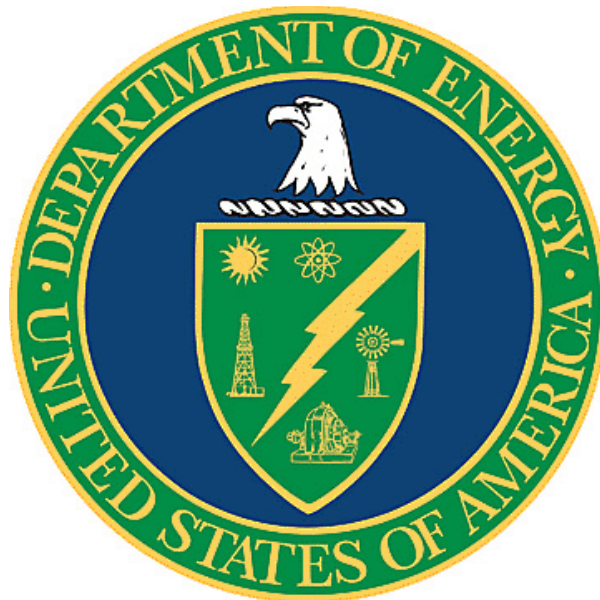


**U. S. Department of Energy  
Carlsbad Field Office**

**ANNUAL TRANSURANIC WASTE INVENTORY  
REPORT – 2024  
(Data Cutoff Date 12/31/2023)**

**DOE-TRU-2024-3425.0**



**Effective: December 2024**

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**REVISION SUMMARY**

| <b>Revision Number</b> | <b>Pages Affected</b> | <b>Description of Revision</b>   |
|------------------------|-----------------------|--|
| 0                      | All                   | Initial issue to document the inventory estimate of transuranic waste reported by the transuranic waste generator sites as of December 31, 2023. |

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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                      |
| INL            | Idaho National Laboratory                            |
| 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 <sup>3</sup> | 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                                     |
| SWB      | standard waste box                                      |
| TRU      | transuranic   |
| WAC      | Waste Acceptance Criteria                               |
| WAP      | Waste Analysis Plan                                     |
| 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 – 2024* (ATWIR-2024) is to document the inventory estimate of transuranic (TRU) waste reported by the TRU waste generator sites as of December 31, 2023. This report also notes changes to the inventory since the ATWIR-2023, which had a data cutoff date of December 31, 2022. 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. It supports the DOE Carlsbad Field Office (CBFO) input into documents (e.g., WIPP Documented Safety Analysis and National Environmental Policy Act evaluations), performance assessments, planned changes, and other planning and documentation as needed for the WIPP facility.

The TRU waste generator sites were asked to report the most comprehensive TRU waste inventory estimate available, including waste from decontamination and decommissioning activities 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-2024 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, except for section 4.2, which provides information on TRU waste projected beyond CY 2033.

Waste streams are designated by the TRU waste generator sites as either WIPP-bound (appear to have no significant technical or legal constraints limiting the waste from being eligible for disposal in the WIPP facility) or potential (have uncertainties regarding eligibility for emplacement in the WIPP facility, as of the data cutoff date for this report). Regardless of its designation or status within this report, TRU waste must satisfy all WIPP waste characterization and certification criteria (e.g., WIPP Waste Acceptance Criteria, WIPP Hazardous Waste Facility Permit, and WIPP Waste Analysis Plan) before it can be disposed of in the WIPP facility.

This ATWIR-2024 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-2023. This inventory report includes estimates for TRU waste volume, waste and packaging material mass, chemical component mass, and radionuclide activity (decayed to common years 2023 and 2033). Table ES-1 presents an overview of the changes in the data from the ATWIR-2023. Specific details of these changes are discussed in section 3.0 of this report.

**Table ES-1. Summary of Parameter Changes**

| <b>Parameter</b>                                    | <b>ATWIR-2023<br/>Total</b> | <b>ATWIR-2024<br/>Total</b> | <b>Net Change</b> | <b>Percent<br/>Change</b> |
|---|-----------------------------|-----------------------------|-------------------|---------------------------|
| Volume (m <sup>3</sup> ) <sup>1</sup>               | 1.15E+05                    | 1.15E+05                    | -7.87E+02         | -0.68%                    |
| Waste and Packaging Material Mass (kg) <sup>1</sup> | 9.89E+07                    | 9.21E+07                    | -6.81E+06         | -6.89%                    |
| Radionuclide Activity (Ci) <sup>1,2</sup>           | 4.93E+06                    | 5.30E+06                    | +3.71E+05         | +7.52%                    |
| Complexing Agents Mass (kg) <sup>3</sup>            | 1.75E+04                    | 1.39E+04                    | -3.52E+03         | -20.15%                   |
| Oxyanions Mass (kg) <sup>3</sup>                    | 6.68E+05                    | 4.53E+05                    | -2.15E+05         | -32.20%                   |

Data Source: Comprehensive Inventory Database (CID) Data Versions D.22.01.33 (Los Alamos National Laboratory – Carlsbad Operations [LANL-CO] 2023a) and D.23.00.33 (LANL-CO 2024a) are used for the ATWIR-2023 and the ATWIR-2024, respectively.

Note: Actual numeric values in this table are rounded to three significant figures for presentation purposes.

<sup>1</sup>Data include stored and projected values from WIPP-bound waste streams at the TRU waste generator sites, waste emplaced at the WIPP facility, and waste in temporary storage at Waste Control Specialists, LLC. Data in this table are presented as follows: volume in cubic meters (m<sup>3</sup>), mass in kilograms (kg), and activity in curies (Ci).

<sup>2</sup>Data decay-corrected through CY 2033.

<sup>3</sup>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.

Under the WIPP Land Withdrawal Act, the WIPP facility is authorized to dispose of 6.2 million cubic feet (175,564 m<sup>3</sup>) of TRU waste. Section 4.0 discusses potential TRU waste streams and waste projected to be generated beyond CY 2033. If all potential waste being reported became eligible for disposal at the WIPP facility and added to the current volume estimate of WIPP-bound stored and projected TRU waste up through and beyond CY 2033, the total waste volume would be approximately 175,000 m<sup>3</sup>.

## 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 – 2024* (ATWIR-2024), with a data cutoff date of December 31, 2023, provides the DOE Carlsbad Field Office (CBFO) with the TRU waste generator sites' best estimate of their existing and future 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) reviews, design changes, identifying waste containing oxyanions and complexing agents, and various analyses, such as the WIPP Documented Safety Analysis (DSA). This ATWIR-2024 focuses on all TRU waste stored or projected to be generated through calendar year (CY) 2033 at the TRU waste generator sites.

When submitting inventory updates, the TRU waste generator sites assign each waste stream a status of “WIPP-bound” or “potential.” As of the data cutoff date for this report, WIPP-bound waste streams appear to have no significant technical or legal constraints limiting the waste from being eligible for disposal in the WIPP facility after all waste characterization and certification criteria have been satisfied. In contrast, potential waste streams have meaningful uncertainties regarding their eligibility due to technical or legal considerations.

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-2023 (U.S. DOE 2024) with a data cutoff date of December 31, 2022.
- Section 4.0 discusses potential TRU waste streams and waste projected to be generated beyond CY 2033.
- Section 5.0 presents a summary of this report.
- Section 6.0 provides a glossary.
- 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.
- Appendix C presents a crosswalk of waste streams between ATWIR-2023 and ATWIR-2024.

This ATWIR-2024 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 2023). 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 2023b), and LCO-QP19-1, *Software Quality Assurance* (LANL-CO 2023c).

## 1.1 Annual TRU Waste Inventory Updates

The TRU waste inventory estimates at the generator sites change frequently due to retrieval, treatment, characterization, and shipping activities; therefore, the generator sites update the inventory estimates annually. This report is an update based on the sites' estimated inventory as of December 31, 2023.

Since the ATWIR-2023, several changes have affected the volume and the non-radiological and radiological characteristics of TRU waste streams. These changes were based mainly on:

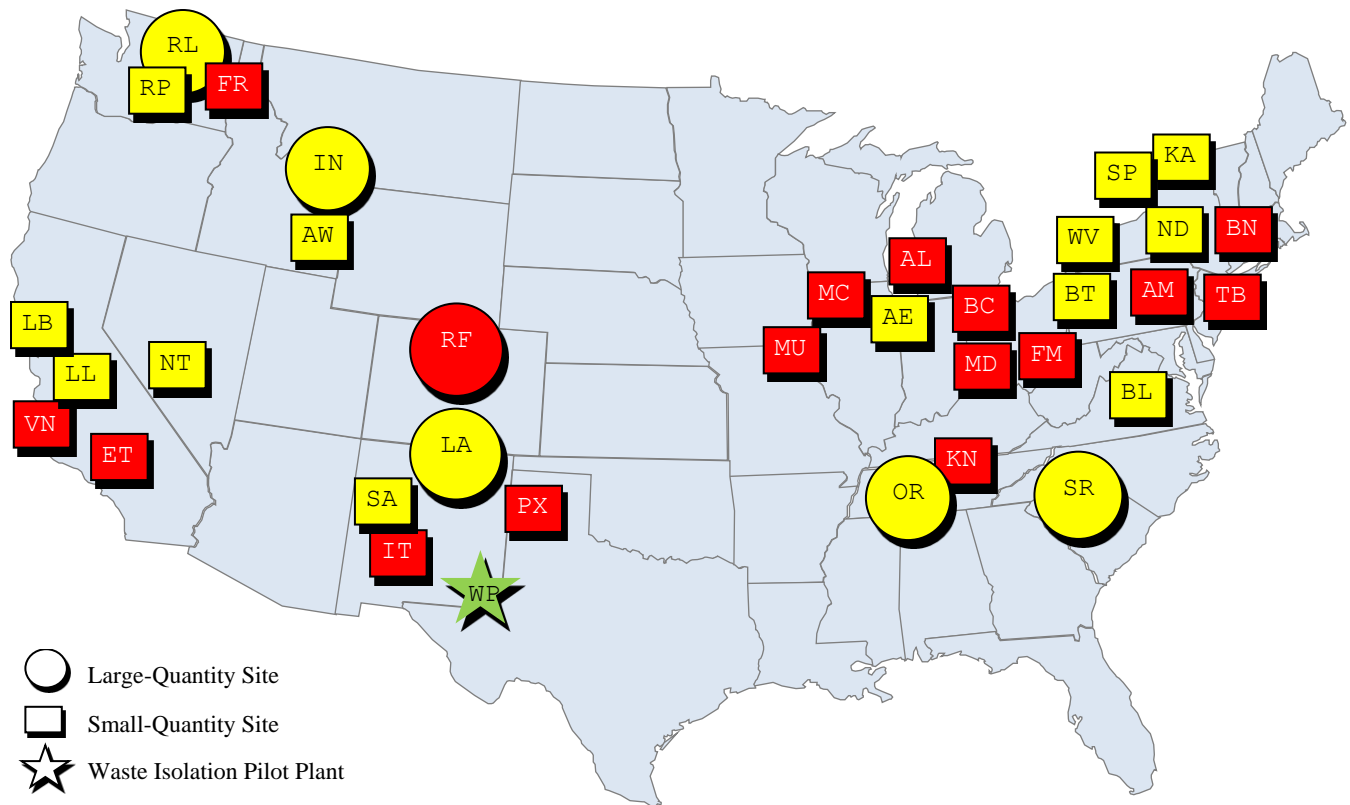
- Shipments of waste from Idaho National Laboratory (INL) to the WIPP facility;
- Reduction of anticipated volume and update to radionuclide calculations at Los Alamos National Laboratory (LANL);
- Reduction in the estimated number of shielded containers to be used and revision to query methodologies at Hanford (Richland) Site (RL);
- Reassignment of TRU waste previously reported by Savannah River Site (SRS) from potential to WIPP-bound;
- Acquisition of new waste 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 (LQs) across the country. This figure presents the DOE TRU waste generator sites as of December 31, 2023, 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: Babcock and Wilcox Nuclear Energy Services (BL), Hanford Site - Office of River Protection (RP), and West Valley Demonstration Project (WV). Potential TRU waste is discussed in section 4.1 of this report.

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



- Large-Quantity Site
- Small-Quantity Site
- Waste Isolation Pilot Plant

**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             |
| 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              |
| KN | Knolls Atomic Power Laboratory-Nuclear Fuel Services |
| 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, 2023,  $\approx 55.9$  cubic meters ( $m^3$ ) of TRU waste from LANL remained in temporary storage at Waste Control Specialists, LLC (WCS), near Andrews, Texas. 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 facility. For ATWIR-2024, the TRU waste generator sites began with the inventory data used for the ATWIR-2023. They updated the information using data from their site-specific databases and acceptable knowledge reports, which provide comprehensive information about the characterized waste streams.

### 1.5 Uses of TRU Waste Inventory Information

The DOE uses TRU waste inventory information to support strategic decisions regarding waste retrieval, treatment, repackaging, characterization, shipment, and disposal initiatives. Sites develop and update site-specific project plans and schedules, detailing approaches for moving TRU waste to the WIPP facility based on current 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 performance assessments, planned changes, design changes, and various analyses, such as the WIPP DSA and NEPA reviews. The DOE/CBFO tracks radiological and non-radiological (waste and packaging materials and chemical components) information about the TRU waste destined for the WIPP facility. 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 by the Inventory Team to create 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. 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 2024b). In December 2023, in accordance with INV-SP-01, a notification was sent from DOE/CBFO (Gerle 2023) to the active TRU waste generator sites initiating 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 and 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, and WIPP Waste Analysis Plan [WAP]) before it can be disposed of at the WIPP facility.

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

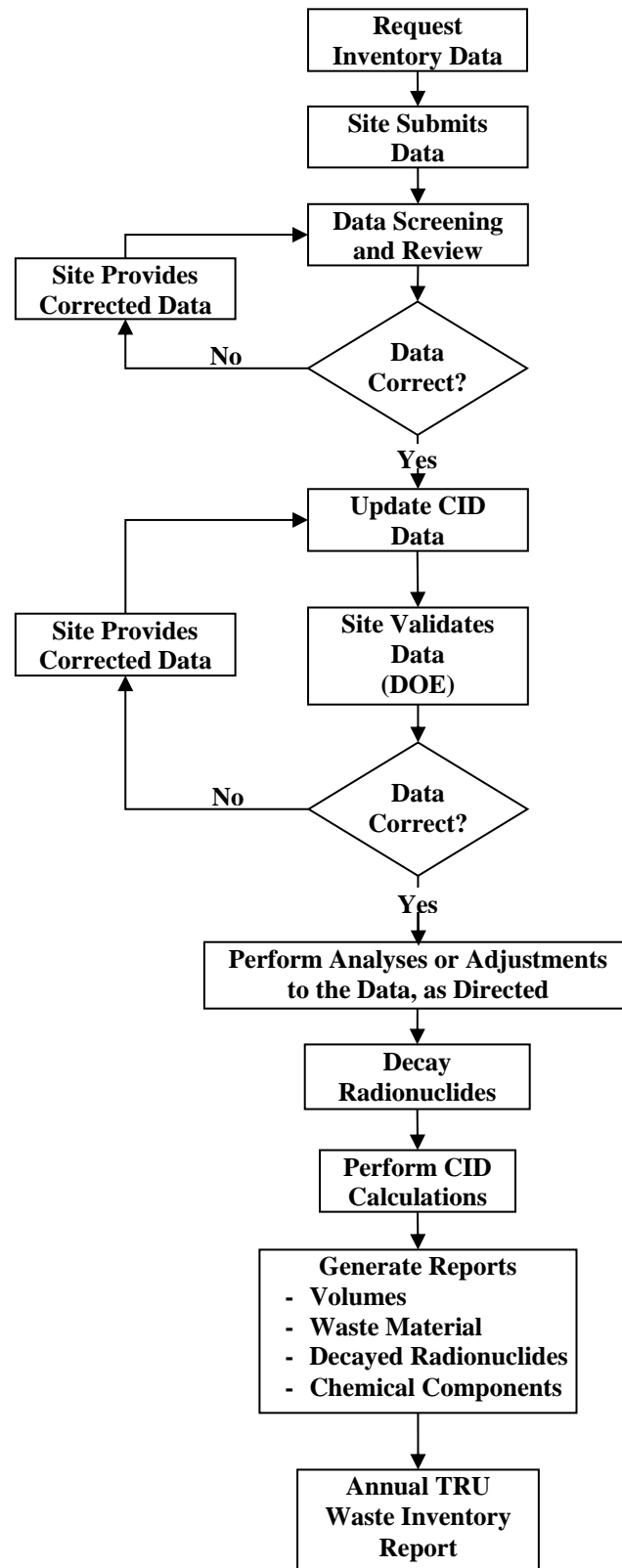
- All required information for WIPP-bound waste streams is entered, and potential waste streams meet the screening memo criteria as discussed in section 4.1;
- TRU alpha concentration is greater than 100 nanocuries per gram;
- Waste streams are categorized correctly as contact-handled (CH) or remote-handled (RH) TRU waste 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. Electronic copies of the waste stream data reports and signed validation letters were then submitted to the LANL-CO Record Center by the Inventory Team. After an analysis was performed to adjust the inventory to CY 2033, the CID data were then labeled as data version D.23.00.33 (LANL-CO 2024a). 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 complies with the DOE/CBFO QAPD requirements. The LANL-CO Software QA Program is documented in LCO-QPD-02 and LCO-QP19-1. 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 values. 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.). Where identified throughout this report, aggregate sums and calculations using raw values are determined before final rounding for presentation purposes to maintain high precision. As such, manual verification of aggregate calculations using the rounded values may not be reconcilable.

Information for emplaced waste (disposed in the underground or held in aboveground storage at the WIPP facility) 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 2024a), the WIPP and WCS data were imported into the CID.

### 2.2.1 Volume Reporting

The waste stream container information collected from the TRU waste generator sites includes stored and projected estimates in both the current and final form configurations. The current form represents the waste in its current packaging configuration. The final form represents estimates of the WIPP-approved container type(s) that will ultimately be used to ship the waste to the WIPP facility. For stored waste not already packaged in WIPP-approved containers, the reported final form container types and counts 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 maintained within the CID to the respective stored and projected container type counts reported by the TRU waste generator sites. The volume of waste emplaced at the WIPP facility and in temporary storage at WCS is directly reported as provided by the WDS.

In January 2019, the DOE/CBFO issued a memorandum (Shrader 2019) establishing a policy for implementing 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 volumes 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 and leaded rubber gloves [rubber portion only]).
- Soil – Generally consists of naturally occurring soil 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 melted or fused at high temperatures with glass-forming additives (e.g., soil or silica) in appropriate proportions to produce 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 components (steel, plastic, cellulose, rubber, and lead) 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 (Van Soest 2012), QAM-19-06 (Toothman 2019), and QAM-21-10 (Van Soest 2021). 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 on 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 determined the time basis for decay and buildup calculations (“decay-correction”).

Since assay dates 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 2023 to bring all sites' radionuclides to the common collection year. Radionuclides from the current and previous year inventories have also been decayed through CY 2033, allowing 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, per LCO-QPD-02 and LCO-QP19-1. The CID first exports the radionuclide activities reported by the TRU waste generator sites as ORIGEN-S input files for each waste stream. Next, the CID sequentially executes ORIGEN-S 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 list radionuclide activities in Ci for each waste stream. The radionuclides in Appendix A are decay-corrected through CY 2023. 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 per LANL-CO QA procedure LCO-QP9-1, *Analyses* (LANL-CO 2024c), as applicable, to support the preparation of this report.

#### **2.3.1 WDS Data Transformation 2023**

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, 2023, 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-76, *WDS Data Transformation for Insertion in the 2023 Inventory CID Import Template* (Van Soest 2024a). Transformations were included in this analysis for waste streams with waste containers residing in more than one location (WIPP underground, WIPP aboveground, 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 2023 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-77, *Adjustment of 2023 Projected Inventory to 2033 Closure Year* (Van Soest 2024b), documents the adjustment of the inventory to CY 2033 to facilitate equivalent comparison with the ATWIR-2023 inventory. After the modifications described within INV-SAR-77 were performed on the updated inventory, the radionuclide activities underwent decay calculations. The data version was then labeled D.23.00.33 (LANL-CO 2024a) and is used for the ATWIR-2024 inventory throughout this report.

### **3.0 TRU WASTE INVENTORY ESTIMATES AND CHANGES**

This section presents the TRU waste inventory data collected and reported using the methodology discussed in section 2.0. Actual numeric 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 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

estimated volumes, waste and packaging materials, and radionuclides in this report to the respective ATWIR-2023 estimated 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 [infocntr@wipp.ws](mailto: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 discusses changes since the ATWIR-2023.

#### 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  $\approx 37,600 \text{ m}^3$  of CH-TRU waste is currently being reported at the sites. This waste could be shipped to the WIPP facility 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, INL, LANL, Oak Ridge National Laboratory [ORNL], and SRS).

Table 3-2 shows the total RH-TRU stored, projected, and anticipated waste volume. The sites are currently reporting an estimated anticipated final form total of  $\approx 1,440 \text{ m}^3$  of RH-TRU waste, which could be shipped to the WIPP facility in the future, provided all WIPP requirements are met. Approximately 95 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 <sup>3</sup> ) | Projected Volume (m <sup>3</sup> ) | Anticipated Volume (m <sup>3</sup> ) |
|--|---------------------------------|------------------------------------|--------------------------------------|
| Argonne National Laboratory                  | 4.14E+01                        | 7.56E+00                           | 4.89E+01                             |
| Hanford (Richland) Site                      | 1.07E+04                        | 5.52E+03                           | 1.62E+04                             |
| Idaho National Laboratory                    | 9.27E+03                        | --                                 | 9.27E+03                             |
| 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       | 2.29E+02                        | 2.28E+02                           | 4.56E+02                             |
| Los Alamos National Laboratory               | 4.53E+03                        | 5.22E+03                           | 9.75E+03                             |
| Material and Fuels Complex                   | --                              | 1.47E+01                           | 1.47E+01                             |
| Nevada National Security Site                | 7.90E+01                        | 6.77E+01                           | 1.47E+02                             |
| Nuclear Radiation Development Site           | 2.10E+00                        | --                                 | 2.10E+00                             |

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

| TRU Waste Generator Site          | Stored Volume (m <sup>3</sup> ) | Projected Volume (m <sup>3</sup> ) | Anticipated Volume (m <sup>3</sup> ) |
|-----------------------------------|---------------------------------|------------------------------------|--------------------------------------|
| Oak Ridge National Laboratory     | 3.00E+02                        | 1.01E+02                           | 4.01E+02                             |
| Sandia National Laboratories      | 1.57E+01                        | 7.52E+01                           | 9.09E+01                             |
| Savannah River Site               | 3.84E+02                        | 7.99E+02                           | 1.18E+03                             |
| Separations Process Research Unit | 6.27E+00                        | --                                 | 6.27E+00                             |
| <b>Grand Total</b>                | <b>2.55E+04</b>                 | <b>1.20E+04</b>                    | <b>3.76E+04</b>                      |

Data Source: CID Data Version D.23.00.33 (LANL-CO 2024a). 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 <sup>3</sup> ) | Projected Volume (m <sup>3</sup> ) | Anticipated Volume (m <sup>3</sup> ) |
|-----------------------------------|---------------------------------|------------------------------------|--------------------------------------|
| Argonne National Laboratory       | 2.09E+01                        | 1.00E+01                           | 3.09E+01                             |
| Bettis Atomic Power Laboratory    | 7.56E+00                        | --                                 | 7.56E+00                             |
| Hanford (Richland) Site           | 7.70E+02                        | 7.25E+01                           | 8.42E+02                             |
| Idaho National Laboratory         | 2.11E+02                        | --                                 | 2.11E+02                             |
| Los Alamos National Laboratory    | 8.01E+01                        | --                                 | 8.01E+01                             |
| Material and Fuels Complex        | 6.30E+00                        | 1.89E+01                           | 2.52E+01                             |
| Oak Ridge National Laboratory     | 1.14E+02                        | 8.97E+01                           | 2.03E+02                             |
| Sandia National Laboratories      | 3.15E+00                        | 6.60E-01                           | 3.81E+00                             |
| Savannah River Site               | 3.15E+01                        | --                                 | 3.15E+01                             |
| Separations Process Research Unit | 2.52E+00                        | --                                 | 2.52E+00                             |
| <b>Grand Total</b>                | <b>1.25E+03</b>                 | <b>1.92E+02</b>                    | <b>1.44E+03</b>                      |

Data Source: CID Data Version D.23.00.33 (LANL-CO 2024a). 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 the final form total volume of the combined CH- and RH-TRU waste between the ATWIR-2023 and this report. The net change column includes both increases and decreases in the 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  $\approx 3,740$  m<sup>3</sup>. This decrease, combined with the net increase of  $\approx 2,960$  m<sup>3</sup> of waste emplaced at the WIPP facility during CY 2023, results in an overall reduction of  $\approx 787$  m<sup>3</sup>.

As shown in Table 3-3, the majority of the decrease in anticipated volume is attributed to INL, LANL, and RL, with a combined decrease of  $\approx 3,620 \text{ m}^3$ . INL reflected the largest decrease of any site ( $\approx 1,340 \text{ m}^3$ ) in anticipated volume. Contributing factors include the emplacement of TRU waste from INL ( $\approx 2,490 \text{ m}^3$ ) at the WIPP facility during CY 2023, partially countered by waste generated from the INL sludge repackaging project. The second largest reduction in anticipated volume is attributed to LANL ( $\approx 1,190 \text{ m}^3$ ), mainly due to changes made from the site's review of data for standard waste boxes (SWBs) and associated inner containers for waste stream LA-MHD01.001. The third largest decrease in anticipated volume is attributed to RL ( $\approx 1,090 \text{ m}^3$ ), primarily due to the decrease in the number of shielded containers used for packaging waste for waste streams RL105-09 and RL300-08.

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

| TRU Waste Generator Site                | ATWIR-2023<br>Total<br>( $\text{m}^3$ ) | ATWIR-2024<br>Total<br>( $\text{m}^3$ ) | Net<br>Change<br>( $\text{m}^3$ ) |
|---|---|---|-----------------------------------|
| Hanford (Richland) Site                 | 1.81E+04                                | 1.70E+04                                | -1.09E+03                         |
| Idaho National Laboratory               | 1.08E+04                                | 9.48E+03                                | -1.34E+03                         |
| Los Alamos National Laboratory          | 1.10E+04                                | 9.83E+03                                | -1.19E+03                         |
| Oak Ridge National Laboratory           | 7.57E+02                                | 6.04E+02                                | -1.53E+02                         |
| Savannah River Site                     | 1.18E+03                                | 1.21E+03                                | +3.49E+01                         |
| Small-Quantity Sites                    | 8.45E+02                                | 8.36E+02                                | -8.75E+00                         |
| <b>Anticipated Total</b>                | <b>4.28E+04</b>                         | <b>3.90E+04</b>                         | <b>-3.74E+03</b>                  |
| WIPP (Emplaced)                         | 7.26E+04                                | 7.55E+04                                | +2.96E+03                         |
| WCS (Temporary Storage)                 | 5.59E+01                                | 5.59E+01                                | --                                |
| <b>Emplaced/Temporary Storage Total</b> | <b>7.26E+04</b>                         | <b>7.56E+04</b>                         | <b>+2.96E+03</b>                  |
| <b>Grand Total</b>                      | <b>1.15E+05</b>                         | <b>1.15E+05</b>                         | <b>-7.87E+02</b>                  |

Data Source: CID Data Versions D.22.01.33 (LANL-CO 2023a) and D.23.00.33 (LANL-CO 2024a).

### 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. This section also discusses changes to the data since the ATWIR-2023.

#### 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**

| <b>Waste Material</b>         | <b>CH Mass (kg)</b> | <b>RH Mass (kg)</b> | <b>Total Mass (kg)</b> |
|-------------------------------|---------------------|---------------------|------------------------|
| Aluminum-based Metal/Alloys   | 1.48E+05            | 9.83E+03            | <b>1.57E+05</b>        |
| Cellulose                     | 8.66E+05            | 4.44E+04            | <b>9.10E+05</b>        |
| Cement                        | 1.15E+06            | 4.41E+03            | <b>1.15E+06</b>        |
| Iron-based Metal/Alloys       | 4.77E+06            | 1.72E+05            | <b>4.94E+06</b>        |
| Other Inorganic Materials     | 1.52E+06            | 1.50E+05            | <b>1.67E+06</b>        |
| Other Metal/Alloys            | 3.48E+05            | 2.54E+04            | <b>3.74E+05</b>        |
| Plastic                       | 8.58E+05            | 1.04E+05            | <b>9.62E+05</b>        |
| Rubber                        | 2.04E+05            | 1.58E+04            | <b>2.20E+05</b>        |
| Soil                          | 1.87E+06            | 1.07E+04            | <b>1.88E+06</b>        |
| Solidified Inorganic Material | 1.56E+06            | 2.24E+04            | <b>1.58E+06</b>        |
| Solidified Organic Material   | 2.54E+05            | 2.20E+03            | <b>2.56E+05</b>        |
| Vitrified                     | --                  | --                  | --                     |
| Packaging Material, Cellulose | 1.17E+06            | --                  | <b>1.17E+06</b>        |
| Packaging Material, Lead      | --                  | 3.50E+06            | <b>3.50E+06</b>        |
| Packaging Material, Plastic   | 1.06E+06            | 1.18E+05            | <b>1.17E+06</b>        |
| Packaging Material, Rubber    | 2.17E+04            | 1.19E+03            | <b>2.29E+04</b>        |
| Packaging Material, Steel     | 1.09E+07            | 4.04E+06            | <b>1.49E+07</b>        |
| <b>Grand Total</b>            | <b>2.67E+07</b>     | <b>8.22E+06</b>     | <b>3.49E+07</b>        |

Data Source: CID Data Version D.23.00.33 (LANL-CO 2024a). 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-2023 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 increases and decreases in waste stream mass reported by the TRU waste generator sites.

Table 3-5 shows that the total anticipated waste material mass decreased by  $\approx 4.79$  million kg at the generator sites and increased by  $\approx 1.52$  million kg for the waste emplaced at the WIPP and in temporary storage. These changes result in an overall decrease in waste material mass of  $\approx 3.27$  million kg. This net decrease is mainly attributed to RL waste stream RL200-02, which, as a result of an updated query methodology, was reported to have  $\approx 2.78$  million kg less waste material mass than in ATWIR-2023.

Anticipated packaging material mass decreased by  $\approx 4.21$  million kg at the generator sites and increased by  $\approx 669,000$  kg for the waste emplaced at the WIPP and in temporary storage. These changes result in an overall decrease in packaging material masses of  $\approx 3.54$  million kg. This net decrease is mainly attributed to RL ( $\approx 4.84$  million kg), countered by a net increase at SRS ( $\approx 1.16$

million kg). The decrease at RL is primarily due to the reduction of final form container counts for waste streams RL105-09, RL300-08, and RL325-08, which are now estimated to be repackaged using fewer shielded containers. The increase at SRS is primarily due to waste stream SR-KAC-PuOx-2 being designated as a WIPP-bound waste stream.

