-241	2.60E+01
Pu-242	4.34E-03
Sr-90	1.24E-05
Th-229	4.10E-07
Th-230	2.29E-05
Th-232	2.98E-07
U-233	6.66E-04
U-234	3.74E-01
U-235	5.16E-06
U-236	7.09E-07
U-238	4.72E-12

Haz. Waste No(s).

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

TRUCON Code(s)

125/225, 154

Waste Stream Description

This CH TRU waste stream consists of debris and Impure Oxide shipped to the SRS from the LASL in 1971 and 1972.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-MD-HET**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	CH Mixed TRU/F listed solvents - Heterogeneous debris from Mound Laboratories					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.3	0.0	1.3
55-gal Drum Dir Ld w/o Liner	0.2	0.0	0.2
SWB Dir Ld w/o Liner	13.2	0.0	13.2
Final Form Total	14.6	0.0	14.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.18E+03
Aluminum-based Metal/Alloys	4.04E+00
Other Metal/Alloys	2.23E+01
Other Inorganic Materials	2.06E+02
Cellulose	4.13E+02
Rubber	6.12E+01
Plastic	2.98E+02
Cement	0.00E+00
Solidified Inorganic Material	7.77E+00
Solidified Organic Material	0.00E+00
Soil	7.01E+01
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	4.63E+01
Packaging Material, Rubber	3.37E+00
Packaging Material, Steel	2.22E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	5.08E-01
Am-243	1.20E-06
Cm-244	4.73E-05
Cs-137	8.39E-05
Np-237	1.01E-04
Pu-238	8.27E+01
Pu-239	1.22E+00
Pu-240	1.88E-01
Pu-241	3.86E+00
Pu-242	1.19E-04
Sr-90	8.31E-05
Th-229	1.34E-05
Th-230	3.54E-05
Th-232	3.64E-06
U-233	2.55E-02
U-234	1.63E-02
U-235	6.80E-06
U-236	3.34E-08
U-238	1.22E-04

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, F007, F009

TRUCON Code(s)

125/225, 154

Waste Stream Description

This waste stream is primarily solids consisting of booties, lab coats, floor sweeping, labware, rags, and other job control waste.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-MD-PAD1**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	CH TRU Heterogeneous debris from the Mound Plant					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	13.9	0.0	13.9
SLB2 Dir Ld	7.4	0.0	7.4
SWB Dir Ld w/o Liner	9.4	0.0	9.4
Final Form Total	30.7	0.0	30.7

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.83E+03
Aluminum-based Metal/Alloys	3.68E+00
Other Metal/Alloys	2.27E+01
Other Inorganic Materials	2.10E+02
Cellulose	5.92E+02
Rubber	7.74E+01
Plastic	3.44E+02
Cement	0.00E+00
Solidified Inorganic Material	1.83E+01
Solidified Organic Material	8.46E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	5.09E+02
Packaging Material, Rubber	1.04E+01
Packaging Material, Steel	4.47E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.80E+01
Am-243	6.10E-05
Cm-244	2.99E-02
Cs-137	7.69E-02
Np-237	1.81E-03
Pu-238	8.54E+03
Pu-239	1.06E+01
Pu-240	1.45E+01
Pu-241	1.14E+02
Pu-242	1.76E-02
Sr-90	7.62E-02
Th-229	1.21E-11
Th-230	9.21E-05
Th-232	5.20E-05
U-233	4.61E-08
U-234	1.74E+00
U-235	3.34E-05
U-236	2.57E-06
U-238	1.23E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D030, D032, D034, D037, D043, F002, F004, F005

TRUCON Code(s)

125/225, 154, 425

Waste Stream Description

This CH TRU waste stream consists of debris shipped to the SRS from the Mound Plant in 1971 and 1972.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-MD-SOIL**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2020
Stream Name	CH Mixed TRU Soil / Gravel (S4000)					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.2	0.0	0.2
55-gal Drum Dir Ld w/o Liner	1.9	0.0	1.9
Final Form Total	2.1	0.0	2.1

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.10E-01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	1.43E+02
Cellulose	7.10E-01
Rubber	2.42E-01
Plastic	1.05E+01
Cement	0.00E+00
Solidified Inorganic Material	4.19E+01
Solidified Organic Material	0.00E+00
Soil	1.75E+03
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	7.71E+00
Packaging Material, Rubber	1.18E+00
Packaging Material, Steel	2.72E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.58E-02
Cs-137	4.06E-06
Np-237	2.17E-06
Pu-238	1.03E+00
Pu-239	2.60E-02
Pu-240	3.77E-03
Pu-241	3.58E-02
Pu-242	5.02E-06
Sr-90	4.01E-06
Th-229	1.99E-14
Th-230	1.25E-08
Th-232	1.35E-19
U-233	6.47E-11
U-234	2.05E-04
U-235	1.80E-10
U-236	7.81E-10
U-238	5.45E-15

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, F002, F003, F004, F005, F007, F009

TRUCON Code(s)

111/211

Waste Stream Description

Soil mixed with absorbent and some commingled debris.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-NIST-HET**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Heterogeneous Debris Waste from the NIST					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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	Total Mass (kg)
Iron-based Metal/Alloys	2.22E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	2.78E+00
Cement	2.90E+01
Solidified Inorganic Material	1.53E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	1.18E-01
Packaging Material, Steel	2.72E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	6.45E+00
Np-237	1.65E-05
Pu-238	7.87E+00
Pu-239	2.58E+00
Pu-240	6.10E-01
Pu-241	1.90E+01
Pu-242	1.09E-04
Th-229	6.58E-14
Th-230	3.86E-08
Th-232	3.11E-14
U-233	2.81E-10
U-234	6.15E-04
U-235	6.28E-06
U-236	7.88E-05
U-238	2.50E-07

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225, 154

Waste Stream Description

This material consist of a combination of unirradiated PuO/UO fuel pellets, Pacemaker source and solidified Pu solutions

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-RH-221H.01**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	RH TRU Heterogeneous debris from the HB-Line					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	6.02E+02
Aluminum-based Metal/Alloys	3.48E+01
Other Metal/Alloys	4.53E+01
Other Inorganic Materials	2.44E+02
Cellulose	2.05E+02
Rubber	5.15E+02
Plastic	1.82E+03
Cement	0.00E+00
Solidified Inorganic Material	1.04E+01
Solidified Organic Material	3.48E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.00E+02
Packaging Material, Rubber	2.48E+00
Packaging Material, Steel	4.07E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.31E-01
Np-237	2.44E+00
Pu-238	1.45E+03
Pu-239	1.19E+00
Pu-240	6.16E-01
Pu-241	2.45E+01
Pu-242	7.11E-04
Th-229	1.65E-08
Th-230	1.65E-06
Th-232	4.97E-15
U-233	6.26E-05
U-234	4.23E-02
U-235	6.06E-05
U-236	1.69E-05
U-238	5.32E-08

Haz. Waste No(s).

D006, D008, D009, D019, D022, D029, D039, D040, D043, F001, F002, F003, F005, U133

TRUCON Code(s)

321, 322, 325

Waste Stream Description

This waste stream is composed of dry heterogeneous organic and inorganic debris.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-RH-221H.02**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Discarding Excess/Expired Materials	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	RH TRU spent Berl saddles from H-Canyon dissolver off-gas system.					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	1.7	0.0	1.7
Final Form Total	1.7	0.0	1.7

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.82E+02
Aluminum-based Metal/Alloys	1.63E+01
Other Metal/Alloys	2.12E+01
Other Inorganic Materials	1.14E+02
Cellulose	9.63E+01
Rubber	2.41E+02
Plastic	8.53E+02
Cement	0.00E+00
Solidified Inorganic Material	4.89E+00
Solidified Organic Material	1.63E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.43E+02
Packaging Material, Rubber	1.77E+00
Packaging Material, Steel	6.14E+03
Packaging Material, Lead	6.47E+03

Final Form Radionuclides

Isotope	Total Activity (Ci)
Np-237	9.04E-04
Pu-238	2.11E+00
Pu-239	1.92E-02
Pu-240	1.31E-02
Pu-242	2.26E-04
Th-229	8.35E-12
Th-230	1.59E-08
Th-232	4.69E-19
U-233	2.71E-08
U-234	2.69E-04
U-235	1.32E-10
U-236	2.71E-09
U-238	2.45E-13

Haz. Waste No(s).

D007, D009, D011

TRUCON Code(s)

125/225

Waste Stream Description

This waste stream is composed of spent Berl saddles (silicon dioxide and aluminum oxide).

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-RH-235F.01**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	RH TRU Heterogeneous debris from the 235F facility.					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	1.3	0.0	1.3
Final Form Total	1.3	0.0	1.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	7.18E+01
Aluminum-based Metal/Alloys	3.91E+00
Other Metal/Alloys	1.91E+00
Other Inorganic Materials	2.09E+01
Cellulose	1.22E+01
Rubber	7.34E+01
Plastic	9.24E+01
Cement	0.00E+00
Solidified Inorganic Material	8.60E-01
Solidified Organic Material	1.67E-01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	5.70E+01
Packaging Material, Rubber	7.08E-01
Packaging Material, Steel	1.16E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.43E+02
Np-237	3.56E-02
Pu-238	3.72E+02
Pu-239	3.00E+00
Pu-240	7.92E-01
Pu-241	4.23E+03
Pu-242	2.88E-04
Th-229	3.27E-10
Th-230	2.45E-07
Th-232	2.83E-17
U-233	1.06E-06
U-234	7.56E-03
U-235	2.07E-08
U-236	1.64E-07
U-238	3.13E-13

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D035, F002

TRUCON Code(s)

322, 325

Waste Stream Description

This waste stream is composed of metal equipment and debris

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-RH-772F.01**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Analytical Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	RH TRU Heterogeneous debris from the 772F and 772-1F laboratories.					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	7.26E+01
Aluminum-based Metal/Alloys	5.33E+00
Other Metal/Alloys	1.47E+01
Other Inorganic Materials	1.47E+02
Cellulose	3.66E+01
Rubber	2.73E+01
Plastic	3.63E+02
Cement	0.00E+00
Solidified Inorganic Material	6.66E-01
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.85E+01
Packaging Material, Rubber	3.54E-01
Packaging Material, Steel	5.81E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	9.14E-03
Cs-137	5.86E-01
Np-237	3.99E-06
Pu-238	3.19E-02
Pu-239	2.68E-02
Pu-240	8.15E-03
Pu-241	3.66E-02
Pu-242	1.33E-06
Sr-90	5.70E-01
Th-229	2.44E-13
Th-230	4.98E-10
Th-232	1.46E-16
U-233	3.09E-10
U-234	3.86E-06
U-235	1.87E-08
U-236	1.67E-07
U-238	3.73E-15

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D028, D029, F002, F003, F005

TRUCON Code(s)

322, 325

Waste Stream Description

This waste stream is primarily solids consisting of booties, lab coats, floor sweeping, labware, rags, other job control waste, small HEPAs liquids, sludges and resins may also be found in this waste.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-RH-773A.01**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Analytical Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	RH TRU Heterogeneous debris from the SRNL					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	16.4	0.0	16.4
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	0.6	8.2	8.8
Final Form Total	17.0	8.2	25.2

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	4.79E+03
Aluminum-based Metal/Alloys	5.26E+01
Other Metal/Alloys	3.21E+02
Other Inorganic Materials	3.16E+03
Cellulose	1.72E+03
Rubber	2.60E+03
Plastic	5.39E+03
Cement	0.00E+00
Solidified Inorganic Material	1.09E+02
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	8.17E+02
Packaging Material, Rubber	1.42E+01
Packaging Material, Steel	2.32E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.91E+00
Am-243	1.29E+00
Cm-244	8.43E+01
Cs-137	2.02E+01
Np-237	1.04E-04
Pu-238	6.49E+01
Pu-239	1.83E+00
Pu-240	1.10E+00
Pu-241	1.01E+01
Pu-242	5.15E-04
Pu-244	9.47E-13
Sr-90	1.47E+01
Th-229	4.42E-12
Th-230	2.34E-07
Th-232	1.82E-16
U-233	6.51E-09
U-234	3.12E-03
U-235	2.89E-08
U-236	4.77E-07
U-238	1.28E-12

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D043, F002, F004, F005

TRUCON Code(s)

321, 322, 325

Waste Stream Description

This waste stream is primarily solids consisting of booties, lab coats, floor sweeping, labware, rags, other job control waste, small HEPAs liquids, sludges and resins may also be found in this waste.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-RH-DWPF-HET**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	RH TRU - Heterogeneous debris from the DWPF					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/o Liner	0.0	7.4	7.4
Final Form Total	0.0	7.4	7.4

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.68E+01
Aluminum-based Metal/Alloys	1.34E+01
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	5.36E+01
Cellulose	1.30E+02
Rubber	0.00E+00
Plastic	2.23E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.21E+01
Packaging Material, Rubber	7.91E+00
Packaging Material, Steel	2.74E+04
Packaging Material, Lead	2.89E+04

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.74E+00
Cs-137	6.31E-01
Np-237	1.35E-05
Pu-238	3.80E-01
Pu-239	5.67E-02
Pu-240	8.94E-01
Pu-241	1.91E+00
Sr-90	6.31E-02
Th-229	4.76E-07
Th-230	4.93E-14
Th-232	6.53E-21
U-233	5.41E-02
U-234	1.07E-07
U-235	7.50E-06
U-236	2.65E-09
U-238	2.12E-04

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

RH TRU waste consisting of contaminated debris

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-RH-FBL.01**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	RH TRU Heterogeneous debris from the FB-Line					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	1.3	0.0	1.3
Final Form Total	1.3	0.0	1.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.44E+01
Aluminum-based Metal/Alloys	3.96E-01
Other Metal/Alloys	8.86E-01
Other Inorganic Materials	1.62E+02
Cellulose	7.61E+00
Rubber	1.16E+01
Plastic	9.65E+01
Cement	0.00E+00
Solidified Inorganic Material	1.05E-01
Solidified Organic Material	5.71E-01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	5.70E+01
Packaging Material, Rubber	7.08E-01
Packaging Material, Steel	1.16E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.18E+00
Cs-137	5.11E-06
Np-237	1.96E-05
Pu-238	1.75E+00
Pu-239	1.83E+00
Pu-240	1.81E+00
Pu-241	1.25E+01
Pu-242	8.97E-05
Sr-90	4.99E-06
Th-229	1.73E-05
Th-230	3.16E-08
Th-232	2.97E-16
U-233	1.31E-02
U-234	2.68E-04
U-235	3.73E-06
U-236	8.04E-07
U-238	2.61E-05

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D018, D019, D022, D029, D039, D040, D043, F002, F005, U002, U151

TRUCON Code(s)

321

Waste Stream Description

This waste stream consists primarily of dry heterogeneous organic debris.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-RH-FBL.02**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	RH TRU Heterogeneous debris from the F-Canyon dissolver off-gas system.					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	1.0	0.0	1.0
Final Form Total	1.0	0.0	1.0

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	1.68E+03
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	1.23E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	8.57E+01
Packaging Material, Rubber	1.06E+00
Packaging Material, Steel	3.68E+03
Packaging Material, Lead	3.88E+03

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.02E-03
Np-237	6.20E-05
Pu-238	4.83E-05
Pu-239	1.89E-03
Pu-240	1.38E-03
Pu-241	8.44E-03
Pu-242	5.16E-01
Th-229	2.65E-12
Th-230	1.59E-05
Th-232	6.73E-15
U-233	4.02E-09
U-234	1.16E-01
U-235	1.47E+00
U-236	9.09E-06
U-238	7.38E-02

Haz. Waste No(s).

D006, D007, D008, D009, D011, D019, D022, D028, D029, F002, F005

TRUCON Code(s)

125/225

Waste Stream Description

This waste stream is primarily solids consisting silver coated ceramics (Berl or Beryl saddles) and debris materials.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-RH-MNDPAD1.01**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	RH Debris from Mound Laboratories					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	3.2	0.0	3.2
Final Form Total	3.2	0.0	3.2

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.91E+02
Aluminum-based Metal/Alloys	1.28E-01
Other Metal/Alloys	1.50E+00
Other Inorganic Materials	2.62E+01
Cellulose	1.15E+01
Rubber	9.08E+00
Plastic	2.11E+01
Cement	0.00E+00
Solidified Inorganic Material	1.12E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.43E+02
Packaging Material, Rubber	1.77E+00
Packaging Material, Steel	2.91E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	6.26E-01
Np-237	1.10E-06
Pu-238	2.21E+03
Pu-239	1.66E+00
Pu-240	9.05E-01
Pu-241	3.06E+01
Pu-242	1.08E-03
Th-229	3.71E-15
Th-230	3.03E-06
Th-232	6.61E-17
U-233	1.65E-11
U-234	6.49E-02
U-235	1.63E-08
U-236	2.68E-07
U-238	1.67E-12

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D030, D032, D034, D037, D043, F002, F004, F005

TRUCON Code(s)

325

Waste Stream Description

Process equipment and exchange resin

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-RH-SDD.01**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Discarding Excess/Expired Materials	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Remote Handled PuBe Sources					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.13E+03
Aluminum-based Metal/Alloys	3.33E+01
Other Metal/Alloys	9.50E+00
Other Inorganic Materials	0.00E+00
Cellulose	1.20E+03
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.85E+01
Packaging Material, Rubber	3.54E-01
Packaging Material, Steel	5.81E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	6.12E+00
Np-237	2.46E-05
Pu-238	8.59E+01
Pu-239	1.42E+00
Pu-240	8.57E-01
Pu-241	2.63E+01
Pu-242	1.43E-03
Th-229	2.56E-13
Th-230	2.02E-07
Th-232	1.06E-16
U-233	6.78E-10
U-234	3.32E-03
U-235	1.82E-08
U-236	3.30E-07
U-238	2.88E-12

No Hazardous Waste Numbers Provided

TRUCON Code(s)

320

Waste Stream Description

This waste stream consists of three PuBe sources.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-RH-SWD.01**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Remote Handled (RH) Mixed TRU Debris (S5000)					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	5.30E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	1.67E+02
Other Inorganic Materials	2.11E+01
Cellulose	1.97E+01
Rubber	3.50E+00
Plastic	5.04E+01
Cement	0.00E+00
Solidified Inorganic Material	7.37E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.85E+01
Packaging Material, Rubber	3.54E-01
Packaging Material, Steel	5.81E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.37E-02
Am-243	1.85E-02
Cm-244	1.41E+00
Cs-137	4.58E-03
Np-237	1.34E-04
Pu-238	7.21E-02
Pu-239	8.62E-02
Pu-240	2.79E-02
Pu-241	6.74E-01
Pu-242	9.39E-06
Pu-244	3.13E-16
Sr-90	3.21E-03
Th-229	1.24E-12
Th-230	4.76E-11
Th-232	9.70E-19
U-233	4.02E-09
U-234	1.46E-06
U-235	5.95E-10
U-236	5.66E-09
U-238	1.02E-14

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D043, F002, F004, F005, U133

TRUCON Code(s)

322

Waste Stream Description

RH Mixed TRU waste resulting from solvent tank emptying and closure in the E-Area of SRS.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-SDD-HET-A**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	CH TRU - Heterogeneous debris from the D&D of the 211-F-Area					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.9	0.0	1.9
SWB Dir Ld w/o Liner	3.8	0.0	3.8
Final Form Total	5.7	0.0	5.7

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.88E+02
Aluminum-based Metal/Alloys	2.81E+00
Other Metal/Alloys	2.20E-01
Other Inorganic Materials	2.73E+00
Cellulose	1.28E+01
Rubber	0.00E+00
Plastic	1.27E+02
Cement	6.03E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	6.94E+01
Packaging Material, Rubber	1.79E+00
Packaging Material, Steel	8.25E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.22E-02
Am-243	3.01E-06
Cm-244	2.48E-04
Cs-137	1.19E-04
Np-237	4.24E-05
Pu-238	3.33E+00
Pu-239	1.91E-01
Pu-240	2.68E-02
Pu-241	3.87E-01
Pu-242	2.37E-05
Sr-90	2.88E-02
Th-229	1.58E-09
Th-230	2.81E-09
Th-232	9.92E-17
U-233	2.99E-06
U-234	7.96E-05
U-235	4.59E-08
U-236	3.37E-07
U-238	9.58E-07

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011

TRUCON Code(s)

125/225

Waste Stream Description

This waste stream is composed of metal equipment, tools and debris and small amounts of Portland cement

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-SDD-HOM-A**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2020
Stream Name	Organic Sludge from D&D of the SRS F-Area 800 Series Underground Tanks					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
55-gal Drum Dir Ld w/o Liner	3.6	0.0	3.6
Final Form Total	4.0	0.0	4.0

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	3.14E+01
Cement	2.09E+03
Solidified Inorganic Material	1.57E+01
Solidified Organic Material	1.10E+02
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.54E+01
Packaging Material, Rubber	2.24E+00
Packaging Material, Steel	5.17E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.21E-01
Am-243	5.70E-04
Np-237	8.10E-02
Pu-238	9.35E+00
Pu-239	8.69E-01
Pu-240	1.65E-01
Pu-241	1.86E+00
Pu-242	3.77E-01
Th-229	1.95E-04
Th-230	4.59E-05
Th-232	7.33E-13
U-233	3.69E-01
U-234	8.33E-01
U-235	6.60E-04
U-236	2.47E-03
U-238	4.01E-02

Haz. Waste No(s).

D004, D005, D007, D008, D009, D011

TRUCON Code(s)

112/212

Waste Stream Description

Absorbed organic sludge

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-SDD-HOM-B**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Sludge from D&D of the SRS F-Area 800 Series Underground Tanks					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.4	0.0	0.4
55-gal Drum Dir Ld w/o Liner	8.4	0.0	8.4
SWB Dir Ld w/o Liner	1.9	0.0	1.9
Final Form Total	10.7	0.0	10.7

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	4.21E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	3.04E+01
Cellulose	1.60E+02
Rubber	0.00E+00
Plastic	3.29E+02
Cement	1.74E+03
Solidified Inorganic Material	9.15E+01
Solidified Organic Material	5.70E-01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.54E+01
Packaging Material, Rubber	5.32E+00
Packaging Material, Steel	1.43E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.78E+00
Am-243	6.20E-04
Cm-244	2.58E-02
Cs-137	4.35E-03
Np-237	6.24E-03
Pu-238	4.86E+02
Pu-239	2.82E+01
Pu-240	3.94E+00
Pu-241	5.29E+01
Pu-242	1.36E-02
Sr-90	1.87E-03
Th-229	5.77E-11
Th-230	5.33E-07
Th-232	1.76E-14
U-233	1.87E-07
U-234	1.32E-02
U-235	2.74E-05
U-236	5.15E-05
U-238	8.03E-04

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011

TRUCON Code(s)

127/227

Waste Stream Description

Absorbed sludge

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-SWMF-HET-A**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	CH Mixed TRU Debris (S5000)					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.8	0.0	0.8
55-gal Drum Dir Ld w/o Liner	4.8	0.0	4.8
SWB Dir Ld w/o Liner	63.9	0.0	63.9
Final Form Total	69.6	0.0	69.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	4.32E+03
Aluminum-based Metal/Alloys	5.73E+01
Other Metal/Alloys	4.28E+00
Other Inorganic Materials	1.36E+02
Cellulose	5.19E+02
Rubber	2.96E+02
Plastic	1.39E+03
Cement	0.00E+00
Solidified Inorganic Material	5.52E-02
Solidified Organic Material	0.00E+00
Soil	3.31E-01
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.08E+01
Packaging Material, Rubber	1.55E+01
Packaging Material, Steel	1.06E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.94E+00
Am-243	3.70E-04
Cm-244	1.06E-01
Cs-137	3.74E-03
Np-237	4.65E-03
Pu-238	4.88E+02
Pu-239	1.02E+01
Pu-240	2.87E+00
Pu-241	3.24E+01
Pu-242	7.42E-03
Sr-90	3.71E-03
Th-229	2.48E-07
Th-230	4.30E-06
Th-232	1.17E-07
U-233	4.03E-04
U-234	7.17E-02
U-235	9.53E-06
U-236	5.94E-07
U-238	3.50E-04

Haz. Waste No(s).

D008, F001, F002, F004, F005, F007, F009, U133, U151

TRUCON Code(s)

125/225, 154

Waste Stream Description

CH Mixed TRU waste resulting from remediation and re-packaging of Mixed "defense related" TRU waste.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-SWMF-HET-B**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Spill Clean-ups/Emergency Response Actions	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Spill cleanup debris.					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.1	0.0	1.1
Final Form Total	1.1	0.0	1.1

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.36E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	3.37E+01
Cellulose	2.69E+01
Rubber	0.00E+00
Plastic	2.56E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.85E+01
Packaging Material, Rubber	5.90E-01
Packaging Material, Steel	1.36E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.59E-01
Am-243	4.43E-01
Cm-244	3.38E+01
Cs-137	5.21E-06
Np-237	8.15E-07
Pu-238	6.79E-01
Pu-239	9.89E-04
Pu-240	1.81E-01
Pu-241	2.19E-01
Pu-242	1.40E-04
Pu-244	8.70E-15
Sr-90	5.16E-06
Th-229	2.51E-15
Th-230	4.47E-10
Th-232	5.82E-18
U-233	1.22E-11
U-234	1.38E-05
U-235	6.51E-12
U-236	3.47E-08
U-238	1.52E-13

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D043, F002, F004, F005, U133

TRUCON Code(s)

125/225, 154

Waste Stream Description

Solid Waste Management Facility debris resulting from spill cleanup activities

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W026-221F-HEPA**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Composite Filter Waste			**Inventory Date**	12/31/2020
Stream Name	CH Mixed TRU HEPA Filters (S5000)					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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	Total Mass (kg)
Iron-based Metal/Alloys	2.09E+01
Aluminum-based Metal/Alloys	1.97E-01
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	1.30E+00
Cellulose	8.66E+00
Rubber	0.00E+00
Plastic	1.52E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.08E+01
Packaging Material, Rubber	4.72E-01
Packaging Material, Steel	1.09E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.35E-01
Am-243	1.28E-14
Cs-137	1.59E-07
Np-237	1.80E-06
Pu-238	5.93E-02
Pu-239	7.84E-01
Pu-240	2.11E-01
Pu-241	1.89E+00
Pu-242	2.66E-05
Sr-90	1.57E-07
Th-229	1.21E-07
Th-230	1.78E-09
Th-232	7.54E-18
U-233	1.97E-04
U-234	2.83E-05
U-235	5.92E-07
U-236	4.37E-08
U-238	4.28E-08

Haz. Waste No(s).

D005, D007, D009, D011, D019, D022, D028, D029, D043, F002, F005

TRUCON Code(s)

119/219, 154

Waste Stream Description

HEPA Filters in Filtered Polyethylene Boxes

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W026-221F-HET**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	CH Mixed TRU/Thirds Heterogeneous debris from 221F					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.8	0.0	0.8
SWB Dir Ld w/o Liner	1.9	0.0	1.9
Final Form Total	2.7	0.0	2.7

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.20E+02
Aluminum-based Metal/Alloys	1.25E+00
Other Metal/Alloys	1.47E+00
Other Inorganic Materials	1.92E+01
Cellulose	8.36E+01
Rubber	2.00E+01
Plastic	8.87E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	6.99E-02
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.08E+01
Packaging Material, Rubber	8.35E-01
Packaging Material, Steel	3.99E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.09E+00
Am-243	2.18E-06
Cm-244	1.19E-02
Cs-137	2.21E-04
Np-237	1.44E-05
Pu-238	1.07E+00
Pu-239	4.30E+00
Pu-240	1.18E+00
Pu-241	1.47E+01
Pu-242	7.32E-04
Sr-90	2.19E-04
Th-229	8.84E-14
Th-230	2.65E-08
Th-232	1.35E-07
U-233	3.44E-10
U-234	4.90E-04
U-235	6.31E-06
U-236	2.10E-07
U-238	4.19E-05

Haz. Waste No(s).

D006, D007, D008, D009, D022, D028, D029, F001, F002, F003, F005

TRUCON Code(s)

125/225, 154

Waste Stream Description

200 Areas (F and H Separations Facilities). This waste is primarily solids consisting of mainly booties, lab coats, floor sweepings, rags, labware, and other job control wastes. Small HEPAs, liquids, sludges and resins may also be found in this stream. The waste is generated primarily through separation activities in the course of plutonium production, includes small amounts of TRU waste from on site laboratories.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W026-221F-HET-A**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	CH Mixed TRU/Thirds Heterogeneous debris from 221F					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	4.6	0.0	4.6
Final Form Total	4.6	0.0	4.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	2.80E+00
Other Inorganic Materials	1.90E+02
Cellulose	2.54E-01
Rubber	0.00E+00
Plastic	1.09E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.70E+02
Packaging Material, Rubber	2.60E+00
Packaging Material, Steel	5.98E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.26E-01
Cm-244	9.11E-03
Cs-137	2.78E-01
Np-237	4.22E-06
Pu-238	5.04E-02
Pu-239	9.32E-01
Pu-240	2.35E-01
Pu-241	5.40E+00
Pu-242	4.07E-05
Sr-90	7.72E-02
Th-229	7.49E-09
Th-230	1.91E-08
Th-232	4.72E-16
U-233	1.22E-05
U-234	2.97E-04
U-235	9.39E-06
U-236	1.39E-06
U-238	3.57E-06

Haz. Waste No(s).

D006, D007, D008, D009, D011, D019, D022, D028, D029, F002, F005

TRUCON Code(s)

125/225, 154

Waste Stream Description

200 Areas (F Separations Facilities). This waste consists of silver impregnated ceramic saddles removed from the F-Canyon dissolver off-gas system.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W026-221F-HOM**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	CH Mixed TRU Solids (S3000)					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

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	Total Mass (kg)
Iron-based Metal/Alloys	2.46E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	2.39E+00
Rubber	9.20E-01
Plastic	3.92E+01
Cement	0.00E+00
Solidified Inorganic Material	3.75E+02
Solidified Organic Material	6.44E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	5.40E+01
Packaging Material, Rubber	8.26E-01
Packaging Material, Steel	1.90E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	6.95E-01
Am-243	1.70E-07
Cs-137	3.10E-02
Np-237	2.25E-05
Pu-238	5.06E-01
Pu-239	2.69E+00
Pu-240	6.04E-01
Pu-241	4.84E+00
Pu-242	8.55E-05
Sr-90	1.61E-05
Th-229	2.58E-13
Th-230	3.61E-09
Th-232	2.82E-17
U-233	7.43E-10
U-234	5.49E-05
U-235	5.22E-08
U-236	1.43E-07
U-238	4.53E-07

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D019, D022, D028, D029, D043, F002, F004, F005, U151

TRUCON Code(s)

127/227

Waste Stream Description

Absorbed oil, neutralized acids / bases and water

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W026-772F-HET**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Combustible Waste			**Inventory Date**	12/31/2020
Stream Name	CH Mixed TRU/Thirds Heterogeneous debris from 772F					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	5.0	0.0	5.0
55-gal Drum Dir Ld w/o Liner	11.6	1.7	13.2
SWB Dir Ld w/o Liner	16.9	41.4	58.3
Final Form Total	33.5	43.0	76.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	8.52E+02
Aluminum-based Metal/Alloys	5.00E+01
Other Metal/Alloys	6.69E+01
Other Inorganic Materials	1.42E+03
Cellulose	4.97E+02
Rubber	3.20E+02
Plastic	3.41E+03
Cement	0.00E+00
Solidified Inorganic Material	6.51E+00
Solidified Organic Material	6.59E-01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.85E+02
Packaging Material, Rubber	2.15E+01
Packaging Material, Steel	1.14E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.84E+01
Am-243	1.63E-04
Cm-244	1.99E-01
Cs-137	6.33E-02
Np-237	1.84E-02
Pu-238	6.52E+02
Pu-239	3.01E+01
Pu-240	7.49E+00
Pu-241	1.20E+02
Pu-242	3.44E-03
Sr-90	6.24E-02
Th-229	3.47E-06
Th-230	6.59E-06
Th-232	3.93E-05
U-233	5.84E-03
U-234	1.25E-01
U-235	1.19E-04
U-236	1.33E-06
U-238	9.97E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D028, D029, F002, F003, F005

TRUCON Code(s)

125/225, 154

Waste Stream Description

This waste stream is composed of Job Control waste, sludges and resins, HEPA filters and metal equipment.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-221F-HET-A**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	CH Mixed TRU/F listed solvents - Heterogeneous debris from 221F					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	2.1	0.0	2.1
SWB Dir Ld w/o Liner	5.6	0.0	5.6
Final Form Total	7.7	0.0	7.7

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.62E+02
Aluminum-based Metal/Alloys	1.01E+00
Other Metal/Alloys	1.47E-01
Other Inorganic Materials	1.47E+01
Cellulose	3.13E+02
Rubber	4.56E+00
Plastic	1.44E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	7.71E+01
Packaging Material, Rubber	2.27E+00
Packaging Material, Steel	1.14E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.55E+00
Am-243	1.53E-06
Cm-244	1.81E-04
Cs-137	3.32E-06
Np-237	1.55E-05
Pu-238	3.98E-01
Pu-239	4.94E+00
Pu-240	1.25E+00
Pu-241	1.13E+01
Pu-242	1.18E-04
Sr-90	3.29E-06
Th-229	4.40E-08
Th-230	1.30E-08
Th-232	4.46E-17
U-233	7.14E-05
U-234	2.06E-04
U-235	8.30E-07
U-236	2.58E-07
U-238	2.48E-06

Haz. Waste No(s).