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

| Waste and Packaging Material                      | ATWIR-2023 Total (kg) | ATWIR-2024 Total (kg) | Net Change (kg)  |
|---|-----------------------|-----------------------|------------------|
| <b>Waste Material</b>                             |                       |                       |                  |
| Aluminum-based Metal/Alloys                       | 1.66E+05              | 1.57E+05              | -8.96E+03        |
| Cellulose   | 8.08E+05              | 9.10E+05              | +1.02E+05        |
| Cement  | 1.19E+06              | 1.15E+06              | -3.81E+04        |
| Iron-based Metal/Alloys                           | 5.05E+06              | 4.94E+06              | -1.11E+05        |
| Other Inorganic Materials                         | 3.83E+06              | 1.67E+06              | -2.16E+06        |
| Other Metal/Alloys                                | 2.33E+05              | 3.74E+05              | +1.41E+05        |
| Plastic   | 9.96E+05              | 9.62E+05              | -3.36E+04        |
| Rubber  | 2.36E+05              | 2.20E+05              | -1.65E+04        |
| Soil  | 3.22E+06              | 1.88E+06              | -1.34E+06        |
| Solidified Inorganic Material                     | 2.86E+06              | 1.58E+06              | -1.29E+06        |
| Solidified Organic Material                       | 2.98E+05              | 2.56E+05              | -4.19E+04        |
| Vitrified   | --                    | --                    | --               |
| <b>Anticipated Waste Total</b>                    | <b>1.89E+07</b>       | <b>1.41E+07</b>       | <b>-4.79E+06</b> |
| WIPP (Emplaced) Waste Total                       | 3.21E+07              | 3.36E+07              | +1.52E+06        |
| WCS (Temporary Storage) Waste Total               | 2.89E+04              | 2.89E+04              | --               |
| <b>Emplaced/Temporary Storage Waste Total</b>     | <b>3.21E+07</b>       | <b>3.36E+07</b>       | <b>+1.52E+06</b> |
| <b>Packaging Material</b>                         |                       |                       |                  |
| Packaging Material, Cellulose                     | 9.69E+05              | 1.17E+06              | +2.02E+05        |
| Packaging Material, Lead                          | 5.88E+06              | 3.50E+06              | -2.38E+06        |
| Packaging Material, Plastic                       | 1.29E+06              | 1.17E+06              | -1.13E+05        |
| Packaging Material, Rubber                        | 2.39E+04              | 2.29E+04              | -9.61E+02        |
| Packaging Material, Steel                         | 1.69E+07              | 1.49E+07              | -1.91E+06        |
| <b>Anticipated Packaging Total</b>                | <b>2.50E+07</b>       | <b>2.08E+07</b>       | <b>-4.21E+06</b> |
| WIPP (Emplaced) Packaging Total                   | 2.28E+07              | 2.35E+07              | +6.69E+05        |
| WCS (Temporary Storage) Packaging Total           | 3.03E+04              | 3.03E+04              | --               |
| <b>Emplaced/Temporary Storage Packaging Total</b> | <b>2.29E+07</b>       | <b>2.35E+07</b>       | <b>+6.69E+05</b> |
| <b>Grand Total</b>                                | <b>9.89E+07</b>       | <b>9.21E+07</b>       | <b>-6.81E+06</b> |

Data Source: CID Data Versions D.22.01.33 (LANL-CO 2023a) and D.23.00.33 (LANL-CO 2024a).

### 3.2.3 Complexing Agents and Oxyanions

This report is the mechanism the DOE uses to summarize the mass of 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 collects the mass of complexing agents and oxyanions destined for emplacement in the WIPP facility 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 and the 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 complexing agents and oxyanions listed in Table 3-6 and therefore may have limited information on these chemical components. When limited information is available, a site will determine its best method for estimating the mass of a waste stream's 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      | SRS      | Grand Total     |
|--------------------------|----------|--------------|----------|----------|----------|----------|----------|----------|----------|-----------------|
| <b>Complexing Agents</b> |          |              |          |          |          |          |          |          |          |                 |
| Acetate                  | --       | 5.01E+03     | 8.00E-02 | --       | --       | --       | 6.42E+00 | --       | --       | <b>5.02E+03</b> |
| Acetic Acid              | 1.46E-01 | 2.50E+03     | 1.14E+03 | 5.41E-03 | --       | 1.79E+00 | 6.42E+00 | 2.00E-09 | --       | <b>3.64E+03</b> |
| Citrate                  | --       | 5.96E+01     | 2.66E-02 | --       | --       | --       | 6.42E+00 | --       | --       | <b>6.60E+01</b> |
| Citric Acid              | 1.46E-01 | 1.14E+03     | 2.08E+00 | 4.38E+02 | --       | 1.79E+00 | 6.42E+00 | 2.00E-09 | 1.62E+01 | <b>1.60E+03</b> |
| EDTA                     | 1.46E-01 | 1.81E+01     | 1.30E+00 | --       | --       | 5.69E-01 | 6.42E+00 | --       | --       | <b>2.65E+01</b> |
| Oxalate                  | 1.46E-01 | 3.49E+01     | 2.16E-03 | --       | --       | --       | 6.42E+00 | --       | --       | <b>4.15E+01</b> |
| Oxalic Acid              | 1.46E-01 | 3.51E+03     | 1.27E+01 | 7.48E+00 | --       | 1.79E+00 | 6.42E+00 | --       | --       | <b>3.54E+03</b> |
| <b>Oxyanions</b>         |          |              |          |          |          |          |          |          |          |                 |
| Nitrate                  | 2.13E+02 | 7.36E+04     | 2.27E+04 | 1.82E+05 | 6.00E-02 | 1.79E+00 | 6.42E+00 | 1.00E-06 | 1.85E+01 | <b>2.79E+05</b> |
| Phosphate                | 1.69E+02 | 7.08E+04     | 1.17E+04 | --       | --       | 1.79E+00 | 6.42E+00 | --       | --       | <b>8.26E+04</b> |
| Sulfate                  | 1.70E+02 | 1.73E+04     | 4.26E+04 | 3.09E+04 | --       | 1.79E+00 | 6.42E+00 | --       | 1.62E+01 | <b>9.10E+04</b> |

Data Source: CID Data Version D.23.00.33 (LANL-CO 2024a). 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-2023 and this report. These data represent only the complexing agents and oxyanions currently being reported by the TRU waste generator sites. Since these data are not tracked in the WDS, they do not include complexing agents or oxyanions emplaced in the WIPP facility or temporary storage.

As shown in Table 3-7, the total change in anticipated complexing agent mass decreased by  $\approx 3,520$  kg, and the total change in anticipated oxyanion mass decreased by  $\approx 215,000$  kg. These decreases may primarily be attributed to the emplacement of significant portions of INL waste streams IN-ID-SDA-Debris, IN-ID-SDA-Sludge, and IN-ID-SDA-Soil, which accounted for a combined decrease of  $\approx 2,060$  kg in complexing agents and  $\approx 108,000$  kg in oxyanions. In addition, RL waste streams RL200-02 and RL325-01 had a combined decrease of  $\approx 1,330$  kg in complexing agents and  $\approx 102,000$  kg in oxyanions, primarily due to an updated query methodology.

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

| Chemical Component       | ATWIR-2023 Total (kg) | ATWIR-2024 Total (kg) | Net Change (kg)  |
|--------------------------|-----------------------|-----------------------|------------------|
| <b>Complexing Agents</b> |                       |                       |                  |
| Acetate                  | 5.12E+03              | 5.02E+03              | -9.84E+01        |
| Acetic Acid              | 6.42E+03              | 3.64E+03              | -2.78E+03        |
| Citrate                  | 2.57E+02              | 6.60E+01              | -1.91E+02        |
| Citric Acid              | 1.68E+03              | 1.60E+03              | -7.21E+01        |
| EDTA                     | 4.90E+01              | 2.65E+01              | -2.25E+01        |
| Oxalate                  | 4.10E+02              | 4.15E+01              | -3.69E+02        |
| Oxalic Acid              | 3.53E+03              | 3.54E+03              | +1.21E+01        |
| <b>Grand Total</b>       | <b>1.75E+04</b>       | <b>1.39E+04</b>       | <b>-3.52E+03</b> |
| <b>Oxyanions</b>         |                       |                       |                  |
| Nitrate                  | 3.60E+05              | 2.79E+05              | -8.09E+04        |
| Phosphate                | 1.61E+05              | 8.26E+04              | -7.83E+04        |
| Sulfate                  | 1.47E+05              | 9.10E+04              | -5.58E+04        |
| <b>Grand Total</b>       | <b>6.68E+05</b>       | <b>4.53E+05</b>       | <b>-2.15E+05</b> |

Data Source: CID Data Versions D.22.01.33 (LANL-CO 2023a) and D.23.00.33 (LANL-CO 2024a). 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 2023, and the values in Table 3-11, which shows a comparison between the ATWIR-2023 and ATWIR-2024 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 radionuclide 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 Decay-Corrected Through CY 2023**

| Radionuclide | ANL      | Hanford (RL) | INL      | KAPL-S   | LANL     | LBNL     | LLNL     | MFC      | NNSS     | NRD      | ORNL     | SNL      | SPRU     | SRS      | Grand Total     |
|--------------|----------|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------------|
| Ac-225       | 1.42E-05 | 2.79E-03     | 2.45E-05 | 1.08E-04 | 1.68E-01 | 5.02E-19 | 9.72E-06 | 2.27E-15 | 6.89E-12 | 1.26E-12 | 4.57E+00 | 2.25E-12 | 2.92E-16 | 3.35E-04 | <b>4.74E+00</b> |
| Ac-227       | 1.18E-05 | 2.62E-04     | 1.98E-02 | 2.38E-11 | 8.48E+01 | 4.01E-23 | 3.56E+01 | 1.11E-13 | 1.01E-10 | --       | 5.50E+00 | 1.18E-10 | 2.60E-09 | 1.24E-01 | <b>1.26E+02</b> |
| Ac-228       | 2.92E-06 | 9.87E-03     | 9.45E-05 | 2.48E-09 | 2.75E-06 | 6.71E-09 | 1.05E-06 | 4.28E-20 | 4.27E-15 | --       | 2.88E-02 | 2.42E-05 | --       | 9.57E-05 | <b>3.89E-02</b> |
| Ag-108       | 1.31E-05 | 1.49E-07     | --       | --       | 1.31E-07 | --       | --       | --       | --       | --       | 1.51E-04 | --       | --       | --       | <b>1.64E-04</b> |
| Ag-108m      | 1.50E-04 | 1.71E-06     | --       | --       | 1.50E-06 | --       | --       | --       | --       | --       | 1.73E-03 | --       | --       | --       | <b>1.88E-03</b> |
| Ag-109m      | 7.25E-07 | 8.21E-07     | --       | --       | --       | --       | 3.15E-06 | --       | --       | --       | 8.82E-06 | 3.58E-08 | --       | --       | <b>1.36E-05</b> |
| Ag-110       | --       | 4.83E-23     | --       | --       | --       | --       | --       | --       | --       | --       | 2.68E-03 | --       | --       | --       | <b>2.68E-03</b> |
| Ag-110m      | --       | 3.55E-21     | --       | --       | --       | --       | --       | --       | --       | --       | 1.97E-01 | --       | --       | --       | <b>1.97E-01</b> |
| Am-241       | 2.89E+01 | 4.48E+04     | 1.68E+04 | 9.09E-02 | 4.19E+04 | 5.36E-03 | 7.05E+02 | 4.59E+01 | 9.94E+00 | 3.28E+01 | 2.42E+03 | 2.38E+00 | 2.80E-02 | 2.71E+05 | <b>3.78E+05</b> |
| Am-242       | 1.14E-04 | 1.85E-03     | --       | --       | --       | --       | 2.08E-04 | --       | --       | --       | 4.56E-03 | --       | --       | 2.09E-05 | <b>8.81E-03</b> |
| Am-242m      | 1.14E-04 | 1.85E-03     | --       | --       | --       | --       | 2.09E-04 | --       | --       | --       | 4.58E-03 | --       | --       | 2.10E-03 | <b>8.85E-03</b> |
| Am-243       | 2.90E+00 | 4.39E-01     | 2.42E-01 | --       | 9.80E-01 | 8.99E-04 | 1.80E-02 | 5.42E-03 | --       | --       | 3.47E+00 | --       | --       | 1.92E-01 | <b>8.25E+00</b> |
| Am-245       | 8.35E-09 | --           | --       | --       | 2.95E-04 | --       | --       | --       | --       | --       | 5.43E-05 | --       | --       | --       | <b>3.49E-04</b> |
| Am-246       | 5.11E-10 | --           | --       | --       | --       | --       | --       | --       | --       | --       | 5.34E-09 | --       | --       | --       | <b>5.85E-09</b> |
| At-217       | 1.42E-05 | 2.79E-03     | 2.45E-05 | 1.08E-04 | 1.68E-01 | 5.02E-19 | 9.72E-06 | 2.27E-15 | 6.89E-12 | 1.26E-12 | 4.57E+00 | 2.25E-12 | 2.92E-16 | 3.35E-04 | <b>4.74E+00</b> |
| Ba-133       | 1.96E-05 | 1.69E-04     | --       | --       | 6.42E-06 | --       | --       | --       | --       | --       | 1.50E-05 | --       | --       | 1.72E-06 | <b>2.12E-04</b> |
| Ba-137m      | 7.41E-01 | 2.51E+02     | 3.26E+00 | --       | 6.48E+00 | 6.80E-08 | 6.15E-01 | 7.45E-01 | --       | --       | 6.51E+01 | 2.86E-01 | 2.56E+00 | 3.77E-01 | <b>3.31E+02</b> |
| Ba-140       | --       | --           | --       | --       | --       | --       | --       | --       | --       | --       | 5.53E-07 | --       | --       | --       | <b>5.53E-07</b> |
| Bi-210       | 9.59E-03 | 1.39E-02     | 8.04E-05 | 1.70E-11 | 2.39E-05 | 2.71E-11 | 2.30E-08 | 5.44E-18 | 4.12E-11 | --       | 3.14E-03 | 2.50E-06 | 2.07E-11 | 8.13E-06 | <b>2.68E-02</b> |
| Bi-211       | 6.05E-06 | 2.62E-04     | 1.02E-02 | 2.38E-11 | 4.35E+01 | 3.65E-24 | 1.83E+01 | 1.51E-14 | 1.01E-10 | --       | 3.11E+00 | 1.18E-10 | 2.60E-09 | 6.41E-02 | <b>6.50E+01</b> |
| Bi-212       | 2.76E-05 | 6.83E-01     | 2.70E-03 | 2.48E-09 | 1.96E+00 | 8.99E-11 | 3.78E-04 | 3.43E-22 | 4.27E-15 | --       | 1.07E+01 | 2.42E-05 | --       | 4.45E+00 | <b>1.78E+01</b> |
| Bi-213       | 1.42E-05 | 2.79E-03     | 2.45E-05 | 1.08E-04 | 1.68E-01 | 5.01E-19 | 9.71E-06 | 2.27E-15 | 6.89E-12 | 1.26E-12 | 4.57E+00 | 2.25E-12 | 2.92E-16 | 3.35E-04 | <b>4.74E+00</b> |
| Bi-214       | 2.61E-02 | 8.01E-02     | 3.93E-02 | 7.38E-11 | 6.61E-03 | 1.33E-08 | 1.13E-05 | 1.04E-14 | 2.96E-10 | --       | 1.54E+00 | 2.23E-11 | 2.66E-10 | 3.36E-05 | <b>1.69E+00</b> |
| Bk-249       | 5.76E-04 | --           | --       | --       | 2.03E+01 | --       | --       | --       | --       | --       | 3.74E+00 | --       | --       | --       | <b>2.41E+01</b> |
| Bk-250       | 3.17E-10 | --           | --       | --       | --       | --       | --       | --       | --       | --       | 3.31E-09 | --       | --       | --       | <b>3.63E-09</b> |
| C-14         | 2.52E-03 | 6.71E-04     | --       | --       | --       | --       | --       | --       | --       | --       | 1.46E-01 | --       | 1.39E-06 | 1.81E-03 | <b>1.51E-01</b> |
| Ca-45        | 1.01E-06 | --           | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | <b>1.01E-06</b> |
| Cd-109       | 7.25E-07 | 8.21E-07     | --       | --       | --       | --       | 3.15E-06 | --       | --       | --       | 8.82E-06 | 3.58E-08 | --       | --       | <b>1.36E-05</b> |
| Cd-113       | 6.35E-25 | 6.86E-25     | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | <b>1.32E-24</b> |
| Cd-113m      | 6.07E-05 | 4.02E-07     | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | <b>6.11E-05</b> |
| Ce-139       | --       | --           | --       | --       | --       | --       | --       | --       | --       | --       | 1.33E-05 | 1.76E-17 | --       | --       | <b>1.33E-05</b> |
| Ce-141       | --       | --           | --       | --       | --       | --       | --       | --       | --       | --       | 2.69E-01 | --       | --       | --       | <b>2.69E-01</b> |
| Ce-144       | 1.08E-03 | 1.64E-04     | --       | --       | 3.72E-05 | --       | --       | 4.89E-02 | --       | --       | 2.58E-01 | --       | --       | --       | <b>3.08E-01</b> |
| Cf-249       | 2.77E-02 | 6.04E-02     | 9.41E-02 | --       | 4.93E-01 | 2.12E-03 | 3.49E+00 | --       | --       | --       | 1.01E+00 | --       | --       | 1.21E-03 | <b>5.18E+00</b> |
| Cf-250       | 1.53E-03 | 2.37E-02     | --       | --       | --       | 3.76E-08 | --       | --       | --       | --       | 2.49E+00 | --       | --       | --       | <b>2.52E+00</b> |
| Cf-251       | 2.14E-04 | 1.23E-03     | --       | --       | --       | --       | 9.78E-06 | --       | --       | --       | 1.07E-01 | --       | --       | 6.78E-04 | <b>1.09E-01</b> |
| Cf-252       | 1.15E-05 | 5.32E-05     | --       | --       | --       | --       | 1.96E-11 | --       | --       | --       | 2.19E+01 | --       | --       | 6.44E-02 | <b>2.20E+01</b> |
| Cf-253       | --       | --           | --       | --       | --       | --       | --       | --       | --       | --       | 6.99E-06 | --       | --       | --       | <b>6.99E-06</b> |
| Cl-36        | 1.38E-07 | --           | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | <b>1.38E-07</b> |
| Cm-242       | 2.04E-04 | 1.53E-03     | --       | --       | 2.37E+01 | --       | 2.41E-05 | --       | --       | --       | 6.71E-01 | --       | --       | 1.73E-03 | <b>2.44E+01</b> |
| Cm-243       | 9.03E-03 | 1.46E-01     | 3.57E+00 | --       | 2.43E-01 | 3.33E-05 | 3.91E-02 | 1.75E-02 | --       | --       | 1.54E+00 | --       | --       | 1.33E-02 | <b>5.58E+00</b> |
| Cm-244       | 1.03E-01 | 7.91E+01     | 2.23E-01 | --       | 7.78E+02 | 6.22E-04 | 1.07E+02 | 7.00E-01 | --       | --       | 1.81E+03 | --       | --       | 2.17E+01 | <b>2.80E+03</b> |
| Cm-245       | 3.11E-05 | 1.11E+00     | 1.64E-04 | --       | 6.03E-04 | 1.73E-08 | 1.08E-02 | --       | --       | --       | 4.11E-01 | --       | --       | 3.11E-03 | <b>1.54E+00</b> |
| Cm-246       | 2.25E-03 | 7.04E-04     | --       | --       | --       | 5.52E-13 | --       | --       | --       | --       | 7.36E+00 | --       | --       | 1.36E-03 | <b>7.37E+00</b> |
| Cm-247       | 3.75E-10 | 2.54E-09     | --       | --       | --       | --       | 1.87E-06 | --       | --       | --       | 1.74E-01 | --       | --       | 7.60E-03 | <b>1.82E-01</b> |
| Cm-248       | 7.38E-05 | 7.81E-05     | --       | --       | --       | 8.43E-08 | 2.19E-01 | --       | --       | --       | 1.86E-01 | --       | --       | 4.68E-06 | <b>4.06E-01</b> |

**Table 3-8. Total CH Radionuclide Activity (Ci) on a Site Basis Decay-Corrected Through CY 2023**  
Continued

| Radionuclide | ANL      | Hanford (RL) | INL      | KAPL-S   | LANL     | LBNL     | LLNL     | MFC      | NNSS     | NRD      | ORNL     | SNL      | SPRU     | SRS      | Grand Total     |
|--------------|----------|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------------|
| Cm-249       | --       | --           | --       | --       | --       | --       | --       | --       | --       | --       | 2.17E-08 | --       | --       | --       | <b>2.17E-08</b> |
| Cm-250       | 2.26E-09 | --           | --       | --       | --       | --       | --       | --       | --       | --       | 2.37E-08 | --       | --       | --       | <b>2.59E-08</b> |
| Co-58        | --       | 1.97E-14     | --       | --       | --       | --       | --       | --       | --       | --       | 3.01E-04 | --       | --       | --       | <b>3.01E-04</b> |
| Co-60        | 3.63E-03 | 9.52E-01     | 9.98E-03 | --       | 2.49E-04 | --       | 2.26E-06 | 2.24E-03 | --       | --       | 9.37E-02 | 3.13E-05 | --       | 4.11E-04 | <b>1.06E+00</b> |
| Cs-134       | 3.34E-02 | 1.48E-03     | --       | --       | --       | --       | --       | 2.48E-02 | --       | --       | 1.12E-01 | --       | --       | 4.71E-07 | <b>1.72E-01</b> |
| Cs-135       | 2.60E-07 | 1.87E-07     | --       | --       | --       | --       | --       | --       | --       | --       | 1.50E-03 | --       | --       | --       | <b>1.50E-03</b> |
| Cs-137       | 7.85E-01 | 2.66E+02     | 3.45E+00 | --       | 6.86E+00 | 7.20E-08 | 6.51E-01 | 7.89E-01 | --       | --       | 6.89E+01 | 3.02E-01 | 2.71E+00 | 4.00E-01 | <b>3.50E+02</b> |
| Es-253       | --       | --           | --       | --       | --       | --       | --       | --       | --       | --       | 9.46E-06 | --       | --       | --       | <b>9.46E-06</b> |
| Eu-152       | 4.37E-05 | 1.21E-01     | 3.98E-04 | --       | 7.31E-04 | --       | 5.10E-05 | --       | --       | --       | 1.12E+01 | 5.41E-06 | --       | 9.51E-05 | <b>1.14E+01</b> |
| Eu-154       | 1.72E-02 | 1.97E+00     | --       | --       | 1.33E-04 | --       | 4.24E-03 | 5.51E-03 | --       | --       | 7.36E-01 | 1.04E-04 | --       | 1.17E-03 | <b>2.73E+00</b> |
| Eu-155       | 3.50E-03 | 9.83E-01     | --       | --       | 4.59E-05 | --       | --       | 5.91E-03 | --       | --       | 4.04E-01 | --       | --       | 6.75E-07 | <b>1.40E+00</b> |
| Fe-55        | 3.46E-03 | 7.62E-03     | --       | --       | --       | --       | --       | --       | --       | --       | 4.09E+00 | --       | --       | --       | <b>4.11E+00</b> |
| Fe-59        | 4.45E-06 | --           | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | <b>4.45E-06</b> |
| Fr-221       | 1.42E-05 | 2.79E-03     | 2.45E-05 | 1.08E-04 | 1.68E-01 | 5.02E-19 | 9.72E-06 | 2.27E-15 | 6.89E-12 | 1.26E-12 | 4.57E+00 | 2.25E-12 | 2.92E-16 | 3.35E-04 | <b>4.74E+00</b> |
| Fr-223       | 1.63E-07 | 3.61E-06     | 2.74E-04 | 3.28E-13 | 1.17E+00 | 5.54E-25 | 4.91E-01 | 1.54E-15 | 1.39E-12 | --       | 7.60E-02 | 1.63E-12 | 3.58E-11 | 1.71E-03 | <b>1.74E+00</b> |
| Gd-152       | 7.84E-21 | 2.50E-15     | 7.16E-20 | --       | 4.34E-19 | --       | 9.16E-21 | --       | --       | --       | 2.05E-15 | 1.62E-19 | --       | 3.46E-19 | <b>4.55E-15</b> |
| Gd-153       | 2.88E-09 | 2.26E-23     | --       | --       | 1.46E-06 | --       | --       | --       | --       | --       | --       | --       | --       | --       | <b>1.47E-06</b> |
| H-3          | 1.03E-02 | 9.17E+01     | --       | --       | 4.07E+04 | --       | --       | --       | --       | --       | 2.18E+01 | --       | --       | 1.86E-04 | <b>4.08E+04</b> |
| Ho-166m      | --       | --           | --       | --       | --       | --       | --       | --       | --       | --       | 7.25E-04 | --       | --       | 3.29E-07 | <b>7.25E-04</b> |
| I-129        | 1.15E-07 | 1.33E-05     | --       | --       | --       | --       | --       | --       | --       | --       | 3.22E-04 | --       | --       | 1.10E-03 | <b>1.44E-03</b> |
| In-113m      | --       | --           | --       | --       | --       | --       | --       | --       | --       | --       | --       | 7.65E-19 | --       | --       | <b>7.65E-19</b> |
| Ir-192       | --       | --           | --       | --       | --       | --       | --       | --       | --       | --       | 6.36E-07 | --       | --       | --       | <b>6.36E-07</b> |
| K-40         | 7.57E-05 | 2.08E-02     | --       | --       | 9.69E-06 | --       | 5.65E-08 | --       | --       | --       | 1.32E-04 | 2.16E-04 | --       | 4.98E-07 | <b>2.13E-02</b> |
| Kr-85        | 5.02E-03 | 1.87E-03     | --       | --       | 6.73E-02 | --       | --       | --       | --       | --       | --       | --       | --       | 8.86E-07 | <b>7.42E-02</b> |
| La-140       | --       | --           | --       | --       | --       | --       | --       | --       | --       | --       | 6.37E-07 | --       | --       | --       | <b>6.37E-07</b> |
| Mn-54        | 4.23E-04 | 4.46E-05     | --       | --       | --       | --       | --       | 6.06E-04 | --       | --       | 1.10E-05 | --       | --       | --       | <b>1.09E-03</b> |
| Na-22        | 1.16E-02 | 2.86E-04     | --       | --       | 2.83E-03 | --       | 1.05E-04 | --       | --       | --       | 3.68E-07 | --       | --       | 3.82E-04 | <b>1.52E-02</b> |
| Na-24        | --       | --           | --       | --       | 3.58E-24 | --       | --       | --       | --       | --       | --       | --       | --       | --       | <b>3.58E-24</b> |
| Nb-93m       | 8.56E-07 | 4.71E-07     | --       | --       | --       | --       | --       | --       | --       | --       | 1.26E-02 | --       | --       | --       | <b>1.26E-02</b> |
| Nb-94        | --       | 1.21E-03     | --       | --       | 2.35E-05 | --       | 2.15E-08 | --       | --       | --       | --       | --       | --       | 7.53E-08 | <b>1.23E-03</b> |
| Nb-95        | 1.14E-06 | 1.89E-13     | --       | --       | --       | --       | --       | --       | --       | --       | 2.26E-01 | --       | --       | --       | <b>2.26E-01</b> |
| Nb-95m       | 2.19E-08 | 1.01E-15     | --       | --       | --       | --       | --       | --       | --       | --       | 1.57E-03 | --       | --       | --       | <b>1.57E-03</b> |
| Nd-144       | 3.75E-20 | 1.52E-17     | --       | --       | 1.86E-19 | --       | --       | 1.69E-18 | --       | --       | 1.36E-12 | --       | --       | --       | <b>1.36E-12</b> |
| Ni-59        | --       | 1.11E-07     | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | 1.77E-10 | <b>1.11E-07</b> |
| Ni-63        | 8.62E-06 | 1.39E-02     | --       | --       | --       | --       | --       | --       | --       | --       | 1.73E+02 | --       | --       | --       | <b>1.73E+02</b> |
| Np-237       | 1.66E-02 | 2.99E+00     | 3.56E-01 | 6.35E-04 | 4.08E+00 | 8.60E-06 | 4.36E-02 | 3.88E-02 | 1.27E-04 | 1.31E-04 | 2.59E+00 | 7.79E-06 | 7.25E-08 | 4.72E-01 | <b>1.06E+01</b> |
| Np-238       | 5.14E-07 | 8.35E-06     | --       | --       | --       | --       | 9.41E-07 | --       | --       | --       | 2.06E-05 | --       | --       | 9.43E-06 | <b>3.98E-05</b> |
| Np-239       | 2.90E+00 | 4.39E-01     | 2.42E-01 | --       | 9.80E-01 | 8.99E-04 | 1.80E-02 | 5.42E-03 | --       | --       | 3.47E+00 | --       | --       | 1.92E-01 | <b>8.25E+00</b> |
| Np-240       | 1.02E-08 | 1.27E-11     | --       | --       | 4.70E-08 | 8.03E-20 | 2.09E-13 | --       | --       | --       | 1.76E-05 | --       | --       | 2.74E-16 | <b>1.76E-05</b> |
| Np-240m      | 8.52E-06 | 1.06E-08     | --       | --       | 3.92E-05 | 6.69E-17 | 1.74E-10 | --       | --       | --       | 1.47E-02 | --       | --       | 2.29E-13 | <b>1.47E-02</b> |
| P-32         | 9.36E-05 | --           | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | <b>9.36E-05</b> |
| Pa-231       | 3.17E-09 | 4.74E-04     | 5.46E-07 | 5.90E-11 | 1.54E-05 | 3.78E-20 | 6.29E-05 | 7.01E-11 | 5.54E-10 | --       | 3.55E-01 | 9.63E-10 | 2.22E-08 | 1.90E-01 | <b>5.45E-01</b> |
| Pa-233       | 1.11E-02 | 2.99E+00     | 2.43E-01 | 6.35E-04 | 2.50E+00 | 5.23E-06 | 2.67E-02 | 2.36E-02 | 1.27E-04 | 1.31E-04 | 1.58E+00 | 7.33E-06 | 7.25E-08 | 4.62E-01 | <b>7.84E+00</b> |
| Pa-234       | 2.98E-06 | 7.25E-03     | 3.40E-03 | --       | 3.86E-04 | 3.30E-13 | 1.26E-05 | 9.14E-07 | 6.71E-15 | --       | 1.10E-04 | 1.42E-08 | 2.93E-06 | 4.58E-04 | <b>1.16E-02</b> |
| Pa-234m      | 2.29E-03 | 5.58E+00     | 2.61E+00 | --       | 2.97E-01 | 2.54E-10 | 9.66E-03 | 7.03E-04 | 5.16E-12 | --       | 8.45E-02 | 1.10E-05 | 2.26E-03 | 3.52E-01 | <b>8.94E+00</b> |
| Pb-209       | 1.42E-05 | 2.79E-03     | 2.45E-05 | 1.08E-04 | 1.68E-01 | 5.01E-19 | 9.71E-06 | 2.27E-15 | 6.89E-12 | 1.26E-12 | 4.57E+00 | 2.25E-12 | 2.92E-16 | 3.35E-04 | <b>4.74E+00</b> |