D006, D008, D009, F001, F002, F005

TRUCON Code(s)

125/225, 154

Waste Stream Description

This waste stream is primarily solids consisting of booties, lab coats, floor sweeping, labware, rags, and other job control waste. This stream differs from SR-W026 because solvent rags are suspected to be in the waste.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-221H-HEPA**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Composite Filter Waste			**Inventory Date**	12/31/2020
Stream Name	CH TRU HEPA filters					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
55-gal Drum Dir Ld w/o Liner	1.5	4.2	5.7
SLB2 Dir Ld	7.4	0.0	7.4
SWB Dir Ld w/o Liner	32.0	15.0	47.0
Final Form Total	41.5	19.2	60.7

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.62E+02
Aluminum-based Metal/Alloys	1.45E+03
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	6.19E+02
Cellulose	4.05E+02
Rubber	5.74E+00
Plastic	8.39E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.31E+01
Packaging Material, Rubber	1.34E+01
Packaging Material, Steel	9.29E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	9.38E-01
Am-243	7.54E-06
Cs-137	8.27E-02
Np-237	2.53E-03
Pu-238	5.70E+02
Pu-239	2.27E+00
Pu-240	6.36E-01
Pu-241	1.04E+01
Pu-242	1.14E-03
Sr-90	8.18E-02
Th-229	2.33E-11
Th-230	7.13E-06
Th-232	2.28E-17
U-233	7.58E-08
U-234	1.16E-01
U-235	6.98E-06
U-236	1.32E-07
U-238	1.24E-12

Haz. Waste No(s).

D006, D007, D008, D009, D011, D019, D022, D029, D035, D039, D040, D043

TRUCON Code(s)

119/219, 425

Waste Stream Description

This waste stream is mixed TRU composed of HEPA filters

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-221H-HET**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	CH Mixed TRU/F listed solvents - Heterogeneous debris from 221H					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	3.2	0.0	3.2
55-gal Drum Dir Ld w/o Liner	0.2	0.0	0.2
SWB Dir Ld w/o Liner	58.3	0.0	58.3
Final Form Total	61.6	0.0	61.6

Waste Material Parameters

Material Parameter	**Total Mass (kg)**
Iron-based Metal/Alloys	1.52E+03
Aluminum-based Metal/Alloys	7.10E+01
Other Metal/Alloys	2.33E+01
Other Inorganic Materials	5.63E+02
Cellulose	3.61E+02
Rubber	9.93E+02
Plastic	3.14E+03
Cement	0.00E+00
Solidified Inorganic Material	8.20E+00
Solidified Organic Material	5.72E-01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.16E+02
Packaging Material, Rubber	1.31E+01
Packaging Material, Steel	9.43E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	**Total Activity (Ci)**
Am-241	9.96E+00
Am-243	1.10E-04
Cm-244	1.44E-01
Cs-137	8.04E-04
Np-237	9.13E-02
Pu-238	4.61E+03
Pu-239	1.54E+01
Pu-240	4.32E+00
Pu-241	2.88E+02
Pu-242	9.78E-03
Sr-90	7.95E-04
Th-229	1.14E-05
Th-230	4.91E-05
Th-232	1.38E-04
U-233	2.17E-02
U-234	9.29E-01
U-235	1.40E-04
U-236	7.67E-07
U-238	1.46E-04

Haz. Waste No(s).

D006, D008, D009, D019, D022, D029, D039, D040, D043, F001, F002, F003, F005, U133

TRUCON Code(s)

125/225, 154

Waste Stream Description

This waste stream is primarily solids consisting of booties, lab coats, floor sweeping, labware, rags, and other job control waste. This stream differs from SR-W026 because solvent rags are suspected to be in the waste. Small HEPA filters, sludges, resins, absorbed liquids, and large metal equipment are also in these waste streams.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-221H-HET-C**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	CH Mixed TRU - Heterogeneous debris from 221H					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.1	0.0	1.1
55-gal Drum Dir Ld w/o Liner	35.1	9.2	44.3
SWB Dir Ld w/o Liner	41.4	5.6	47.0
Final Form Total	77.5	14.9	92.4

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	4.32E+03
Aluminum-based Metal/Alloys	6.57E+02
Other Metal/Alloys	2.80E+01
Other Inorganic Materials	1.47E+03
Cellulose	4.02E+02
Rubber	2.41E+03
Plastic	4.97E+03
Cement	0.00E+00
Solidified Inorganic Material	1.41E+02
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.85E+01
Packaging Material, Rubber	3.46E+01
Packaging Material, Steel	1.31E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.25E+01
Am-243	6.62E-04
Cs-137	2.63E-03
Np-237	2.18E-01
Pu-238	1.61E+02
Pu-239	8.00E+01
Pu-240	1.92E+01
Pu-241	1.23E+02
Pu-242	1.09E-02
Sr-90	2.60E-03
Th-229	8.61E-07
Th-230	2.42E-06
Th-232	5.06E-16
U-233	1.64E-03
U-234	4.53E-02
U-235	6.68E-04
U-236	3.42E-06
U-238	4.08E-05

Haz. Waste No(s).

D006, D007, D008, D009, D011

TRUCON Code(s)

125/225, 154

Waste Stream Description

This waste stream is primarily solids consisting of booties, lab coats, floor sweeping, labware, rags, and other job control waste. Small HEPA filters, sludges, resins, absorbed liquids, and large metal equipment are also in this waste stream.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-221H-HOM**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	CH Mixed TRU Absorbed / Stabilized Liquids					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.6	0.0	0.6
55-gal Drum Dir Ld w/o Liner	0.2	0.0	0.2
Final Form Total	0.8	0.0	0.8

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	5.03E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	8.89E+01
Cellulose	3.35E+00
Rubber	3.35E+00
Plastic	3.86E+01
Cement	0.00E+00
Solidified Inorganic Material	2.68E+01
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.31E+01
Packaging Material, Rubber	4.72E-01
Packaging Material, Steel	1.09E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.88E-01
Am-243	9.69E-08
Cs-137	4.04E-03
Np-237	1.17E-04
Pu-238	6.17E-01
Pu-239	6.70E-01
Pu-240	1.82E-01
Pu-241	1.64E+00
Pu-242	6.51E-05
Sr-90	4.00E-03
Th-229	2.88E-09
Th-230	8.15E-08
Th-232	1.83E-15
U-233	4.67E-06
U-234	1.27E-03
U-235	2.42E-05
U-236	5.33E-06
U-238	1.27E-06

Haz. Waste No(s).

D006, D007, D008, D009, D011, D019, D022, D029, D043, F002, F005, U133

TRUCON Code(s)

127/227

Waste Stream Description

This waste stream is comprised of greater than 50 percent by volume absorbed liquid waste

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-235F-HEPA**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Composite Filter Waste			**Inventory Date**	12/31/2020
Stream Name	CH Mixed TRU consisting of HEPA Filters from the 235-F.					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.1	0.0	1.1
SWB Dir Ld w/o Liner	9.4	0.0	9.4
Final Form Total	10.5	0.0	10.5

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.01E+01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	7.33E+00
Cellulose	2.96E+02
Rubber	0.00E+00
Plastic	1.85E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.85E+01
Packaging Material, Rubber	2.40E+00
Packaging Material, Steel	1.59E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.20E-01
Am-243	3.45E-13
Cs-137	6.88E-07
Np-237	1.86E-03
Pu-238	1.03E+01
Pu-239	7.08E-02
Pu-240	3.07E-02
Pu-241	3.98E-01
Pu-242	5.42E-05
Sr-90	6.81E-07
Th-229	1.26E-11
Th-230	1.77E-07
Th-232	8.07E-19
U-233	4.77E-08
U-234	3.30E-03
U-235	2.73E-05
U-236	5.45E-09
U-238	5.05E-14

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D035

TRUCON Code(s)

119/219, 154

Waste Stream Description

This waste stream is composed of spent HEPA Filters

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-235F-HET**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	CH Mixed TRU/F listed solvents - Heterogeneous debris from 235F					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	2.9	0.0	2.9
55-gal Drum Dir Ld w/o Liner	9.9	9.0	18.9
85-gal Drum w/ 1 - 55-gal Drum w/ Liner	0.4	0.0	0.4
SWB Dir Ld w/o Liner	5.6	0.0	5.6
Final Form Total	18.9	9.0	27.9

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.62E+03
Aluminum-based Metal/Alloys	4.57E+01
Other Metal/Alloys	8.10E+01
Other Inorganic Materials	2.27E+02
Cellulose	2.80E+02
Rubber	7.65E+02
Plastic	1.38E+03
Cement	0.00E+00
Solidified Inorganic Material	5.19E+00
Solidified Organic Material	2.50E+00
Soil	9.27E-02
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.23E+02
Packaging Material, Rubber	1.38E+01
Packaging Material, Steel	3.83E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	7.51E+00
Am-243	4.32E-05
Cm-244	8.21E-03
Cs-137	6.58E-05
Np-237	1.26E-01
Pu-238	3.47E+03
Pu-239	4.76E+00
Pu-240	2.05E+00
Pu-241	1.31E+02
Pu-242	3.92E-03
Sr-90	6.52E-05
Th-229	3.43E-06
Th-230	5.14E-05
Th-232	4.42E-05
U-233	6.49E-03
U-234	9.61E-01
U-235	9.33E-05
U-236	3.64E-07
U-238	4.25E-05

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D035, F002, F003

TRUCON Code(s)

125/225, 154

Waste Stream Description

This mixed waste stream is primarily solids consisting of booties, lab coats, floor sweeping, labware, rags, and other job control waste, small HEPAs, liquids, sludges and resins may also be found in this stream.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-235F-HOM**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	CH mixed TRU S3000 solids from 235F					**Activities Decayed to CY**	2020

Waste Volume Detail (m 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	Total Mass (kg)
Iron-based Metal/Alloys	5.83E-01
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	5.83E-01
Cellulose	5.83E-01
Rubber	5.83E-01
Plastic	1.75E+00
Cement	0.00E+00
Solidified Inorganic Material	5.42E+01
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	7.71E+00
Packaging Material, Rubber	1.18E-01
Packaging Material, Steel	2.72E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.22E-02
Np-237	6.99E-08
Pu-238	4.97E+01
Pu-239	3.66E-02
Pu-240	2.00E-02
Pu-241	7.46E-01
Pu-242	2.38E-05
Th-229	2.52E-16
Th-230	4.31E-08
Th-232	9.36E-19
U-233	1.12E-12
U-234	1.16E-03
U-235	2.89E-10
U-236	4.74E-09
U-238	2.96E-14

Haz. Waste No(s).

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

TRUCON Code(s)

127/227

Waste Stream Description

This waste consists of sludge from tank cleanout.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-321-322M-HET**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	CH Mixed TRU Debris (S5000)					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.3	0.0	1.3
Final Form Total	1.3	0.0	1.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.77E+02
Aluminum-based Metal/Alloys	4.52E+00
Other Metal/Alloys	1.04E+01
Other Inorganic Materials	2.31E+01
Cellulose	2.94E+01
Rubber	8.55E+01
Plastic	1.21E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	1.36E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	4.63E+01
Packaging Material, Rubber	7.08E-01
Packaging Material, Steel	1.63E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.59E+00
Np-237	6.28E-04
Pu-238	2.98E-02
Pu-239	5.26E-02
Pu-240	1.24E-02
Pu-241	1.35E+02
Pu-242	2.16E-06
Th-229	5.78E-12
Th-230	1.96E-11
Th-232	4.45E-19
U-233	1.88E-08
U-234	6.04E-07
U-235	3.63E-10
U-236	2.57E-09
U-238	2.35E-15

Haz. Waste No(s).

D008, D009, F001, F002

TRUCON Code(s)

125/225, 129/229

Waste Stream Description

CH Mixed TRU waste resulting from target assembly fabrication leading to production of defense related nuclear materials.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-773A-HET**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	CH Mixed TRU/F listed solvents - Heterogeneous debris from 773A					**Activities Decayed to CY**	2020

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	12.0	0.0	12.0
55-gal Drum Dir Ld w/o Liner	15.5	157.1	172.6
SWB Dir Ld w/o Liner	60.2	41.4	101.5
Final Form Total	87.7	198.4	286.1

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.03E+04
Aluminum-based Metal/Alloys	1.96E+02
Other Metal/Alloys	3.58E+02
Other Inorganic Materials	4.05E+03
Cellulose	3.27E+03
Rubber	1.98E+03
Plastic	9.03E+03
Cement	0.00E+00
Solidified Inorganic Material	4.46E+01
Solidified Organic Material	6.29E-01
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	4.39E+02
Packaging Material, Rubber	1.23E+02
Packaging Material, Steel	3.96E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.98E+01
Am-243	3.08E-01
Cm-244	2.32E+01
Cs-137	2.08E-01
Np-237	6.92E-02
Pu-238	2.85E+03
Pu-239	1.24E+02
Pu-240	2.84E+01
Pu-241	4.07E+02
Pu-242	6.13E-03
Pu-244	6.55E-13
Sr-90	2.07E-01
Th-229	7.02E-06
Th-230	3.04E-05
Th-232	1.54E-04
U-233	1.33E-02
U-234	5.76E-01
U-235	3.21E-04
U-236	5.05E-06
U-238	3.04E-03

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, 154

Waste Stream Description

This mixed waste stream is primarily solids consisting of booties, lab coats, floor sweeping, labware, rags, other job control waste, small HEPAs liquids, sludges and resins may also be found in this waste.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-773A-HOM**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Analytical Laboratory Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	CH Mixed TRU Homogeneous Solids (S3000)					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	1.1	0.0	1.1
Final Form Total	1.1	0.0	1.1

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.52E+00
Aluminum-based Metal/Alloys	3.43E-02
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	7.24E+00
Rubber	2.29E+00
Plastic	2.29E+01
Cement	0.00E+00
Solidified Inorganic Material	9.37E+01
Solidified Organic Material	2.53E+02
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.85E+01
Packaging Material, Rubber	5.90E-01
Packaging Material, Steel	1.36E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	6.24E-04
Cs-137	6.40E-03
Np-237	1.41E-05
Pu-238	6.66E+01
Pu-239	4.37E-05
Pu-240	2.23E-05
Pu-241	3.61E-04
Pu-242	2.14E-05
Sr-90	6.33E-03
Th-229	1.30E-13
Th-230	8.42E-07
Th-232	7.98E-22
U-233	4.23E-10
U-234	1.38E-02
U-235	3.01E-13
U-236	4.62E-12
U-238	2.32E-14

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D043, F002, F004, F005

TRUCON Code(s)

127/227

Waste Stream Description

CH Mixed TRU Homogeneous Solids resulting from liquid absorption at the SRNL.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-FB-Pre86-C**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Combustible Waste			**Inventory Date**	12/31/2020
Stream Name	CH Mixed TRU - Heterogeneous debris from FB-Line					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	31.7	0.0	31.7
SWB Dir Ld w/o Liner	30.1	0.0	30.1
Final Form Total	61.8	0.0	61.8

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.61E+03
Aluminum-based Metal/Alloys	1.62E+01
Other Metal/Alloys	2.02E+01
Other Inorganic Materials	5.43E+02
Cellulose	5.78E+02
Rubber	5.24E+02
Plastic	3.67E+03
Cement	0.00E+00
Solidified Inorganic Material	1.17E+01
Solidified Organic Material	2.71E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.16E+03
Packaging Material, Rubber	2.36E+01
Packaging Material, Steel	8.75E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	5.52E+01
Am-243	8.14E-05
Cm-244	1.63E-01
Cs-137	2.67E-04
Np-237	3.10E-03
Pu-238	2.25E+01
Pu-239	1.59E+02
Pu-240	4.55E+01
Pu-241	4.85E+02
Pu-242	8.35E-03
Sr-90	2.64E-04
Th-229	4.63E-07
Th-230	2.52E-07
Th-232	4.44E-06
U-233	7.52E-04
U-234	4.13E-03
U-235	1.20E-05
U-236	9.42E-06
U-238	4.82E-05

Haz. Waste No(s).

D005, D006, D007, D008, D009, D011, D018, D019, D022, D029, D039, D040, D043, F001, F002, F003, F005, U002, U151

TRUCON Code(s)

125/225, 133/233, 154

Waste Stream Description

This waste stream is primarily solids consisting of booties, lab coats, floor sweeping, labware, rags, and other job control waste. Small HEPA filters, sludges, resins, absorbed liquids, and metal equipment is also present in the waste stream.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-W027-HBL-Box**

Appendix A

Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	CH mixed TRU from 221H					**Activities Decayed to CY**	2020

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	4.2	0.0	4.2
SLB2 Dir Ld	14.8	0.0	14.8
SWB Dir Ld w/o Liner	32.0	0.0	32.0
Final Form Total	50.9	0.0	50.9

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	3.24E+03
Aluminum-based Metal/Alloys	8.62E-01
Other Metal/Alloys	2.99E+00
Other Inorganic Materials	2.68E+02
Cellulose	3.78E+03
Rubber	1.33E+02
Plastic	2.22E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	1.02E+01
Packaging Material, Steel	7.91E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.72E-01
Am-243	3.89E-08
Cm-244	4.09E-03
Cs-137	1.55E-03
Np-237	3.32E-03
Pu-238	2.01E+02
Pu-239	1.08E+00
Pu-240	3.22E-01
Pu-241	4.60E+00
Pu-242	6.26E-04
Sr-90	1.54E-03
Th-229	2.25E-11
Th-230	2.05E-06
Th-232	8.45E-18
U-233	8.53E-08
U-234	3.89E-02
U-235	3.52E-07
U-236	5.71E-08
U-238	5.82E-13

Haz. Waste No(s).

D006, D007, D008, D009, D011, D019, D022, D029, D043, F002, F005, U133

TRUCON Code(s)

125/225, 154, 425

Waste Stream Description

This waste stream is defense related debris consisting of large equipment and job control waste packaged in large steel boxes

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

APPENDIX B POTENTIAL TRU WASTE PROFILE REPORTS

The following WPRs contain final form information through CY 2033 on potential TRU waste streams as of the inventory date, December 31, 2020. These waste streams were placed in the potential category for various reasons, as stated in section 4.1 of this report.

The TRU waste generator sites that have reported potential TRU waste streams are:

BL Babcock and Wilcox Nuclear Energy Services
IN Idaho National Laboratory
LA Los Alamos National Laboratory
RL Hanford (Richland) Site
RP Hanford Site – Office of River Protection
SR Savannah River Site
WV West Valley Demonstration Project

Waste Stream ID: **BL-Parks**

Appendix B

Waste Profile Report

Site	Babcock and Wilcox Nuclear Energy Services	**Summary Category**	S5000	**Defense Determination**	Pending Determination	**Handling**	CH
Source Cat.	Source Information Not Compiled	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Parks Township TRU Waste					**Activities as of CY**	2000

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	4.0	0.0	4.0
SWB Dir Ld w/o Liner	5.6	0.0	5.6
Final Form Total	9.6	0.0	9.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	3.33E+00
Packaging Material, Steel	1.39E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	7.68E+01
Cs-137	3.96E-02
Pu-238	3.31E+01
Pu-239	1.75E+02
Pu-240	6.59E+01
Pu-241	1.76E+03
Pu-242	3.89E-02
U-234	2.97E-04
U-235	1.34E-05
U-238	2.69E-05

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Waste from Parks Township ROD 63FR3629, 65FR82985, 69FR39446 amended 27 February 2008 Point of Contact William Spurgeon.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **BL-Parks-A**

Appendix B

Waste Profile Report

Site	Babcock and Wilcox Nuclear Energy Services	**Summary Category**	S5000	**Defense Determination**	Pending Determination	**Handling**	RH
Source Cat.	Source Information Not Compiled	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Parks Township TRU Waste					**Activities as of CY**	2000

Waste Volume Detail (m ³)

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

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	5.43E+00
Packaging Material, Rubber	3.54E-01
Packaging Material, Steel	5.81E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	5.00E-02
Pu-239	3.92E+00

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Waste from Parks Township ROD 63FR3629, 65FR82985, 69FR39446 amended 27 February 2008 Point of Contact William Spurgeon

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-DD-001**

Appendix B

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S9000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Unknown			**Inventory Date**	12/31/2020
Stream Name	To Be Determined					**Activities as of CY**	N/A

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SWB Dir Ld w/ Liner	0.0	4000.6	4000.6
Final Form Total	0.0	4000.6	4000.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	4.83E+03
Packaging Material, Rubber	7.72E+02
Packaging Material, Steel	6.17E+05
Packaging Material, Lead	0.00E+00

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Waste generated during D&D of AMWTP

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-ID-TRU-RHNH**

Appendix B

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Newly Generated Secondary TRU Waste from Repackaging of MFC RH-TRU					**Activities as of CY**	2017

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	2.5	0.0	2.5
Final Form Total	2.5	0.0	2.5

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.17E+01
Packaging Material, Rubber	1.42E+00
Packaging Material, Steel	2.32E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.57E-01
Cs-137	1.01E+01
Pu-238	5.13E-02
Pu-239	2.56E-01
Pu-240	6.08E-02
Pu-241	1.08E+00
Pu-242	7.91E-05
Sr-90	6.42E+00
U-233	1.43E-03
U-234	8.84E-04
U-235	4.90E-05
U-238	1.34E-05

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream was generated at CPP-659 and CPP-666 hot cell facilities secondary waste during the repackaging of MFC RH-TRU debris. Waste is debris, consisting of plastic, wipes, chop saws, empty containers, and tools.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-IW-609**

Appendix B

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Large Items from Large Item Repackaging					**Activities as of CY**	2019

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
SLB2 Dir Ld	51.7	0.0	51.7
Final Form Total	51.7	0.0	51.7

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	5.71E+00
Packaging Material, Steel	8.54E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.99E-03
Pu-238	1.00E+01
Pu-239	1.84E-02
Pu-240	1.06E-02
Pu-241	3.03E-02
Pu-242	2.45E-07

Haz. Waste No(s).

D004, D008, D009, D010, D011, D030, D032, D033, D034, D037, D043, F001, F002, F003, F004, F005, F006, F007, F009, P030, P098, P099, P106, U003, U103, U108, U134, U151

No TRUCON Codes Provided

Waste Stream Description

Debris waste generated from repackaging of large items in the Retrieval Contamination Enclosure, the Inner Contamination Enclosure and the Debris Repackage Project.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-SBW-01A**

Appendix B

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	SBW Treatment - Steam Reforming - Carbonate Waste Form					**Activities as of CY**	2006

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid - Dir Ld	979.0	0.0	979.0
Final Form Total	979.0	0.0	979.0

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	1.31E+06
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	0.00E+00
Packaging Material, Steel	5.49E+05
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.16E+02
Am-243	1.71E-01
Cm-244	1.21E+00
Cs-137	1.74E+05
Np-237	2.41E+00
Pu-238	3.73E+03
Pu-239	4.04E+02
Pu-240	1.50E+02
Pu-241	1.52E+03
Pu-242	7.73E-02
Sr-90	1.14E+05
U-233	3.38E-02
U-234	5.38E+00
U-235	1.32E-01
U-238	1.29E-01

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 3-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 96% 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 1100 canisters with a surface dose rate <100 Rem/hr.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **IN-SBW-01B**

Appendix B

Waste Profile Report

Site	Idaho National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	SBW Treatment - Steam Reforming Process - Debris					**Activities as of CY**	2021

Waste Volume Detail (m ³)

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	Total Mass (kg)
Iron-based Metal/Alloys	6.23E+04
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	1.78E+02
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	0.00E+00
Packaging Material, Steel	4.99E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.69E-01
Am-243	2.54E-04
Cm-244	1.80E-03
Cs-137	2.58E+02
Np-237	3.59E-03
Pu-238	5.54E+00
Pu-239	6.01E-01
Pu-240	2.23E-01
Pu-241	2.26E+00
Pu-242	1.15E-04
Sr-90	1.69E+02
U-233	5.02E-05
U-234	7.99E-03
U-235	1.96E-04
U-238	1.92E-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 debris from the steam reforming process would include spent HEPA filters and other failed equipment.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **LA-TA-55-04**

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Waste Profile Report

Site	Los Alamos National Laboratory	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	TA-55 metal waste					**Activities as of CY**	N/A

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	24.4	0.0	24.4
55-gal POC - 12" w/ Liner	3.6	0.0	3.6
SWB Dir Ld w/ Liner	30.1	0.0	30.1
Final Form Total	58.0	0.0	58.0

Waste Material Parameters

Material Parameter	**Total Mass (kg)**
Iron-based Metal/Alloys	3.82E+03
Aluminum-based Metal/Alloys	1.55E+01
Other Metal/Alloys	4.58E+02
Other Inorganic Materials	2.48E+03
Cellulose	3.16E+02
Rubber	4.75E+02
Plastic	1.46E+03
Cement	0.00E+00
Solidified Inorganic Material	6.09E+01
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	2.05E+03
Packaging Material, Plastic	1.49E+03
Packaging Material, Rubber	2.81E+01
Packaging Material, Steel	1.58E+04
Packaging Material, Lead	0.00E+00

No Final Form Radionuclides Provided

Haz. Waste No(s).

D005, D006, D007, D008, D009, D010, D011

TRUCON Code(s)

122/222, 124/224, 125/225

Waste Stream Description

Metal waste from facility and equipment operations/maintenance that includes tools, cans, equipment, motors, pumps, with possible presence of a small amount of plastics

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL221T-01**

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Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Waste Generated during operations in building 221T					**Activities as of CY**	N/A

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	8.8	0.0	8.8
Final Form Total	8.8	0.0	8.8

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.24E+02
Packaging Material, Rubber	4.96E+00
Packaging Material, Steel	1.14E+03
Packaging Material, Lead	0.00E+00

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Combustible and noncombustible TRU debris waste

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RL300-11**

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Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	300 Area TRU RH Non-Mixed Debris					**Activities as of CY**	2001

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner	7.6	0.0	7.6
Final Form Total	7.6	0.0	7.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	6.51E+02
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	4.99E+03
Cellulose	1.63E+02
Rubber	0.00E+00
Plastic	4.07E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	3.42E+02
Packaging Material, Rubber	4.25E+00
Packaging Material, Steel	6.97E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	5.51E+00
Am-243	2.49E+00
Cs-137	3.98E+06
Np-237	1.74E-05
Pu-238	6.14E+00
Pu-239	2.41E+00
Pu-240	9.19E-01
Pu-241	4.06E+01
Pu-242	1.62E-03
Sr-90	2.88E+06
Th-232	9.33E-05
U-234	3.47E-04
U-235	5.30E-06
U-236	1.29E-05
U-238	9.37E-05

No Hazardous Waste Numbers Provided

TRUCON Code(s)

325

Waste Stream Description

High Cs-137 content, vitrified waste form in heavily shielded casks.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLALPHA-08**

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Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Other/Multiple Sources	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Alpha Caissons TRU RH Debris					**Activities as of CY**	N/A

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	1075.1	0.0	1075.1
Final Form Total	1075.1	0.0	1075.1

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	9.30E+04
Packaging Material, Rubber	1.15E+03
Packaging Material, Steel	4.00E+06
Packaging Material, Lead	4.21E+06

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Debris waste generated from operations within the 300 area hot cells.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLCH2-08**

Appendix B

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Tank Farms TRU RH Mixed Debris					**Activities as of CY**	2001

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	7.0	0.0	7.0
Final Form Total	7.0	0.0	7.0

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	7.71E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	9.35E+02
Other Inorganic Materials	1.85E+01
Cellulose	0.00E+00
Rubber	1.15E+02
Plastic	3.19E+01
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	6.09E+02
Packaging Material, Rubber	7.55E+00
Packaging Material, Steel	2.62E+04
Packaging Material, Lead	2.76E+04

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.45E-01
Cs-137	1.15E+01
Pu-238	3.94E-03
Pu-239	1.26E-01
Pu-240	2.53E-02
Pu-241	3.77E-02
Sr-90	5.10E+02
U-233	1.58E-03
U-235	4.55E-05
U-238	1.05E-03

Haz. Waste No(s).

D030, D032, F001, F002, F003, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

RH waste- Equipment removed from waste tanks (instrument trees, pumps, circulators, agitators, heaters, sluicers, steam coils, air lances, cameras). The waste stream ranges from contaminated clothing to process equipment contaminated with RCRA constituents.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLDD-01**

Appendix B

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Future D&D and CERCLA waste projects TRU Debris					**Activities as of CY**	N/A

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/ Liner	0.0	318.8	318.8
SWB Dir Ld w/ Liner	0.0	582.8	582.8
Final Form Total	0.0	901.6	901.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.24E+04
Packaging Material, Rubber	2.92E+02
Packaging Material, Steel	1.31E+05
Packaging Material, Lead	0.00E+00

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

CH Debris to be generated from future D&D and CERCLA waste projects. Includes PUREX facility, PUREX tunnels, REDOX, Liquid Waste Sites, Plutonium Concentration and Isolation facilities, 200-WA-1, and 325 facility. Additional waste volume from 200-SW-2 not included as part of volume [10,000 m3].

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLDD-08**

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Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Future D&D and CERCLA waste projects TRU RH Debris					**Activities as of CY**	N/A

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Lead Shielded Cntr w/ 1 - 30 gal w/ Liner	0.0	71.5	71.5
Final Form Total	0.0	71.5	71.5

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	6.19E+03
Packaging Material, Rubber	7.67E+01
Packaging Material, Steel	2.66E+05
Packaging Material, Lead	2.80E+05

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

RH Debris to be generated from future D&D and CERCLA waste projects. Includes PUREX facility, PUREX tunnels, REDOX, Liquid Waste Sites, Plutonium Concentration and Isolation facilities, 200-WA-1, and 325 facility. Additional waste volume from 200-SW-2 not included as part of volume [10,000 m3].