**Table 3-8. Total CH Radionuclide Activity (Ci) on a Site Basis Decay-Corrected Through CY 2023**  
Continued

| Radionuclide | ANL      | Hanford (RL) | INL      | KAPL-S   | LANL     | LBNL     | LLNL     | MFC      | NNSS     | NRD      | ORNL     | SNL      | SPRU     | SRS      | Grand Total |
|--------------|----------|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------------|
| Pb-210       | 9.66E-03 | 1.39E-02     | 1.04E-04 | 1.70E-11 | 2.78E-05 | 3.50E-11 | 2.98E-08 | 9.61E-18 | 4.12E-11 | --       | 4.06E-03 | 2.50E-06 | 2.07E-11 | 8.13E-06 | 2.78E-02    |
| Pb-211       | 6.05E-06 | 2.62E-04     | 1.02E-02 | 2.38E-11 | 4.35E+01 | 3.65E-24 | 1.83E+01 | 1.51E-14 | 1.01E-10 | --       | 3.11E+00 | 1.18E-10 | 2.60E-09 | 6.41E-02 | 6.50E+01    |
| Pb-212       | 2.76E-05 | 6.83E-01     | 2.70E-03 | 2.48E-09 | 1.96E+00 | 8.99E-11 | 3.78E-04 | 3.43E-22 | 4.27E-15 | --       | 1.07E+01 | 2.42E-05 | --       | 4.45E+00 | 1.78E+01    |
| Pb-214       | 2.61E-02 | 8.01E-02     | 3.93E-02 | 7.38E-11 | 6.61E-03 | 1.33E-08 | 1.13E-05 | 1.04E-14 | 2.96E-10 | --       | 1.54E+00 | 2.23E-11 | 2.66E-10 | 3.36E-05 | 1.69E+00    |
| Pd-107       | 6.19E-07 | 1.65E-07     | --       | --       | --       | --       | --       | --       | --       | --       | 1.40E-05 | --       | --       | --       | 1.48E-05    |
| Pm-147       | 1.90E-01 | 1.71E+00     | --       | --       | --       | --       | --       | --       | --       | --       | 9.62E+01 | --       | --       | --       | 9.81E+01    |
| Po-210       | 1.47E-03 | 1.39E-02     | 5.36E-06 | 1.70E-11 | 1.10E-05 | 1.74E-12 | 1.49E-09 | 1.94E-19 | 4.12E-11 | --       | 2.06E-04 | 2.50E-06 | 2.07E-11 | 8.13E-06 | 1.56E-02    |
| Po-211       | 1.66E-08 | 7.21E-07     | 2.80E-05 | 6.53E-14 | 1.20E-01 | 1.00E-26 | 5.02E-02 | 4.14E-17 | 2.78E-13 | --       | 8.54E-03 | 3.26E-13 | 7.14E-12 | 1.76E-04 | 1.79E-01    |
| Po-212       | 1.77E-05 | 4.37E-01     | 1.73E-03 | 1.59E-09 | 1.26E+00 | 5.76E-11 | 2.42E-04 | 2.19E-22 | 2.74E-15 | --       | 6.83E+00 | 1.55E-05 | --       | 2.85E+00 | 1.14E+01    |
| Po-213       | 1.39E-05 | 2.73E-03     | 2.39E-05 | 1.06E-04 | 1.64E-01 | 4.91E-19 | 9.51E-06 | 2.22E-15 | 6.74E-12 | 1.23E-12 | 4.47E+00 | 2.21E-12 | 2.86E-16 | 3.28E-04 | 4.64E+00    |
| Po-214       | 2.61E-02 | 8.01E-02     | 3.93E-02 | 7.38E-11 | 6.61E-03 | 1.33E-08 | 1.13E-05 | 1.04E-14 | 2.96E-10 | --       | 1.54E+00 | 2.23E-11 | 2.66E-10 | 3.36E-05 | 1.69E+00    |
| Po-215       | 6.05E-06 | 2.62E-04     | 1.02E-02 | 2.38E-11 | 4.35E+01 | 3.65E-24 | 1.83E+01 | 1.51E-14 | 1.01E-10 | --       | 3.11E+00 | 1.18E-10 | 2.60E-09 | 6.41E-02 | 6.50E+01    |
| Po-216       | 2.76E-05 | 6.83E-01     | 2.70E-03 | 2.48E-09 | 1.96E+00 | 8.99E-11 | 3.78E-04 | 3.43E-22 | 4.27E-15 | --       | 1.07E+01 | 2.42E-05 | --       | 4.45E+00 | 1.78E+01    |
| Po-218       | 2.61E-02 | 8.01E-02     | 3.93E-02 | 7.38E-11 | 6.61E-03 | 1.33E-08 | 1.13E-05 | 1.04E-14 | 2.96E-10 | --       | 1.54E+00 | 2.23E-11 | 2.66E-10 | 3.36E-05 | 1.69E+00    |
| Pr-144       | 1.08E-03 | 1.64E-04     | --       | --       | 3.72E-05 | --       | --       | 4.89E-02 | --       | --       | 2.58E-01 | --       | --       | --       | 3.08E-01    |
| Pr-144m      | 1.51E-05 | 2.30E-06     | --       | --       | 5.21E-07 | --       | --       | 6.84E-04 | --       | --       | 3.61E-03 | --       | --       | --       | 4.31E-03    |
| Pu-236       | 1.35E-09 | 2.09E-09     | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | 3.44E-09    |
| Pu-238       | 2.48E+00 | 1.08E+04     | 1.07E+04 | 6.84E-01 | 3.43E+05 | 3.17E-03 | 7.06E+02 | 2.58E+00 | 1.76E+01 | --       | 4.55E+03 | 6.44E-01 | 2.67E-03 | 7.70E+04 | 4.47E+05    |
| Pu-239       | 1.20E+01 | 3.88E+04     | 1.20E+04 | 8.07E-02 | 6.33E+04 | 3.63E-04 | 7.31E+02 | 5.07E+00 | 1.33E+02 | --       | 3.36E+02 | 1.38E+01 | 2.58E-01 | 5.74E+05 | 6.90E+05    |
| Pu-240       | 3.95E+00 | 1.71E+04     | 2.82E+03 | --       | 1.59E+04 | 1.00E-05 | 3.45E+02 | 3.80E-01 | 3.02E+01 | --       | 6.28E+02 | 3.34E+00 | --       | 1.75E+05 | 2.12E+05    |
| Pu-241       | 8.76E+01 | 2.27E+05     | 1.50E+04 | --       | 2.54E+05 | 1.28E-04 | 2.10E+03 | --       | 9.89E+01 | --       | 1.22E+04 | 2.06E+01 | 2.38E-02 | 1.19E+06 | 1.70E+06    |
| Pu-242       | 2.99E-02 | 8.36E+00     | 4.32E-01 | --       | 5.62E+00 | 5.12E-20 | 7.05E-02 | 9.17E-05 | 1.66E-03 | --       | 4.02E+00 | 4.87E-04 | 6.86E-04 | 5.34E+01 | 7.20E+01    |
| Pu-243       | 3.75E-10 | 2.54E-09     | --       | --       | --       | --       | 1.87E-06 | --       | --       | --       | 1.74E-01 | --       | --       | 7.60E-03 | 1.82E-01    |
| Pu-244       | 8.53E-06 | 1.06E-08     | --       | --       | 3.92E-05 | 6.70E-17 | 1.74E-10 | --       | --       | --       | 1.47E-02 | --       | --       | 2.29E-13 | 1.47E-02    |
| Pu-246       | 5.11E-10 | --           | --       | --       | --       | --       | --       | --       | --       | --       | 5.34E-09 | --       | --       | --       | 5.85E-09    |
| Ra-223       | 6.05E-06 | 2.62E-04     | 1.02E-02 | 2.38E-11 | 4.35E+01 | 3.65E-24 | 1.83E+01 | 1.51E-14 | 1.01E-10 | --       | 3.11E+00 | 1.18E-10 | 2.60E-09 | 6.41E-02 | 6.50E+01    |
| Ra-224       | 2.76E-05 | 6.83E-01     | 2.70E-03 | 2.48E-09 | 1.96E+00 | 8.99E-11 | 3.78E-04 | 3.43E-22 | 4.27E-15 | --       | 1.07E+01 | 2.42E-05 | --       | 4.45E+00 | 1.78E+01    |
| Ra-225       | 1.91E-05 | 2.79E-03     | 4.52E-05 | 1.08E-04 | 1.68E-01 | 1.35E-18 | 1.80E-05 | 6.08E-15 | 6.89E-12 | 1.26E-12 | 4.57E+00 | 2.25E-12 | 2.92E-16 | 3.39E-04 | 4.74E+00    |
| Ra-226       | 2.62E-02 | 8.01E-02     | 3.94E-02 | 7.38E-11 | 6.62E-03 | 1.33E-08 | 1.13E-05 | 1.40E-14 | 2.96E-10 | --       | 1.54E+00 | 2.23E-11 | 2.66E-10 | 3.36E-05 | 1.69E+00    |
| Ra-228       | 2.92E-06 | 9.87E-03     | 9.45E-05 | 2.48E-09 | 2.75E-06 | 6.71E-09 | 1.05E-06 | 4.28E-20 | 4.27E-15 | --       | 2.88E-02 | 2.42E-05 | --       | 9.57E-05 | 3.89E-02    |
| Rb-87        | 1.49E-10 | --           | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | 1.49E-10    |
| Rh-103m      | --       | --           | --       | --       | --       | --       | --       | --       | --       | --       | 9.43E-02 | --       | --       | --       | 9.43E-02    |
| Rh-106       | 2.17E-03 | 2.53E-04     | --       | --       | 3.01E-04 | --       | --       | 3.49E-02 | --       | --       | 1.16E+00 | --       | --       | 1.40E-09 | 1.20E+00    |
| Rn-219       | 6.05E-06 | 2.62E-04     | 1.02E-02 | 2.38E-11 | 4.35E+01 | 3.65E-24 | 1.83E+01 | 1.51E-14 | 1.01E-10 | --       | 3.11E+00 | 1.18E-10 | 2.60E-09 | 6.41E-02 | 6.50E+01    |
| Rn-220       | 2.76E-05 | 6.83E-01     | 2.70E-03 | 2.48E-09 | 1.96E+00 | 8.99E-11 | 3.78E-04 | 3.43E-22 | 4.27E-15 | --       | 1.07E+01 | 2.42E-05 | --       | 4.45E+00 | 1.78E+01    |
| Rn-222       | 2.61E-02 | 8.01E-02     | 3.93E-02 | 7.38E-11 | 6.61E-03 | 1.33E-08 | 1.13E-05 | 1.04E-14 | 2.96E-10 | --       | 1.54E+00 | 2.23E-11 | 2.66E-10 | 3.36E-05 | 1.69E+00    |
| Ru-103       | --       | --           | --       | --       | --       | --       | --       | --       | --       | --       | 9.44E-02 | --       | --       | --       | 9.44E-02    |
| Ru-106       | 2.17E-03 | 2.53E-04     | --       | --       | 3.01E-04 | --       | --       | 3.49E-02 | --       | --       | 1.16E+00 | --       | --       | 1.40E-09 | 1.20E+00    |
| S-35         | 4.09E-03 | --           | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | 4.09E-03    |
| Sb-125       | 9.11E-05 | 8.99E-03     | --       | --       | 3.00E-05 | --       | 7.73E-06 | 1.09E-02 | --       | --       | 5.39E-02 | --       | --       | 2.67E-05 | 7.39E-02    |
| Sb-126       | 1.09E-08 | 1.29E-07     | --       | --       | 1.03E-06 | --       | --       | --       | --       | --       | 5.68E-06 | --       | --       | --       | 6.85E-06    |
| Sb-126m      | 3.57E-06 | 9.25E-07     | --       | --       | 7.39E-06 | --       | --       | --       | --       | --       | --       | --       | --       | --       | 1.19E-05    |
| Se-75        | --       | --           | --       | --       | --       | --       | --       | --       | --       | --       | 3.34E-04 | --       | --       | --       | 3.34E-04    |
| Se-79        | 1.40E-06 | 5.80E-05     | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | --       | 5.94E-05    |
| Sm-147       | 1.26E-13 | 1.69E-10     | --       | --       | --       | --       | --       | --       | --       | --       | 4.42E-09 | --       | --       | --       | 4.59E-09    |
| Sm-148       | 3.43E-38 | 1.20E-30     | 3.13E-37 | --       | 4.32E-35 | --       | 4.01E-38 | --       | --       | --       | 1.63E-15 | 9.36E-35 | --       | 1.41E-34 | 1.63E-15    |

**Table 3-8. Total CH Radionuclide Activity (Ci) on a Site Basis Decay-Corrected Through CY 2023**  
Continued

| Radionuclide       | ANL             | Hanford (RL)    | INL             | KAPL-S          | LANL            | LBNL            | LLNL            | MFC             | NNSS            | NRD             | ORNL            | SNL             | SPRU            | SRS             | Grand Total     |
|--------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Sm-151             | --              | 5.35E-03        | --              | --              | 2.95E-06        | --              | --              | --              | --              | --              | 5.12E-01        | --              | --              | --              | 5.17E-01        |
| Sn-113             | --              | --              | --              | --              | --              | --              | --              | --              | --              | --              | --              | 7.65E-19        | --              | --              | 7.65E-19        |
| Sn-119m            | --              | 2.44E-20        | --              | --              | --              | --              | --              | --              | --              | --              | --              | --              | --              | --              | 2.44E-20        |
| Sn-121             | --              | 3.31E-07        | --              | --              | 9.65E-05        | --              | --              | --              | --              | --              | --              | --              | --              | --              | 9.68E-05        |
| Sn-121m            | --              | 4.27E-07        | --              | --              | 1.24E-04        | --              | --              | --              | --              | --              | --              | --              | --              | --              | 1.25E-04        |
| Sn-126             | 3.57E-06        | 9.25E-07        | --              | --              | 7.39E-06        | --              | --              | --              | --              | --              | --              | --              | --              | --              | 1.19E-05        |
| Sr-85              | 2.64E-05        | --              | --              | --              | --              | --              | --              | --              | --              | --              | --              | 7.62E-28        | --              | --              | 2.64E-05        |
| Sr-89              | --              | --              | --              | --              | --              | --              | --              | --              | --              | --              | 9.46E-02        | --              | --              | --              | 9.46E-02        |
| Sr-90              | 5.84E-01        | 5.55E+02        | 3.79E+00        | --              | 6.42E-01        | --              | 6.73E-01        | 7.66E-01        | --              | --              | 7.40E+01        | 1.31E-02        | 1.06E-01        | 2.44E-01        | 6.36E+02        |
| Ta-182             | --              | 1.28E-15        | --              | --              | --              | --              | --              | --              | --              | --              | --              | --              | --              | --              | 1.28E-15        |
| Tc-99              | 1.62E-02        | 3.55E-02        | --              | --              | --              | --              | --              | --              | --              | --              | 2.17E+01        | --              | 1.46E-04        | 1.76E-05        | 2.18E+01        |
| Te-123             | --              | --              | --              | --              | --              | --              | --              | --              | --              | --              | --              | 6.98E-22        | --              | --              | 6.98E-22        |
| Te-123m            | --              | --              | --              | --              | --              | --              | --              | --              | --              | --              | --              | 2.49E-19        | --              | --              | 2.49E-19        |
| Te-125m            | 8.40E-06        | 2.19E-03        | --              | --              | 7.33E-06        | --              | 6.36E-07        | 8.95E-04        | --              | --              | 4.44E-03        | --              | --              | 6.52E-06        | 7.55E-03        |
| Th-227             | 8.63E-06        | 2.59E-04        | 1.45E-02        | 2.34E-11        | 6.21E+01        | 1.04E-23        | 2.61E+01        | 3.65E-14        | 9.96E-11        | --              | 4.22E+00        | 1.17E-10        | 2.56E-09        | 9.07E-02        | 9.24E+01        |
| Th-228             | 2.76E-05        | 6.83E-01        | 3.15E-03        | 2.48E-09        | 2.29E+00        | 1.19E-10        | 3.82E-04        | 5.08E-22        | 4.27E-15        | --              | 1.09E+01        | 2.42E-05        | --              | 5.18E+00        | 1.90E+01        |
| Th-229             | 2.34E-05        | 2.79E-03        | 8.65E-05        | 1.08E-04        | 1.68E-01        | 4.14E-18        | 3.46E-05        | 1.87E-14        | 6.89E-12        | 1.26E-12        | 4.57E+00        | 2.25E-12        | 2.92E-16        | 3.46E-04        | 4.74E+00        |
| Th-230             | 4.62E-04        | 1.39E-03        | 3.95E-06        | 1.39E-08        | 3.53E-03        | 4.11E-16        | 9.95E-05        | 6.46E-10        | 1.02E-07        | --              | 1.18E-02        | 1.24E-08        | 1.54E-07        | 2.99E-04        | 1.76E-02        |
| Th-231             | 6.38E-05        | 2.10E-01        | 9.16E-02        | 7.89E-08        | 5.12E-02        | 3.58E-14        | 1.06E-03        | 3.31E-05        | 2.62E-06        | --              | 5.78E-03        | 5.50E-06        | 1.31E-04        | 5.49E-03        | 3.65E-01        |
| Th-232             | 1.88E-04        | 1.56E-02        | 7.85E-03        | 2.51E-09        | 2.29E-04        | 5.60E-07        | 8.75E-05        | 7.13E-18        | 8.83E-15        | --              | 6.35E-02        | 2.42E-05        | --              | 1.44E-04        | 8.77E-02        |
| Th-234             | 2.29E-03        | 5.58E+00        | 2.61E+00        | --              | 2.97E-01        | 2.54E-10        | 9.66E-03        | 7.03E-04        | 5.16E-12        | --              | 8.45E-02        | 1.10E-05        | 2.26E-03        | 3.52E-01        | 8.94E+00        |
| Tl-206             | 1.27E-08        | 1.84E-08        | 1.06E-10        | 2.24E-17        | 3.15E-11        | 3.57E-17        | 3.04E-14        | 7.19E-24        | 5.43E-17        | --              | 4.14E-09        | 3.30E-12        | 2.73E-17        | 1.07E-11        | 3.53E-08        |
| Tl-207             | 6.04E-06        | 2.62E-04        | 1.01E-02        | 2.37E-11        | 4.34E+01        | 3.64E-24        | 1.82E+01        | 1.50E-14        | 1.01E-10        | --              | 3.10E+00        | 1.18E-10        | 2.59E-09        | 6.39E-02        | 6.48E+01        |
| Tl-208             | 9.92E-06        | 2.45E-01        | 9.72E-04        | 8.90E-10        | 7.05E-01        | 3.23E-11        | 1.36E-04        | 1.23E-22        | 1.54E-15        | --              | 3.83E+00        | 8.70E-06        | --              | 1.60E+00        | 6.38E+00        |
| Tl-209             | 2.98E-07        | 5.86E-05        | 5.14E-07        | 2.26E-06        | 3.52E-03        | 1.05E-20        | 2.04E-07        | 4.76E-17        | 1.45E-13        | 2.64E-14        | 9.59E-02        | 4.73E-14        | 6.13E-18        | 7.04E-06        | 9.95E-02        |
| U-232              | 9.89E-06        | 7.43E-01        | 8.85E-02        | --              | 6.43E+01        | --              | 1.07E-03        | --              | --              | --              | 5.30E+01        | --              | --              | 1.44E+02        | 2.62E+02        |
| U-233              | 6.58E-03        | 2.78E+00        | 9.81E+00        | 3.41E-02        | 4.17E+01        | 1.31E-12        | 3.93E+00        | 5.94E-09        | 8.58E-09        | 3.48E-09        | 2.94E+01        | 3.29E-09        | 1.25E-12        | 2.12E+00        | 8.98E+01        |
| U-234              | 1.14E-01        | 5.19E+00        | 1.09E+00        | 8.04E-05        | 4.51E+01        | 8.94E-10        | 3.49E-02        | 7.03E-04        | 1.08E-03        | --              | 1.08E+00        | 1.67E-04        | 2.09E-03        | 4.66E+00        | 5.73E+01        |
| U-235              | 6.38E-05        | 2.10E-01        | 9.16E-02        | 7.89E-08        | 5.12E-02        | 3.58E-14        | 1.06E-03        | 3.31E-05        | 2.62E-06        | --              | 5.78E-03        | 5.50E-06        | 1.31E-04        | 5.49E-03        | 3.65E-01        |
| U-236              | 1.89E-05        | 5.86E-03        | 2.91E-05        | --              | 9.14E-03        | 2.96E-14        | 1.89E-06        | 1.45E-06        | 1.79E-05        | --              | 6.18E-03        | 2.03E-07        | --              | 2.32E-02        | 4.45E-02        |
| U-237              | 2.05E-03        | 5.42E+00        | 3.50E-01        | --              | 5.93E+00        | 3.00E-09        | 4.92E-02        | --              | 2.37E-03        | --              | 2.92E-01        | 4.83E-04        | 5.70E-07        | 2.84E+01        | 4.05E+01        |
| U-238              | 3.39E-03        | 5.58E+00        | 3.84E+00        | --              | 4.43E-01        | 3.90E-10        | 1.49E-02        | 1.08E-03        | 5.16E-12        | --              | 9.66E-02        | 1.10E-05        | 2.26E-03        | 5.19E-01        | 1.05E+01        |
| U-240              | 8.52E-06        | 1.06E-08        | --              | --              | 3.92E-05        | 6.69E-17        | 1.74E-10        | --              | --              | --              | 1.47E-02        | --              | --              | 2.29E-13        | 1.47E-02        |
| Y-89m              | --              | --              | --              | --              | --              | --              | --              | --              | --              | --              | 8.80E-06        | --              | --              | --              | 8.80E-06        |
| Y-90               | 5.84E-01        | 5.56E+02        | 3.79E+00        | --              | 6.42E-01        | --              | 6.74E-01        | 7.67E-01        | --              | --              | 7.40E+01        | 1.31E-02        | 1.06E-01        | 2.45E-01        | 6.36E+02        |
| Zn-65              | --              | 1.09E-08        | --              | --              | --              | --              | --              | --              | --              | --              | 5.13E-03        | --              | --              | --              | 5.13E-03        |
| Zr-93              | 1.71E-06        | 8.47E-07        | --              | --              | --              | --              | --              | --              | --              | --              | 1.24E-02        | --              | --              | --              | 1.24E-02        |
| Zr-95              | 1.86E-06        | 8.57E-14        | --              | --              | --              | --              | --              | --              | --              | --              | 1.34E-01        | --              | --              | --              | 1.34E-01        |
| <b>Grand Total</b> | <b>1.44E+02</b> | <b>3.40E+05</b> | <b>5.74E+04</b> | <b>8.92E-01</b> | <b>7.60E+05</b> | <b>1.36E-02</b> | <b>4.88E+03</b> | <b>5.80E+01</b> | <b>2.90E+02</b> | <b>3.28E+01</b> | <b>2.28E+04</b> | <b>4.13E+01</b> | <b>5.80E+00</b> | <b>2.29E+06</b> | <b>3.48E+06</b> |

Data Source: CID Data Version D.23.00.33 (LANL-CO 2024a). 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 Decay-Corrected Through CY 2023**

| Radionuclide | ANL      | BAPL     | Hanford (RL) | INL      | LANL     | MFC      | ORNL     | SNL      | SPRU     | SRS      | Grand Total |
|--------------|----------|----------|--------------|----------|----------|----------|----------|----------|----------|----------|-------------|
| Ac-225       | 4.10E-03 | 4.57E-05 | 9.09E-04     | 1.55E-03 | 5.55E-14 | 2.70E-09 | 2.41E-03 | 7.22E-10 | 3.70E-15 | 2.08E-05 | 9.03E-03    |
| Ac-227       | 1.77E-01 | 3.03E-11 | 1.26E-01     | 4.70E-06 | 2.05E-07 | 5.51E-07 | 9.97E-04 | 3.88E-08 | 2.31E-08 | 1.34E-04 | 3.04E-01    |
| Ac-228       | 1.41E-02 | 2.81E-15 | 8.86E-04     | 1.87E-15 | 1.04E-15 | 1.02E+00 | 1.61E-05 | 1.36E-16 | 6.65E-16 | 8.24E-15 | 1.03E+00    |
| Ag-108       | 8.48E-04 | --       | --           | --       | --       | 3.95E-07 | --       | --       | --       | --       | 8.49E-04    |
| Ag-108m      | 9.75E-03 | --       | --           | --       | --       | 4.55E-06 | --       | --       | --       | --       | 9.76E-03    |
| Ag-109m      | 7.08E-02 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 7.08E-02    |
| Ag-110       | 4.46E-05 | --       | 1.24E-12     | --       | --       | 7.53E-16 | 5.99E-04 | --       | --       | --       | 6.43E-04    |
| Ag-110m      | 3.28E-03 | --       | 9.12E-11     | --       | --       | 5.53E-14 | 4.40E-02 | --       | --       | --       | 4.73E-02    |
| Am-241       | 8.15E+01 | 3.04E-02 | 2.72E+03     | 8.58E+02 | 3.60E+00 | 6.71E+01 | 3.98E+02 | 2.80E+01 | 3.53E-01 | 1.75E+02 | 4.33E+03    |
| Am-242       | 2.00E-01 | --       | 1.08E+00     | --       | --       | 2.06E-05 | 3.63E-02 | --       | --       | 1.96E-02 | 1.34E+00    |
| Am-242m      | 2.01E-01 | --       | 1.09E+00     | --       | --       | 2.07E-05 | 3.64E-02 | --       | --       | 1.97E-02 | 1.34E+00    |
| Am-243       | 4.07E-01 | 1.13E-04 | 4.31E+00     | 4.72E-08 | --       | 1.69E-01 | 2.86E+01 | --       | --       | 8.92E-01 | 3.44E+01    |
| Am-245       | 2.18E-13 | --       | --           | --       | --       | --       | 7.09E-14 | --       | --       | 1.54E-12 | 1.83E-12    |
| Ar-37        | 3.64E-19 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 3.64E-19    |
| Ar-39        | 6.82E-03 | --       | --           | --       | --       | 3.52E-04 | --       | --       | --       | --       | 7.18E-03    |
| Ar-42        | 1.72E-02 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 1.72E-02    |
| At-217       | 4.10E-03 | 4.57E-05 | 9.09E-04     | 1.55E-03 | 5.55E-14 | 2.70E-09 | 2.41E-03 | 7.22E-10 | 3.70E-15 | 2.08E-05 | 9.03E-03    |
| Ba-133       | 1.25E+00 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 1.25E+00    |
| Ba-137m      | 1.19E+03 | 4.50E+01 | 1.42E+05     | 1.14E+04 | 1.21E+03 | 2.45E+03 | 4.27E+03 | 2.78E+02 | 1.75E+01 | 1.26E+01 | 1.63E+05    |
| Bi-210       | 6.09E-01 | 7.28E-13 | 1.37E+00     | 1.93E-08 | 2.42E-11 | 8.69E-06 | 5.75E-04 | 6.04E-10 | 1.27E-10 | 1.36E-08 | 1.98E+00    |
| Bi-211       | 1.77E-01 | 3.03E-11 | 1.27E-01     | 4.70E-06 | 2.05E-07 | 5.52E-07 | 6.21E-04 | 3.88E-08 | 2.31E-08 | 1.34E-04 | 3.05E-01    |
| Bi-212       | 1.67E+00 | 8.20E-03 | 1.74E-03     | 7.44E-01 | 6.15E-16 | 3.27E-01 | 7.82E-02 | 6.27E-17 | 3.73E-16 | 5.89E-15 | 2.83E+00    |
| Bi-213       | 4.10E-03 | 4.57E-05 | 9.09E-04     | 1.55E-03 | 5.55E-14 | 2.70E-09 | 2.41E-03 | 7.22E-10 | 3.70E-15 | 2.08E-05 | 9.03E-03    |
| Bi-214       | 1.21E-09 | 1.47E-11 | 3.20E+00     | 2.83E-07 | 2.79E-10 | 2.88E-04 | 2.82E-01 | 7.77E-09 | 1.63E-09 | 9.10E-08 | 3.49E+00    |
| Bk-249       | 1.50E-08 | --       | --           | --       | --       | --       | 4.89E-09 | --       | --       | 1.07E-07 | 1.27E-07    |
| C-14         | --       | 1.57E-03 | 3.36E-04     | --       | --       | 1.79E-02 | --       | --       | 2.95E-05 | 8.02E-04 | 2.07E-02    |
| Ca-45        | 3.97E-05 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 3.97E-05    |
| Cd-109       | 7.08E-02 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 7.08E-02    |
| Cd-113       | 3.18E-19 | --       | 1.62E-18     | --       | --       | 2.65E-20 | --       | --       | --       | --       | 1.97E-18    |
| Cd-113m      | 5.38E-01 | --       | 8.55E-01     | --       | --       | 1.55E-02 | --       | --       | --       | --       | 1.41E+00    |
| Cd-115m      | 3.51E-14 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 3.51E-14    |
| Ce-139       | 9.80E-05 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 9.80E-05    |
| Ce-141       | 3.73E-18 | --       | --           | --       | --       | 2.80E-02 | 6.15E-01 | --       | --       | --       | 6.43E-01    |
| Ce-144       | 4.93E-01 | --       | 1.89E-03     | 2.88E-12 | 1.37E-03 | 5.63E-03 | 4.26E+00 | --       | --       | 1.00E-08 | 4.76E+00    |
| Cf-249       | 2.93E-03 | --       | 2.05E-11     | 1.09E-03 | --       | --       | 5.87E+00 | --       | --       | 7.71E-04 | 5.88E+00    |
| Cf-250       | --       | --       | --           | 8.29E-03 | --       | --       | 3.64E+01 | --       | --       | 8.85E-06 | 3.64E+01    |
| Cf-251       | --       | --       | 1.50E-12     | 2.83E-04 | --       | --       | 5.91E+00 | --       | --       | 5.05E-07 | 5.91E+00    |
| Cf-252       | --       | --       | --           | 8.43E-05 | --       | --       | 2.69E+01 | --       | --       | 1.13E-03 | 2.69E+01    |
| Cl-36        | --       | --       | --           | --       | --       | 7.91E-03 | --       | --       | --       | --       | 7.91E-03    |
| Cm-242       | 1.65E-01 | --       | 8.95E-01     | 1.26E-07 | --       | 1.70E-05 | 1.26E+00 | --       | --       | 1.62E-02 | 2.34E+00    |
| Cm-243       | 1.36E-01 | --       | 2.01E+01     | --       | --       | 2.39E-02 | 4.94E+00 | --       | --       | 1.32E-03 | 2.52E+01    |
| Cm-244       | 7.20E+01 | --       | 4.75E+02     | 1.75E+02 | --       | 5.66E-01 | 5.04E+03 | --       | --       | 5.20E+01 | 5.81E+03    |
| Cm-245       | 3.77E-05 | --       | 8.78E-02     | 1.48E-01 | --       | 9.73E-03 | 9.02E-01 | --       | --       | 1.10E-02 | 1.16E+00    |
| Cm-246       | --       | --       | 3.54E-02     | 6.94E-06 | --       | 9.83E-02 | 3.46E+01 | --       | --       | 1.47E-02 | 3.47E+01    |
| Cm-247       | --       | --       | 1.12E-10     | 6.14E-11 | --       | --       | 3.74E-05 | --       | --       | 2.78E-08 | 3.74E-05    |
| Cm-248       | --       | --       | 1.69E-06     | 1.72E-09 | --       | 1.03E-02 | 2.07E-01 | --       | --       | 5.31E-06 | 2.17E-01    |
| Co-58        | 7.95E-09 | --       | 2.07E-16     | --       | --       | --       | --       | --       | --       | --       | 7.95E-09    |
| Co-60        | 1.37E+01 | 1.95E-01 | 2.46E+01     | 4.94E+01 | 1.05E-01 | 1.96E+01 | 1.34E+00 | --       | 8.87E-06 | 3.03E-05 | 1.09E+02    |

**Table 3-9. Total RH Radionuclide Activity (Ci) on a Site Basis Decay-Corrected Through CY 2023**  
Continued

| Radionuclide | ANL      | BAPL     | Hanford (RL) | INL      | LANL     | MFC      | ORNL     | SNL      | SPRU     | SRS      | Grand Total |
|--------------|----------|----------|--------------|----------|----------|----------|----------|----------|----------|----------|-------------|
| Cr-51        | 9.06E-22 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 9.06E-22    |
| Cs-134       | 4.72E+00 | 1.68E-04 | 2.03E+01     | 1.28E-05 | --       | 2.04E+01 | 6.77E+01 | --       | --       | 2.40E-03 | 1.13E+02    |
| Cs-135       | --       | --       | 5.47E-04     | 8.21E-06 | --       | 9.49E-04 | 1.86E-03 | --       | --       | --       | 3.36E-03    |
| Cs-137       | 1.26E+03 | 4.77E+01 | 1.51E+05     | 1.21E+04 | 1.28E+03 | 2.59E+03 | 4.53E+03 | 2.95E+02 | 1.85E+01 | 1.33E+01 | 1.73E+05    |
| Dy-159       | 1.69E-05 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 1.69E-05    |
| Eu-149       | 9.35E-08 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 9.35E-08    |
| Eu-152       | 5.72E-01 | 3.53E+00 | 2.41E+00     | 1.99E-05 | --       | 3.32E-03 | 4.58E+01 | --       | --       | 4.37E-05 | 5.23E+01    |
| Eu-154       | 6.67E+02 | 1.16E+00 | 3.15E+02     | 1.24E+01 | 3.86E-02 | 3.88E+01 | 1.85E+02 | --       | --       | 1.65E-01 | 1.22E+03    |
| Eu-155       | 1.81E+00 | 1.60E-02 | 1.06E+02     | 5.26E+00 | 1.45E-01 | 1.04E+01 | 8.07E+00 | --       | --       | 1.61E-03 | 1.32E+02    |
| Fe-55        | 1.30E+01 | 4.07E-03 | 6.12E-01     | --       | --       | 1.27E+00 | --       | --       | --       | --       | 1.49E+01    |
| Fe-59        | 1.09E-14 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 1.09E-14    |
| Fr-221       | 4.10E-03 | 4.57E-05 | 9.09E-04     | 1.55E-03 | 5.55E-14 | 2.70E-09 | 2.41E-03 | 7.22E-10 | 3.70E-15 | 2.08E-05 | 9.03E-03    |
| Fr-223       | 2.44E-03 | 4.19E-13 | 1.74E-03     | 6.48E-08 | 2.83E-09 | 7.60E-09 | 1.38E-05 | 5.35E-10 | 3.19E-10 | 1.85E-06 | 4.20E-03    |
| Gd-152       | 5.85E-15 | 3.61E-14 | 7.03E-14     | 3.57E-21 | --       | 9.91E-17 | 9.92E-15 | --       | --       | 1.03E-18 | 1.22E-13    |
| Gd-153       | 1.23E-03 | --       | 7.59E-06     | --       | --       | --       | --       | --       | --       | --       | 1.24E-03    |
| H-3          | 1.01E+01 | 8.98E-02 | 6.53E+02     | --       | --       | 3.43E-01 | 7.02E-01 | --       | --       | 2.40E-02 | 6.65E+02    |
| Hf-175       | 5.81E-10 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 5.81E-10    |
| Hf-181       | 1.83E-16 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 1.83E-16    |
| I-125        | 1.49E-10 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 1.49E-10    |
| I-129        | 3.09E-10 | 1.98E-05 | 2.32E-03     | 2.55E-07 | --       | 5.51E-02 | 1.02E-04 | --       | --       | --       | 5.75E-02    |
| I-131        | --       | --       | --           | --       | --       | --       | 5.00E-02 | --       | --       | --       | 5.00E-02    |
| In-113m      | 2.52E-06 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 2.52E-06    |
| In-114       | 1.27E-13 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 1.27E-13    |
| In-114m      | 1.33E-13 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 1.33E-13    |
| In-115       | 2.07E-17 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 2.07E-17    |
| In-115m      | 3.88E-18 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 3.88E-18    |
| Ir-194       | 5.65E-03 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 5.65E-03    |
| K-42         | 1.72E-02 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 1.72E-02    |
| Kr-85        | 2.61E+01 | 1.46E+00 | 2.11E+02     | --       | 3.49E+02 | 7.88E-01 | 7.39E+00 | --       | --       | 2.94E-01 | 5.95E+02    |
| Lu-177       | 1.36E-07 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 1.36E-07    |
| Lu-177m      | 6.23E-07 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 6.23E-07    |
| Mn-54        | 1.33E-01 | --       | 3.17E-03     | --       | --       | 4.75E-01 | 1.51E-03 | --       | --       | --       | 6.13E-01    |
| Mo-93        | --       | --       | 2.73E-05     | --       | --       | 2.85E-02 | --       | --       | --       | --       | 2.86E-02    |
| Na-22        | 7.46E-03 | --       | 1.43E-05     | --       | --       | --       | --       | --       | --       | --       | 7.48E-03    |
| Nb-91        | 1.12E-02 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 1.12E-02    |
| Nb-93m       | 3.13E-01 | 2.58E-03 | 3.09E-03     | --       | --       | 1.38E-02 | 1.71E-03 | --       | --       | --       | 3.34E-01    |
| Nb-94        | --       | --       | 7.62E-02     | --       | --       | 2.02E-01 | 1.14E-06 | --       | --       | --       | 2.79E-01    |
| Nb-95        | 3.68E-08 | --       | 7.01E-18     | --       | --       | 1.76E-07 | 5.83E+00 | --       | --       | --       | 5.83E+00    |
| Nb-95m       | 1.96E-10 | --       | 3.74E-20     | --       | --       | 8.15E-31 | 2.96E-02 | --       | --       | --       | 2.96E-02    |
| Nd-144       | 1.54E-14 | 4.20E-45 | 3.53E-14     | 9.97E-29 | 1.52E-15 | 8.97E-14 | 1.48E-16 | --       | --       | 3.59E-16 | 1.42E-13    |
| Ni-59        | 9.10E-03 | 1.03E-01 | 2.08E-04     | --       | --       | 2.02E-01 | --       | --       | --       | 2.88E-10 | 3.15E-01    |
| Ni-63        | 1.20E+00 | 7.76E+00 | 2.17E+00     | 7.04E-04 | --       | 3.28E+01 | --       | --       | --       | --       | 4.39E+01    |
| Np-235       | 4.52E-02 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 4.52E-02    |
| Np-237       | 2.16E-03 | 1.61E-04 | 2.92E-01     | 1.35E-03 | 9.98E-06 | 5.94E-02 | 4.36E-01 | 3.62E-05 | 9.17E-07 | 2.48E+00 | 3.27E+00    |
| Np-238       | 9.03E-04 | --       | 4.89E-03     | --       | --       | 9.30E-08 | 1.64E-04 | --       | --       | 8.85E-05 | 6.05E-03    |
| Np-239       | 4.07E-01 | 1.13E-04 | 4.31E+00     | 4.72E-08 | --       | 1.69E-01 | 2.86E+01 | --       | --       | 8.92E-01 | 3.44E+01    |
| Np-240       | --       | --       | 2.07E-09     | 4.97E-20 | --       | 9.77E-14 | 4.32E-09 | --       | --       | 9.18E-16 | 6.39E-09    |

**Table 3-9. Total RH Radionuclide Activity (Ci) on a Site Basis Decay-Corrected Through CY 2023**

Continued

| Radionuclide | ANL      | BAPL     | Hanford (RL) | INL      | LANL     | MFC      | ORNL     | SNL      | SPRU     | SRS      | Grand Total     |
|--------------|----------|----------|--------------|----------|----------|----------|----------|----------|----------|----------|-----------------|
| Np-240m      | --       | --       | 1.73E-06     | 4.14E-17 | --       | 8.14E-11 | 3.60E-06 | --       | --       | 7.65E-13 | <b>5.33E-06</b> |
| Os-185       | 2.29E-09 | --       | --           | --       | --       | --       | --       | --       | --       | --       | <b>2.29E-09</b> |
| Os-194       | 5.65E-03 | --       | --           | --       | --       | --       | --       | --       | --       | --       | <b>5.65E-03</b> |
| Pa-231       | 7.21E-07 | 4.01E-10 | 3.77E-05     | 4.06E-05 | 1.57E-06 | 1.14E-07 | 6.77E-06 | 3.35E-07 | 1.97E-07 | 5.61E-04 | <b>6.49E-04</b> |
| Pa-233       | 2.16E-03 | 1.61E-04 | 2.92E-01     | 1.35E-03 | 9.98E-06 | 5.94E-02 | 2.66E-01 | 3.59E-05 | 9.17E-07 | 2.48E+00 | <b>3.10E+00</b> |
| Pa-234       | 5.75E-05 | 2.37E-11 | 1.47E-03     | 1.99E-03 | 5.30E-08 | 2.77E-06 | 4.72E-05 | 1.50E-06 | 2.06E-05 | 9.60E-05 | <b>3.69E-03</b> |
| Pa-234m      | 4.42E-02 | 1.82E-08 | 1.13E+00     | 1.53E+00 | 4.07E-05 | 2.13E-03 | 3.63E-02 | 1.15E-03 | 1.59E-02 | 7.39E-02 | <b>2.84E+00</b> |
| Pb-209       | 4.10E-03 | 4.57E-05 | 9.09E-04     | 1.55E-03 | 5.55E-14 | 2.70E-09 | 2.41E-03 | 7.22E-10 | 3.70E-15 | 2.08E-05 | <b>9.03E-03</b> |
| Pb-210       | 6.08E-01 | 7.28E-13 | 1.37E+00     | 1.93E-08 | 2.42E-11 | 8.69E-06 | 7.44E-04 | 6.04E-10 | 1.27E-10 | 1.36E-08 | <b>1.98E+00</b> |
| Pb-211       | 1.77E-01 | 3.03E-11 | 1.27E-01     | 4.70E-06 | 2.05E-07 | 5.52E-07 | 6.21E-04 | 3.88E-08 | 2.31E-08 | 1.34E-04 | <b>3.05E-01</b> |
| Pb-212       | 1.67E+00 | 8.20E-03 | 1.74E-03     | 7.44E-01 | 6.15E-16 | 3.27E-01 | 7.82E-02 | 6.27E-17 | 3.73E-16 | 5.89E-15 | <b>2.83E+00</b> |
| Pb-214       | 1.21E-09 | 1.47E-11 | 3.20E+00     | 2.83E-07 | 2.79E-10 | 2.88E-04 | 2.82E-01 | 7.77E-09 | 1.63E-09 | 9.10E-08 | <b>3.49E+00</b> |
| Pd-107       | --       | --       | 7.64E-05     | --       | --       | 2.54E-05 | 4.41E-04 | --       | --       | --       | <b>5.43E-04</b> |
| Pm-145       | 3.86E-01 | --       | --           | --       | --       | --       | --       | --       | --       | --       | <b>3.86E-01</b> |
| Pm-146       | 3.23E-01 | --       | --           | --       | --       | 2.28E-04 | --       | --       | --       | --       | <b>3.24E-01</b> |
| Pm-147       | 1.67E+01 | 4.16E-02 | 5.64E+00     | 3.02E-05 | 3.75E-05 | 1.13E-01 | 1.14E+01 | --       | --       | 8.67E-03 | <b>3.38E+01</b> |
| Pm-148       | 1.41E-17 | --       | --           | --       | --       | --       | --       | --       | --       | --       | <b>1.41E-17</b> |
| Pm-148m      | 2.67E-16 | --       | --           | --       | --       | --       | --       | --       | --       | --       | <b>2.67E-16</b> |
| Po-210       | 6.09E-01 | 7.28E-13 | 1.37E+00     | 1.93E-08 | 2.42E-11 | 4.63E-06 | 3.70E-05 | 6.04E-10 | 1.27E-10 | 1.36E-08 | <b>1.98E+00</b> |
| Po-211       | 4.87E-04 | 8.34E-14 | 3.48E-04     | 1.29E-08 | 5.64E-10 | 1.52E-09 | 1.71E-06 | 1.07E-10 | 6.36E-11 | 3.68E-07 | <b>8.37E-04</b> |
| Po-212       | 1.07E+00 | 5.25E-03 | 1.11E-03     | 4.76E-01 | 3.94E-16 | 2.10E-01 | 5.01E-02 | 4.02E-17 | 2.39E-16 | 3.77E-15 | <b>1.81E+00</b> |
| Po-213       | 4.01E-03 | 4.48E-05 | 8.90E-04     | 1.51E-03 | 5.43E-14 | 2.64E-09 | 2.35E-03 | 7.07E-10 | 3.62E-15 | 2.04E-05 | <b>8.84E-03</b> |
| Po-214       | 1.21E-09 | 1.47E-11 | 3.20E+00     | 2.83E-07 | 2.79E-10 | 2.88E-04 | 2.82E-01 | 7.76E-09 | 1.63E-09 | 9.10E-08 | <b>3.49E+00</b> |
| Po-215       | 1.77E-01 | 3.03E-11 | 1.27E-01     | 4.70E-06 | 2.05E-07 | 5.52E-07 | 6.21E-04 | 3.88E-08 | 2.31E-08 | 1.34E-04 | <b>3.05E-01</b> |
| Po-216       | 1.67E+00 | 8.20E-03 | 1.74E-03     | 7.44E-01 | 6.15E-16 | 3.27E-01 | 7.82E-02 | 6.27E-17 | 3.73E-16 | 5.89E-15 | <b>2.83E+00</b> |
| Po-218       | 1.21E-09 | 1.47E-11 | 3.20E+00     | 2.83E-07 | 2.79E-10 | 2.88E-04 | 2.82E-01 | 7.77E-09 | 1.63E-09 | 9.10E-08 | <b>3.49E+00</b> |
| Pr-144       | 4.93E-01 | --       | 1.89E-03     | 2.88E-12 | 1.37E-03 | 5.63E-03 | 4.26E+00 | --       | --       | 1.00E-08 | <b>4.76E+00</b> |
| Pr-144m      | 6.90E-03 | --       | 2.65E-05     | 4.03E-14 | 1.92E-05 | 7.88E-05 | 5.96E-02 | --       | --       | 1.40E-10 | <b>6.67E-02</b> |
| Pu-236       | 1.38E-01 | --       | 4.74E-07     | 3.07E-07 | --       | 3.54E-08 | 1.74E-04 | --       | --       | --       | <b>1.38E-01</b> |
| Pu-238       | 1.06E+02 | 1.20E+00 | 1.23E+03     | 8.20E+02 | 1.47E+00 | 9.65E+00 | 1.53E+03 | 1.36E+01 | 1.70E-02 | 4.07E+03 | <b>7.78E+03</b> |
| Pu-239       | 8.92E+01 | 1.03E-03 | 1.07E+03     | 6.70E+02 | 9.26E+01 | 3.30E+01 | 4.55E+01 | 3.65E+01 | 1.25E+00 | 1.05E+01 | <b>2.05E+03</b> |
| Pu-240       | 5.49E+01 | --       | 5.70E+02     | 3.62E+02 | 2.51E+00 | 4.17E+00 | 1.24E+02 | 2.33E+01 | --       | 5.79E+00 | <b>1.15E+03</b> |
| Pu-241       | 6.21E+02 | 1.32E-01 | 1.07E+04     | 2.34E+03 | 5.77E+01 | 5.59E+01 | 5.38E+03 | 2.72E+02 | 1.39E-01 | 3.75E+03 | <b>2.32E+04</b> |
| Pu-242       | 4.06E-02 | 1.85E-05 | 4.73E-01     | 2.65E-01 | 1.52E-03 | 4.51E-02 | 1.03E+00 | 1.11E-02 | 7.07E-03 | 5.20E-01 | <b>2.39E+00</b> |
| Pu-243       | --       | --       | 1.12E-10     | 6.14E-11 | --       | --       | 3.74E-05 | --       | --       | 2.78E-08 | <b>3.74E-05</b> |
| Pu-244       | --       | --       | 1.73E-06     | 4.15E-17 | --       | 8.15E-11 | 3.60E-06 | --       | --       | 7.66E-13 | <b>5.33E-06</b> |
| Ra-223       | 1.77E-01 | 3.03E-11 | 1.27E-01     | 4.70E-06 | 2.05E-07 | 5.52E-07 | 6.21E-04 | 3.88E-08 | 2.31E-08 | 1.34E-04 | <b>3.05E-01</b> |
| Ra-224       | 1.67E+00 | 8.20E-03 | 1.74E-03     | 7.44E-01 | 6.15E-16 | 3.27E-01 | 7.82E-02 | 6.27E-17 | 3.73E-16 | 5.89E-15 | <b>2.83E+00</b> |
| Ra-225       | 4.10E-03 | 4.57E-05 | 9.09E-04     | 1.55E-03 | 5.55E-14 | 2.70E-09 | 2.42E-03 | 7.25E-10 | 3.70E-15 | 2.08E-05 | <b>9.04E-03</b> |
| Ra-226       | 1.21E-09 | 1.47E-11 | 3.20E+00     | 2.83E-07 | 2.79E-10 | 2.88E-04 | 2.82E-01 | 7.77E-09 | 1.63E-09 | 9.10E-08 | <b>3.49E+00</b> |
| Ra-228       | 1.41E-02 | 2.81E-15 | 8.86E-04     | 1.87E-15 | 1.04E-15 | 1.02E+00 | 1.61E-05 | 1.36E-16 | 6.65E-16 | 8.24E-15 | <b>1.03E+00</b> |
| Rb-87        | --       | --       | --           | --       | --       | --       | 6.97E-08 | --       | --       | --       | <b>6.97E-08</b> |
| Re-188       | 2.82E-11 | --       | --           | --       | --       | --       | --       | --       | --       | --       | <b>2.82E-11</b> |
| Rh-102       | 1.39E-03 | --       | --           | --       | --       | --       | --       | --       | --       | --       | <b>1.39E-03</b> |
| Rh-103m      | 9.63E-15 | --       | --           | --       | --       | --       | 4.28E-01 | --       | --       | --       | <b>4.28E-01</b> |
| Rh-106       | 1.56E+00 | --       | 5.24E-03     | 7.85E-11 | 3.85E-02 | 3.29E+01 | 6.31E+00 | --       | --       | 2.54E-07 | <b>4.08E+01</b> |
| Rn-219       | 1.77E-01 | 3.03E-11 | 1.27E-01     | 4.70E-06 | 2.05E-07 | 5.52E-07 | 6.21E-04 | 3.88E-08 | 2.31E-08 | 1.34E-04 | <b>3.05E-01</b> |

**Table 3-9. Total RH Radionuclide Activity (Ci) on a Site Basis Decay-Corrected Through CY 2023**  
Continued

| Radionuclide | ANL      | BAPL     | Hanford (RL) | INL      | LANL     | MFC      | ORNL     | SNL      | SPRU     | SRS      | Grand Total |
|--------------|----------|----------|--------------|----------|----------|----------|----------|----------|----------|----------|-------------|
| Rn-220       | 1.67E+00 | 8.20E-03 | 1.74E-03     | 7.44E-01 | 6.15E-16 | 3.27E-01 | 7.82E-02 | 6.27E-17 | 3.73E-16 | 5.89E-15 | 2.83E+00    |
| Rn-222       | 1.21E-09 | 1.47E-11 | 3.20E+00     | 2.83E-07 | 2.79E-10 | 2.88E-04 | 2.82E-01 | 7.77E-09 | 1.63E-09 | 9.10E-08 | 3.49E+00    |
| Ru-103       | 9.64E-15 | --       | --           | --       | --       | --       | 4.29E-01 | --       | --       | --       | 4.29E-01    |
| Ru-106       | 1.56E+00 | --       | 5.24E-03     | 7.85E-11 | 3.85E-02 | 3.29E+01 | 6.31E+00 | --       | --       | 2.54E-07 | 4.08E+01    |
| S-35         | 6.56E-09 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 6.56E-09    |
| Sb-124       | 1.57E-10 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 1.57E-10    |
| Sb-125       | 1.10E+01 | 8.20E-04 | 1.57E+01     | 1.17E-05 | 5.00E-02 | 3.62E+00 | 1.20E+00 | --       | --       | --       | 3.15E+01    |
| Sb-126       | --       | --       | 1.96E-04     | 5.15E-07 | 7.90E-03 | 1.89E-04 | 4.15E-08 | --       | --       | --       | 8.28E-03    |
| Sb-126m      | --       | --       | 1.40E-03     | 4.23E-06 | 5.64E-02 | 1.35E-03 | 2.15E-03 | --       | --       | --       | 6.13E-02    |
| Sc-46        | 2.57E-08 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 2.57E-08    |
| Se-75        | 2.05E-06 | --       | --           | --       | --       | --       | 3.84E-03 | --       | --       | --       | 3.84E-03    |
| Se-79        | --       | --       | 1.24E-01     | 1.05E-06 | --       | 2.83E-04 | --       | --       | --       | 1.07E-02 | 1.35E-01    |
| Sm-145       | 6.08E-03 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 6.08E-03    |
| Sm-146       | 5.13E-09 | --       | --           | --       | --       | 1.45E-11 | --       | --       | --       | --       | 5.15E-09    |
| Sm-147       | 1.13E-09 | 2.83E-12 | 3.12E-09     | 2.00E-17 | 9.09E-15 | 6.37E-11 | 1.62E-08 | --       | --       | 3.22E-11 | 2.05E-08    |
| Sm-148       | 7.86E-20 | 8.25E-30 | 4.21E-29     | 1.56E-38 | --       | 5.74E-32 | 2.72E-31 | --       | --       | 4.88E-34 | 7.86E-20    |
| Sm-151       | 1.35E+00 | 1.51E-01 | 3.99E+01     | 2.46E-03 | 2.15E-02 | 1.74E+00 | 1.06E+00 | --       | --       | 1.67E-01 | 4.44E+01    |
| Sn-113       | 2.52E-06 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 2.52E-06    |
| Sn-119m      | 1.14E-02 | --       | 2.41E-11     | --       | --       | --       | --       | --       | --       | --       | 1.14E-02    |
| Sn-121       | 2.91E-01 | --       | 2.36E-04     | --       | 6.83E-01 | 1.28E-04 | --       | --       | --       | --       | 9.75E-01    |
| Sn-121m      | 3.75E-01 | --       | 3.04E-04     | --       | 8.80E-01 | 1.65E-04 | --       | --       | --       | --       | 1.26E+00    |
| Sn-123       | 4.95E-05 | --       | --           | --       | --       | --       | 1.19E-09 | --       | --       | --       | 4.95E-05    |
| Sn-126       | --       | --       | 1.40E-03     | 4.23E-06 | 5.64E-02 | 1.35E-03 | 2.15E-03 | --       | --       | --       | 6.13E-02    |
| Sr-85        | 1.90E-10 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 1.90E-10    |
| Sr-89        | 2.60E-11 | --       | --           | --       | --       | --       | 7.38E+00 | --       | --       | --       | 7.38E+00    |
| Sr-90        | 8.94E+02 | 4.69E+01 | 9.32E+04     | 1.03E+04 | 8.88E+02 | 2.44E+03 | 4.75E+03 | 2.20E+02 | 2.54E+00 | 9.77E+00 | 1.13E+05    |
| Ta-182       | 4.66E-03 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 4.66E-03    |
| Tb-157       | 3.02E-02 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 3.02E-02    |
| Tb-160       | 6.52E-10 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 6.52E-10    |
| Tc-97        | 1.01E-08 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 1.01E-08    |
| Tc-97m       | 8.91E-08 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 8.91E-08    |
| Tc-99        | 4.42E-03 | 1.33E-02 | 5.23E+00     | 1.54E-04 | --       | 3.76E+01 | 1.13E-01 | --       | 4.48E-03 | 1.12E-03 | 4.29E+01    |
| Te-121       | 4.45E-05 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 4.45E-05    |
| Te-121m      | 4.47E-05 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 4.47E-05    |
| Te-123       | 5.32E-15 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 5.32E-15    |
| Te-123m      | 5.13E-06 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 5.13E-06    |
| Te-125m      | 2.68E+00 | 2.00E-04 | 3.83E+00     | 9.63E-07 | 1.22E-02 | 8.69E-01 | 2.47E-01 | --       | --       | 1.76E-24 | 7.64E+00    |
| Te-127       | 1.81E-05 | --       | --           | --       | --       | --       | 9.91E-12 | --       | --       | --       | 1.81E-05    |
| Te-127m      | 1.85E-05 | --       | --           | --       | --       | --       | 1.01E-11 | --       | --       | --       | 1.85E-05    |
| Te-129       | 1.46E-18 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 1.46E-18    |
| Te-129m      | 2.28E-18 | --       | --           | --       | --       | --       | --       | --       | --       | --       | 2.28E-18    |
| Th-227       | 1.75E-01 | 2.99E-11 | 1.25E-01     | 4.63E-06 | 2.02E-07 | 5.45E-07 | 7.30E-04 | 3.83E-08 | 2.28E-08 | 1.32E-04 | 3.00E-01    |
| Th-228       | 1.67E+00 | 8.19E-03 | 1.74E-03     | 7.43E-01 | 6.15E-16 | 3.27E-01 | 7.83E-02 | 6.27E-17 | 3.73E-16 | 5.89E-15 | 2.82E+00    |
| Th-229       | 4.10E-03 | 4.57E-05 | 9.09E-04     | 1.55E-03 | 5.55E-14 | 2.70E-09 | 2.44E-03 | 7.29E-10 | 3.70E-15 | 2.08E-05 | 9.06E-03    |
| Th-230       | 1.13E-06 | 1.37E-08 | 2.36E-04     | 2.18E-04 | 1.44E-07 | 1.20E-04 | 1.39E-05 | 4.55E-06 | 9.44E-07 | 2.83E-05 | 6.23E-04    |
| Th-231       | 6.81E-03 | 3.79E-06 | 1.22E-01     | 2.70E-01 | 8.25E-03 | 2.29E-03 | 2.17E-03 | 4.09E-03 | 1.17E-03 | 1.47E+00 | 1.89E+00    |
| Th-232       | 1.13E-15 | 1.13E-14 | 1.34E-03     | 8.54E-15 | 2.71E-15 | 5.97E-13 | 1.05E-03 | 5.30E-16 | 1.86E-15 | 1.68E-14 | 2.39E-03    |

**Table 3-9. Total RH Radionuclide Activity (Ci) on a Site Basis Decay-Corrected Through CY 2023**  
Continued

| Radionuclide       | ANL             | BAPL            | Hanford (RL)    | INL             | LANL            | MFC             | ORNL            | SNL             | SPRU            | SRS             | Grand Total     |
|--------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Th-234             | 4.42E-02        | 1.82E-08        | 1.13E+00        | 1.53E+00        | 4.07E-05        | 2.13E-03        | 3.63E-02        | 1.15E-03        | 1.59E-02        | 7.39E-02        | <b>2.84E+00</b> |
| Tl-206             | 8.03E-07        | 9.61E-19        | 1.81E-06        | 2.55E-14        | 3.19E-17        | 1.15E-11        | 7.59E-10        | 7.98E-16        | 1.68E-16        | 1.80E-14        | <b>2.61E-06</b> |
| Tl-207             | 1.77E-01        | 3.03E-11        | 1.26E-01        | 4.68E-06        | 2.05E-07        | 5.51E-07        | 6.19E-04        | 3.87E-08        | 2.31E-08        | 1.34E-04        | <b>3.04E-01</b> |
| Tl-208             | 6.00E-01        | 2.95E-03        | 6.24E-04        | 2.67E-01        | 2.21E-16        | 1.18E-01        | 2.81E-02        | 2.25E-17        | 1.34E-16        | 2.12E-15        | <b>1.02E+00</b> |
| Tl-209             | 8.61E-05        | 9.60E-07        | 1.91E-05        | 3.25E-05        | 1.17E-15        | 5.67E-11        | 5.05E-05        | 1.52E-11        | 7.77E-17        | 4.37E-07        | <b>1.90E-04</b> |
| Tm-170             | 1.58E-06        | --              | --              | --              | --              | --              | --              | --              | --              | --              | <b>1.58E-06</b> |
| Tm-171             | 6.09E-02        | --              | --              | --              | --              | --              | --              | --              | --              | --              | <b>6.09E-02</b> |
| U-232              | 1.16E+00        | 8.00E-03        | 9.43E-04        | 7.23E-01        | --              | 1.81E-07        | 1.55E-01        | --              | --              | --              | <b>2.04E+00</b> |
| U-233              | 3.56E-05        | 9.86E-03        | 7.80E-01        | 4.00E+00        | 2.00E-10        | 1.47E-05        | 7.20E+00        | 2.12E-06        | 1.58E-11        | 1.32E-02        | <b>1.20E+01</b> |
| U-234              | 2.54E-02        | 3.07E-04        | 1.62E+00        | 4.58E+00        | 1.76E-03        | 9.27E-02        | 2.33E-01        | 1.27E-01        | 1.28E-02        | 2.71E-01        | <b>6.96E+00</b> |
| U-235              | 6.81E-03        | 3.79E-06        | 1.22E-01        | 2.70E-01        | 8.25E-03        | 2.29E-03        | 2.17E-03        | 4.09E-03        | 1.17E-03        | 1.47E+00        | <b>1.89E+00</b> |
| U-236              | 8.65E-06        | 4.57E-05        | 1.72E-01        | 5.81E-05        | 6.43E-06        | 2.24E-03        | 1.06E-03        | 2.72E-06        | 4.70E-06        | 2.87E-05        | <b>1.76E-01</b> |
| U-237              | 1.49E-02        | 3.16E-06        | 2.56E-01        | 5.60E-02        | 1.38E-03        | 1.34E-03        | 1.26E-01        | 6.41E-03        | 3.34E-06        | 8.98E-02        | <b>5.52E-01</b> |
| U-238              | 4.42E-02        | 1.82E-08        | 1.13E+00        | 1.53E+00        | 4.07E-05        | 2.13E-03        | 4.54E-02        | 1.40E-03        | 1.59E-02        | 7.39E-02        | <b>2.85E+00</b> |
| U-240              | --              | --              | 1.73E-06        | 4.14E-17        | --              | 8.14E-11        | 3.60E-06        | --              | --              | 7.65E-13        | <b>5.33E-06</b> |
| V-49               | 7.44E-02        | --              | --              | --              | --              | --              | --              | --              | --              | --              | <b>7.44E-02</b> |
| W-181              | 2.65E-07        | --              | --              | --              | --              | --              | --              | --              | --              | --              | <b>2.65E-07</b> |
| W-185              | 5.31E-10        | --              | --              | --              | --              | --              | --              | --              | --              | --              | <b>5.31E-10</b> |
| W-188              | 2.79E-11        | --              | --              | --              | --              | --              | --              | --              | --              | --              | <b>2.79E-11</b> |
| Xe-127             | 1.26E-17        | --              | --              | --              | --              | --              | --              | --              | --              | --              | <b>1.26E-17</b> |
| Xe-131m            | --              | --              | --              | --              | --              | --              | 2.01E-03        | --              | --              | --              | <b>2.01E-03</b> |
| Y-89m              | 2.42E-15        | --              | --              | --              | --              | --              | 6.86E-04        | --              | --              | --              | <b>6.86E-04</b> |
| Y-90               | 8.94E+02        | 4.69E+01        | 9.32E+04        | 1.03E+04        | 8.88E+02        | 2.44E+03        | 4.75E+03        | 2.20E+02        | 2.54E+00        | 9.77E+00        | <b>1.13E+05</b> |
| Y-91               | 1.63E-09        | --              | --              | --              | --              | --              | --              | --              | --              | --              | <b>1.63E-09</b> |
| Zn-65              | 3.59E-04        | --              | 7.33E-06        | --              | --              | 1.26E-01        | 3.64E-03        | --              | --              | --              | <b>1.30E-01</b> |
| Zr-93              | --              | 3.11E-03        | 8.98E-03        | --              | --              | 1.18E-03        | 5.85E-03        | --              | --              | --              | <b>1.91E-02</b> |
| Zr-95              | 1.67E-08        | --              | 3.18E-18        | --              | --              | 6.93E-29        | 2.51E+00        | --              | --              | --              | <b>2.51E+00</b> |
| <b>Grand Total</b> | <b>6.05E+03</b> | <b>2.02E+02</b> | <b>4.98E+05</b> | <b>4.94E+04</b> | <b>4.77E+03</b> | <b>1.03E+04</b> | <b>3.14E+04</b> | <b>1.39E+03</b> | <b>4.29E+01</b> | <b>8.12E+03</b> | <b>6.10E+05</b> |

Data Source: CID Data Version D.23.00.33 (LANL-CO 2024a). 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 Radionuclide Activity by Site Decay-Corrected Through CY 2023**

| TRU Waste Generator Site                     | CH Activity (Ci) | RH Activity (Ci) | Total Activity (Ci) |
|--|------------------|------------------|---------------------|
| Argonne National Laboratory                  | 1.44E+02         | 6.05E+03         | <b>6.20E+03</b>     |
| Bettis Atomic Power Laboratory               | --               | 2.02E+02         | <b>2.02E+02</b>     |
| Hanford (Richland) Site                      | 3.40E+05         | 4.98E+05         | <b>8.38E+05</b>     |
| Idaho National Laboratory                    | 5.74E+04         | 4.94E+04         | <b>1.07E+05</b>     |
| Knolls Atomic Power Laboratory - Schenectady | 8.92E-01         | --               | <b>8.92E-01</b>     |
| Lawrence Berkeley National Laboratory        | 1.36E-02         | --               | <b>1.36E-02</b>     |
| Lawrence Livermore National Laboratory       | 4.88E+03         | --               | <b>4.88E+03</b>     |
| Los Alamos National Laboratory               | 7.60E+05         | 4.77E+03         | <b>7.65E+05</b>     |
| Material and Fuels Complex                   | 5.80E+01         | 1.03E+04         | <b>1.04E+04</b>     |
| Nevada National Security Site                | 2.90E+02         | --               | <b>2.90E+02</b>     |
| Nuclear Radiation Development Site           | 3.28E+01         | --               | <b>3.28E+01</b>     |
| Oak Ridge National Laboratory                | 2.28E+04         | 3.14E+04         | <b>5.42E+04</b>     |
| Sandia National Laboratories                 | 4.13E+01         | 1.39E+03         | <b>1.43E+03</b>     |
| Savannah River Site                          | 2.29E+06         | 8.12E+03         | <b>2.30E+06</b>     |
| Separations Process Research Unit            | 5.80E+00         | 4.29E+01         | <b>4.87E+01</b>     |
| <b>Grand Total</b>                           | <b>3.48E+06</b>  | <b>6.10E+05</b>  | <b>4.09E+06</b>     |

Data Source: CID Data Version D.23.00.33 (LANL-CO 2024a). 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-2023 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 increases and decreases in activity reported by the TRU waste generator sites and the WDS.