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLN622FD-01**

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Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	Weather station radiological sources					**Activities as of CY**	2007

Waste Volume Detail (m 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	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	1.54E+01
Packaging Material, Rubber	2.36E-01
Packaging Material, Steel	5.44E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	7.12E-02
Np-237	7.06E-07
Pu-238	5.24E-05
Pu-239	2.15E-03
Pu-240	4.90E-04
Pu-241	3.57E-03
Pu-242	4.19E-08

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Source facility is the weather station, Radiological Sources

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLPFP-02**

Appendix B

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S4000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Contaminated Soil/Debris Waste			**Inventory Date**	12/31/2020
Stream Name	PFP CH-TRU Contaminated Soil					**Activities as of CY**	2010

Waste Volume Detail (m ³)

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	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.31E+01
Packaging Material, Rubber	3.54E-01
Packaging Material, Steel	8.16E+01
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.09E-02
Cs-137	8.00E-07
Pu-238	7.89E-04
Pu-239	6.11E-02
Pu-240	1.34E-02
Pu-241	1.02E-01
Pu-242	1.08E-06
Sr-90	7.27E-07

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

Soil remediation wastes in PFP Zone.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RLPRC-01**

Appendix B

Waste Profile Report

Site	Hanford (Richland) Site	**Summary Category**	S5000	**Defense Determination**	Unknown	**Handling**	CH
Source Cat.	R&D/R&D Laboratory Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	CUPRC TRU Non-Mixed Debris					**Activities as of CY**	1987

Waste Volume Detail (m ³)

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	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	8.78E+01
Other Inorganic Materials	1.25E+03
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.27E+00
Packaging Material, Rubber	3.63E-01
Packaging Material, Steel	2.90E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	9.24E-02
Pu-238	3.76E-02
Pu-239	3.45E-01
Pu-240	8.79E-02
Pu-241	2.41E+00
Pu-242	5.88E-06
Th-232	1.04E-04
U-234	1.18E-06
U-235	5.34E-08
U-238	1.15E-06

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

The waste is generated from R&D/R&D Laboratory Waste activities at the CEER University Laboratory.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RP-TFC001**

Appendix B

Waste Profile Report

Site	Hanford (River Protection) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Bismuth Phosphate Process TRU Solids					**Activities as of CY**	2004

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	446.9	0.0	446.9
Final Form Total	446.9	0.0	446.9

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	4.83E+05
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	2.51E+02
Packaging Material, Steel	5.79E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.23E+01
Cs-137	2.68E+02
Np-237	5.35E-03
Pu-238	2.90E+00
Pu-239	2.26E+02
Pu-240	2.73E+01
Pu-241	8.29E+01
Pu-242	1.35E-03
Sr-90	3.50E+03
U-233	4.83E-07
U-234	7.37E-01
U-235	2.38E-02
U-236	7.11E-03
U-238	5.44E-01

Haz. Waste No(s).

D002, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D030, D033, D034, D035, D036, D038, D039, D040, D041, D043, F001, F002, F003, F004, F005

No TRUCON Codes Provided

Waste Stream Description

Solidified aqueous waste slurry

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RP-W754**

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Waste Profile Report

Site	Hanford (River Protection) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	224 Waste					**Activities as of CY**	2004

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	329.3	0.0	329.3
Final Form Total	329.3	0.0	329.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	3.47E+05
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	1.85E+02
Packaging Material, Steel	4.26E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.88E+01
Cs-137	5.37E+01
Np-237	5.24E-04
Pu-238	3.59E+00
Pu-239	5.01E+02
Pu-240	4.17E+01
Pu-241	6.98E+01
Pu-242	1.59E-03
Sr-90	1.09E+03
U-233	4.01E-08
U-234	5.79E-02
U-235	2.34E-03
U-236	5.66E-04
U-238	5.30E-02

Haz. Waste No(s).

D002, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D030, D033, D034, D035, D036, D038, D039, D040, D041, D043, F001, F002, F003, F004, F005

No TRUCON Codes Provided

Waste Stream Description

Solidified aqueous waste slurry.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **RP-W755**

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Waste Profile Report

Site	Hanford (River Protection) Site	**Summary Category**	S3000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Materials Production/Recovery Effluents	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	Bismuth Phosphate Process TRU Solids					**Activities as of CY**	2004

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	809.1	0.0	809.1
Final Form Total	809.1	0.0	809.1

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	8.78E+05
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	4.55E+02
Packaging Material, Steel	1.05E+05
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.12E+02
Cs-137	2.63E+02
Np-237	6.38E-02
Pu-238	2.36E+00
Pu-239	4.29E+02
Pu-240	3.48E+01
Pu-241	5.41E+01
Pu-242	4.37E-04
Sr-90	9.52E+03
U-233	2.47E-06
U-234	2.86E+00
U-235	1.27E-01
U-236	2.30E-02
U-238	2.91E+00

Haz. Waste No(s).

D002, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D030, D033, D034, D035, D036, D038, D039, D040, D041, D043, F001, F002, F003, F004, F005

No TRUCON Codes Provided

Waste Stream Description

Solidified aqueous waste slurry

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-CH-PP**

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Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	CH TRU waste from the Proposed NNSA Pit Production Mission					**Activities as of CY**	N/A

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.0	313.3	313.3
Final Form Total	0.0	313.3	313.3

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	1.76E+02
Packaging Material, Steel	4.06E+04
Packaging Material, Lead	0.00E+00

No Final Form Radionuclides Provided

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

CH TRU waste resulting from processing of aged weapons grade Pu.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-KAC-HET-2**

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Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	CH TRU Heterogeneous debris from the K-Area downblend of 26.9 MT material					**Activities as of CY**	2033

Waste Volume Detail (m^3)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.0	46.0	46.0
Final Form Total	0.0	46.0	46.0

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	1.12E+03
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	1.04E+02
Rubber	9.60E+02
Plastic	7.23E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	2.58E+01
Packaging Material, Steel	5.96E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.33E+01
Np-237	2.20E-04
Pu-238	1.12E+01
Pu-239	9.22E+01
Pu-240	2.39E+01
Pu-241	2.56E+02
Pu-242	7.88E-03
U-235	1.75E-04
U-238	6.16E-06

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225, 154

Waste Stream Description

This waste stream consists of plutonium contaminated debris resulting from downblend and packaging Pu oxide

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **SR-KAC-PuOx-2**

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Waste Profile Report

Site	Savannah River Site	**Summary Category**	S5000	**Defense Determination**	Defense-Related	**Handling**	CH
Source Cat.	Discarding Excess/Expired Materials	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	K-Area Pu Oxide waste associated with 26.9 MT material					**Activities as of CY**	2033

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal CCO w/ Liner	0.0	41.1	41.1
Final Form Total	0.0	41.1	41.1

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	2.47E+04
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	4.18E+03
Other Inorganic Materials	5.23E+03
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	6.97E+02
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	7.42E+04
Packaging Material, Plastic	2.48E+04
Packaging Material, Rubber	3.79E+02
Packaging Material, Steel	2.60E+05
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.21E+04
Pu-238	2.34E+03
Pu-239	5.48E+04
Pu-240	1.21E+04
Pu-241	5.22E+04
Pu-242	1.68E+00

No Hazardous Waste Numbers Provided

TRUCON Code(s)

125/225

Waste Stream Description

The plutonium oxide material is being blended and packaged specifically for disposal at WIPP.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **WV-M010a**

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Waste Profile Report

Site	West Valley Demonstration Project	**Summary Category**	S3000	**Defense Determination**	Unknown	**Handling**	CH
Source Cat.	Facility/Equipment Operation and Maintenance Waste	**Waste Matrix Code Group**	Solidified Organics			**Inventory Date**	12/31/2020
Stream Name	TRU Spent Absorbents CH					**Activities as of CY**	2018

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	0.2	0.0	0.2
SLB2 Dir Ld	29.6	0.0	29.6
Final Form Total	29.8	0.0	29.8

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	5.75E+03
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	1.92E+03
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	3.38E+00
Packaging Material, Steel	4.91E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.73E+00
Am-243	1.28E-01
Cs-137	1.67E-01
Np-237	5.83E-05
Pu-238	9.55E-01
Pu-239	1.07E+00
Pu-240	8.21E-01
Pu-241	1.19E+01
Pu-242	4.23E-02
Sr-90	1.22E-01
U-233	7.28E-04
U-234	3.48E-04
U-235	7.67E-05
U-238	6.26E-04

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of spent absorbents (not cement) generated from site operations. The media absorbed is an organic liquid for this waste stream. This does not contain hazardous waste.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **WV-T004a**

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Waste Profile Report

Site	West Valley Demonstration Project	**Summary Category**	S3000	**Defense Determination**	Unknown	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	CH TRU Liquids/Absorbed Liquids					**Activities as of CY**	2018

Waste Volume Detail (m ³)

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	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	1.96E+02
Solidified Inorganic Material	4.36E+02
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	1.18E+00
Packaging Material, Steel	2.72E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	8.06E+00
Am-243	2.20E-03
Cm-244	1.11E-02
Cs-137	4.56E-02
Np-237	1.99E-05
Pu-238	1.41E+01
Pu-239	6.25E+00
Pu-240	4.80E+00
Pu-241	3.48E+01
Pu-242	1.06E-03
Sr-90	1.64E-01
U-233	3.82E-03
U-234	1.81E-03
U-235	8.53E-05
U-238	1.12E-03

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of liquid, absorbed liquid, and/or solidified liquid waste with associated fissile material generated from decontamination and decommissioning activities.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **WV-T004b**

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Waste Profile Report

Site	West Valley Demonstration Project	**Summary Category**	S3000	**Defense Determination**	Unknown	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	RH TRU Liquids/Absorbed Liquids					**Activities as of CY**	2015

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	3.2	0.0	3.2
Final Form Total	3.2	0.0	3.2

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	2.14E+03
Solidified Inorganic Material	1.20E+03
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.71E+01
Packaging Material, Rubber	1.77E+00
Packaging Material, Steel	2.91E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.67E+00
Am-243	4.50E-02
Cm-244	3.13E-02
Cs-137	1.00E+01
Np-237	2.73E-04
Pu-238	1.95E+00
Pu-239	7.48E-01
Pu-240	5.51E-01
Pu-241	9.94E+00
Pu-242	1.46E-02
Sr-90	1.86E+01
U-233	4.28E-03
U-234	2.00E-03
U-235	1.10E-05
U-238	2.33E-04

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of liquid, absorbed liquid, and/or solidified liquid waste with associated fissile material generated from decontamination and decommissioning activities.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **WV-T006a**

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Waste Profile Report

Site	West Valley Demonstration Project	**Summary Category**	S5000	**Defense Determination**	Unknown	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	CH TRU General Waste					**Activities as of CY**	2010

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	107.9	4.2	112.1
SWB Dir Ld w/o Liner	133.5	0.0	133.5
Final Form Total	241.4	4.2	245.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	1.31E+04
Other Inorganic Materials	1.36E+04
Cellulose	1.26E+04
Rubber	5.25E+03
Plastic	7.87E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	8.88E+01
Packaging Material, Steel	3.51E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	8.73E+01
Am-243	1.27E+00
Cm-244	3.16E-01
Cs-137	1.44E+00
Np-237	1.22E-03
Pu-238	5.09E+01
Pu-239	2.26E+01
Pu-240	1.85E+01
Pu-241	4.46E+02
Pu-242	6.96E-01
Sr-90	3.97E+00
U-233	4.31E-02
U-234	2.50E-02
U-235	7.04E-04
U-238	5.32E-03

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of radiologically contaminated solid waste generated from various site activities. The specific contents include but are not limited to Anti-C clothing, hoses, glovebags, tools, pre-filters, HEPA filters, Roughing filters, other filters, sweeping compound, glove boxes, tools, evaporators, dissolver tanks, condensers, piping DAW, plastic bags, bottles, and cell floor debris etc.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **WV-T006b**

Appendix B

Waste Profile Report

Site	West Valley Demonstration Project	**Summary Category**	S5000	**Defense Determination**	Unknown	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	RH TRU General Waste					**Activities as of CY**	2013

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	243.2	0.0	243.2
Final Form Total	243.2	0.0	243.2

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	2.47E+04
Other Inorganic Materials	2.46E+04
Cellulose	2.46E+04
Rubber	9.88E+03
Plastic	1.48E+04
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.10E+03
Packaging Material, Rubber	1.37E+02
Packaging Material, Steel	2.24E+05
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	3.73E+02
Am-243	9.81E-01
Cm-244	7.00E+00
Cs-137	3.51E+03
Np-237	1.08E-01
Pu-238	1.15E+02
Pu-239	8.66E+01
Pu-240	6.56E+01
Pu-241	9.23E+02
Pu-242	2.22E-01
Sr-90	3.90E+03
U-233	1.02E+00
U-234	4.82E-01
U-235	1.34E-02
U-238	8.92E-02

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of radiologically contaminated solid waste generated from various site activities. The specific contents include but are not limited to Anti-C clothing, hoses, glovebags, tools, pre-filters, HEPA filters, Roughing filters, other filters, sweeping compound, glove boxes, tools, evaporators, dissolver tanks, condensers, piping DAW, plastic bags, bottles, and cell floor debris etc.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **WV-T017b**

Appendix B

Waste Profile Report

Site	West Valley Demonstration Project	**Summary Category**	S5000	**Defense Determination**	Unknown	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	RH TRU Spent Filter Media					**Activities as of CY**	2008

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	7.6	0.0	7.6
Final Form Total	7.6	0.0	7.6

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	1.88E+03
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	6.52E+01
Packaging Material, Rubber	4.25E+00
Packaging Material, Steel	6.97E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	2.84E-01
Cs-137	1.35E+02
Np-237	5.58E-04
Pu-238	1.27E-01
Pu-239	3.07E-01
Pu-240	2.35E-01
Pu-241	2.30E+00
Sr-90	4.44E+00
U-235	6.92E-04
U-238	1.09E-03

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of spent filter media generated from filtration of the Fuel Receiving & Storage pool where radiologically contaminated equipment was stored.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **WV-W024a**

Appendix B

Waste Profile Report

Site	West Valley Demonstration Project	**Summary Category**	S5000	**Defense Determination**	Unknown	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	CH TRU Mixed Waste					**Activities as of CY**	2018

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
55-gal Drum Dir Ld w/o Liner	2.7	0.0	2.7
SLB2 Dir Ld	7.4	0.0	7.4
SWB Dir Ld w/o Liner	5.6	0.0	5.6
Final Form Total	15.8	0.0	15.8

Waste Material Parameters

Material Parameter	**Total Mass (kg)**
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	1.85E+03
Cellulose	1.85E+03
Rubber	7.41E+02
Plastic	1.11E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	3.44E+00
Packaging Material, Steel	2.44E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	**Total Activity (Ci)**
Am-241	1.68E+00
Am-243	3.07E-02
Cm-244	1.86E-02
Cs-137	8.12E-01
Np-237	1.48E-05
Pu-238	2.68E+00
Pu-239	7.33E-01
Pu-240	5.61E-01
Pu-241	1.28E+01
Pu-242	9.21E-02
Sr-90	1.39E+01
U-233	5.96E-02
U-234	2.84E-02
U-235	1.52E-04
U-238	1.18E-03

Haz. Waste No(s).

D005, D006, D007, D008, D009

No TRUCON Codes Provided

Waste Stream Description

Contains hazardous constituents from D&D activities and Laboratory Waste generated onsite in solid forms such as filters, vacuum cans, glove box debris, piping, hoses, pumps, anti C clothing, bags, wipes, and floor debris. If any liquids are found, then the liquid would be solidified and not expected to be TRU.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **WV-W024b**

Appendix B

Waste Profile Report

Site	West Valley Demonstration Project	**Summary Category**	S5000	**Defense Determination**	Unknown	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Heterogeneous Debris Waste			**Inventory Date**	12/31/2020
Stream Name	RH TRU Mixed Waste					**Activities as of CY**	2004

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	32.1	0.0	32.1
Final Form Total	32.1	0.0	32.1

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	5.88E+03
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	7.36E+03
Cellulose	0.00E+00
Rubber	1.47E+03
Plastic	2.21E+03
Cement	0.00E+00
Solidified Inorganic Material	0.00E+00
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	2.77E+02
Packaging Material, Rubber	1.81E+01
Packaging Material, Steel	2.96E+04
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	4.35E+02
Am-243	1.41E+00
Cm-244	7.02E+00
Cs-137	8.20E+03
Np-237	1.14E-01
Pu-238	1.58E+02
Pu-239	1.34E+02
Pu-240	1.02E+02
Pu-241	1.59E+03
Pu-242	6.68E-01
Sr-90	5.36E+03
U-233	1.01E+00
U-234	4.81E-01
U-235	7.51E-02
U-238	3.06E-01

Haz. Waste No(s).