As shown in Table 3-11, the total anticipated CH- and RH-TRU waste radionuclide activity reported by the sites increased by  $\approx 294,000$  Ci. This increase, combined with an increase of  $\approx 77,300$  Ci that were emplaced at the WIPP facility during CY 2023, results in an overall increase of  $\approx 371,000$  Ci. SRS reflected the greatest anticipated site increase ( $\approx 395,000$  Ci), primarily attributed to the designation of waste stream SR-KAC-PuOx-2 as WIPP-bound, accounting for  $\approx 385,000$  Ci of the increase. This increase in radionuclide activity was partially countered with a significant decrease from LANL ( $\approx 86,400$  Ci), primarily due to decreased anticipated waste and updated calculations for waste streams LA-MHD01.001 and LA-MHD01-Pits.

**Table 3-11. CH/RH Radionuclide Activity Changes Decay-Corrected Through CY 2033**

| <b>TRU Waste Generator Site</b>         | <b>ATWIR-2023<br/>Total (Ci)</b> | <b>ATWIR-2024<br/>Total (Ci)</b> | <b>Net Change<br/>(Ci)</b> |
|---|----------------------------------|----------------------------------|----------------------------|
| Hanford (Richland) Site                 | 6.46E+05                         | 6.46E+05                         | +1.10E+01                  |
| Idaho National Laboratory               | 1.02E+05                         | 8.98E+04                         | -1.22E+04                  |
| Los Alamos National Laboratory          | 7.16E+05                         | 6.30E+05                         | -8.64E+04                  |
| Oak Ridge National Laboratory           | 4.19E+04                         | 4.10E+04                         | -8.46E+02                  |
| Savannah River Site                     | 1.51E+06                         | 1.90E+06                         | +3.95E+05                  |
| Small-Quantity Sites                    | 2.01E+04                         | 1.84E+04                         | -1.65E+03                  |
| <b>Anticipated Total</b>                | <b>3.03E+06</b>                  | <b>3.33E+06</b>                  | <b>+2.94E+05</b>           |
| WIPP (Emplaced)                         | 1.89E+06                         | 1.97E+06                         | +7.73E+04                  |
| WCS (Temporary Storage)                 | 4.11E+03                         | 4.11E+03                         | --                         |
| <b>Emplaced/Temporary Storage Total</b> | <b>1.90E+06</b>                  | <b>1.97E+06</b>                  | <b>+7.73E+04</b>           |
| <b>Grand Total</b>                      | <b>4.93E+06</b>                  | <b>5.30E+06</b>                  | <b>+3.71E+05</b>           |

Data Source: CID Data Versions D.22.01.33 (LANL-CO 2023a) and D.23.00.33 (LANL-CO 2024a). 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 collected and reported using the methodology discussed in section 2.0. Actual numeric 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 facility 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 when regulatory uncertainties exist regarding waste eligibility or 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 WAP) before it can be disposed of at the WIPP facility.

For strategic planning initiatives across the DOE complex, the DOE requested the sites report defense-related TRU waste projected beyond CY 2033, where applicable. These projected inventory estimates include information on decontamination and decommissioning (D&D) activities and all other site activities that have produced or are expected to produce defense-related TRU waste. The DOE may use these inventory estimates to plan 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

≈8,160 m<sup>3</sup>, or 17 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 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 facility can only accept TRU waste from defense-related activities, as stated in the WIPP LWA (U.S. Congress 1992 and 1996). Waste with 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** – Numerous regulatory restrictions would prevent waste in its current form from coming to the WIPP facility. 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. Sites must treat, repackage, or remove any restricted items before such waste can be accepted for disposal at the WIPP facility.
- **Incomplete Data** – Waste with 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 categorized as 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 details on all potential waste streams are provided in Appendix B of this report. Table 4-1 identifies those CH- and RH-TRU waste streams categorized as potential for reasons other than direction from the DOE as of the data cutoff date for this report.

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

| <b>Waste Stream ID<sup>1</sup></b> | <b>Handling</b> | <b>Final Form Anticipated Volume (m<sup>3</sup>)</b> | <b>Categories of Potential WIPP CH/RH-TRU Waste</b> |
|------------------------------------|-----------------|--|---|
| 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                                     |
| NT-W021                            | CH              | 1.50E+01   | Regulatory Restrictions                             |



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

Continued

| Waste Stream ID <sup>1</sup> | Handling | Final Form Anticipated Volume (m <sup>3</sup> ) | Categories of Potential WIPP CH/RH-TRU Waste |
|------------------------------|----------|---|--|
| OR-TBD-CH-HET                | CH       | 1.20E+01  | TRU Waste Determination                      |
| OR-TBD-RH-HET                | RH       | 5.04E+00  | TRU Waste Determination                      |
| OR-Y12-CH-HET                | CH       | 6.30E-01  | TRU Waste Determination                      |
| RL221T-01                    | CH       | 8.82E+00  | Incomplete Data                              |
| RL300-11                     | RH       | 1.09E+02  | Regulatory Restrictions                      |
| RLALPHA-08                   | RH       | 6.09E+01  | Incomplete Data                              |
| RLCH2-08                     | RH       | 2.20E+00  | TRU Waste Determination                      |
| RLDD-01                      | CH       | 3.01E+02  | Incomplete Data                              |
| RLDD-08                      | RH       | 3.30E+01  | Incomplete Data                              |
| RLPFP-02                     | CH       | 8.40E-01  | Incomplete Data                              |
| RLPRC-01                     | CH       | 4.20E-01  | Defense Determination                        |
| <b>Grand Total</b>           |          | <b>4.56E+03</b>                                 |  |

<sup>1</sup>See Figure 1-1 for site designators. Data Source: CID Data Version D.23.00.33 (LANL-CO 2024a).

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 in order to be re-categorized as WIPP-bound.

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

| Waste Stream ID <sup>1</sup> | Handling | Final Form Anticipated Volume (m <sup>3</sup> ) |
|------------------------------|----------|---|
| IN-SBW-01A                   | RH       | 1.34E+03  |
| 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  |
| WV-M010a                     | CH       | 2.98E+01  |
| WV-T004a                     | CH       | 2.31E+00  |
| WV-T004b                     | RH       | 3.78E+00  |
| WV-T006a                     | CH       | 2.68E+02  |
| WV-T006b                     | RH       | 2.29E+02  |
| WV-W024a                     | CH       | 1.74E+01  |
| WV-W024b                     | RH       | 3.21E+01  |

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

| Waste Stream ID <sup>1</sup> | Handling | Final Form Anticipated Volume (m <sup>3</sup> ) |
|------------------------------|----------|---|
| WV-W050a                     | CH       | 3.99E+00  |
| WV-W050b                     | RH       | 6.93E+00  |
| <b>Grand Total</b>           |          | <b>3.60E+03</b>                                 |

<sup>1</sup>See Figure 1-1 for site designators. Data Source: CID Data Version D.23.00.33 (LANL-CO 2024a).

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, four potential waste streams were re-designated as WIPP-bound during CY 2023.

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

| ATWIR-2023 Potential Waste Stream ID <sup>1</sup> | ATWIR-2024 WIPP-bound Waste Stream ID | Reason  |
|---|---------------------------------------|---|
| OR-GENR-RH-HET                                    | OR-GENR-CH-HET                        | Waste stream moved into OR-GENR-CH-HET              |
| RLN622FD-01                                       | RL200-02                              | Waste stream moved into RL200-02                    |
| SR-KAC-HET-2                                      | SR-KAC-HET-2                          | Changed to WIPP-bound based on recent NEPA approval |
| SR-KAC-PuOx-2                                     | SR-KAC-PuOx-2                         | Changed to WIPP-bound based on recent NEPA approval |

<sup>1</sup>See Figure 1-1 for site designators. Data Source: CID Data Version D.23.00.33 (LANL-CO 2024a).

## 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 WIPP-bound and potential CH- and RH-TRU waste 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 Waste Volume Beyond CY 2033**

| Waste Stream ID <sup>1</sup> | Handling | End Generation Year | Final Form Volume Projected Beyond CY 2033 (m <sup>3</sup> ) |
|------------------------------|----------|---------------------|--|
| <b>WIPP-bound</b>            |          |                     |  |
| AE-T001                      | CH       | 2051                | 7.14E+00   |
| AE-T009                      | RH       | 2051                | 3.74E+00   |
| AW-N027.531                  | CH       | 2054                | 4.41E+00   |
| AW-T031.1322                 | RH       | 2054                | 2.65E+01   |
| AW-T033.1325                 | CH       | 2054                | 2.65E+01   |
| AW-W020.13                   | RH       | 2054                | 1.32E+01   |
| KA-T001                      | RH       | 2050                | 1.26E+01   |
| KA-T002                      | RH       | 2050                | 6.30E-01   |
| KA-W016                      | RH       | 2050                | 6.30E-01   |
| LA-CIN01.001                 | CH       | 2050                | 6.59E+01   |
| LA-MHD01-Pits                | CH       | 2070                | 3.54E+03   |
| LA-MHD01.001                 | CH       | 2050                | 5.09E+03   |
| LA-MHD03.001                 | CH       | 2050                | 6.37E+02   |
| LA-OS-00-01.001              | CH       | 2050                | 8.16E+00   |
| LB-T001                      | CH       | 2050                | 2.10E-01   |
| LB-T002                      | CH       | 2050                | 2.10E-01   |
| LL-M001                      | CH       | 2050                | 3.09E+02   |
| LL-T004                      | CH       | 2050                | 1.66E+00   |
| LL-W019                      | CH       | 2050                | 1.79E+01   |
| OR-REDC-CH-HET               | CH       | 2082                | 5.33E+02   |
| OR-REDC-RH-HET               | RH       | 2082                | 2.55E+02   |
| OR-RF-RH-HET                 | RH       | 2082                | 1.85E+02   |
| RL200-01                     | CH       | 2037                | 5.08E+02   |
| RL200-02                     | CH       | 2037                | 2.64E+03   |
| RL222S-01                    | CH       | 2060                | 5.67E+01   |
| RL325-01                     | CH       | 2060                | 1.86E+02   |
| RL325-03                     | CH       | 2050                | 9.66E+00   |
| RL325-08                     | RH       | 2060                | 9.17E+01   |
| RLWTP-08                     | RH       | 2050                | 4.79E+01   |
| SR-CH-PP                     | CH       | 2083                | 2.27E+04   |
| SR-KAC-HET-2                 | CH       | 2049                | 1.54E+02   |
| SR-KAC-HET-B                 | CH       | 2049                | 5.23E+01   |
| SR-KAC-PuOx                  | CH       | 2049                | 2.54E+02   |
| SR-KAC-PuOx-2                | CH       | 2049                | 1.06E+03   |
| SR-RH-773A.01                | RH       | 2036                | 2.73E+00   |
| SR-W027-221H-HEPA            | CH       | 2051                | 4.14E+01   |
| SR-W027-221H-HET-C           | CH       | 2051                | 7.56E+00   |
| SR-W027-773A-HET             | CH       | 2036                | 8.19E+00   |
| <b>WIPP-bound Total</b>      |          |                     | <b>3.86E+04</b>  |

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

Continued

| Waste Stream ID <sup>1</sup> | Handling | End Generation Year | Final Form Volume Projected Beyond CY 2033 (m <sup>3</sup> ) |
|------------------------------|----------|---------------------|--|
| <b>Potential</b>             |          |                     |  |
| OR-TBD-RH-HET                | RH       | 2082                | 6.87E+01   |
| RLDD-01                      | CH       | 2057                | 5.29E+03   |
| RLDD-02                      | CH       | 2040                | 3.03E+03   |
| RLDD-08                      | RH       | 2057                | 5.89E+02   |
| RLDD-10                      | RH       | 2045                | 3.33E+02   |
| WV-Z001                      | CH       | 2050                | 4.30E+03   |
| <b>Potential Total</b>       |          |                     | <b>1.36E+04</b>  |
| <b>Grand Total</b>           |          |                     | <b>5.22E+04</b>  |

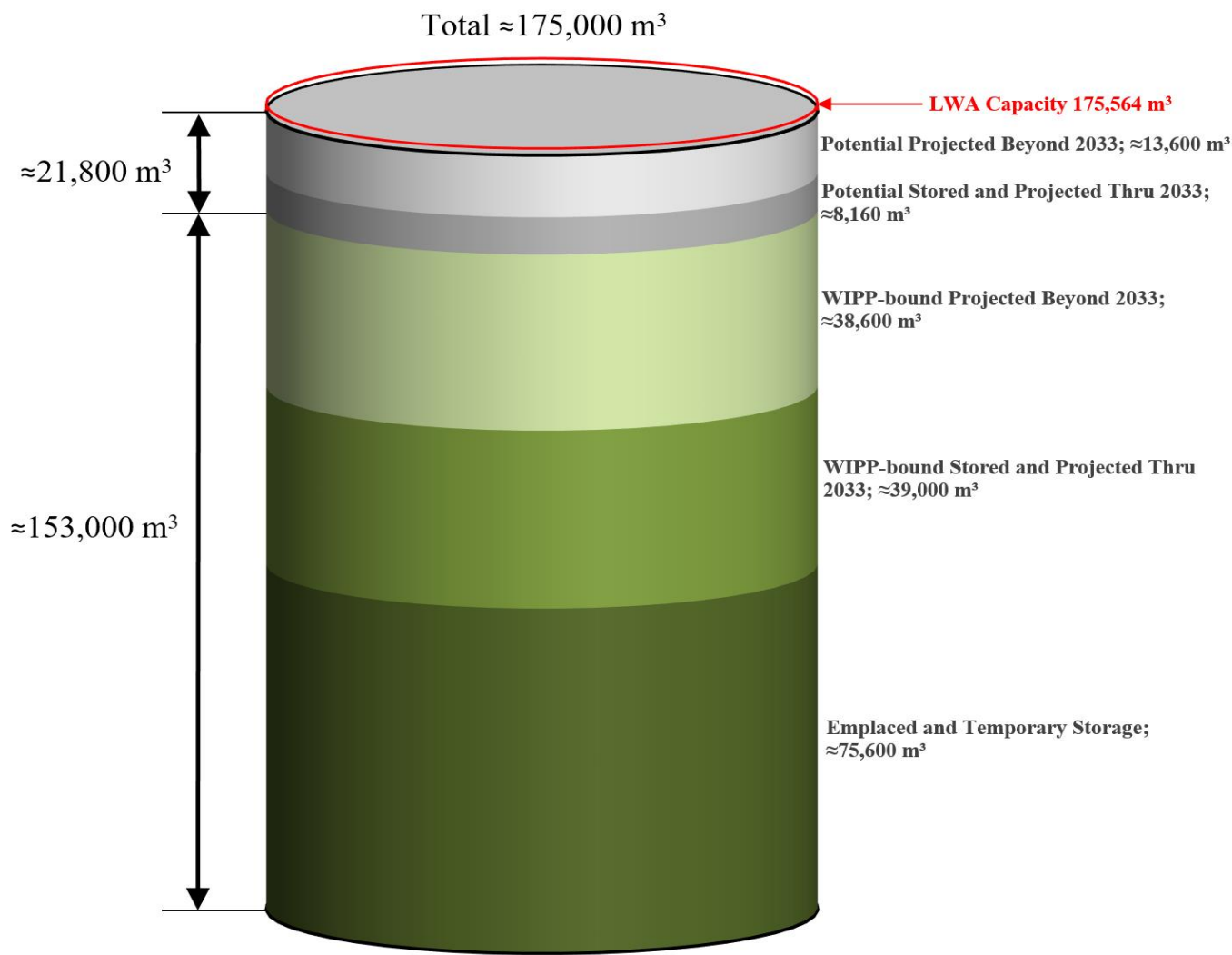
<sup>1</sup>See Figure 1-1 for site designators. Data Source: CID Data Version D.23.00.33 (LANL-CO 2024a).

As shown throughout this report, the estimated waste volumes for the following categories are reported as follows:

- Emplaced and Temporary Storage:  $\approx 75,600 \text{ m}^3$  (Table 3-3)
- WIPP-bound Stored and Projected Thru 2033:  $\approx 39,000 \text{ m}^3$  (Table 3-3)
- WIPP-bound Projected Beyond 2033:  $\approx 38,600 \text{ m}^3$  (Table 4-4)
- Potential Stored and Projected Thru 2033:  $\approx 8,160 \text{ m}^3$  (Table 4-1 and Table 4-2)
- Potential Projected Beyond 2033:  $\approx 13,600 \text{ m}^3$  (Table 4-4)

Under the WIPP LWA, the WIPP facility is authorized to dispose of 6.2 million cubic feet ( $175,564 \text{ m}^3$ ) of TRU waste. The current estimated total volume of TRU waste already emplaced at the WIPP facility or in temporary storage, plus stored and projected WIPP-bound waste, is approximately  $153,000 \text{ m}^3$ .

The volume of stored and projected potential waste reported by TRU waste generator sites is approximately  $21,800 \text{ m}^3$ . If all potential waste being reported became eligible for disposal at the WIPP facility and added to the current estimate of stored and projected WIPP-bound volume, the total waste volume would be approximately  $175,000 \text{ m}^3$ . Figure 4-1 is a graphical representation of the above data as compared to the LWA capacity limit.

**Figure 4-1. ATWIR-2024 Volume vs LWA Capacity Limit**

## 5.0 SUMMARY

This report is an update to the inventory used in the ATWIR-2023 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, 2023.

The TRU waste generator sites continue to refine 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 shipments of waste from INL to the WIPP facility; reduction of anticipated volume and update to radionuclide calculations at LANL; reduction in

the estimated number of shielded containers to be used and revision to query methodologies at RL; reassignment of TRU waste previously reported by SRS from potential to WIPP-bound; 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 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 held in aboveground storage or disposed of in the WIPP facility. Emplaced inventory is tracked by the WDS, the official database of record for waste emplaced in the WIPP facility.

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

**Hazardous Waste Facility Permit** – Authorizes the management, storage, and disposal of CH- and RH-TRU mixed waste at the WIPP facility, 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 facility, 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 facility. Regardless of its designation in this report, TRU waste must meet all WIPP requirements before it can be disposed of in the WIPP facility. 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 that require a QA program, including those implementing activities related to regulatory compliance certification, waste characterization and certification, repository PA, waste isolation, waste transportation, nuclear safety, environmental protection, and management and operation of the WIPP facility.

**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 facility) 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 facility 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 facility.

**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 waste streams that appear, as of the data cutoff date, to have no significant technical or legal constraints limiting the waste from being eligible for disposal in the WIPP facility after all waste characterization and certification criteria have been satisfied. WIPP-bound inventory will be included in PA.

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**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, 2023.

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 |
| 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           | 12/31/2023 |    |
| Stream Name | ANL-E Contact-Handled Mixed Heterogeneous Debris |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 41.4        | 7.6        | 48.9        |
| <b>Final Form Total</b>     | <b>41.4</b> | <b>7.6</b> | <b>48.9</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.38E+03        |
| Aluminum-based Metal/Alloys   | 5.68E+01        |
| Other Metal/Alloys            | 1.54E+02        |
| Other Inorganic Materials     | 3.82E+02        |
| Cellulose                     | 3.08E+02        |
| Rubber                        | 3.88E+02        |
| Plastic                       | 1.95E+03        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 6.86E+01        |
| Solidified Organic Material   | 1.66E+01        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 1.80E+03        |
| Packaging Material, Rubber    | 2.75E+01        |
| Packaging Material, Steel     | 6.34E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 2.89E+01            |
| Am-243  | 2.90E+00            |
| Cm-244  | 1.03E-01            |
| Cs-137  | 7.85E-01            |
| Np-237  | 1.66E-02            |
| Pu-238  | 2.48E+00            |
| Pu-239  | 1.20E+01            |
| Pu-240  | 3.95E+00            |
| Pu-241  | 8.76E+01            |
| Pu-242  | 2.99E-02            |
| Pu-244  | 8.53E-06            |
| Sr-90   | 5.84E-01            |
| Th-229  | 2.34E-05            |
| Th-230  | 4.62E-04            |
| Th-232  | 1.88E-04            |
| U-233   | 6.58E-03            |
| U-234   | 1.14E-01            |
| U-235   | 6.38E-05            |
| U-236   | 1.89E-05            |
| U-238   | 3.39E-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 waste debris consists primarily of heterogeneous organic and inorganic laboratory debris (more than 50% per container) and lesser amounts of homogeneous organic and inorganic materials (less than 50% per container) generated during the neutralization and solidification of aqueous and inorganic liquids originating from Argonne laboratory and maintenance operations. 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.

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           | 12/31/2023 |    |
| Stream Name | RH TRU                      |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |             |             |             |
|-------------------------|-------------|-------------|-------------|
| Container Type          | Stored      | Proj.       | Total       |
| RH SCA-30G1 w/ Liner    | 19.8        | 10.0        | 29.8        |
| RH SCA-55G1 w/ Liner    | 1.1         | 0.0         | 1.1         |
| <b>Final Form Total</b> | <b>20.9</b> | <b>10.0</b> | <b>30.9</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.32E+03        |
| Aluminum-based Metal/Alloys   | 1.11E+03        |
| Other Metal/Alloys            | 1.02E+03        |
| Other Inorganic Materials     | 1.45E+03        |
| Cellulose                     | 1.86E+03        |
| Rubber                        | 5.05E+02        |
| Plastic                       | 8.98E+02        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 8.88E+00        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 2.63E+03        |
| Packaging Material, Rubber    | 3.24E+01        |
| Packaging Material, Steel     | 1.17E+05        |
| Packaging Material, Lead      | 1.17E+05        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 8.15E+01            |
| Am-243  | 4.07E-01            |
| Cm-244  | 7.20E+01            |
| Cs-137  | 1.26E+03            |
| Np-237  | 2.16E-03            |
| Pu-238  | 1.06E+02            |
| Pu-239  | 8.92E+01            |
| Pu-240  | 5.49E+01            |
| Pu-241  | 6.21E+02            |
| Pu-242  | 4.06E-02            |
| Sr-90   | 8.94E+02            |
| Th-229  | 4.10E-03            |
| Th-230  | 1.13E-06            |
| Th-232  | 1.13E-15            |
| U-233   | 3.56E-05            |
| U-234   | 2.54E-02            |
| U-235   | 6.81E-03            |
| U-236   | 8.65E-06            |
| U-238   | 4.42E-02            |

**Haz. Waste No(s).**

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

**TRUCON Code(s)**

125/225

**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.

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           | 12/31/2023 |    |
| Stream Name | MFC CH-MTRU Due to RCRA Metals                     |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

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

**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            | 1.21E+02        |
| Other Inorganic Materials     | 1.45E+01        |
| Cellulose                     | 4.46E+01        |
| Rubber                        | 0.00E+00        |
| Plastic                       | 3.62E+01        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 7.96E+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    | 1.18E+00        |
| Packaging Material, Steel     | 2.72E+02        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 2.16E+01            |
| Am-243  | 2.15E-11            |
| Cs-137  | 1.83E-04            |
| Np-237  | 9.23E-04            |
| Pu-239  | 6.85E-01            |
| Sr-90   | 1.96E-04            |
| Th-229  | 4.44E-16            |
| Th-230  | 1.96E-18            |
| U-233   | 1.41E-10            |
| U-234   | 5.91E-12            |
| U-235   | 7.80E-06            |
| U-238   | 5.50E-05            |

**Haz. Waste No(s).**

|  |
|--|
| D006, D007, D008, D011, 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.

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           | 12/31/2023 |    |
| Stream Name | RH TRU Hot Cell Waste                              |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                          |            |             |             |
|---|------------|-------------|-------------|
| Container Type                              | Stored     | Proj.       | Total       |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner  | 0.0        | 12.6        | 12.6        |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 3.8        | 0.0         | 3.8         |
| <b>Final Form Total</b>                     | <b>3.8</b> | <b>12.6</b> | <b>16.4</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 9.15E+02        |
| Aluminum-based Metal/Alloys   | 9.86E+02        |
| Other Metal/Alloys            | 8.13E+02        |
| Other Inorganic Materials     | 2.87E+01        |
| Cellulose                     | 2.55E+02        |
| Rubber                        | 0.00E+00        |
| Plastic                       | 3.74E+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   | 6.03E+02        |
| Packaging Material, Rubber    | 9.20E+00        |
| Packaging Material, Steel     | 1.51E+04        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 4.57E+01            |
| Am-243  | 6.32E-09            |
| Cm-244  | 1.25E-06            |
| Cs-137  | 6.14E+02            |
| Np-237  | 5.67E-02            |
| Pu-238  | 1.03E+00            |
| Pu-239  | 1.49E+01            |
| Pu-240  | 5.82E-01            |
| Pu-241  | 1.69E+00            |
| Pu-242  | 5.66E-03            |
| Sr-90   | 9.78E+02            |
| Th-229  | 1.68E-09            |
| Th-230  | 3.92E-06            |
| Th-232  | 5.30E-13            |
| U-233   | 3.06E-06            |
| U-234   | 3.55E-02            |
| U-235   | 2.83E-04            |
| U-236   | 8.96E-04            |
| U-238   | 2.44E-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).



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           | 12/31/2023 |    |
| Stream Name | MFC CH-TRU Waste            |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |            |             |             |
|------------------------------|------------|-------------|-------------|
| Container Type               | Stored     | Proj.       | Total       |
| 55-gal Drum Dir Ld w/o Liner | 0.0        | 12.6        | 12.6        |
| <b>Final Form Total</b>      | <b>0.0</b> | <b>12.6</b> | <b>12.6</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.89E+02        |
| Aluminum-based Metal/Alloys   | 8.97E+01        |
| Other Metal/Alloys            | 8.13E+01        |
| Other Inorganic Materials     | 3.74E+02        |
| Cellulose                     | 6.94E+02        |
| Rubber                        | 1.83E+01        |
| Plastic                       | 7.13E+02        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 2.10E+02        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 0.00E+00        |
| Packaging Material, Rubber    | 7.08E+00        |
| Packaging Material, Steel     | 1.63E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 2.43E+01            |
| Am-243  | 5.42E-03            |
| Cm-244  | 7.00E-01            |
| Cs-137  | 7.89E-01            |
| Np-237  | 3.79E-02            |
| Pu-238  | 2.58E+00            |
| Pu-239  | 4.39E+00            |
| Pu-240  | 3.80E-01            |
| Pu-242  | 9.17E-05            |
| Sr-90   | 7.66E-01            |
| Th-229  | 1.82E-14            |
| Th-230  | 6.46E-10            |
| Th-232  | 7.13E-18            |
| U-233   | 5.80E-09            |
| U-234   | 7.03E-04            |
| U-235   | 2.53E-05            |
| U-236   | 1.45E-06            |
| U-238   | 1.03E-03            |

No Hazardous Waste Numbers Provided

TRUCON Code(s)  
125/225

**Waste Stream Description**

Miscellaneous process material debris waste.

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           | 12/31/2023 |    |
| Stream Name | RH MTRU Hot Cell Waste     |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                          |            |            |            |
|---|------------|------------|------------|
| Container Type                              | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner  | 0.6        | 6.3        | 6.9        |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b>                     | <b>2.5</b> | <b>6.3</b> | <b>8.8</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 3.51E+02        |
| Aluminum-based Metal/Alloys   | 4.59E+01        |
| Other Metal/Alloys            | 9.93E+02        |
| Other Inorganic Materials     | 1.34E+02        |
| Cellulose                     | 5.04E+02        |
| Rubber                        | 0.00E+00        |
| Plastic                       | 4.80E+02        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 2.41E+01        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 3.30E+02        |
| Packaging Material, Rubber    | 4.96E+00        |
| Packaging Material, Steel     | 8.13E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 2.14E+01            |
| Am-243  | 1.69E-01            |
| Cm-244  | 5.66E-01            |
| Cs-137  | 1.98E+03            |
| Np-237  | 2.71E-03            |
| Pu-238  | 8.62E+00            |
| Pu-239  | 1.81E+01            |
| Pu-240  | 3.59E+00            |
| Pu-241  | 5.42E+01            |
| Pu-242  | 3.95E-02            |
| Pu-244  | 8.15E-11            |
| Sr-90   | 1.46E+03            |
| Th-229  | 1.02E-09            |
| Th-230  | 1.16E-04            |
| Th-232  | 6.64E-14            |
| U-233   | 1.16E-05            |
| U-234   | 5.72E-02            |
| U-235   | 2.01E-03            |
| U-236   | 1.35E-03            |
| U-238   | 1.89E-03            |

**Haz. Waste No(s).**

D004, D005, D006, D007, D008, D009, D010, D011

**TRUCON Code(s)**

325

**Waste Stream Description**

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

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           | 12/31/2023 |    |
| Stream Name | Irradiated TRU material waste  |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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        |
| <b>Final Form Total</b>                     | <b>7.6</b> | <b>0.0</b> | <b>7.6</b> |

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  | 3.04E-02            |
| Am-243  | 1.13E-04            |
| Cs-137  | 4.77E+01            |
| Np-237  | 1.61E-04            |
| Pu-238  | 1.20E+00            |
| Pu-239  | 1.03E-03            |
| Pu-241  | 1.32E-01            |
| Pu-242  | 1.85E-05            |
| Sr-90   | 4.69E+01            |
| Th-229  | 4.57E-05            |
| Th-230  | 1.37E-08            |
| Th-232  | 1.13E-14            |
| U-233   | 9.86E-03            |
| U-234   | 3.07E-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.