D006, D007, D008, D009, D010, D011

No TRUCON Codes Provided

Waste Stream Description

Contains hazardous constituents from D&D activities and Laboratory Waste generated onsite in solid forms such as filters, vacuum cans, glove box debris, piping, hoses, pumps, anti C clothing, bags, wipes, and floor debris. If any liquids are found, then the liquid would be solidified and not expected to be TRU.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **WV-W050a**

Appendix B

Waste Profile Report

Site	West Valley Demonstration Project	**Summary Category**	S3000	**Defense Determination**	Unknown	**Handling**	CH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	CH TRU Mixed Liquids/Absorbed Liquids					**Activities as of CY**	2017

Waste Volume Detail (m ³)

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

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	1.18E+03
Solidified Inorganic Material	1.48E+03
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	0.00E+00
Packaging Material, Rubber	2.24E+00
Packaging Material, Steel	5.17E+02
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	1.46E-01
Am-243	1.53E-03
Cm-244	3.51E-03
Cs-137	5.35E-01
Np-237	5.27E-03
Pu-238	2.03E-01
Pu-239	6.45E-02
Pu-240	4.92E-02
Pu-241	7.51E-01
Pu-242	3.01E-04
Sr-90	1.50E+01
U-233	4.16E-02
U-234	1.99E-02
U-235	9.69E-04
U-238	4.67E-03

Haz. Waste No(s).

D006, D007, D008, D009, D010

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of RCRA hazardous liquid, absorbed liquid, and/or solidified liquid waste with associated fissile material generated from decontamination and decommissioning activities.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

Waste Stream ID: **WV-W050b**

Appendix B

Waste Profile Report

Site	West Valley Demonstration Project	**Summary Category**	S3000	**Defense Determination**	Unknown	**Handling**	RH
Source Cat.	Remediation/D&D Waste	**Waste Matrix Code Group**	Solidified Inorganics			**Inventory Date**	12/31/2020
Stream Name	RH TRU Mixed Liquids/Absorbed Liquids					**Activities as of CY**	2017

Waste Volume Detail (m ³)

Final Form Volumes			
Container Type	**Stored**	**Proj.**	**Total**
RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner	6.9	0.0	6.9
Final Form Total	6.9	0.0	6.9

Waste Material Parameters

Material Parameter	Total Mass (kg)
Iron-based Metal/Alloys	0.00E+00
Aluminum-based Metal/Alloys	0.00E+00
Other Metal/Alloys	0.00E+00
Other Inorganic Materials	0.00E+00
Cellulose	0.00E+00
Rubber	0.00E+00
Plastic	0.00E+00
Cement	7.38E+03
Solidified Inorganic Material	3.69E+03
Solidified Organic Material	0.00E+00
Soil	0.00E+00
Vitrified	0.00E+00
Packaging Material, Cellulose	0.00E+00
Packaging Material, Plastic	5.97E+01
Packaging Material, Rubber	3.89E+00
Packaging Material, Steel	6.39E+03
Packaging Material, Lead	0.00E+00

Final Form Radionuclides

Isotope	Total Activity (Ci)
Am-241	9.27E-01
Am-243	1.07E-02
Cm-244	2.25E-02
Cs-137	3.66E+00
Np-237	3.27E-02
Pu-238	1.27E+00
Pu-239	4.06E-01
Pu-240	3.09E-01
Pu-241	4.63E+00
Pu-242	2.06E-03
Sr-90	9.26E+01
U-233	2.59E-01
U-234	1.23E-01
U-235	6.02E-03
U-238	2.91E-02

Haz. Waste No(s).

D007, D009

No TRUCON Codes Provided

Waste Stream Description

This waste stream consists of RCRA hazardous liquid, absorbed liquid, and/or solidified liquid waste with associated fissile material generated from decontamination and decommissioning activities.

Comprehensive Inventory Database ver. ***2.04*** *Data ver.* ***D.20.00.33***

NOTE: Actual numerical values have been rounded for presentation purposes

APPENDIX C CROSSWALK OF WASTE STREAMS

From one release of the ATWIR report to the next, waste streams may undergo reorganization by the TRU waste generator sites. Waste streams may be renamed, divided, consolidated, created, or removed from the inventory altogether (i.e., shipped to the WIPP or reclassified as low-level waste). This appendix contains a crosswalk that maps current ATWIR-2021 TRU waste generator site waste streams to the ATWIR-2020 TRU waste generator site waste streams. This appendix does not include emplaced waste at the WIPP or waste temporarily stored at WCS.

Table C-1 displays the association of each ATWIR-2021 waste stream to its respective ATWIR-2020 waste stream(s). Table C-2 shows the inverse of Table C-1. Table C-2 displays the association of each ATWIR-2020 waste stream to its respective ATWIR-2021 waste stream(s).

Site Code and Site Name:

AE	Argonne National Laboratory
AW	Material and Fuels Complex
BL	Babcock and Wilcox Nuclear Energy Services
BT	Bettis Atomic Power Laboratory
IN	Idaho National Laboratory
KA	Knolls Atomic Power Laboratory - Schenectady
KN	Knolls Atomic Power Laboratory - Nuclear Fuel Services
LA	Los Alamos National Laboratory
LB	Lawrence Berkeley National Laboratory
LL	Lawrence Livermore National Laboratory
ND	Nuclear Radiation Development Site
NT	Nevada National Security Site
OR	Oak Ridge National Laboratory
RL	Hanford (Richland) Site
RP	Hanford Site – Office of River Protection
SA	Sandia National Laboratories
SP	Separations Process Research Unit
SR	Savannah River Site
WV	West Valley Demonstration Project

Table C-1. Crosswalk of ATWIR-2021 to ATWIR-2020 Waste Streams

Site Code	ATWIR-2021 Waste Streams	ATWIR-2020 Waste Streams
AE	AE-T001	AE-T001
AE	AE-T003	AE-T003
AE	AE-T009	AE-T009
AW	AW-N027.531	AW-N027.531
AW	AW-T031.1322	AW-T031.1322
AW	AW-T033.1325	AW-T033.1325
AW	AW-W020.13	AW-W020.13
BL	BL-Parks	BL-Parks
BL	BL-Parks-A	BL-Parks-A
BT	BT-T001	BT-T001
IN	IN-AE-102-SRP	IN-BN-AE102
IN	IN-AE-105-SRP	IN-BN-AE105
IN	IN-AE-AGHC-02	IN-AE-AGHC-02
IN	IN-AW-T031.1322	IN-AW-T031.1322
IN	IN-BN-215	IN-BN650
IN	IN-BN-215-SRP	IN-BN650
IN	IN-BN-216	IN-BN650
IN	IN-BN-217	IN-BN650
IN	IN-BN-500	IN-BN-500
IN	IN-BN-501-SRP	IN-BN650
IN	IN-BN-522	IN-BN650
IN	IN-BN-522-SRP	IN-BN650
IN	IN-BN-599	IN-BN650
IN	IN-BN-602	IN-BN650
IN	IN-BN-RF-003-SRP	IN-BN650
IN	IN-BN-RF003	IN-BN-RF003
IN	IN-BN-RF290	IN-BN-RF290
IN	IN-BN-RF311	IN-BN-RF311
IN	IN-BN-RF409-SRP	IN-BN-RF409
IN	IN-BN-RF420	IN-BN-RF420
IN	IN-BN-RF432	IN-BN-RF432
IN	IN-BN-RF801	IN-BN-RF801
IN	IN-BN-RF990	IN-BN-RF990
IN	IN-BN004	IN-BN004
IN	IN-BN222	IN-BN222
IN	IN-BN510	IN-BN510
IN	IN-BN510.1	IN-BN510.1
IN	IN-BN510.2	IN-BN510.2
IN	IN-BN510.3	IN-BN510.3
IN	IN-BN510.4	IN-BN-508, IN-BN510.4, IN-IC-604
IN	IN-BN510.4-RH	IN-BN510.4-RH

Table C-1. Crosswalk of ATWIR-2021 to ATWIR-2020 Waste Streams
Continued

Site Code	ATWIR-2021 Waste Streams	ATWIR-2020 Waste Streams
IN	IN-BN538	IN-BN538, IN-BN-538-INTEC
IN	IN-BN539	IN-BN539
IN	IN-BN600	IN-BN600
IN	IN-BN650	IN-BN650
IN	IN-BN835	IN-BN835
IN	IN-BN836	IN-BN836
IN	IN-BNINW216	IN-BNINW216
IN	IN-BNINW216-SRP	IN-BN650
IN	IN-BNINW218	IN-BNINW218
IN	IN-BNINW218-SRP	IN-BN650
IN	IN-DD-001	IN-DD-001
IN	IN-IC-603	IN-BN650
IN	IN-ID-ANLE-BIN	IN-ID-ANLE-BIN
IN	IN-ID-ANLW-W269-RH	IN-ID-ANLW-W269-RH
IN	IN-ID-BTO-030	IN-ID-BTO-030
IN	IN-ID-EBR-S5000	IN-ID-EBR-S5000
IN	IN-ID-HFEF-S3000-RP	IN-ID-HFEF-S3000-RP
IN	IN-ID-HFEF-S5000-RP	IN-ID-HFEF-S5000-RP
IN	IN-ID-INL-152M	IN-ID-INL-152M
IN	IN-ID-MFC-SOLID	IN-ID-MFC-SOLID
IN	IN-ID-MISC-RH	IN-ID-MISC-RH
IN	IN-ID-RF-S3114	IN-ID-RF-S3114
IN	IN-ID-RF-S5000-RH	IN-ID-RF-S5000-RH
IN	IN-ID-Sample Fuel	IN-ID-Sample Fuel
IN	IN-ID-SDA-Debris	IN-ID-SDA-Debris
IN	IN-ID-SDA-Sludge	IN-ID-SDA-Sludge
IN	IN-ID-SDA-Soil	IN-ID-SDA-Soil
IN	IN-ID-Source Material	IN-ID-Source Material
IN	IN-ID-SRP-S3000	IN-ID-SRP-S3000
IN	IN-ID-TRA-W345-RH	IN-ID-TRA-W345-RH
IN	IN-ID-TRU-RHNH	IN-ID-TRU-RHNH
IN	IN-IW-603	IN-BN650
IN	IN-IW-608	IN-IW-608
IN	IN-IW-609	IN-BN650
IN	IN-MD-811	IN-BN650
IN	IN-MO-545	IN-MO-545
IN	IN-NRF-SPC-103	IN-NRF-SPC-103
IN	IN-RF-005-SRP	IN-BN650
IN	IN-RF-750	IN-BN650
IN	IN-RF-806	IN-BN650
IN	IN-RF-990-SRP	IN-BN650

Table C-1. Crosswalk of ATWIR-2021 to ATWIR-2020 Waste Streams
Continued

Site Code	ATWIR-2021 Waste Streams	ATWIR-2020 Waste Streams
IN	IN-SBW-01A	IN-SBW-01A
IN	IN-SBW-01B	IN-SBW-01B
IN	IN-SD-178-SRP	IN-BN650
KA	KA-T001	KA-T001
KA	KA-T002	KA-T002
KA	KA-T003	KA-T003
KA	KA-W016	KA-W016
KN	KN-B234TRU	KN-B234TRU
LA	LA-CIN01.001	LA-CIN01.001, LA-MHD01.001
LA	LA-CIN02.001	LA-CIN02.001
LA	LA-CIN03.001	LA-CIN03.001
LA	LA-LA225D	LA-LA225D
LA	LA-LANHD01	LA-LANHD01
LA	LA-MHD01-Pits	LA-MHD01-Pits
LA	LA-MHD01.001	LA-LA238HONR, LA-LA238HOR, LA-LAMHD02238, LA-LAMIN04S, LA-LANHD02238, LA-LANIN03NC, LA-MHD01.001, LA-TA-55-04, LA-TA-55-19, LA-TA-55-30
LA	LA-MHD03.001	LA-MHD03.001, LA-TA-03-29
LA	LA-MHD04.001	LA-MHD04.001
LA	LA-MHD05-ITRI.001	LA-MHD05-ITRI.001
LA	LA-MHD08.001	LA-MHD08.001
LA	LA-MHD09.001	LA-MHD09.001
LA	LA-MIN02-V.001	LA-MIN02-V.001
LA	LA-MIN03-NC.001	LA-MIN03-NC.001, LA-TA-50-19
LA	LA-MIN04-S.001	LA-MIN04-S.001
LA	LA-MIN05-V.001	LA-MIN05-V.001
LA	LA-MIN06-NS.001	LA-MHD01.001, LA-MIN06-NS.001
LA	LA-MSG04.001	LA-MSG04.001
LA	LA-OS-00-01.001	LA-OS-00-01.001
LA	LA-OS-00-04	LA-OS-00-04
LA	LA-TA-00-01	LA-TA-00-01
LA	LA-TA-00-03	LA-TA-00-03
LA	LA-TA-03-10	LA-TA-03-10
LA	LA-TA-03-14	LA-TA-03-14
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-21-05	LA-TA-21-05
LA	LA-TA-21-06	LA-TA-21-06

Table C-1. Crosswalk of ATWIR-2021 to ATWIR-2020 Waste Streams
Continued

Site Code	ATWIR-2021 Waste Streams	ATWIR-2020 Waste Streams
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-21-12	LA-TA-21-12
LA	LA-TA-21-13	LA-TA-21-13
LA	LA-TA-21-15	LA-TA-21-15
LA	LA-TA-21-16	LA-TA-21-16
LA	LA-TA-21-17	LA-TA-21-17
LA	LA-TA-50-18	LA-TA-50-18
LA	LA-TA-50-19	LA-TA-50-19
LA	LA-TA-55-04	LA-LANHD01, LA-TA-55-04
LA	LA-TA-55-19	LA-TA-55-19
LA	LA-TA-55-21	LA-TA-55-21
LA	LA-TA-55-30	LA-TA-55-30
LA	LA-TA-55-38	LA-TA-55-38
LA	LA-TRU-Empty-110	LA-TRU-Empty-110
LA	LA-TRU-Empty-55	LA-TRU-Empty-55
LA	LA-TRU-Empty-85	LA-TRU-Empty-85
LA	LA-TRU-Empty-SWB	LA-TRU-Empty-SWB
LB	LB-T001	LB-T001
LB	LB-T002	LB-T002
LL	LL-M001	LL-M001
LL	LL-T004	LL-T004
LL	LL-W018-S5100	LL-W018-S5100
LL	LL-W018-SS	LL-W018-SS
LL	LL-W019	LL-W019
ND	ND-T001	ND-T001
ND	ND-T002	ND-T002
NT	NT-JAS-01	NT-JAS-01
NT	NT-W021	NT-W021
OR	OR-CHEM-CH-HET	OR-CHEM-CH-HET
OR	OR-CHEM-RH-HET	OR-CHEM-RH-HET
OR	OR-CRF-CH-HET	OR-CRF-CH-HET
OR	OR-GENR-CH-HET	OR-GENR-CH-HET
OR	OR-GENR-RH-HET	OR-GENR-RH-HET
OR	OR-GRSC-RH-HOM	OR-TBD-CH-HET, OR-TBD-RH-HET
OR	OR-IFEL-CH-HET	OR-IFEL-CH-HET
OR	OR-ISTP-CH-HET	OR-ISTP-CH-HET
OR	OR-ISTP-RH-HET	OR-ISTP-RH-HET
OR	OR-LWT-CH-HET	OR-WSTR-CH-HET
OR	OR-MRF-CH-HET	OR-MRF-CH-HET

Table C-1. Crosswalk of ATWIR-2021 to ATWIR-2020 Waste Streams
Continued

Site Code	ATWIR-2021 Waste Streams	ATWIR-2020 Waste Streams
OR	OR-MRF-RH-HET	OR-MRF-RH-HET
OR	OR-NBL-CH-HET	OR-NBL-CH-HET
OR	OR-NFS-CH-HET-A	OR-NFS-CH-HET
OR	OR-NFS-CH-HOM-A	OR-NFS-CH-HOM
OR	OR-NFS-CH-SOIL	OR-NFS-CH-SOIL
OR	OR-OXIDE-CH-HET	OR-OXIDE-CH-HET
OR	OR-PGDP-CH-HET	OR-PGDP-CH-HET
OR	OR-RADP-CH-HET	OR-RADP-CH-HET
OR	OR-RADP-RH-HET	OR-RADP-RH-HET
OR	OR-REDC-CH-HET	OR-REDC-CH-HET
OR	OR-REDC-RH-HET	OR-REDC-RH-HET
OR	OR-RF-CH-HET	OR-RF-CH-HET
OR	OR-RF-RH-HET	OR-RF-RH-HET
OR	OR-SOURCE-CH-HET	OR-TBD-CH-HET
OR	OR-SWSA-CH-HET	OR-SWSA-CH-HET
OR	OR-SWSA-CH-SOIL	OR-SWSA-CH-SOIL
OR	OR-TBD-CH-HET	OR-TBD-CH-HET
OR	OR-TBD-RH-HET	OR-TBD-RH-HET
OR	OR-W1A-CH-SOIL	OR-W1A-CH-SOIL
OR	OR-W1A-RH-SOIL	OR-W1A-RH-SOIL
OR	OR-WC14-RH-HET	OR-TBD-RH-HET
OR	OR-Y12-CH-HET	OR-Y12-CH-HET
RL	RL100D-08	RL100D-08
RL	RL105-01	RL105-01
RL	RL105-03	RL105-03
RL	RL105-08	RL105-08
RL	RL105-09	RL105-09
RL	RL170-08	RL170-08
RL	RL200-01	RL200-01
RL	RL200-02	RL200-02
RL	RL200-10	RL200-10
RL	RL201-03	RL201-03
RL	RL202S-01	RL202S-01
RL	RL209E-01	RL209E-01
RL	RL209E-08	RL209E-08
RL	RL216Z-02	RL216Z-02
RL	RL221T-01	RL221T-01
RL	RL221U-03	RL221U-03
RL	RL221U-08	RL221U-08
RL	RL222S-01	RL222S-01
RL	RL222S-08	RL222S-08

Table C-1. Crosswalk of ATWIR-2021 to ATWIR-2020 Waste Streams
Continued

Site Code	ATWIR-2021 Waste Streams	ATWIR-2020 Waste Streams
RL	RL231Z-01	RL231Z-01
RL	RL231Z-03	RL231Z-03
RL	RL233S-01	RL233S-01
RL	RL233S-03	RL233S-03
RL	RL300-01	RL300-01
RL	RL300-03	RL300-03
RL	RL300-07	RL300-07
RL	RL300-08	RL300-08
RL	RL300-11	RL300-11
RL	RL308-01	RL308-01
RL	RL308-03	RL308-03
RL	RL308-08	RL308-08
RL	RL325-01	RL325-01
RL	RL325-03	RL325-03
RL	RL325-05	RL325-05
RL	RL325-07	RL325-07
RL	RL325-08	RL325-08
RL	RL325-09	RL325-09
RL	RL618-01	RL618-01
RL	RL618-08	RL618-08
RL	RLALE-02	RLALE-02
RL	RLALPHA-08	RLALPHA-08
RL	RLARG-01	RLARG-01
RL	RLBART-07	RLBART-08
RL	RLBAT-01	RLBAT-01
RL	RLBAT-07	RLBAT-07
RL	RLBAT-08	RLBAT-08
RL	RLBET-08	RLBET-08
RL	RLBW-01	RLBW-01
RL	RLBW-03	RLBW-03
RL	RLBW-08	RLBW-08
RL	RLCFF-01	RLCFF-01
RL	RLCFF-03	RLCFF-03
RL	RLCH2-01	RLCH2-01
RL	RLCH2-08	RLCH2-08
RL	RLCH2-09	RLCH2-09
RL	RLDD-01	RL200-01, RLDD-01
RL	RLDD-02	RLDD-02
RL	RLDD-08	RLDD-08
RL	RLDD-10	RLDD-10
RL	RLESG-01	RLESG-01

Table C-1. Crosswalk of ATWIR-2021 to ATWIR-2020 Waste Streams
Continued

Site Code	ATWIR-2021 Waste Streams	ATWIR-2020 Waste Streams
RL	RLESG-03	RLESG-03
RL	RLESG-08	RLESG-08
RL	RLESG-09	RLESG-09
RL	RLEXX-01	RLEXX-01
RL	RLFFTF-01	RLFFTF-01
RL	RLFFTF-08	RLFFTF-08
RL	RLGEV-01	RLGEV-01
RL	RLGEV-03	RLGEV-03
RL	RLGEV-08	RLGEV-08
RL	RLHAN-01A	RLHAN-01A
RL	RLHAN-01B	RLHAN-01
RL	RLHAN-03	RLHAN-03
RL	RLHAN-08	RLHAN-08
RL	RLIAEA-03	RLIAEA-03
RL	RLMLB-08	RLMLB-08
RL	RLMLL-01	RLMLL-01
RL	RLN622FD-01	RLN622FD-01
RL	RLP11-01	RLP11-01
RL	RLPFP-01	RLPFP-01
RL	RLPFP-01A	RLPFP-01A
RL	RLPFP-01B	RLPFP-01B
RL	RLPFP-02	RLPFP-02
RL	RLPFP-03	RLPFP-03
RL	RLPFP-04	RLPFP-04
RL	RLPFP-04J	RLPFP-04
RL	RLPFP-04NJ	RLPFP-04
RL	RLPFP-05	RLPFP-05
RL	RLPFP-08	RLPFP-08
RL	RLPFP-09	RLPFP-09
RL	RLPRC-01	RLPRC-01
RL	RLPURX-01	RLPURX-01
RL	RLPURX-08	RLPURX-08
RL	RLRFET-01	RLRFET-01
RL	RLSAN-01	RLSAN-01
RL	RLSWO-01	RLSWO-01
RL	RLSWO-05	RLSWO-05
RL	RLWAR-01	RLWAR-01
RL	RLWAR-03	RLWAR-03
RL	RLWTP-08	RLWTP-08
RP	RP-TFC001	RP-TFC001
RP	RP-W754	RP-W754

Table C-1. Crosswalk of ATWIR-2021 to ATWIR-2020 Waste Streams
Continued

Site Code	ATWIR-2021 Waste Streams	ATWIR-2020 Waste Streams
RP	RP-W755	RP-W755
SA	SA-W134	SA-W134
SA	SA-W135	SA-W135
SA	SA-W136	SA-W136
SA	SA-W137	SA-W137
SA	SA-W138M	SA-W138M
SA	SA-W139	SA-W139
SP	SP-CHHD	SP-CHHD
SP	SP-RHHD	SP-RHHD
SP	SP-RHIN	SP-RHIN
SR	SR-221H-EUOx	SR-221H-EUOx
SR	SR-AGNS-HOM	SR-AGNS-HOM
SR	SR-BCLDP-HET	SR-BCLDP-HET
SR	SR-BCLDP.003.001	SR-BCLDP.003.001
SR	SR-BCLDP.004.004	SR-BCLDP.004.004
SR	SR-CH-PP	SR-CH-PP, SR-RH-PP
SR	SR-DWPF-HET	SR-DWPF-HET
SR	SR-HBL-235F-HET	SR-HBL-235F-HET
SR	SR-KAC-HET	SR-KAC-HET, SR-KAC-HET-2
SR	SR-KAC-HET-2	SR-KAC-HET-2
SR	SR-KAC-HET-A	SR-KAC-HET-A
SR	SR-KAC-PuOx	SR-KAC-PuOx, SR-KAC-PuOx-2
SR	SR-KAC-PuOx-2	SR-KAC-PuOx-2
SR	SR-LA-PAD1	SR-LA-PAD1
SR	SR-MD-HET	SR-MD-HET
SR	SR-MD-PAD1	SR-MD-PAD1
SR	SR-MD-SOIL	SR-MD-SOIL
SR	SR-NIST-HET	SR-NIST-HET
SR	SR-RH-221H.01	SR-RH-221H.01
SR	SR-RH-221H.02	SR-RH-221H.02
SR	SR-RH-235F.01	SR-RH-235F.01
SR	SR-RH-772F.01	SR-RH-772F.01
SR	SR-RH-773A.01	SR-RH-773A.01
SR	SR-RH-DWPF-HET	SR-RH-DWPF-HET
SR	SR-RH-FBL.01	SR-RH-FBL.01
SR	SR-RH-FBL.02	SR-RH-FBL.02
SR	SR-RH-MNDPAD1.01	SR-RH-MNDPAD1.01
SR	SR-RH-SDD.01	SR-RH-SDD.01
SR	SR-RH-SWD.01	SR-RH-SWD.01
SR	SR-SDD-HET-A	SR-SDD-HET-A
SR	SR-SDD-HOM-A	SR-SDD-HOM-A

Table C-1. Crosswalk of ATWIR-2021 to ATWIR-2020 Waste Streams
Continued

Site Code	ATWIR-2021 Waste Streams	ATWIR-2020 Waste Streams
SR	SR-SDD-HOM-B	SR-SDD-HOM-B
SR	SR-SWMF-HET-A	SR-SWMF-HET-A
SR	SR-SWMF-HET-B	SR-SWMF-HET-B
SR	SR-W026-221F-HEPA	SR-W026-221F-HEPA
SR	SR-W026-221F-HET	SR-W026-221F-HET
SR	SR-W026-221F-HET-A	SR-W026-221F-HET-A
SR	SR-W026-221F-HOM	SR-W026-221F-HOM
SR	SR-W026-772F-HET	SR-W026-772F-HET
SR	SR-W027-221F-HET-A	SR-W027-221F-HET-A
SR	SR-W027-221H-HEPA	SR-W027-221H-HEPA
SR	SR-W027-221H-HET	SR-W027-221H-HET
SR	SR-W027-221H-HET-C	SR-W027-221H-HET-C
SR	SR-W027-221H-HOM	SR-W027-221H-HOM
SR	SR-W027-235F-HEPA	SR-W027-235F-HEPA
SR	SR-W027-235F-HET	SR-W027-235F-HET, SR-W027-235F-IR
SR	SR-W027-235F-HOM	SR-W027-235F-HOM
SR	SR-W027-321-322M-HET	SR-W027-321-322M-HET
SR	SR-W027-773A-HET	SR-W027-773A-HET
SR	SR-W027-773A-HOM	SR-W027-773A-HOM
SR	SR-W027-FB-Pre86-C	SR-W027-FB-Pre86-C
SR	SR-W027-HBL-Box	SR-W027-HBL-Box
WV	WV-M010a	WV-M010a
WV	WV-T004a	WV-T004a
WV	WV-T004b	WV-T004b, WV-T006b
WV	WV-T006a	WV-T006a
WV	WV-T006b	WV-T006b
WV	WV-T017b	WV-T017b
WV	WV-W024a	WV-W024a
WV	WV-W024b	WV-W024b
WV	WV-W050a	WV-W050a
WV	WV-W050b	WV-W050a, WV-W050b
WV	WV-Z001	WV-Z001

Data Source: CID Data Version D.20.00.33 (LANL-CO 2021). Note: This table contains data for WIPP-bound and potential waste streams only.

Table C-2. Crosswalk of ATWIR-2020 to ATWIR-2021 Waste Streams

Site Code	ATWIR-2020 Waste Streams	ATWIR-2021 Waste Streams
AE	AE-T001	AE-T001
AE	AE-T003	AE-T003
AE	AE-T009	AE-T009
AW	AW-N027.531	AW-N027.531
AW	AW-T031.1322	AW-T031.1322
AW	AW-T033.1325	AW-T033.1325
AW	AW-W020.13	AW-W020.13
BL	BL-Parks	BL-Parks
BL	BL-Parks-A	BL-Parks-A
BT	BT-T001	BT-T001
IN	IN-AE-AGHC-02	IN-AE-AGHC-02
IN	IN-AW-T031.1322	IN-AW-T031.1322
IN	IN-BN-500	IN-BN-500
IN	IN-BN-508	IN-BN510.4
IN	IN-BN-538-INTEC	IN-BN538
IN	IN-BN-AE102	IN-AE-102-SRP
IN	IN-BN-AE105	IN-AE-105-SRP
IN	IN-BN-RF003	IN-BN-RF003
IN	IN-BN-RF290	IN-BN-RF290
IN	IN-BN-RF311	IN-BN-RF311
IN	IN-BN-RF409	IN-BN-RF409-SRP
IN	IN-BN-RF420	IN-BN-RF420
IN	IN-BN-RF432	IN-BN-RF432
IN	IN-BN-RF801	IN-BN-RF801
IN	IN-BN-RF990	IN-BN-RF990
IN	IN-BN004	IN-BN004
IN	IN-BN222	IN-BN222
IN	IN-BN510	IN-BN510
IN	IN-BN510.1	IN-BN510.1
IN	IN-BN510.2	IN-BN510.2
IN	IN-BN510.3	IN-BN510.3
IN	IN-BN510.4	IN-BN510.4
IN	IN-BN510.4-RH	IN-BN510.4-RH
IN	IN-BN538	IN-BN538
IN	IN-BN539	IN-BN539
IN	IN-BN600	IN-BN600

Table C-2. Crosswalk of ATWIR-2020 to ATWIR-2021 Waste Streams
Continued

Site Code	ATWIR-2020 Waste Streams	ATWIR-2021 Waste Streams
IN	IN-BN650	IN-BN-215, IN-BN-215-SRP, IN-BN-216, IN-BN-217, IN-BN-501-SRP, IN-BN-522, IN-BN-522-SRP, IN-BN-599, IN-BN-602, IN-BN650, IN-BNINW216-SRP, IN-BNINW218-SRP, IN-BN-RF-003-SRP, IN-IC-603, IN-IW-603, IN-IW-609, IN-MD-811, IN-RF-005-SRP, IN-RF-750, IN-RF-806, IN-RF-990-SRP, IN-SD-178-SRP
IN	IN-BN835	IN-BN835
IN	IN-BN836	IN-BN836
IN	IN-BNINW216	IN-BNINW216
IN	IN-BNINW218	IN-BNINW218
IN	IN-DD-001	IN-DD-001
IN	IN-IC-604	IN-BN510.4
IN	IN-ID-ANLE-BIN	IN-ID-ANLE-BIN
IN	IN-ID-ANLW-W269-RH	IN-ID-ANLW-W269-RH
IN	IN-ID-BTO-030	IN-ID-BTO-030
IN	IN-ID-EBR-S5000	IN-ID-EBR-S5000
IN	IN-ID-HFEF-S3000-RP	IN-ID-HFEF-S3000-RP
IN	IN-ID-HFEF-S5000-RP	IN-ID-HFEF-S5000-RP
IN	IN-ID-INL-152M	IN-ID-INL-152M
IN	IN-ID-MFC-SOLID	IN-ID-MFC-SOLID
IN	IN-ID-MISC-RH	IN-ID-MISC-RH
IN	IN-ID-RF-S3114	IN-ID-RF-S3114
IN	IN-ID-RF-S5000-RH	IN-ID-RF-S5000-RH
IN	IN-ID-Sample Fuel	IN-ID-Sample Fuel
IN	IN-ID-SDA-Debris	IN-ID-SDA-Debris
IN	IN-ID-SDA-Sludge	IN-ID-SDA-Sludge
IN	IN-ID-SDA-Soil	IN-ID-SDA-Soil
IN	IN-ID-Source Material	IN-ID-Source Material
IN	IN-ID-SRP-S3000	IN-ID-SRP-S3000
IN	IN-ID-TRA-W345-RH	IN-ID-TRA-W345-RH
IN	IN-ID-TRU-RHNH	IN-ID-TRU-RHNH
IN	IN-IW-608	IN-IW-608
IN	IN-MO-545	IN-MO-545
IN	IN-NRF-SPC-103	IN-NRF-SPC-103
IN	IN-SBW-01A	IN-SBW-01A
IN	IN-SBW-01B	IN-SBW-01B
KA	KA-T001	KA-T001
KA	KA-T002	KA-T002
KA	KA-T003	KA-T003
KA	KA-W016	KA-W016