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           | 12/31/2023 |    |
| Stream Name | MFC Retrievable ANL-E RH TRU Containers - Stage 2 |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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        |
| <b>Final Form Total</b>                     | <b>104.6</b> | <b>0.0</b> | <b>104.6</b> |

**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  | 4.85E+02            |
| Cm-244  | 7.92E+00            |
| Cs-137  | 1.86E+03            |
| Np-237  | 6.24E-04            |
| Pu-238  | 9.14E+01            |
| Pu-239  | 4.24E+02            |
| Pu-240  | 2.28E+02            |
| Pu-241  | 1.68E+03            |
| Pu-242  | 1.38E-01            |
| Sr-90   | 1.54E+03            |
| Th-229  | 4.27E-07            |
| Th-230  | 5.55E-05            |
| Th-232  | 2.67E-15            |
| U-233   | 1.21E-03            |
| U-234   | 1.51E+00            |
| U-235   | 5.24E-02            |
| U-236   | 2.70E-05            |
| 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.

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           | 12/31/2023 |    |
| Stream Name | RH-TRU Debris Waste From Materials and Fuels Complex Hot Fuel Examination Facility at the INL. |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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        |
| <b>Final Form Total</b>                     | <b>1.3</b> | <b>0.0</b> | <b>1.3</b> |

**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  | 8.51E+00            |
| Cs-137  | 2.41E+02            |
| Np-237  | 1.32E-05            |
| Pu-238  | 5.84E+00            |
| Pu-239  | 4.33E+00            |
| Pu-240  | 2.46E+00            |
| Pu-241  | 8.81E+01            |
| Sr-90   | 3.93E+01            |
| Th-229  | 2.02E-14            |
| Th-230  | 1.42E-06            |
| Th-232  | 4.49E-17            |
| U-233   | 1.39E-10            |
| U-234   | 3.08E-02            |
| U-235   | 6.16E-04            |
| U-236   | 3.64E-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

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  | 12/31/2023               |      |
| Stream Name | Special Setups Waste                    |                         |                       |                       |                 | Activities Decayed to CY | 2023 |

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

| Final Form Volumes                  |             |            |             |
|-------------------------------------|-------------|------------|-------------|
| Container Type                      | Stored      | Proj.      | Total       |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 4.2         | 0.0        | 4.2         |
| TDOP w/ 6 - 85-gal Drums w/o Liners | 42.2        | 0.0        | 42.2        |
| <b>Final Form Total</b>             | <b>46.4</b> | <b>0.0</b> | <b>46.4</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 8.25E+01        |
| Aluminum-based Metal/Alloys   | 1.09E+00        |
| Other Metal/Alloys            | 1.15E-01        |
| Other Inorganic Materials     | 0.00E+00        |
| Cellulose                     | 8.34E+00        |
| Rubber                        | 0.00E+00        |
| Plastic                       | 1.32E+02        |
| Cement                        | 7.51E+02        |
| Solidified Inorganic Material | 3.55E+04        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 9.20E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 1.54E+02        |
| Packaging Material, Rubber    | 3.74E+01        |
| Packaging Material, Steel     | 2.39E+04        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 6.48E+01            |
| Am-243  | 1.41E-10            |
| Cs-137  | 7.74E-07            |
| Np-237  | 2.63E-03            |
| Pu-238  | 4.70E+00            |
| Pu-239  | 1.15E+02            |
| Pu-240  | 2.57E+01            |
| Pu-241  | 1.21E+02            |
| Pu-242  | 2.70E-03            |
| Sr-90   | 8.48E-07            |
| Th-229  | 4.46E-12            |
| Th-230  | 1.65E-08            |
| Th-232  | 1.69E-16            |
| U-233   | 3.40E-08            |
| U-234   | 6.16E-04            |
| U-235   | 1.71E-04            |
| U-236   | 2.28E-06            |
| U-238   | 1.26E-12            |

**Haz. Waste No(s).**

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

**TRUCON Code(s)**

111/211

**Waste Stream Description**

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

Waste Stream ID: **IN-BN-218**

**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           | 12/31/2023 |    |
| Stream Name | SRP Soils                 |                         |                                |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                  |             |            |             |
|-------------------------------------|-------------|------------|-------------|
| Container Type                      | Stored      | Proj.      | Total       |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 12.6        | 0.0        | 12.6        |
| TDOP w/ 6 - 85-gal Drums w/ Liners  | 1.9         | 0.0        | 1.9         |
| TDOP w/ 6 - 85-gal Drums w/o Liners | 1.9         | 0.0        | 1.9         |
| <b>Final Form Total</b>             | <b>16.4</b> | <b>0.0</b> | <b>16.4</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 5.56E+01        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 6.62E-01        |
| Cellulose                     | 7.85E+00        |
| Rubber                        | 2.12E+01        |
| Plastic                       | 1.66E+02        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 8.43E+02        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 6.86E+03        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 5.09E+02        |
| Packaging Material, Rubber    | 1.50E+01        |
| Packaging Material, Steel     | 8.22E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 4.13E-01            |
| Cs-137  | 6.03E-06            |
| Np-237  | 7.69E-06            |
| Pu-238  | 9.75E-01            |
| Pu-239  | 4.30E-01            |
| Pu-240  | 9.47E-02            |
| Pu-241  | 3.64E-01            |
| Pu-242  | 1.05E-05            |
| Sr-90   | 6.63E-06            |
| Th-229  | 3.69E-18            |
| Th-230  | 8.36E-11            |
| Th-232  | 6.91E-22            |
| U-233   | 1.17E-12            |
| U-234   | 9.10E-05            |
| U-235   | 1.66E-05            |
| U-236   | 2.80E-10            |
| U-238   | 1.86E-04            |

**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**

Soils repackaged in the SRP, which contain <5% by volume identified organic setups waste (RF-003 or RF-743) or other organic solids. The waste may also contain <50% by volume debris items (for example, tray liners, plastic sheeting, rubber bands, glovebox gloves, HEPA filters, and metal tools), and/or organic or inorganic homogenous solids.

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           | 12/31/2023 |    |
| Stream Name | Solidified Plutonium Recovery Incinerator Waste |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                 |            |            |            |
|------------------------------------|------------|------------|------------|
| Container Type                     | Stored     | Proj.      | Total      |
| SWB w/ 4 - 55-gal Drums w/ Liners  | 3.4        | 0.0        | 3.4        |
| TDOP w/ 6 - 85-gal Drums w/ Liners | 3.8        | 0.0        | 3.8        |
| <b>Final Form Total</b>            | <b>7.2</b> | <b>0.0</b> | <b>7.2</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 9.69E+01        |
| Aluminum-based Metal/Alloys   | 3.81E+00        |
| Other Metal/Alloys            | 1.33E+01        |
| Other Inorganic Materials     | 0.00E+00        |
| Cellulose                     | 4.76E-01        |
| Rubber                        | 2.86E-01        |
| Plastic                       | 1.50E+02        |
| Cement                        | 1.76E+01        |
| Solidified Inorganic Material | 2.26E+03        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 2.16E+02        |
| Packaging Material, Rubber    | 6.38E+00        |
| Packaging Material, Steel     | 3.58E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.21E+01            |
| Np-237  | 1.58E-04            |
| Pu-238  | 2.27E+00            |
| Pu-239  | 6.31E+01            |
| Pu-240  | 1.38E+01            |
| Pu-241  | 8.46E+01            |
| Pu-242  | 1.05E-03            |
| Th-229  | 9.67E-13            |
| Th-230  | 1.32E-09            |
| Th-232  | 3.62E-16            |
| U-233   | 3.76E-09            |
| U-234   | 4.34E-05            |
| U-235   | 1.68E-06            |
| U-236   | 2.44E-06            |
| U-238   | 9.74E-13            |

**Haz. Waste No(s).**

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

**TRUCON Code(s)**

111/211, 114/214, 127/227

**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.



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           | 12/31/2023 |    |
| Stream Name | Supercompacted Debris Waste |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                  |               |            |               |
|-------------------------------------|---------------|------------|---------------|
| Container Type                      | Stored        | Proj.      | Total         |
| 100-gal Drum Dir Ld w/o Liner       | 139.1         | 0.0        | 139.1         |
| SWB Dir Ld w/o Liner                | 1.9           | 0.0        | 1.9           |
| SWB w/ 2 - 100-gal Drums w/o Liners | 2232.1        | 0.0        | 2232.1        |
| TDOP w/ 6 - 85-gal Drums w/o Liners | 1.9           | 0.0        | 1.9           |
| <b>Final Form Total</b>             | <b>2375.0</b> | <b>0.0</b> | <b>2375.0</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.49E+06        |
| Aluminum-based Metal/Alloys   | 3.06E+03        |
| Other Metal/Alloys            | 1.33E+04        |
| Other Inorganic Materials     | 5.16E+04        |
| Cellulose                     | 2.23E+05        |
| Rubber                        | 2.83E+04        |
| Plastic                       | 1.79E+05        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 1.58E+04        |
| Solidified Organic Material   | 1.57E+02        |
| Soil                          | 8.54E+02        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 0.00E+00        |
| Packaging Material, Rubber    | 1.80E+03        |
| Packaging Material, Steel     | 1.12E+06        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 4.09E+03            |
| Am-243  | 2.40E-01            |
| Cs-137  | 3.03E+00            |
| Np-237  | 1.37E-01            |
| Pu-238  | 1.03E+04            |
| Pu-239  | 6.87E+03            |
| Pu-240  | 1.67E+03            |
| Pu-241  | 8.50E+03            |
| Pu-242  | 2.71E-01            |
| Sr-90   | 3.34E+00            |
| Th-229  | 8.53E-05            |
| Th-230  | 1.75E-07            |
| Th-232  | 7.68E-03            |
| U-233   | 9.70E+00            |
| U-234   | 1.92E-01            |
| U-235   | 4.75E-02            |
| U-236   | 4.95E-06            |
| U-238   | 1.59E+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.

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           | 12/31/2023 |    |
| Stream Name | AMWTP Non-PCB Soil        |                         |                                |                       | Activities Decayed to CY | 2023       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | 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                       | 4.54E-01        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 0.00E+00        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 2.98E+02        |
| 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  | 9.61E-03            |
| Np-237  | 5.43E-07            |
| Pu-238  | 1.06E-03            |
| Pu-239  | 5.43E-02            |
| Pu-240  | 1.15E-02            |
| Pu-241  | 5.54E-02            |
| Pu-242  | 1.10E-06            |
| Th-229  | 4.89E-15            |
| Th-230  | 7.00E-13            |
| Th-232  | 4.11E-19            |
| U-233   | 1.60E-11            |
| U-234   | 2.15E-08            |
| U-235   | 3.74E-10            |
| U-236   | 2.38E-09            |
| U-238   | 1.20E-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.

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           | 12/31/2023 |    |
| Stream Name | Oversized Debris Items from Supercompactor Facility |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |              |            |              |
|-------------------------|--------------|------------|--------------|
| Container Type          | Stored       | Proj.      | Total        |
| SLB2 Dir Ld             | 288.2        | 0.0        | 288.2        |
| <b>Final Form Total</b> | <b>288.2</b> | <b>0.0</b> | <b>288.2</b> |

**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  | 8.97E+00            |
| Np-237  | 7.68E-05            |
| Pu-238  | 1.16E+00            |
| Pu-239  | 3.92E+01            |
| Pu-240  | 8.73E+00            |
| Pu-241  | 9.42E+01            |
| Pu-242  | 1.14E-03            |
| Th-229  | 3.16E-13            |
| Th-230  | 1.81E-09            |
| Th-232  | 1.59E-16            |
| U-233   | 1.49E-09            |
| U-234   | 4.76E-05            |
| U-235   | 1.02E-05            |
| U-236   | 1.29E-06            |
| U-238   | 8.84E-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.

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           | 12/31/2023 |    |
| Stream Name | TRU Radioactive - Only Debris Waste                |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |             |            |             |
|-------------------------|-------------|------------|-------------|
| Container Type          | Stored      | Proj.      | Total       |
| SLB2 Dir Ld             | 51.7        | 0.0        | 51.7        |
| <b>Final Form Total</b> | <b>51.7</b> | <b>0.0</b> | <b>51.7</b> |

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  | 3.88E-01            |
| Np-237  | 6.03E-07            |
| Pu-238  | 1.02E+01            |
| Pu-239  | 1.68E+00            |
| Pu-240  | 3.81E-01            |
| Pu-241  | 4.02E+00            |
| Pu-242  | 4.98E-05            |
| Th-229  | 9.21E-16            |
| Th-230  | 3.38E-09            |
| Th-232  | 6.96E-18            |
| U-233   | 6.33E-12            |
| U-234   | 1.46E-04            |
| U-235   | 8.28E-09            |
| U-236   | 5.64E-08            |
| U-238   | 3.86E-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.

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           | 12/31/2023 |    |
| Stream Name | Lab Non-PCB Homogeneous Solids Waste (Not P/U Listed) |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 0.6        | 0.0        | 0.6        |
| <b>Final Form Total</b>      | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

**Waste Material Parameters**

| Material Parameter            | 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   | 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  | 1.73E-01            |
| Cs-137  | 7.61E-05            |
| Np-237  | 6.05E-07            |
| Pu-238  | 1.18E-02            |
| Pu-239  | 4.65E-01            |
| Pu-240  | 1.03E-01            |
| Pu-241  | 4.44E-01            |
| Pu-242  | 1.35E-05            |
| Sr-90   | 8.20E-05            |
| Th-229  | 4.57E-15            |
| Th-230  | 1.97E-11            |
| Th-232  | 9.12E-18            |
| U-233   | 1.42E-11            |
| U-234   | 3.83E-07            |
| U-235   | 5.04E-09            |
| U-236   | 3.36E-08            |
| U-238   | 2.30E-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.

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           | 12/31/2023 |    |
| Stream Name | AMWTP WMF-676 PCB Contaminated Debris |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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         | 16.6          | 0.0        | 16.6          |
| 55-gal Drum Dir Ld w/o Liner        | 13.2          | 0.0        | 13.2          |
| SLB2 Dir Ld                         | 1389.3        | 0.0        | 1389.3        |
| SWB Dir Ld w/o Liner                | 5.6           | 0.0        | 5.6           |
| TDOP w/ 6 - 85-gal Drums w/o Liners | 53.8          | 0.0        | 53.8          |
| <b>Final Form Total</b>             | <b>1480.1</b> | <b>0.0</b> | <b>1480.1</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.05E+05        |
| Aluminum-based Metal/Alloys   | 6.98E+01        |
| Other Metal/Alloys            | 4.25E+03        |
| Other Inorganic Materials     | 3.64E+03        |
| Cellulose                     | 7.40E+03        |
| Rubber                        | 1.90E+02        |
| Plastic                       | 8.47E+03        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 1.44E+03        |
| Solidified Organic Material   | 1.16E+02        |
| Soil                          | 1.82E+02        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 6.09E+02        |
| Packaging Material, Rubber    | 2.14E+02        |
| Packaging Material, Steel     | 2.62E+05        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.64E+01            |
| Am-243  | 7.53E-05            |
| Cs-137  | 7.67E-02            |
| Np-237  | 7.33E-04            |
| Pu-238  | 3.41E+00            |
| Pu-239  | 8.26E+01            |
| Pu-240  | 1.82E+01            |
| Pu-241  | 1.41E+02            |
| Pu-242  | 1.98E-03            |
| Sr-90   | 8.35E-02            |
| Th-229  | 1.07E-07            |
| Th-230  | 1.39E-09            |
| Th-232  | 4.18E-06            |
| U-233   | 1.22E-02            |
| U-234   | 1.51E-03            |
| U-235   | 1.88E-04            |
| U-236   | 5.40E-08            |
| U-238   | 6.96E-03            |

**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).

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           | 12/31/2023 |    |
| Stream Name | P/U-listed Lab Non-PCB Homogeneous Solids Waste |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | 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   | 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  | 1.31E+00            |
| Cs-137  | 4.42E-06            |
| Np-237  | 5.15E-06            |
| Pu-238  | 2.98E-03            |
| Pu-239  | 1.17E-01            |
| Pu-240  | 2.60E-02            |
| Pu-241  | 1.11E-01            |
| Pu-242  | 3.41E-06            |
| Sr-90   | 4.78E-06            |
| Th-229  | 4.71E-14            |
| Th-230  | 5.93E-12            |
| Th-232  | 2.74E-18            |
| U-233   | 1.34E-10            |
| U-234   | 1.06E-07            |
| U-235   | 1.38E-09            |
| U-236   | 9.25E-09            |
| U-238   | 6.35E-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.

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           | 12/31/2023 |    |
| Stream Name | AMWTP Sludge Repackaging Project (SRP) Combined Sludge Waste |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                  |               |            |               |
|-------------------------------------|---------------|------------|---------------|
| Container Type                      | Stored        | Proj.      | Total         |
| 55-gal Drum Dir Ld w/ Liner         | 1154.6        | 0.0        | 1154.6        |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 737.1         | 0.0        | 737.1         |
| TDOP w/ 6 - 85-gal Drums w/ Liners  | 309.1         | 0.0        | 309.1         |
| <b>Final Form Total</b>             | <b>2200.8</b> | <b>0.0</b> | <b>2200.8</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 3.77E+03        |
| Aluminum-based Metal/Alloys   | 2.32E+01        |
| Other Metal/Alloys            | 8.47E+02        |
| Other Inorganic Materials     | 6.46E+02        |
| Cellulose                     | 2.16E+03        |
| Rubber                        | 1.27E+03        |
| Plastic                       | 3.05E+04        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 6.24E+05        |
| Solidified Organic Material   | 2.13E+05        |
| Soil                          | 1.39E+03        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 7.69E+04        |
| Packaging Material, Rubber    | 1.60E+03        |
| Packaging Material, Steel     | 6.74E+05        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.19E+03            |
| Am-243  | 1.41E-03            |
| Cm-244  | 2.23E-01            |
| Cs-137  | 2.52E-01            |
| Np-237  | 5.70E-02            |
| Pu-238  | 1.08E+02            |
| Pu-239  | 2.90E+03            |
| Pu-240  | 6.51E+02            |
| Pu-241  | 2.99E+03            |
| Pu-242  | 7.07E-02            |
| Sr-90   | 2.71E-01            |
| Th-229  | 7.83E-07            |
| Th-230  | 2.15E-07            |
| Th-232  | 1.63E-04            |
| U-233   | 8.90E-02            |
| U-234   | 2.33E-01            |
| U-235   | 1.28E-02            |
| U-236   | 1.93E-06            |
| U-238   | 5.97E-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.



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           | 12/31/2023 |    |
| Stream Name | Solidified Acid/Caustic Waste           |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                  |            |            |            |
|-------------------------------------|------------|------------|------------|
| Container Type                      | Stored     | Proj.      | Total      |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 2.1        | 0.0        | 2.1        |
| TDOP w/ 6 - 85-gal Drums w/ Liners  | 3.8        | 0.0        | 3.8        |
| <b>Final Form Total</b>             | <b>5.9</b> | <b>0.0</b> | <b>5.9</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 4.54E-01        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 5.86E-01        |
| Other Inorganic Materials     | 2.86E-01        |
| Cellulose                     | 5.04E+00        |
| Rubber                        | 1.60E+00        |
| Plastic                       | 1.65E+01        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 2.07E+03        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 1.70E+02        |
| Packaging Material, Rubber    | 5.04E+00        |
| Packaging Material, Steel     | 3.02E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.67E-01            |
| Cs-137  | 7.80E-07            |
| Np-237  | 2.73E-05            |
| Pu-238  | 1.13E+02            |
| Pu-239  | 1.86E-01            |
| Pu-240  | 1.19E-01            |
| Pu-241  | 6.16E-01            |
| Pu-242  | 1.32E-04            |
| Sr-90   | 8.58E-07            |
| Th-229  | 1.31E-17            |
| Th-230  | 1.84E-11            |
| Th-232  | 8.66E-22            |
| U-233   | 4.17E-12            |
| U-234   | 3.60E-05            |
| U-235   | 1.83E-11            |
| U-236   | 3.51E-10            |
| U-238   | 6.49E-05            |

**Haz. Waste No(s).**

D007, D008, D009, F001, F002

**TRUCON Code(s)**

111/211, 127/227

**Waste Stream Description**

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

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           | 12/31/2023 |    |
| Stream Name | Cemented Sludge                              |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                 |            |            |            |
|------------------------------------|------------|------------|------------|
| Container Type                     | Stored     | Proj.      | Total      |
| SWB w/ 4 - 55-gal Drums w/ Liners  | 5.0        | 0.0        | 5.0        |
| TDOP w/ 6 - 85-gal Drums w/ Liners | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b>            | <b>7.0</b> | <b>0.0</b> | <b>7.0</b> |

**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                       | 1.36E+00        |
| Cement                        | 4.54E-01        |
| Solidified Inorganic Material | 6.31E+03        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 2.31E+02        |
| Packaging Material, Rubber    | 6.53E+00        |
| Packaging Material, Steel     | 3.39E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.64E-02            |
| Np-237  | 2.55E-06            |
| Pu-238  | 1.31E+00            |
| Pu-239  | 2.05E-03            |
| Pu-240  | 1.40E-03            |
| Pu-241  | 1.41E-03            |
| Pu-242  | 1.61E-06            |
| Th-229  | 4.36E-15            |
| Th-230  | 1.95E-10            |
| Th-232  | 9.19E-21            |
| U-233   | 3.31E-11            |
| U-234   | 1.26E-05            |
| U-235   | 6.05E-12            |
| U-236   | 1.24E-10            |
| U-238   | 7.48E-16            |

**Haz. Waste No(s).**

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

**TRUCON Code(s)**

111/211, 127/227

**Waste Stream Description**

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.

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           | 12/31/2023 |    |
| Stream Name | First/Second Stage Sludge                    |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                  |            |            |            |
|-------------------------------------|------------|------------|------------|
| Container Type                      | Stored     | Proj.      | Total      |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 2.1        | 0.0        | 2.1        |
| TDOP w/ 6 - 85-gal Drums w/o Liners | 3.8        | 0.0        | 3.8        |
| <b>Final Form Total</b>             | <b>5.9</b> | <b>0.0</b> | <b>5.9</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 3.48E+01        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 0.00E+00        |
| Cellulose                     | 1.14E-01        |
| Rubber                        | 0.00E+00        |
| Plastic                       | 1.21E+01        |
| Cement                        | 1.02E+01        |
| Solidified Inorganic Material | 3.07E+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+01        |
| Packaging Material, Rubber    | 5.04E+00        |
| Packaging Material, Steel     | 3.02E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.07E+01            |
| Cs-137  | 3.38E-07            |
| Np-237  | 3.88E-04            |
| Pu-238  | 6.92E-02            |
| Pu-239  | 1.59E+00            |
| Pu-240  | 3.55E-01            |
| Pu-241  | 2.43E+00            |
| Pu-242  | 7.09E-05            |
| Sr-90   | 3.70E-07            |
| Th-229  | 6.34E-13            |
| Th-230  | 4.20E-09            |
| Th-232  | 2.33E-18            |
| U-233   | 4.87E-09            |
| U-234   | 1.53E-04            |
| U-235   | 3.17E-05            |
| U-236   | 3.15E-08            |
| U-238   | 7.66E-04            |

**Haz. Waste No(s).**

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

**TRUCON Code(s)**

|                  |
|------------------|
| 111/211, 127/227 |
|------------------|

**Waste Stream Description**

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

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           | 12/31/2023 |    |
| Stream Name | Building 374 Sludge                     |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                  |             |            |             |
|-------------------------------------|-------------|------------|-------------|
| Container Type                      | Stored      | Proj.      | Total       |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 14.7        | 0.0        | 14.7        |
| TDOP w/ 6 - 85-gal Drums w/ Liners  | 1.9         | 0.0        | 1.9         |
| <b>Final Form Total</b>             | <b>16.6</b> | <b>0.0</b> | <b>16.6</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 8.06E+01        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 0.00E+00        |
| Cellulose                     | 2.24E-01        |
| Rubber                        | 1.02E+00        |
| Plastic                       | 2.42E+01        |
| Cement                        | 1.06E+02        |
| Solidified Inorganic Material | 1.43E+04        |
| 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+02        |
| Packaging Material, Rubber    | 1.55E+01        |
| Packaging Material, Steel     | 8.27E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.44E+00            |
| Np-237  | 1.03E-05            |
| Pu-238  | 6.01E-01            |
| Pu-239  | 1.21E+00            |
| Pu-240  | 2.63E-01            |
| Pu-241  | 1.38E+00            |
| Pu-242  | 3.49E-05            |
| Th-229  | 1.62E-14            |
| Th-230  | 1.45E-06            |
| Th-232  | 1.27E-06            |
| U-233   | 1.26E-10            |
| U-234   | 5.26E-02            |
| U-235   | 3.83E-03            |
| U-236   | 2.33E-08            |
| U-238   | 2.73E-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.

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           | 12/31/2023 |    |
| Stream Name | Rocky Flats Building 774 Organic Setups (IN-BN-RF003) |                         |                     |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                  |            |            |            |
|-------------------------------------|------------|------------|------------|
| Container Type                      | Stored     | Proj.      | Total      |
| TDOP w/ 6 - 85-gal Drums w/ Liners  | 1.9        | 0.0        | 1.9        |
| TDOP w/ 6 - 85-gal Drums w/o Liners | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b>             | <b>3.8</b> | <b>0.0</b> | <b>3.8</b> |

**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     | 1.54E+00        |
| Cellulose                     | 0.00E+00        |
| Rubber                        | 0.00E+00        |
| Plastic                       | 0.00E+00        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 1.54E+00        |
| Solidified Organic Material   | 1.35E+03        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 4.63E+01        |
| Packaging Material, Rubber    | 3.04E+00        |
| Packaging Material, Steel     | 1.98E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.37E+01            |
| Np-237  | 3.57E-04            |
| Pu-238  | 6.79E-03            |
| Pu-239  | 2.52E-01            |
| Pu-240  | 5.60E-02            |
| Pu-241  | 3.45E-01            |
| Pu-242  | 7.33E-06            |
| Th-229  | 5.77E-13            |
| Th-230  | 6.02E-10            |
| Th-232  | 2.54E-07            |
| U-233   | 4.45E-09            |
| U-234   | 2.19E-05            |
| U-235   | 7.06E-06            |
| U-236   | 4.97E-09            |
| U-238   | 3.41E-15            |

**Haz. Waste No(s).**

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

**TRUCON Code(s)**

111/211

**Waste Stream Description**

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

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  | 12/31/2023               |      |
| Stream Name | Filtered Sludge                         |                         |                       |                       |                 | Activities Decayed to CY | 2023 |

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

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

**Waste Material Parameters**

| Material Parameter            | 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  | 8.09E-02            |
| Np-237  | 1.34E-06            |
| Pu-238  | 1.21E-02            |
| Pu-239  | 3.06E-01            |
| Pu-240  | 7.00E-02            |
| Pu-241  | 1.85E-01            |
| Pu-242  | 5.73E-06            |
| Th-229  | 8.34E-15            |
| Th-230  | 5.84E-12            |
| Th-232  | 1.84E-18            |
| U-233   | 3.23E-11            |
| U-234   | 2.10E-07            |
| U-235   | 1.81E-09            |
| U-236   | 1.24E-08            |
| U-238   | 5.33E-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.

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  | 12/31/2023 |    |
| Stream Name | RF Miscellaneous Heels    |                         |                       | Activities Decayed to CY |                 | 2023       |    |

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

| Final Form Volumes                 |            |            |            |
|------------------------------------|------------|------------|------------|
| Container Type                     | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner        | 0.4        | 0.0        | 0.4        |
| TDOP w/ 6 - 85-gal Drums w/ Liners | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b>            | <b>2.3</b> | <b>0.0</b> | <b>2.3</b> |

**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   | 6.17E+01        |
| Packaging Material, Rubber    | 1.76E+00        |
| Packaging Material, Steel     | 1.05E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.26E+00            |
| Cs-137  | 6.16E-07            |
| Np-237  | 4.73E-05            |
| Pu-238  | 2.06E+00            |
| Pu-239  | 1.48E+01            |
| Pu-240  | 3.50E+00            |
| Pu-241  | 9.59E+00            |
| Pu-242  | 2.75E-04            |
| Sr-90   | 6.59E-07            |
| Th-229  | 2.16E-12            |
| Th-230  | 9.51E-09            |
| Th-232  | 8.28E-16            |
| U-233   | 2.96E-09            |
| U-234   | 1.12E-04            |
| U-235   | 2.62E-07            |
| U-236   | 1.86E-06            |
| U-238   | 7.67E-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).

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           | 12/31/2023 |    |
| Stream Name | Miscellaneous Incinerator Ash and Soot  |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                 |            |            |            |
|------------------------------------|------------|------------|------------|
| Container Type                     | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner        | 0.2        | 0.0        | 0.2        |
| TDOP w/ 6 - 85-gal Drums w/ Liners | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b>            | <b>2.1</b> | <b>0.0</b> | <b>2.1</b> |

**Waste Material Parameters**

| Material Parameter            | 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   | 5.40E+01        |
| Packaging Material, Rubber    | 1.64E+00        |
| Packaging Material, Steel     | 1.02E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 5.51E-01            |
| Np-237  | 9.86E-06            |
| Pu-238  | 1.14E-01            |
| Pu-239  | 2.56E+00            |
| Pu-240  | 5.21E-01            |
| Pu-241  | 2.01E+00            |
| Pu-242  | 4.09E-05            |
| Th-229  | 4.35E-13            |
| Th-230  | 4.67E-10            |
| Th-232  | 1.10E-16            |
| U-233   | 6.17E-10            |
| U-234   | 5.84E-06            |
| U-235   | 4.28E-08            |
| U-236   | 2.62E-07            |
| U-238   | 1.08E-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**

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.