Table C-2. Crosswalk of ATWIR-2020 to ATWIR-2021 Waste Streams
Continued

Site Code	ATWIR-2020 Waste Streams	ATWIR-2021 Waste Streams
KN	KN-B234TRU	KN-B234TRU
LA	LA-CIN01.001	LA-CIN01.001
LA	LA-CIN02.001	LA-CIN02.001
LA	LA-CIN03.001	LA-CIN03.001
LA	LA-LA225D	LA-LA225D
LA	LA-LA238HONR	LA-MHD01.001
LA	LA-LA238HOR	LA-MHD01.001
LA	LA-LAMHD02238	LA-MHD01.001
LA	LA-LAMIN04S	LA-MHD01.001
LA	LA-LANHD01	LA-LANHD01, LA-TA-55-04
LA	LA-LANHD02238	LA-MHD01.001
LA	LA-LANIN03NC	LA-MHD01.001
LA	LA-MHD01-Pits	LA-MHD01-Pits
LA	LA-MHD01.001	LA-CIN01.001, LA-MHD01.001, LA-MIN06-NS.001
LA	LA-MHD03.001	LA-MHD03.001
LA	LA-MHD04.001	LA-MHD04.001
LA	LA-MHD05-ITRI.001	LA-MHD05-ITRI.001
LA	LA-MHD08.001	LA-MHD08.001
LA	LA-MHD09.001	LA-MHD09.001
LA	LA-MIN02-V.001	LA-MIN02-V.001
LA	LA-MIN03-NC.001	LA-MIN03-NC.001
LA	LA-MIN04-S.001	LA-MIN04-S.001
LA	LA-MIN05-V.001	LA-MIN05-V.001
LA	LA-MIN06-NS.001	LA-MIN06-NS.001
LA	LA-MSG04.001	LA-MSG04.001
LA	LA-OS-00-01.001	LA-OS-00-01.001
LA	LA-OS-00-04	LA-OS-00-04
LA	LA-TA-00-01	LA-TA-00-01
LA	LA-TA-00-03	LA-TA-00-03
LA	LA-TA-03-10	LA-TA-03-10
LA	LA-TA-03-14	LA-TA-03-14
LA	LA-TA-03-27	LA-TA-03-27
LA	LA-TA-03-28	LA-TA-03-28
LA	LA-TA-03-29	LA-MHD03.001, LA-TA-03-29
LA	LA-TA-03-30	LA-TA-03-30
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

Table C-2. Crosswalk of ATWIR-2020 to ATWIR-2021 Waste Streams
Continued

Site Code	ATWIR-2020 Waste Streams	ATWIR-2021 Waste Streams
LA	LA-TA-21-12	LA-TA-21-12
LA	LA-TA-21-13	LA-TA-21-13
LA	LA-TA-21-15	LA-TA-21-15
LA	LA-TA-21-16	LA-TA-21-16
LA	LA-TA-21-17	LA-TA-21-17
LA	LA-TA-50-18	LA-TA-50-18
LA	LA-TA-50-19	LA-MIN03-NC.001, LA-TA-50-19
LA	LA-TA-55-04	LA-MHD01.001, LA-TA-55-04
LA	LA-TA-55-19	LA-MHD01.001, LA-TA-55-19
LA	LA-TA-55-21	LA-TA-55-21
LA	LA-TA-55-30	LA-MHD01.001, LA-TA-55-30
LA	LA-TA-55-38	LA-TA-55-38
LA	LA-TRU-Empty-110	LA-TRU-Empty-110
LA	LA-TRU-Empty-55	LA-TRU-Empty-55
LA	LA-TRU-Empty-85	LA-TRU-Empty-85
LA	LA-TRU-Empty-SWB	LA-TRU-Empty-SWB
LB	LB-T001	LB-T001
LB	LB-T002	LB-T002
LL	LL-M001	LL-M001
LL	LL-T004	LL-T004
LL	LL-W018-S5100	LL-W018-S5100
LL	LL-W018-SS	LL-W018-SS
LL	LL-W019	LL-W019
ND	ND-T001	ND-T001
ND	ND-T002	ND-T002
NT	NT-JAS-01	NT-JAS-01
NT	NT-W021	NT-W021
OR	OR-CHEM-CH-HET	OR-CHEM-CH-HET
OR	OR-CHEM-RH-HET	OR-CHEM-RH-HET
OR	OR-CRF-CH-HET	OR-CRF-CH-HET
OR	OR-GENR-CH-HET	OR-GENR-CH-HET
OR	OR-GENR-RH-HET	OR-GENR-RH-HET
OR	OR-IFEL-CH-HET	OR-IFEL-CH-HET
OR	OR-ISTP-CH-HET	OR-ISTP-CH-HET
OR	OR-ISTP-RH-HET	OR-ISTP-RH-HET
OR	OR-MRF-CH-HET	OR-MRF-CH-HET
OR	OR-MRF-RH-HET	OR-MRF-RH-HET
OR	OR-NBL-CH-HET	OR-NBL-CH-HET
OR	OR-NFS-CH-HET	OR-NFS-CH-HET-A
OR	OR-NFS-CH-HOM	OR-NFS-CH-HOM-A
OR	OR-NFS-CH-SOIL	OR-NFS-CH-SOIL

Table C-2. Crosswalk of ATWIR-2020 to ATWIR-2021 Waste Streams
Continued

Site Code	ATWIR-2020 Waste Streams	ATWIR-2021 Waste Streams
OR	OR-OXIDE-CH-HET	OR-OXIDE-CH-HET
OR	OR-PGDP-CH-HET	OR-PGDP-CH-HET
OR	OR-RADP-CH-HET	OR-RADP-CH-HET
OR	OR-RADP-RH-HET	OR-RADP-RH-HET
OR	OR-REDC-CH-HET	OR-REDC-CH-HET
OR	OR-REDC-RH-HET	OR-REDC-RH-HET
OR	OR-RF-CH-HET	OR-RF-CH-HET
OR	OR-RF-RH-HET	OR-RF-RH-HET
OR	OR-SWSA-CH-HET	OR-SWSA-CH-HET
OR	OR-SWSA-CH-SOIL	OR-SWSA-CH-SOIL
OR	OR-TBD-CH-HET	OR-GRSC-RH-HOM, OR-SOURCE-CH-HET, OR-TBD-CH-HET
OR	OR-TBD-RH-HET	OR-GRSC-RH-HOM, OR-TBD-RH-HET, OR-WC14-RH-HET
OR	OR-W1A-CH-SOIL	OR-W1A-CH-SOIL
OR	OR-W1A-RH-SOIL	OR-W1A-RH-SOIL
OR	OR-WSTR-CH-HET	OR-LWT-CH-HET
OR	OR-Y12-CH-HET	OR-Y12-CH-HET
RL	RL100D-08	RL100D-08
RL	RL105-01	RL105-01
RL	RL105-03	RL105-03
RL	RL105-08	RL105-08
RL	RL105-09	RL105-09
RL	RL170-08	RL170-08
RL	RL200-01	RL200-01, RLDD-01
RL	RL200-02	RL200-02
RL	RL200-10	RL200-10
RL	RL201-03	RL201-03
RL	RL202S-01	RL202S-01
RL	RL209E-01	RL209E-01
RL	RL209E-08	RL209E-08
RL	RL216Z-02	RL216Z-02
RL	RL221T-01	RL221T-01
RL	RL221U-03	RL221U-03
RL	RL221U-08	RL221U-08
RL	RL222S-01	RL222S-01
RL	RL222S-08	RL222S-08
RL	RL231Z-01	RL231Z-01
RL	RL231Z-03	RL231Z-03
RL	RL233S-01	RL233S-01
RL	RL233S-03	RL233S-03

Table C-2. Crosswalk of ATWIR-2020 to ATWIR-2021 Waste Streams
Continued

Site Code	ATWIR-2020 Waste Streams	ATWIR-2021 Waste Streams
RL	RL300-01	RL300-01
RL	RL300-03	RL300-03
RL	RL300-07	RL300-07
RL	RL300-08	RL300-08
RL	RL300-11	RL300-11
RL	RL308-01	RL308-01
RL	RL308-03	RL308-03
RL	RL308-08	RL308-08
RL	RL325-01	RL325-01
RL	RL325-03	RL325-03
RL	RL325-05	RL325-05
RL	RL325-07	RL325-07
RL	RL325-08	RL325-08
RL	RL325-09	RL325-09
RL	RL618-01	RL618-01
RL	RL618-08	RL618-08
RL	RLALE-02	RLALE-02
RL	RLALPHA-08	RLALPHA-08
RL	RLARG-01	RLARG-01
RL	RLBART-08	RLBART-07
RL	RLBAT-01	RLBAT-01
RL	RLBAT-07	RLBAT-07
RL	RLBAT-08	RLBAT-08
RL	RLBET-08	RLBET-08
RL	RLBW-01	RLBW-01
RL	RLBW-03	RLBW-03
RL	RLBW-08	RLBW-08
RL	RLCFF-01	RLCFF-01
RL	RLCFF-03	RLCFF-03
RL	RLCH2-01	RLCH2-01
RL	RLCH2-08	RLCH2-08
RL	RLCH2-09	RLCH2-09
RL	RLDD-01	RLDD-01
RL	RLDD-02	RLDD-02
RL	RLDD-08	RLDD-08
RL	RLDD-10	RLDD-10
RL	RLESG-01	RLESG-01
RL	RLESG-03	RLESG-03
RL	RLESG-08	RLESG-08
RL	RLESG-09	RLESG-09
RL	RLEXX-01	RLEXX-01

Table C-2. Crosswalk of ATWIR-2020 to ATWIR-2021 Waste Streams
Continued

Site Code	ATWIR-2020 Waste Streams	ATWIR-2021 Waste Streams
RL	RLFFTF-01	RLFFTF-01
RL	RLFFTF-08	RLFFTF-08
RL	RLGEV-01	RLGEV-01
RL	RLGEV-03	RLGEV-03
RL	RLGEV-08	RLGEV-08
RL	RLHAN-01	RLHAN-01B
RL	RLHAN-01A	RLHAN-01A
RL	RLHAN-03	RLHAN-03
RL	RLHAN-08	RLHAN-08
RL	RLIAEA-03	RLIAEA-03
RL	RLMLB-08	RLMLB-08
RL	RLMLL-01	RLMLL-01
RL	RLN622FD-01	RLN622FD-01
RL	RLP11-01	RLP11-01
RL	RLPFP-01	RLPFP-01
RL	RLPFP-01A	RLPFP-01A
RL	RLPFP-01B	RLPFP-01B
RL	RLPFP-02	RLPFP-02
RL	RLPFP-03	RLPFP-03
RL	RLPFP-04	RLPFP-04, RLPFP-04J, RLPFP-04NJ
RL	RLPFP-05	RLPFP-05
RL	RLPFP-08	RLPFP-08
RL	RLPFP-09	RLPFP-09
RL	RLPRC-01	RLPRC-01
RL	RLPURX-01	RLPURX-01
RL	RLPURX-08	RLPURX-08
RL	RLRFET-01	RLRFET-01
RL	RLSAN-01	RLSAN-01
RL	RLSWO-01	RLSWO-01
RL	RLSWO-05	RLSWO-05
RL	RLWAR-01	RLWAR-01
RL	RLWAR-03	RLWAR-03
RL	RLWTP-08	RLWTP-08
RP	RP-TFC001	RP-TFC001
RP	RP-W754	RP-W754
RP	RP-W755	RP-W755
SA	SA-W134	SA-W134
SA	SA-W135	SA-W135
SA	SA-W136	SA-W136
SA	SA-W137	SA-W137
SA	SA-W138M	SA-W138M

Table C-2. Crosswalk of ATWIR-2020 to ATWIR-2021 Waste Streams
Continued

Site Code	ATWIR-2020 Waste Streams	ATWIR-2021 Waste Streams
SA	SA-W139	SA-W139
SP	SP-CHHD	SP-CHHD
SP	SP-RHHD	SP-RHHD
SP	SP-RHIN	SP-RHIN
SR	SR-221H-EUOx	SR-221H-EUOx
SR	SR-AGNS-HOM	SR-AGNS-HOM
SR	SR-BCLDP-HET	SR-BCLDP-HET
SR	SR-BCLDP.003.001	SR-BCLDP.003.001
SR	SR-BCLDP.004.004	SR-BCLDP.004.004
SR	SR-CH-PP	SR-CH-PP
SR	SR-DWPF-HET	SR-DWPF-HET
SR	SR-HBL-235F-HET	SR-HBL-235F-HET
SR	SR-KAC-HET	SR-KAC-HET
SR	SR-KAC-HET-2	SR-KAC-HET, SR-KAC-HET-2
SR	SR-KAC-HET-A	SR-KAC-HET-A
SR	SR-KAC-PuOx	SR-KAC-PuOx
SR	SR-KAC-PuOx-2	SR-KAC-PuOx, SR-KAC-PuOx-2
SR	SR-LA-PAD1	SR-LA-PAD1
SR	SR-MD-HET	SR-MD-HET
SR	SR-MD-PAD1	SR-MD-PAD1
SR	SR-MD-SOIL	SR-MD-SOIL
SR	SR-NIST-HET	SR-NIST-HET
SR	SR-RH-221H.01	SR-RH-221H.01
SR	SR-RH-221H.02	SR-RH-221H.02
SR	SR-RH-235F.01	SR-RH-235F.01
SR	SR-RH-772F.01	SR-RH-772F.01
SR	SR-RH-773A.01	SR-RH-773A.01
SR	SR-RH-DWPF-HET	SR-RH-DWPF-HET
SR	SR-RH-FBL.01	SR-RH-FBL.01
SR	SR-RH-FBL.02	SR-RH-FBL.02
SR	SR-RH-MNDPAD1.01	SR-RH-MNDPAD1.01
SR	SR-RH-PP	SR-CH-PP
SR	SR-RH-SDD.01	SR-RH-SDD.01
SR	SR-RH-SWD.01	SR-RH-SWD.01
SR	SR-SDD-HET-A	SR-SDD-HET-A
SR	SR-SDD-HOM-A	SR-SDD-HOM-A
SR	SR-SDD-HOM-B	SR-SDD-HOM-B
SR	SR-SWMF-HET-A	SR-SWMF-HET-A
SR	SR-SWMF-HET-B	SR-SWMF-HET-B
SR	SR-W026-221F-HEPA	SR-W026-221F-HEPA
SR	SR-W026-221F-HET	SR-W026-221F-HET

Table C-2. Crosswalk of ATWIR-2020 to ATWIR-2021 Waste Streams
Continued

Site Code	ATWIR-2020 Waste Streams	ATWIR-2021 Waste Streams
SR	SR-W026-221F-HET-A	SR-W026-221F-HET-A
SR	SR-W026-221F-HOM	SR-W026-221F-HOM
SR	SR-W026-772F-HET	SR-W026-772F-HET
SR	SR-W027-221F-HET-A	SR-W027-221F-HET-A
SR	SR-W027-221H-HEPA	SR-W027-221H-HEPA
SR	SR-W027-221H-HET	SR-W027-221H-HET
SR	SR-W027-221H-HET-C	SR-W027-221H-HET-C
SR	SR-W027-221H-HOM	SR-W027-221H-HOM
SR	SR-W027-235F-HEPA	SR-W027-235F-HEPA
SR	SR-W027-235F-HET	SR-W027-235F-HET
SR	SR-W027-235F-HOM	SR-W027-235F-HOM
SR	SR-W027-235F-IR	SR-W027-235F-HET
SR	SR-W027-321-322M-HET	SR-W027-321-322M-HET
SR	SR-W027-773A-HET	SR-W027-773A-HET
SR	SR-W027-773A-HOM	SR-W027-773A-HOM
SR	SR-W027-FB-Pre86-C	SR-W027-FB-Pre86-C
SR	SR-W027-HBL-Box	SR-W027-HBL-Box
WV	WV-M010a	WV-M010a
WV	WV-T004a	WV-T004a
WV	WV-T004b	WV-T004b
WV	WV-T006a	WV-T006a
WV	WV-T006b	WV-T004b, WV-T006b
WV	WV-T017b	WV-T017b
WV	WV-W024a	WV-W024a
WV	WV-W024b	WV-W024b
WV	WV-W050a	WV-W050a, WV-W050b
WV	WV-W050b	WV-W050b
WV	WV-Z001	WV-Z001

Data Source: CID Data Version D.20.00.33 (LANL-CO 2021). Note: This table contains data for WIPP-bound and potential waste streams only.