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           | 12/31/2023 |    |
| Stream Name | RF Leached Cemented Resins              |                         |                     |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                  |            |            |            |
|-------------------------------------|------------|------------|------------|
| Container Type                      | Stored     | Proj.      | Total      |
| SWB w/ 4 - 55-gal Drums w/ Liners   | 3.4        | 0.0        | 3.4        |
| TDOP w/ 6 - 85-gal Drums w/o Liners | 3.8        | 0.0        | 3.8        |
| <b>Final Form Total</b>             | <b>7.2</b> | <b>0.0</b> | <b>7.2</b> |

**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                        | 3.06E+01        |
| Solidified Inorganic Material | 6.39E+00        |
| Solidified Organic Material   | 1.26E+03        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 1.23E+02        |
| Packaging Material, Rubber    | 6.38E+00        |
| Packaging Material, Steel     | 3.58E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 7.61E+01            |
| Np-237  | 9.56E-04            |
| Pu-238  | 8.61E-01            |
| Pu-239  | 2.96E+01            |
| Pu-240  | 6.67E+00            |
| Pu-241  | 2.74E+01            |
| Pu-242  | 5.68E-04            |
| Th-229  | 2.65E-12            |
| Th-230  | 1.82E-10            |
| Th-232  | 7.80E-17            |
| U-233   | 1.54E-08            |
| U-234   | 9.87E-06            |
| U-235   | 1.17E-07            |
| U-236   | 7.90E-07            |
| U-238   | 3.53E-13            |

**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

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           | 12/31/2023 |    |
| Stream Name | Building 774 Solidified Organics                   |                         |                     |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                  |            |            |            |
|-------------------------------------|------------|------------|------------|
| Container Type                      | Stored     | Proj.      | Total      |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 2.1        | 0.0        | 2.1        |
| TDOP w/ 6 - 85-gal Drums w/ Liners  | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b>             | <b>4.0</b> | <b>0.0</b> | <b>4.0</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.61E-01        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 0.00E+00        |
| Cellulose                     | 1.09E-01        |
| Rubber                        | 0.00E+00        |
| Plastic                       | 5.03E+00        |
| Cement                        | 3.81E-01        |
| Solidified Inorganic Material | 0.00E+00        |
| Solidified Organic Material   | 1.61E+03        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 1.23E+02        |
| Packaging Material, Rubber    | 3.52E+00        |
| Packaging Material, Steel     | 2.03E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 4.70E-01            |
| Am-243  | 1.21E-12            |
| Np-237  | 1.04E-05            |
| Pu-238  | 1.03E-01            |
| Pu-239  | 2.57E+00            |
| Pu-240  | 5.82E-01            |
| Pu-241  | 4.57E+00            |
| Pu-242  | 5.00E-05            |
| Th-229  | 2.97E-14            |
| Th-230  | 8.37E-11            |
| Th-232  | 6.81E-18            |
| U-233   | 1.71E-10            |
| U-234   | 2.86E-06            |
| U-235   | 5.52E-07            |
| U-236   | 6.90E-08            |
| U-238   | 3.10E-14            |

**Haz. Waste No(s).**

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

**TRUCON Code(s)**

111/211

**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.

Waste Stream ID: **IN-BNSRPS3.1A**

**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           | 12/31/2023 |    |
| Stream Name | SRP First and Second Stage Sludge Repackaged at WMF-1619 and WMF-676 |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                  |              |            |              |
|-------------------------------------|--------------|------------|--------------|
| Container Type                      | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner         | 130.4        | 0.0        | 130.4        |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 84.0         | 0.0        | 84.0         |
| TDOP w/ 6 - 85-gal Drums w/o Liners | 111.4        | 0.0        | 111.4        |
| <b>Final Form Total</b>             | <b>325.8</b> | <b>0.0</b> | <b>325.8</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 4.42E+01        |
| Aluminum-based Metal/Alloys   | 1.79E-02        |
| Other Metal/Alloys            | 1.93E+00        |
| Other Inorganic Materials     | 4.78E-02        |
| Cellulose                     | 1.58E+00        |
| Rubber                        | 2.92E+00        |
| Plastic                       | 4.71E+01        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 2.11E+03        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 6.09E-01        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 7.87E+03        |
| Packaging Material, Rubber    | 2.41E+02        |
| Packaging Material, Steel     | 1.16E+05        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 2.38E+03            |
| Cs-137  | 1.99E-04            |
| Np-237  | 4.23E-02            |
| Pu-238  | 9.51E+00            |
| Pu-239  | 1.86E+02            |
| Pu-240  | 4.46E+01            |
| Pu-241  | 4.42E+02            |
| Pu-242  | 1.22E-02            |
| Sr-90   | 2.19E-04            |
| Th-229  | 2.32E-08            |
| Th-230  | 1.24E-08            |
| Th-232  | 3.26E-19            |
| U-233   | 2.63E-03            |
| U-234   | 1.35E-02            |
| U-235   | 1.16E-03            |
| U-236   | 1.32E-07            |
| U-238   | 3.41E-02            |

**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)**

|                  |
|------------------|
| 111/211, 127/227 |
|------------------|

**Waste Stream Description**

The BNSRPS3.1A waste stream consists of First and Second Stage Inorganic Sludges initially generated at the RFP and transferred to the INL for storage. The waste then served as feedstock to the SRP.

Waste Stream ID: **IN-BNSRPS3.3A**

**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           | 12/31/2023 |    |
| Stream Name | Sludge Repackage Project at WMF-1617, Rocky Flats Inorganics |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                  |              |            |              |
|-------------------------------------|--------------|------------|--------------|
| Container Type                      | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner         | 224.1        | 0.0        | 224.1        |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 142.8        | 0.0        | 142.8        |
| TDOP w/ 6 - 85-gal Drums w/ Liners  | 34.6         | 0.0        | 34.6         |
| <b>Final Form Total</b>             | <b>401.4</b> | <b>0.0</b> | <b>401.4</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.10E-01        |
| Aluminum-based Metal/Alloys   | 3.78E-03        |
| Other Metal/Alloys            | 2.79E-01        |
| Other Inorganic Materials     | 3.39E-02        |
| Cellulose                     | 3.84E-01        |
| Rubber                        | 3.18E-01        |
| Plastic                       | 4.69E+00        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 2.28E+02        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 2.40E-02        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 1.43E+04        |
| Packaging Material, Rubber    | 2.89E+02        |
| Packaging Material, Steel     | 1.18E+05        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.30E+03            |
| Cs-137  | 1.12E-05            |
| Np-237  | 5.14E-02            |
| Pu-238  | 1.16E+01            |
| Pu-239  | 2.93E+02            |
| Pu-240  | 6.87E+01            |
| Pu-241  | 5.26E+02            |
| Pu-242  | 1.53E-02            |
| Sr-90   | 1.22E-05            |
| Th-229  | 2.30E-07            |
| Th-230  | 1.24E-06            |
| Th-232  | 4.51E-16            |
| U-233   | 8.72E-04            |
| U-234   | 4.49E-02            |
| U-235   | 1.43E-03            |
| U-236   | 6.10E-06            |
| U-238   | 3.90E-02            |

**Haz. Waste No(s).**

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

**TRUCON Code(s)**

|         |
|---------|
| 111/211 |
|---------|

**Waste Stream Description**

The BNSRPS3.3A waste stream consists of First and Second Stage Inorganic Sludges initially generated at the RFP and transferred to the INL for storage. The waste then served as feedstock to the SRP.

Waste Stream ID: **IN-BNSRPS3.3B**

**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           | 12/31/2023 |    |
| Stream Name | Sludge Repackage Project at WMF-1617, Rocky Flats Organics |                         |                     |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                  |              |            |              |
|-------------------------------------|--------------|------------|--------------|
| Container Type                      | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner         | 140.9        | 0.0        | 140.9        |
| TDOP w/ 10 - 55-gal Drums w/ Liners | 90.3         | 0.0        | 90.3         |
| TDOP w/ 6 - 85-gal Drums w/ Liners  | 11.5         | 0.0        | 11.5         |
| <b>Final Form Total</b>             | <b>242.7</b> | <b>0.0</b> | <b>242.7</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.01E-01        |
| Aluminum-based Metal/Alloys   | 5.21E-03        |
| Other Metal/Alloys            | 1.00E-01        |
| Other Inorganic Materials     | 6.03E-01        |
| Cellulose                     | 4.05E-01        |
| Rubber                        | 5.61E-01        |
| Plastic                       | 1.18E+01        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 0.00E+00        |
| Solidified Organic Material   | 4.96E+02        |
| Soil                          | 1.24E-01        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 8.77E+03        |
| Packaging Material, Rubber    | 1.74E+02        |
| Packaging Material, Steel     | 6.89E+04        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.73E+02            |
| Cs-137  | 2.24E-06            |
| Np-237  | 2.73E-03            |
| Pu-238  | 1.46E+00            |
| Pu-239  | 3.46E+01            |
| Pu-240  | 7.61E+00            |
| Pu-241  | 5.30E+01            |
| Pu-242  | 1.43E-03            |
| Sr-90   | 2.45E-06            |
| Th-229  | 4.51E-12            |
| Th-230  | 2.11E-07            |
| Th-232  | 5.00E-17            |
| U-233   | 3.45E-08            |
| U-234   | 7.64E-03            |
| U-235   | 2.42E-04            |
| U-236   | 6.76E-07            |
| U-238   | 1.44E-02            |

**Haz. Waste No(s).**

|  |
|--|
| D004, D005, D006, D007, D008, D009, D010, D011, D022, D026, D027, D028, D029, D030, D032, D034, D036, D037, F003, F001, F002, F005, F006, F007, F009 |
|--|

**TRUCON Code(s)**

|         |
|---------|
| 112/212 |
|---------|

**Waste Stream Description**

The BNSRPS3.3B waste stream consists of drums containing processed Rocky Flats organic waste (IDCs RF-003, RF-743, RF-700, and RF-801) combined with nonhazardous absorbents. This waste stream includes Organic Setups, OASIS Waste, and Solidified Organics that were originally generated in Rocky Flats Building 774. The waste then served as feedstock to the SRP.

Waste Stream ID: **IN-BN-SRP-S3000.2A**

**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           | 12/31/2023 |    |
| Stream Name | SRP Pyrochemical Salts    |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                  |             |            |             |
|-------------------------------------|-------------|------------|-------------|
| Container Type                      | Stored      | Proj.      | Total       |
| TDOP w/ 6 - 85-gal Drums w/o Liners | 32.6        | 0.0        | 32.6        |
| <b>Final Form Total</b>             | <b>32.6</b> | <b>0.0</b> | <b>32.6</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 4.99E+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                       | 5.70E+00        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 9.33E+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    | 2.58E+01        |
| Packaging Material, Steel     | 1.68E+04        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 5.48E+02            |
| Cs-137  | 1.30E-04            |
| Np-237  | 8.99E-03            |
| Pu-238  | 1.49E+01            |
| Pu-239  | 3.64E+02            |
| Pu-240  | 8.38E+01            |
| Pu-241  | 3.96E+02            |
| Pu-242  | 1.18E-02            |
| Sr-90   | 1.43E-04            |
| Th-229  | 6.71E-12            |
| Th-230  | 3.50E-09            |
| Th-232  | 2.45E-16            |
| U-233   | 7.68E-08            |
| U-234   | 2.33E-04            |
| U-235   | 5.41E-06            |
| U-236   | 4.96E-06            |
| U-238   | 3.67E-12            |

**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)**

|                  |
|------------------|
| 124/224, 125/225 |
|------------------|

**Waste Stream Description**

The IN-BN-SRP-S3000.2A waste stream consists of pyrochemical salt waste initially generated from plutonium recovery operations at the RFP and transferred to the INL. The waste then served as feedstock to the SRP.

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           | 12/31/2023 |    |
| Stream Name | Laboratory Homogeneous Solids Waste |                         |                     |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner  | 1.5        | 0.0        | 1.5        |
| 55-gal Drum Dir Ld w/o Liner | 2.9        | 0.0        | 2.9        |
| <b>Final Form Total</b>      | <b>4.4</b> | <b>0.0</b> | <b>4.4</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.98E+00        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 1.12E+02        |
| Cellulose                     | 0.00E+00        |
| Rubber                        | 0.00E+00        |
| Plastic                       | 5.01E+01        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 0.00E+00        |
| Solidified Organic Material   | 6.57E+02        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 5.40E+01        |
| Packaging Material, Rubber    | 2.48E+00        |
| Packaging Material, Steel     | 5.71E+02        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.42E-01            |
| Cs-137  | 1.15E-05            |
| Np-237  | 4.22E-06            |
| Pu-238  | 2.14E-02            |
| Pu-239  | 6.85E-01            |
| Pu-240  | 1.70E-01            |
| Pu-241  | 7.52E-01            |
| Pu-242  | 1.62E-05            |
| Sr-90   | 1.26E-05            |
| Th-229  | 1.80E-14            |
| Th-230  | 7.13E-12            |
| Th-232  | 3.10E-18            |
| U-233   | 8.39E-11            |
| U-234   | 3.08E-07            |
| U-235   | 3.37E-09            |
| U-236   | 2.51E-08            |
| U-238   | 1.25E-14            |

**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.

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           | 12/31/2023 |    |
| Stream Name | RH TRU Debris Waste from ANL-E stored at INL |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-55G1 w/o Liner   | 0.4        | 0.0        | 0.4        |
| <b>Final Form Total</b> | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

**Waste Material Parameters**

| Material Parameter            | 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   | 0.00E+00        |
| Packaging Material, Rubber    | 1.84E-01        |
| Packaging Material, Steel     | 2.60E+03        |
| Packaging Material, Lead      | 1.87E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 5.81E-02            |
| Cs-137  | 5.24E-02            |
| Np-237  | 1.32E-07            |
| Pu-238  | 7.08E-03            |
| Pu-239  | 2.21E-02            |
| Pu-240  | 1.30E-02            |
| Pu-241  | 5.11E-02            |
| Pu-242  | 4.21E-04            |
| Sr-90   | 4.64E-02            |
| Th-229  | 3.17E-07            |
| Th-230  | 4.95E-09            |
| Th-232  | 4.67E-19            |
| U-233   | 5.15E-04            |
| U-234   | 7.71E-05            |
| U-235   | 2.44E-06            |
| U-236   | 2.70E-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)**

|                  |
|------------------|
| 121/221, 125/225 |
|------------------|

**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.



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           | 12/31/2023 |    |
| Stream Name | RH Laboratory Waste from INL |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-55G1 w/o Liner   | 0.6        | 0.0        | 0.6        |
| <b>Final Form Total</b> | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

**Waste Material Parameters**

| Material Parameter            | 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   | 0.00E+00        |
| Packaging Material, Rubber    | 2.76E-01        |
| Packaging Material, Steel     | 3.90E+03        |
| Packaging Material, Lead      | 2.80E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.30E+00            |
| Cs-137  | 1.87E-01            |
| Np-237  | 9.70E-06            |
| Pu-238  | 3.09E-01            |
| Pu-239  | 1.76E+01            |
| Pu-240  | 3.70E+00            |
| Pu-242  | 4.06E-02            |
| Sr-90   | 4.83E-02            |
| Th-229  | 3.28E-10            |
| Th-230  | 3.78E-09            |
| Th-232  | 2.19E-16            |
| U-233   | 4.14E-07            |
| U-234   | 4.97E-05            |
| U-235   | 8.39E-07            |
| U-236   | 9.85E-07            |
| U-238   | 1.40E-08            |

**Haz. Waste No(s).**

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

**TRUCON Code(s)**

127/227

**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.

Waste Stream ID: **IN-ID-Bettis-Pu8Li14B**

**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           | 12/31/2023 |    |
| Stream Name | Bettis Atomic Power Laboratory Sealed Source |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-55G1 w/o Liner   | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b> | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.52E+00        |
| Aluminum-based Metal/Alloys   | 3.30E-01        |
| Other Metal/Alloys            | 1.50E-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   | 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    | 9.20E-02        |
| Packaging Material, Steel     | 1.30E+03        |
| Packaging Material, Lead      | 9.34E-01        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.82E-01            |
| Cs-137  | 1.07E-04            |
| Np-237  | 8.56E-07            |
| Pu-238  | 1.57E+02            |
| Pu-239  | 1.71E-01            |
| Pu-240  | 1.02E-01            |
| Pu-241  | 1.05E+00            |
| Pu-242  | 1.56E-04            |
| Sr-90   | 9.01E-05            |
| Th-229  | 2.62E-15            |
| Th-230  | 1.69E-06            |
| Th-232  | 3.65E-18            |
| U-233   | 1.28E-11            |
| U-234   | 2.79E-02            |
| U-235   | 8.59E-09            |
| U-236   | 2.11E-08            |
| U-238   | 9.73E-10            |

No Hazardous Waste Numbers Provided

TRUCON Code(s)  
120/220

**Waste Stream Description**

Plutonium-lithium alpha-n neutron source

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           | 12/31/2023 |    |
| Stream Name | Solidified Waste Sludge from Bettis Atomic Power Lab. |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-55G1 w/o Liner   | 0.2        | 0.0        | 0.2        |
| RH SCA-55G2 w/o Liner   | 0.6        | 0.0        | 0.6        |
| <b>Final Form Total</b> | <b>0.8</b> | <b>0.0</b> | <b>0.8</b> |

**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   | 0.00E+00        |
| Packaging Material, Rubber    | 4.10E-01        |
| Packaging Material, Steel     | 4.58E+03        |
| Packaging Material, Lead      | 4.79E+03        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.51E-02            |
| Cs-137  | 1.02E+01            |
| Np-237  | 4.42E-08            |
| Pu-238  | 3.46E-01            |
| Pu-239  | 1.98E-01            |
| Pu-240  | 4.18E-03            |
| Pu-242  | 7.19E-04            |
| Sr-90   | 1.65E+01            |
| Th-229  | 1.84E-06            |
| Th-230  | 1.68E-07            |
| Th-232  | 2.48E-19            |
| U-233   | 2.33E-03            |
| U-234   | 2.03E-03            |
| U-235   | 4.57E-05            |
| U-236   | 1.11E-09            |
| U-238   | 3.16E-05            |

**Haz. Waste No(s).**

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

**TRUCON Code(s)**

127/227

**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.

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           | 12/31/2023 |    |
| Stream Name | RH-TRU Debris Waste From Experimental Breeder Reactor |                         |                           |                       | Activities Decayed to CY | 2023       |    |

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

| 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        |
| <b>Final Form Total</b>                     | <b>4.4</b> | <b>0.0</b> | <b>4.4</b> |

**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  | 5.61E-06            |
| Cs-137  | 1.11E+02            |
| Np-237  | 1.62E-11            |
| Pu-238  | 7.27E-04            |
| Pu-239  | 1.47E+01            |
| Pu-240  | 5.34E-03            |
| Pu-241  | 1.20E-05            |
| Pu-242  | 2.60E-13            |
| Sr-90   | 1.02E+01            |
| Th-229  | 6.35E-11            |
| Th-230  | 1.65E-08            |
| Th-232  | 3.16E-19            |
| U-233   | 8.02E-08            |
| U-234   | 2.15E-04            |
| U-235   | 5.81E-02            |
| U-236   | 1.42E-09            |
| 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

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           | 12/31/2023 |    |
| Stream Name | Sodium contaminated RH TRU Waste from Materials and Fuels Complex at INL. |                         |                     |                       | Activities Decayed to CY | 2023       |    |

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

| 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        |
| <b>Final Form Total</b>                     | <b>3.8</b> | <b>0.0</b> | <b>3.8</b> |

**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  | 1.43E+01            |
| Cm-244  | 4.36E-02            |
| Cs-137  | 4.73E+01            |
| Np-237  | 1.82E-05            |
| Pu-238  | 7.01E+00            |
| Pu-239  | 1.32E+01            |
| Pu-240  | 9.51E+00            |
| Pu-241  | 1.04E+02            |
| Pu-242  | 6.10E-03            |
| Sr-90   | 4.74E+01            |
| Th-229  | 2.61E-10            |
| Th-230  | 7.08E-07            |
| Th-232  | 1.11E-16            |
| U-233   | 7.43E-07            |
| U-234   | 1.93E-02            |
| U-235   | 5.35E-05            |
| U-236   | 1.13E-06            |
| 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

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           | 12/31/2023 |    |
| Stream Name | Sodium contaminated RH TRU Waste from Materials and Fuels Complex at INL. |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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         |
| RH SCA-55G1 w/o Liner                       | 8.2         | 0.0        | 8.2         |
| RH SCA-55G2 w/o Liner                       | 5.3         | 0.0        | 5.3         |
| <b>Final Form Total</b>                     | <b>20.4</b> | <b>0.0</b> | <b>20.4</b> |

**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   | 5.97E+01        |
| Packaging Material, Rubber    | 1.01E+01        |
| Packaging Material, Steel     | 8.44E+04        |
| Packaging Material, Lead      | 3.99E+04        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 4.64E+01            |
| Cm-244  | 1.19E-01            |
| Cs-137  | 1.08E+02            |
| Np-237  | 5.91E-05            |
| Pu-238  | 2.49E+01            |
| Pu-239  | 8.69E+01            |
| Pu-240  | 4.16E+01            |
| Pu-241  | 2.64E+02            |
| Pu-242  | 1.46E-02            |
| Sr-90   | 1.43E+02            |
| Th-229  | 8.13E-10            |
| Th-230  | 5.52E-06            |
| Th-232  | 4.86E-16            |
| U-233   | 2.31E-06            |
| U-234   | 1.50E-01            |
| U-235   | 5.75E-03            |
| U-236   | 4.92E-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)**

122/222, 125/225, 321, 322, 325

**Waste Stream Description**

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

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           | 12/31/2023 |    |
| Stream Name | RH-TRU Debris Waste From Materials and Fuels Complex Hot Fuel Examination Facility at the INL. |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                          |             |            |             |
|---|-------------|------------|-------------|
| Container Type                              | Stored      | Proj.      | Total       |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 13.9        | 0.0        | 13.9        |
| RH SCA-55G1 w/o Liner                       | 3.4         | 0.0        | 3.4         |
| RH SCA-55G2 w/o Liner                       | 1.5         | 0.0        | 1.5         |
| <b>Final Form Total</b>                     | <b>18.7</b> | <b>0.0</b> | <b>18.7</b> |

**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   | 1.19E+02        |
| Packaging Material, Rubber    | 1.00E+01        |
| Packaging Material, Steel     | 4.12E+04        |
| Packaging Material, Lead      | 1.12E+04        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 5.34E-01            |
| Cs-137  | 6.92E+02            |
| Np-237  | 1.57E-06            |
| Pu-238  | 3.22E-01            |
| Pu-239  | 6.51E+01            |
| Pu-240  | 5.28E+01            |
| Pu-241  | 2.88E-02            |
| Pu-242  | 7.82E-03            |
| Sr-90   | 3.04E+02            |
| Th-229  | 1.02E-04            |
| Th-230  | 8.38E-05            |
| Th-232  | 3.12E-15            |
| U-233   | 1.29E-01            |
| U-234   | 1.01E+00            |
| U-235   | 1.07E-01            |
| U-236   | 1.41E-05            |
| 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)**

121/221, 122/222, 125/225, 321, 322, 325

**Waste Stream Description**

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

Waste Stream ID: **IN-ID-INTEC-308-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           | 12/31/2023 |    |
| Stream Name | Filter media pieces and other debris               |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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        |
| <b>Final Form Total</b>                     | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

**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                     | 6.80E+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  | 6.35E-04            |
| Am-243  | 4.72E-08            |
| Cm-244  | 5.61E-07            |
| Cs-137  | 4.36E-01            |
| Np-237  | 9.76E-06            |
| Pu-238  | 9.83E-03            |
| Pu-239  | 1.58E-04            |
| Pu-240  | 1.53E-04            |
| Pu-241  | 5.14E-03            |
| Pu-242  | 4.10E-07            |
| Sr-90   | 3.69E-01            |
| Th-229  | 1.07E-14            |
| Th-230  | 2.82E-10            |
| Th-232  | 7.71E-20            |
| U-233   | 1.22E-09            |
| U-234   | 1.11E-06            |
| U-235   | 5.50E-09            |
| U-236   | 1.56E-08            |
| U-238   | 4.95E-10            |

**Haz. Waste No(s).**

D004, D005, D006, D007, D008, D009

**TRUCON Code(s)**

322

**Waste Stream Description**

Legacy waste from sump screens in decontamination cell room 308 at INTEC CPP-659 hot cell.



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           | 12/31/2023 |    |
| Stream Name | RH-TRU Waste From Materials and Fuels Complex at the INL. |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-55G1 w/o Liner   | 0.2        | 0.0        | 0.2        |
| RH SCA-55G2 w/o Liner   | 0.8        | 0.0        | 0.8        |
| <b>Final Form Total</b> | <b>1.1</b> | <b>0.0</b> | <b>1.1</b> |

**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   | 0.00E+00        |
| Packaging Material, Rubber    | 5.16E-01        |
| Packaging Material, Steel     | 5.68E+03        |
| Packaging Material, Lead      | 6.38E+03        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 9.66E-02            |
| Cs-137  | 1.40E+01            |
| Np-237  | 2.20E-07            |
| Pu-238  | 2.87E-02            |
| Pu-239  | 1.71E-01            |
| Pu-240  | 4.40E-02            |
| Pu-242  | 8.19E-04            |
| Sr-90   | 1.54E+01            |
| Th-229  | 8.54E-09            |
| Th-230  | 1.14E-06            |
| Th-232  | 1.58E-18            |
| U-233   | 1.39E-05            |
| U-234   | 1.77E-02            |
| U-235   | 1.00E-03            |
| U-236   | 9.12E-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)**

121/221, 125/225

**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.

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           | 12/31/2023 |    |
| Stream Name | Analytical Laboratory waste from MFC (formerly know as ANL-W) |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-55G1 w/o Liner   | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b> | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

**Waste Material Parameters**

| Material Parameter            | 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   | 0.00E+00        |
| Packaging Material, Rubber    | 9.20E-02        |
| Packaging Material, Steel     | 1.30E+03        |
| Packaging Material, Lead      | 9.34E-01        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 4.13E-02            |
| Cs-137  | 1.05E-01            |
| Np-237  | 9.42E-08            |
| Pu-238  | 2.56E-03            |
| Pu-239  | 2.40E-02            |
| Pu-240  | 3.42E-03            |
| Pu-242  | 2.21E-03            |
| Sr-90   | 3.17E-01            |
| Th-229  | 8.33E-08            |
| Th-230  | 8.71E-09            |
| Th-232  | 1.23E-19            |
| U-233   | 1.35E-04            |
| U-234   | 1.35E-04            |
| U-235   | 7.50E-06            |
| U-236   | 7.10E-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)**

121/221, 125/225

**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.

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           | 12/31/2023 |    |
| Stream Name | Rocky Flats Generated Suspect RH TRU waste received from AMWTP |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-55G1 w/o Liner   | 1.1        | 0.0        | 1.1        |
| <b>Final Form Total</b> | <b>1.1</b> | <b>0.0</b> | <b>1.1</b> |

**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   | 0.00E+00        |
| Packaging Material, Rubber    | 4.60E-01        |
| Packaging Material, Steel     | 6.50E+03        |
| Packaging Material, Lead      | 4.67E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.00E+02            |
| Cs-137  | 7.13E-02            |
| Np-237  | 2.95E-04            |
| Pu-238  | 3.11E-02            |
| Pu-239  | 1.62E+00            |
| Pu-240  | 3.56E-01            |
| Pu-242  | 7.03E-04            |
| Sr-90   | 4.32E-03            |
| Th-229  | 2.43E-07            |
| Th-230  | 1.43E-07            |
| Th-232  | 2.11E-17            |
| U-233   | 3.07E-04            |
| U-234   | 1.73E-03            |
| U-235   | 5.70E-04            |
| U-236   | 9.48E-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)**

121/221, 122/222

**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.

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           | 12/31/2023 |    |
| Stream Name | RH TRU Waste from INL.    |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-55G1 w/o Liner   | 1.3        | 0.0        | 1.3        |
| RH SCA-55G2 w/o Liner   | 1.3        | 0.0        | 1.3        |
| <b>Final Form Total</b> | <b>2.5</b> | <b>0.0</b> | <b>2.5</b> |

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   | 0.00E+00        |
| Packaging Material, Rubber    | 1.19E+00        |
| Packaging Material, Steel     | 1.44E+04        |
| Packaging Material, Lead      | 9.58E+03        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 9.55E+00            |
| Cs-137  | 1.05E+01            |
| Np-237  | 2.77E-05            |
| Pu-238  | 9.17E-01            |
| Pu-239  | 3.26E+01            |
| Pu-240  | 1.09E+01            |
| Pu-241  | 1.55E+01            |
| Pu-242  | 2.31E-02            |
| Sr-90   | 2.13E+01            |
| Th-229  | 1.48E-04            |
| Th-230  | 1.86E-06            |
| Th-232  | 6.46E-16            |
| U-233   | 1.88E-01            |
| U-234   | 2.25E-02            |
| U-235   | 8.86E-04            |
| U-236   | 2.91E-06            |
| U-238   | 1.35E-02            |

Haz. Waste No(s).

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

TRUCON Code(s)

121/221, 122/222, 125/225

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

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           | 12/31/2023 |    |
| Stream Name | ICP Retrieved Debris Waste (Filters/Graphite) |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 337.5        | 0.0        | 337.5        |
| <b>Final Form Total</b>     | <b>337.5</b> | <b>0.0</b> | <b>337.5</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.03E+02        |
| Aluminum-based Metal/Alloys   | 6.56E+00        |
| Other Metal/Alloys            | 5.19E+00        |
| Other Inorganic Materials     | 2.95E+04        |
| Cellulose                     | 5.39E+04        |
| Rubber                        | 7.46E+01        |
| Plastic                       | 1.02E+03        |
| Cement                        | 1.00E+02        |
| Solidified Inorganic Material | 2.77E+04        |
| Solidified Organic Material   | 2.50E+00        |
| Soil                          | 1.24E+04        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 1.24E+04        |
| Packaging Material, Rubber    | 1.90E+02        |
| Packaging Material, Steel     | 4.37E+04        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.76E+02            |
| Cs-137  | 2.32E-03            |
| Np-237  | 3.19E-03            |
| Pu-238  | 6.03E+00            |
| Pu-239  | 1.92E+02            |
| Pu-240  | 4.18E+01            |
| Pu-241  | 1.98E+02            |
| Pu-242  | 5.52E-03            |
| Sr-90   | 2.56E-03            |
| Th-229  | 1.69E-08            |
| Th-230  | 1.15E-07            |
| Th-232  | 3.05E-19            |
| U-233   | 1.92E-03            |
| U-234   | 1.25E-01            |
| U-235   | 4.54E-03            |
| U-236   | 1.24E-07            |
| U-238   | 1.18E-01            |

**Haz. Waste No(s).**

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

**TRUCON Code(s)**

|                                       |
|---------------------------------------|
| 112/212, 119/219,<br>122/222, 127/227 |
|---------------------------------------|

**Waste Stream Description**

Pre-1970 buried waste retrieved for the Idaho Cleanup Project

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           | 12/31/2023 |    |
| Stream Name | ICP Retrieved Sludge Waste (Inorganic/Organic Sludge/Roaster Oxide) |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 994.4        | 0.0        | 994.4        |
| <b>Final Form Total</b>     | <b>994.4</b> | <b>0.0</b> | <b>994.4</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.54E+03        |
| Aluminum-based Metal/Alloys   | 5.01E+00        |
| Other Metal/Alloys            | 1.14E+02        |
| Other Inorganic Materials     | 1.23E+03        |
| Cellulose                     | 4.73E+03        |
| Rubber                        | 4.49E+02        |
| Plastic                       | 6.09E+02        |
| Cement                        | 2.34E+02        |
| Solidified Inorganic Material | 5.10E+05        |
| Solidified Organic Material   | 1.57E+04        |
| Soil                          | 2.41E+04        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 3.65E+04        |
| Packaging Material, Rubber    | 5.59E+02        |
| Packaging Material, Steel     | 1.29E+05        |
| Packaging Material, Lead      | 0.00E+00        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 2.49E+03            |
| Cs-137  | 6.28E-02            |
| Np-237  | 4.45E-02            |
| Pu-238  | 3.06E+01            |
| Pu-239  | 6.55E+02            |
| Pu-240  | 1.46E+02            |
| Pu-241  | 1.17E+03            |
| Pu-242  | 3.19E-02            |
| Sr-90   | 6.91E-02            |
| Th-229  | 2.14E-14            |
| Th-230  | 2.72E-07            |
| Th-232  | 1.07E-18            |
| U-233   | 6.79E-09            |
| U-234   | 2.96E-01            |
| U-235   | 1.49E-02            |
| U-236   | 4.33E-07            |
| U-238   | 9.73E-01            |

Haz. Waste No(s).

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

TRUCON Code(s)

|                              |
|------------------------------|
| 112/212, 122/222,<br>127/227 |
|------------------------------|

Waste Stream Description

Pre-1970 buried waste retrieved for the Idaho Cleanup Project

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           | 12/31/2023 |    |
| Stream Name | ICP Retrieved Soils       |                         |                                |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 312.3        | 0.0        | 312.3        |
| <b>Final Form Total</b>     | <b>312.3</b> | <b>0.0</b> | <b>312.3</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.12E+02        |
| Aluminum-based Metal/Alloys   | 3.53E-01        |
| Other Metal/Alloys            | 5.15E+01        |
| Other Inorganic Materials     | 1.96E+03        |
| Cellulose                     | 9.13E+03        |
| Rubber                        | 7.08E+01        |
| Plastic                       | 8.39E+02        |
| Cement                        | 5.11E+01        |
| Solidified Inorganic Material | 2.97E+04        |
| Solidified Organic Material   | 2.89E+02        |
| Soil                          | 1.22E+05        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 1.15E+04        |
| Packaging Material, Rubber    | 1.75E+02        |
| Packaging Material, Steel     | 4.04E+04        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.96E+02            |
| Cs-137  | 2.18E-02            |
| Np-237  | 3.51E-03            |
| Pu-238  | 4.10E+00            |
| Pu-239  | 1.16E+02            |
| Pu-240  | 2.49E+01            |
| Pu-241  | 1.44E+02            |
| Pu-242  | 3.91E-03            |
| Sr-90   | 2.40E-02            |
| Th-229  | 2.95E-08            |
| Th-230  | 1.08E-07            |
| Th-232  | 1.82E-19            |
| U-233   | 3.36E-03            |
| U-234   | 1.17E-01            |
| U-235   | 4.77E-03            |
| U-236   | 7.38E-08            |
| U-238   | 1.92E-01            |

**Haz. Waste No(s).**

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

**TRUCON Code(s)**

|                              |
|------------------------------|
| 112/212, 122/222,<br>127/227 |
|------------------------------|

**Waste Stream Description**

Pre-1970 buried waste retrieved for the Idaho Cleanup Project

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           | 12/31/2023 |    |
| Stream Name | Miscellaneous Source Material       |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-55G1 w/o Liner   | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b> | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

Waste Material Parameters

| Material Parameter            | 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   | 0.00E+00        |
| Packaging Material, Rubber    | 9.20E-02        |
| Packaging Material, Steel     | 1.30E+03        |
| Packaging Material, Lead      | 9.34E-01        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.75E+01            |
| Cs-137  | 1.41E-04            |
| Np-237  | 3.99E-05            |
| Pu-238  | 3.62E-02            |
| Pu-239  | 1.20E+00            |
| Pu-240  | 3.07E-01            |
| Pu-241  | 5.42E-01            |
| Pu-242  | 2.97E-05            |
| Sr-90   | 1.20E-04            |
| Th-229  | 1.23E-13            |
| Th-230  | 3.53E-10            |
| Th-232  | 1.10E-17            |
| U-233   | 6.00E-10            |
| U-234   | 5.86E-06            |
| U-235   | 5.56E-08            |
| U-236   | 6.36E-08            |
| U-238   | 1.18E-09            |

No Hazardous Waste Numbers Provided

TRUCON Code(s)  
120/220

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



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           | 12/31/2023 |    |
| Stream Name | RH-TRU Debris from TRA at the INL |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-55G1 w/o Liner   | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b> | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

**Waste Material Parameters**

| Material Parameter            | 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   | 0.00E+00        |
| Packaging Material, Rubber    | 9.20E-02        |
| Packaging Material, Steel     | 1.30E+03        |
| Packaging Material, Lead      | 9.34E-01        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.80E-04            |
| Cm-244  | 1.66E+02            |
| Np-237  | 1.82E-10            |
| Pu-240  | 3.35E+00            |
| Pu-241  | 2.33E-02            |
| Th-229  | 2.90E-19            |
| Th-232  | 1.91E-16            |
| U-233   | 1.80E-15            |
| U-236   | 8.68E-07            |

**Haz. Waste No(s).**

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

**TRUCON Code(s)**

|         |
|---------|
| 122/222 |
|---------|

**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

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           | 12/31/2023 |    |
| Stream Name | Heterogeneous Debris from Large Item Repackaging |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |             |            |             |
|-------------------------|-------------|------------|-------------|
| Container Type          | Stored      | Proj.      | Total       |
| SLB2 Dir Ld             | 51.7        | 0.0        | 51.7        |
| SWB Dir Ld w/o Liner    | 39.5        | 0.0        | 39.5        |
| <b>Final Form Total</b> | <b>91.2</b> | <b>0.0</b> | <b>91.2</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.82E+04        |
| Aluminum-based Metal/Alloys   | 1.33E+01        |
| Other Metal/Alloys            | 4.30E+01        |
| Other Inorganic Materials     | 1.64E+02        |
| Cellulose                     | 1.18E+03        |
| Rubber                        | 1.64E+01        |
| Plastic                       | 9.27E+02        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 5.00E+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    | 1.33E+01        |
| Packaging Material, Steel     | 1.46E+04        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 5.93E+00            |
| Am-243  | 2.42E-05            |
| Np-237  | 6.99E-05            |
| Pu-238  | 6.01E+01            |
| Pu-239  | 1.56E+01            |
| Pu-240  | 3.52E+00            |
| Pu-241  | 4.02E+01            |
| Pu-242  | 4.59E-04            |
| Th-229  | 1.14E-13            |
| Th-230  | 7.12E-09            |
| Th-232  | 2.31E-17            |
| U-233   | 8.76E-10            |
| U-234   | 5.14E-04            |
| U-235   | 4.61E-08            |
| U-236   | 3.13E-07            |
| U-238   | 2.14E-13            |

**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.

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           | 12/31/2023 |    |
| Stream Name | Evaporator and Dissolver Sludge |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| 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 | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b>      | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.44E+00        |
| Aluminum-based Metal/Alloys   | 2.85E+00        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 0.00E+00        |
| Cellulose                     | 8.70E+00        |
| Rubber                        | 5.18E+00        |
| Plastic                       | 0.00E+00        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 9.10E+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    | 2.36E-01        |
| Packaging Material, Steel     | 5.44E+01        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 8.45E-02            |
| Np-237  | 2.70E-06            |
| Pu-238  | 2.61E+01            |
| Pu-239  | 7.19E-02            |
| Pu-240  | 3.55E-02            |
| Pu-241  | 3.61E-01            |
| Pu-242  | 3.40E-05            |
| Th-229  | 1.32E-13            |
| Th-230  | 1.07E-07            |
| Th-232  | 7.49E-18            |
| U-233   | 1.82E-10            |
| U-234   | 1.34E-03            |
| U-235   | 1.20E-09            |
| U-236   | 1.79E-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.

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           | 12/31/2023 |    |
| Stream Name | Monsanto                            |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH Can NS15 w/o Liner   | 0.4        | 0.0        | 0.4        |
| <b>Final Form Total</b> | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

Waste Material Parameters

| Material Parameter            | 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  | 7.20E+01            |
| Am-243  | 1.44E-14            |
| Np-237  | 1.17E-04            |
| Pu-238  | 1.18E+02            |
| Pu-239  | 9.84E-02            |
| Pu-240  | 5.44E-03            |
| Pu-241  | 3.53E-02            |
| Pu-242  | 3.04E-05            |
| Pu-244  | 4.15E-17            |
| Th-229  | 1.83E-13            |
| Th-230  | 3.92E-08            |
| Th-232  | 9.93E-20            |
| U-233   | 1.25E-09            |
| U-234   | 1.69E-03            |
| U-235   | 4.85E-10            |
| U-236   | 8.05E-10            |
| U-238   | 2.36E-14            |

Haz. Waste No(s).

|                        |
|------------------------|
| D006, D007, D008, D011 |
|------------------------|

TRUCON Code(s)

|     |
|-----|
| 320 |
|-----|

Waste Stream Description

Neutron sources from Monsanto

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

**Appendix A**

Waste Profile Report

|             |   |                         |                            |                       |                          |            |    |
|-------------|---|-------------------------|----------------------------|-----------------------|--------------------------|------------|----|
| Site        | Idaho 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           | 12/31/2023 |    |
| Stream Name | Organic Material Can waste              |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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        |
| <b>Final Form Total</b>                     | <b>2.5</b> | <b>0.0</b> | <b>2.5</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.00E+01        |
| Aluminum-based Metal/Alloys   | 1.00E+01        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 0.00E+00        |
| Cellulose                     | 5.00E+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  | 1.53E-04            |
| Cm-244  | 1.20E-05            |
| Cs-137  | 5.74E-01            |
| Np-237  | 1.92E-10            |
| Pu-238  | 1.88E-02            |
| Pu-239  | 3.79E-05            |
| Pu-240  | 1.52E-05            |
| Pu-241  | 1.72E-03            |
| Sr-90   | 5.43E-01            |
| Th-229  | 1.87E-19            |
| Th-230  | 1.21E-09            |
| Th-232  | 9.16E-16            |
| U-233   | 1.60E-15            |
| U-234   | 3.31E-05            |
| U-235   | 1.49E-13            |
| U-236   | 4.64E-06            |

**Haz. Waste No(s).**

D006

**TRUCON Code(s)**

322

**Waste Stream Description**

Fuel Examination waste from NRF

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           | 12/31/2023 |    |
| Stream Name | RH-TRU Debris Waste from the Naval Nuclear Propulsion Program (NNPP) |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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        |
| <b>Final Form Total</b>                     | <b>46.6</b> | <b>0.0</b> | <b>46.6</b> |

**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  | 9.95E+01            |
| Cm-244  | 1.04E+00            |
| Cs-137  | 8.95E+03            |
| Np-237  | 1.29E-04            |
| Pu-238  | 4.14E+02            |
| Pu-239  | 8.52E+00            |
| Pu-240  | 8.55E+00            |
| Pu-241  | 1.84E+02            |
| Pu-242  | 2.93E-02            |
| Sr-90   | 8.20E+03            |
| Th-229  | 1.29E-03            |
| Th-230  | 6.55E-05            |
| Th-232  | 9.99E-17            |
| U-233   | 3.68E+00            |
| U-234   | 1.78E+00            |
| U-235   | 4.33E-02            |
| U-236   | 1.01E-06            |
| 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.

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  | 12/31/2023 |    |
| Stream Name | Solidified Process Solids |                         |                       | Activities Decayed to CY |                 | 2023       |    |

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

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

Waste Material Parameters

| Material Parameter            | 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                       | 2.50E+01        |
| 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  | 3.25E-01            |
| Np-237  | 3.71E-06            |
| Pu-238  | 3.60E-02            |
| Pu-239  | 2.17E+00            |
| Pu-240  | 5.29E-01            |
| Pu-241  | 1.54E+00            |
| Pu-242  | 3.67E-05            |
| Th-229  | 4.74E-14            |
| Th-230  | 3.97E-11            |
| Th-232  | 3.13E-17            |
| U-233   | 1.26E-10            |
| U-234   | 9.48E-07            |
| U-235   | 1.92E-08            |
| U-236   | 1.41E-07            |
| U-238   | 5.12E-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.

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

**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           | 12/31/2023 |    |
| Stream Name | Rocky Flats Source                  |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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        |
| <b>Final Form Total</b>                     | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 0.00E+00        |
| Aluminum-based Metal/Alloys   | 3.00E+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  | 3.46E-02            |
| Cs-137  | 1.65E+00            |
| Np-237  | 7.20E-07            |
| Pu-238  | 2.02E-01            |
| Pu-239  | 1.98E-04            |
| Pu-240  | 1.36E-04            |
| Pu-241  | 8.01E-05            |
| Pu-242  | 1.58E-07            |
| Sr-90   | 1.87E+00            |
| Th-229  | 3.20E-15            |
| Th-230  | 6.72E-11            |
| Th-232  | 2.48E-21            |
| U-233   | 1.47E-11            |
| U-234   | 2.90E-06            |
| U-235   | 9.75E-13            |
| U-236   | 2.01E-11            |
| U-238   | 1.23E-16            |

No Hazardous Waste Numbers Provided

TRUCON Code(s)  
320

**Waste Stream Description**

Source originating from Rocky Flats



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           | 12/31/2023 |    |
| Stream Name | Transuranic Debris                           |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes       |            |            |            |
|--------------------------|------------|------------|------------|
| Container Type           | Stored     | Proj.      | Total      |
| 55-gal POC - 6" w/ Liner | 0.0        | 0.0        | 0.0        |
| <b>Final Form Total</b>  | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> |

**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  | 9.09E-02            |
| Np-237  | 6.35E-04            |
| Pu-238  | 6.84E-01            |
| Pu-239  | 8.07E-02            |
| Th-229  | 1.08E-04            |
| Th-230  | 1.39E-08            |
| Th-232  | 2.51E-09            |
| U-233   | 3.41E-02            |
| U-234   | 8.04E-05            |
| U-235   | 7.89E-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.

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  | 12/31/2023               |      |
| Stream Name | Cemented TRU Waste                                 |                         |                       |                       |                 | Activities Decayed to CY | 2023 |

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

| Final Form Volumes                |              |             |              |
|-----------------------------------|--------------|-------------|--------------|
| Container Type                    | Stored       | Proj.       | Total        |
| 55-gal Drum Dir Ld w/ Liner       | 83.2         | 66.4        | 149.5        |
| 55-gal POC - 12" w/ Liner         | 0.0          | 0.0         | 0.0          |
| SWB Dir Ld w/ Liner               | 127.8        | 0.0         | 127.8        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 1.7          | 0.0         | 1.7          |
| <b>Final Form Total</b>           | <b>212.7</b> | <b>66.4</b> | <b>279.1</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.36E+04        |
| Aluminum-based Metal/Alloys   | 7.03E-01        |
| Other Metal/Alloys            | 3.75E+03        |
| Other Inorganic Materials     | 6.40E+02        |
| Cellulose                     | 4.09E+01        |
| Rubber                        | 1.20E+02        |
| Plastic                       | 2.47E+03        |
| Cement                        | 1.11E+05        |
| Solidified Inorganic Material | 0.00E+00        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 1.45E+02        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 2.81E+01        |
| Packaging Material, Plastic   | 5.71E+03        |
| Packaging Material, Rubber    | 1.10E+02        |
| Packaging Material, Steel     | 4.00E+04        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.54E+04            |
| Am-243  | 3.71E-01            |
| Cs-137  | 1.74E-04            |
| Np-237  | 1.18E-01            |
| Pu-238  | 2.74E+03            |
| Pu-239  | 2.26E+03            |
| Pu-240  | 6.47E+02            |
| Pu-241  | 1.61E+04            |
| Pu-242  | 8.42E-01            |
| Pu-244  | 1.59E-07            |
| Sr-90   | 1.36E-04            |
| Th-229  | 5.42E-07            |
| Th-230  | 3.56E-07            |
| Th-232  | 3.71E-16            |
| U-233   | 6.16E-02            |
| U-234   | 3.87E-01            |
| U-235   | 3.28E-03            |
| U-236   | 7.62E-05            |
| U-238   | 7.93E-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)**

114/214, 125/225, 126/226

**Waste Stream Description**

Inorganic homogenous solid waste (cemented TRU waste) generated in TA-55.

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  | 12/31/2023               |      |
| Stream Name | Cemented TRU Waste                                 |                         |                       |                       |                 | Activities Decayed to CY | 2023 |

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

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 16.2         | 0.0        | 16.2         |
| SWB Dir Ld w/ Liner         | 101.5        | 0.0        | 101.5        |
| <b>Final Form Total</b>     | <b>117.7</b> | <b>0.0</b> | <b>117.7</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 8.22E+03        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 1.63E+00        |
| Cellulose                     | 6.13E+01        |
| Rubber                        | 3.49E+00        |
| Plastic                       | 5.75E+02        |
| Cement                        | 6.07E+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   | 7.16E+02        |
| Packaging Material, Rubber    | 2.87E+01        |
| Packaging Material, Steel     | 1.78E+04        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 2.87E+02            |
| Am-243  | 2.07E-02            |
| Cs-137  | 1.43E-04            |
| Np-237  | 2.21E-02            |
| Pu-238  | 2.66E+01            |
| Pu-239  | 3.53E+02            |
| Pu-240  | 5.67E+01            |
| Pu-241  | 3.73E+02            |
| Pu-242  | 1.19E-02            |
| Sr-90   | 1.16E-04            |
| Th-229  | 1.06E-14            |
| Th-230  | 4.29E-08            |
| Th-232  | 2.57E-05            |
| U-233   | 3.38E-09            |
| U-234   | 4.66E-02            |
| U-235   | 1.70E-03            |
| U-236   | 1.68E-07            |
| U-238   | 1.29E-04            |

**Haz. Waste No(s).**

|  |
|--|
| D004, D005, D006,<br>D007, D008, D009,<br>D010, D011, D018,<br>D019, D021, D022,<br>D035, D038, D039,<br>D040, F001, F002,<br>F005 |
|--|

**TRUCON Code(s)**

|                              |
|------------------------------|
| 111/211, 114/214,<br>125/225 |
|------------------------------|

**Waste Stream Description**

Homogeneous cemented inorganics generated in the TA-50-01 RLWTF pretreatment process.

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           | 12/31/2023 |    |
| Stream Name | Cemented TRU Waste                                 |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.85E+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                       | 1.48E+01        |
| Cement                        | 1.37E+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   | 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  | 1.05E-01            |
| Am-243  | 4.22E-05            |
| Cs-137  | 2.52E-04            |
| Np-237  | 2.83E-05            |
| Pu-238  | 1.29E+00            |
| Pu-239  | 4.09E-01            |
| Pu-240  | 6.99E-02            |
| Pu-241  | 1.06E+00            |
| Pu-242  | 5.59E-05            |
| Sr-90   | 2.51E-04            |
| Th-229  | 5.96E-07            |
| Th-230  | 4.61E-09            |
| Th-232  | 5.11E-20            |
| U-233   | 1.23E-10            |
| U-234   | 5.04E-04            |
| U-235   | 1.24E-05            |
| U-236   | 2.07E-09            |
| U-238   | 7.11E-04            |

**Haz. Waste No(s).**

|  |
|--|
| D004, D005, D006,<br>D007, D008, D009,<br>D010, D011, D022,<br>D027, D028, D029,<br>D030, D037, D043,<br>F001, F002, F004,<br>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.

Waste Stream ID: **LA-CIN04.001**

**Appendix A**

Waste Profile Report

|             |  |                         |                       |                       |                          |            |    |
|-------------|--|-------------------------|-----------------------|-----------------------|--------------------------|------------|----|
| Site        | Los Alamos National Laboratory             | Summary Category        | S3000                 | Defense Determination | Defense-Related          | Handling   | CH |
| Source Cat. | Spill Clean-ups/Emergency Response Actions | Waste Matrix Code Group | Solidified Inorganics |                       | Inventory Date           | 12/31/2023 |    |
| Stream Name | Cemented TRU Waste                         |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |               |            |               |
|-----------------------------|---------------|------------|---------------|
| Container Type              | Stored        | Proj.      | Total         |
| 55-gal Drum Dir Ld w/ Liner | 0.4           | 0.0        | 0.4           |
| SWB Dir Ld w/ Liner         | 1485.2        | 0.0        | 1485.2        |
| <b>Final Form Total</b>     | <b>1485.6</b> | <b>0.0</b> | <b>1485.6</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 3.59E+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                       | 5.32E+03        |
| Cement                        | 8.60E+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   | 1.81E+03        |
| Packaging Material, Rubber    | 2.87E+02        |
| Packaging Material, Steel     | 2.29E+05        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.04E+04            |
| Am-243  | 4.40E-06            |
| Cs-137  | 1.92E-01            |
| Np-237  | 1.01E-02            |
| Pu-238  | 3.11E+01            |
| Pu-239  | 6.13E+01            |
| Pu-240  | 3.72E-01            |
| Pu-241  | 4.93E+00            |
| Pu-242  | 2.15E-05            |
| Sr-90   | 1.35E-01            |
| Th-229  | 5.84E-12            |
| Th-230  | 1.63E-07            |
| Th-232  | 1.23E-14            |
| U-233   | 6.64E-08            |
| U-234   | 6.04E-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 |
|--|

**TRUCON Code(s)**

|                  |
|------------------|
| 111/211, 127/227 |
|------------------|

**Waste Stream Description**

Cemented TRU waste stored in corrugated metal pipes.

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  | 12/31/2023               |      |
| Stream Name | Cemented TRU Waste                                 |                         |                       |                       |                 | Activities Decayed to CY | 2023 |

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

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 4.4        | 0.0        | 4.4        |
| SWB Dir Ld w/ Liner         | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b>     | <b>6.3</b> | <b>0.0</b> | <b>6.3</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.76E+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                       | 3.12E+00        |
| Cement                        | 4.91E+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   | 1.64E+02        |
| Packaging Material, Rubber    | 2.84E+00        |
| Packaging Material, Steel     | 8.61E+02        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 4.11E-01            |
| Am-243  | 3.53E-04            |
| Cs-137  | 2.60E-05            |
| Np-237  | 3.63E-05            |
| Pu-238  | 3.00E-01            |
| Pu-239  | 8.75E-01            |
| Pu-240  | 1.69E-01            |
| Pu-241  | 1.01E+00            |
| Pu-242  | 1.18E-05            |
| Sr-90   | 2.56E-05            |
| Th-229  | 1.80E-06            |
| Th-230  | 6.33E-09            |
| Th-232  | 4.32E-17            |
| U-233   | 1.38E-09            |
| U-234   | 8.04E-05            |
| U-235   | 6.61E-07            |
| U-236   | 1.20E-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.

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           | 12/31/2023 |    |
| Stream Name | TRU METAL WASTE                |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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        |
| <b>Final Form Total</b> | <b>29.8</b> | <b>0.0</b> | <b>29.8</b> |

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  | 1.73E+00            |
| Np-237  | 4.86E-06            |
| Pu-238  | 7.72E-01            |
| Pu-239  | 2.34E+01            |
| Pu-240  | 1.94E+00            |
| Pu-241  | 2.55E+01            |
| Pu-242  | 1.14E-02            |
| Th-229  | 2.74E-14            |
| Th-230  | 7.52E-09            |
| Th-232  | 1.15E-16            |
| U-233   | 9.80E-11            |
| U-234   | 1.01E-04            |
| U-235   | 5.03E-07            |
| U-236   | 5.18E-07            |
| U-238   | 1.59E-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

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           | 12/31/2023 |    |
| Stream Name | Heterogeneous Debris Waste     |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                |              |               |               |
|-----------------------------------|--------------|---------------|---------------|
| Container Type                    | Stored       | Proj.         | Total         |
| 55-gal Drum Dir Ld w/ Liner       | 228.9        | 718.8         | 947.7         |
| 55-gal POC - 12" w/ Liner         | 16.4         | 0.0           | 16.4          |
| SLB2 Dir Ld                       | 0.0          | 473.0         | 473.0         |
| SWB Dir Ld w/ Liner               | 97.8         | 1906.3        | 2004.1        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 4.2          | 285.6         | 289.8         |
| <b>Final Form Total</b>           | <b>347.3</b> | <b>3383.7</b> | <b>3731.0</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 4.71E+05        |
| Aluminum-based Metal/Alloys   | 7.87E+03        |
| Other Metal/Alloys            | 3.24E+04        |
| Other Inorganic Materials     | 3.33E+04        |
| Cellulose                     | 7.03E+04        |
| Rubber                        | 3.27E+04        |
| Plastic                       | 6.69E+04        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 9.05E+04        |
| Solidified Organic Material   | 1.29E+02        |
| Soil                          | 3.25E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 9.44E+03        |
| Packaging Material, Plastic   | 5.04E+04        |
| Packaging Material, Rubber    | 1.30E+03        |
| Packaging Material, Steel     | 6.85E+05        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 7.50E+03            |
| Am-243  | 1.61E-01            |
| Cs-137  | 5.16E-04            |
| Np-237  | 4.24E-02            |
| Pu-238  | 2.19E+05            |
| Pu-239  | 3.26E+04            |
| Pu-240  | 8.06E+03            |
| Pu-241  | 1.29E+05            |
| Pu-242  | 2.41E+00            |
| Pu-244  | 8.64E-07            |
| Sr-90   | 5.09E-04            |
| Th-229  | 3.22E-06            |
| Th-230  | 2.29E-05            |
| Th-232  | 2.28E-15            |
| U-233   | 1.12E-01            |
| U-234   | 2.50E+01            |
| U-235   | 2.41E-03            |
| U-236   | 4.73E-04            |
| U-238   | 4.00E-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.



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           | 12/31/2023 |    |
| Stream Name | Heterogeneous Debris           |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |            |               |               |
|-----------------------------|------------|---------------|---------------|
| Container Type              | Stored     | Proj.         | Total         |
| 55-gal Drum Dir Ld w/ Liner | 0.0        | 824.3         | 824.3         |
| 55-gal POC - 12" w/ Liner   | 0.0        | 554.0         | 554.0         |
| <b>Final Form Total</b>     | <b>0.0</b> | <b>1378.2</b> | <b>1378.2</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 7.29E+04        |
| Aluminum-based Metal/Alloys   | 2.95E+02        |
| Other Metal/Alloys            | 8.74E+03        |
| Other Inorganic Materials     | 4.73E+04        |
| Cellulose                     | 6.04E+03        |
| Rubber                        | 9.06E+03        |
| Plastic                       | 2.79E+04        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 1.16E+03        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 3.19E+05        |
| Packaging Material, Plastic   | 1.18E+05        |
| Packaging Material, Rubber    | 1.80E+03        |
| Packaging Material, Steel     | 1.36E+06        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 4.62E+03            |
| Am-243  | 1.13E-01            |
| Cs-137  | 7.54E-03            |
| Np-237  | 1.44E-01            |
| Pu-238  | 5.26E+04            |
| Pu-239  | 2.22E+04            |
| Pu-240  | 5.51E+03            |
| Pu-241  | 9.15E+04            |
| Pu-242  | 9.58E-01            |
| Pu-244  | 3.72E-05            |
| Sr-90   | 8.68E-03            |
| Th-229  | 6.92E-14            |
| Th-230  | 5.65E-06            |
| Th-232  | 3.09E-14            |
| U-233   | 2.20E-08            |
| U-234   | 6.15E+00            |
| U-235   | 1.84E-03            |
| U-236   | 6.27E-03            |
| U-238   | 2.97E-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)**

|  |
|--|
| 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

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           | 12/31/2023 |    |
| Stream Name | Heterogeneous Debris Waste     |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                |              |              |              |
|-----------------------------------|--------------|--------------|--------------|
| Container Type                    | Stored       | Proj.        | Total        |
| 55-gal Drum Dir Ld w/ Liner       | 82.3         | 75.6         | 157.9        |
| 55-gal POC - 12" w/ Liner         | 0.0          | 0.0          | 0.0          |
| SLB2 Dir Ld                       | 0.0          | 310.4        | 310.4        |
| SWB Dir Ld w/ Liner               | 16.9         | 0.0          | 16.9         |
| SWB w/ 4 - 55-gal Drums w/ Liners | 2.5          | 0.0          | 2.5          |
| <b>Final Form Total</b>           | <b>101.8</b> | <b>386.0</b> | <b>487.8</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 4.24E+04        |
| Aluminum-based Metal/Alloys   | 7.27E+02        |
| Other Metal/Alloys            | 1.79E+03        |
| Other Inorganic Materials     | 4.79E+03        |
| Cellulose                     | 1.42E+04        |
| Rubber                        | 8.48E+02        |
| Plastic                       | 7.28E+03        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 1.10E+04        |
| Solidified Organic Material   | 1.72E+01        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 2.81E+01        |
| Packaging Material, Plastic   | 5.92E+03        |
| Packaging Material, Rubber    | 1.29E+02        |
| Packaging Material, Steel     | 7.56E+04        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.47E+02            |
| Am-243  | 1.57E-01            |
| Cm-244  | 7.74E+02            |
| Cs-137  | 1.02E+00            |
| Np-237  | 3.71E+00            |
| Pu-238  | 4.38E+02            |
| Pu-239  | 1.07E+03            |
| Pu-240  | 2.48E+02            |
| Pu-241  | 3.79E+03            |
| Pu-242  | 1.61E-02            |
| Sr-90   | 4.93E-01            |
| Th-229  | 9.99E-05            |
| Th-230  | 1.58E-07            |
| Th-232  | 2.03E-04            |
| U-233   | 5.67E-07            |
| U-234   | 1.72E-01            |
| U-235   | 5.14E-03            |
| U-236   | 3.87E-04            |
| U-238   | 3.31E-04            |

**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.

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           | 12/31/2023 |    |
| Stream Name | Heterogeneous Debris Waste                         |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 0.4         | 0.0        | 0.4         |
| SWB Dir Ld w/ Liner         | 1.9         | 0.0        | 1.9         |
| TDOP Dir Ld                 | 18.0        | 0.0        | 18.0        |
| <b>Final Form Total</b>     | <b>20.3</b> | <b>0.0</b> | <b>20.3</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.20E+03        |
| Aluminum-based Metal/Alloys   | 7.87E+01        |
| Other Metal/Alloys            | 3.51E+01        |
| Other Inorganic Materials     | 1.39E+01        |
| Cellulose                     | 5.45E+02        |
| Rubber                        | 8.74E+01        |
| Plastic                       | 2.32E+02        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 1.34E+02        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 1.77E+01        |
| Packaging Material, Rubber    | 3.86E+00        |
| Packaging Material, Steel     | 3.43E+03        |
| Packaging Material, Lead      | 0.00E+00        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 4.59E-01            |
| Am-243  | 3.31E-05            |
| Cs-137  | 1.29E-06            |
| Np-237  | 1.51E-05            |
| Pu-238  | 1.61E+01            |
| Pu-239  | 2.94E+00            |
| Pu-240  | 5.98E-01            |
| Pu-241  | 1.95E+00            |
| Pu-242  | 9.98E-05            |
| Sr-90   | 1.28E-06            |
| Th-229  | 2.18E-13            |
| Th-230  | 1.41E-07            |
| Th-232  | 3.54E-17            |
| U-233   | 5.60E-10            |
| U-234   | 1.91E-03            |
| U-235   | 3.52E-08            |
| U-236   | 1.59E-07            |
| U-238   | 1.39E-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)

116/216, 125/225

Waste Stream Description

Mixed heterogeneous combustible and non-combustible debris generated at TA-21 DP West Facility during plutonium processing and associated operations.

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           | 12/31/2023 |    |
| Stream Name | Heterogeneous Debris Waste                         |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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        |
| <b>Final Form Total</b>     | <b>4.6</b> | <b>0.0</b> | <b>4.6</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 3.39E+02        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 8.32E+01        |
| Other Inorganic Materials     | 7.86E+01        |
| Cellulose                     | 2.13E+01        |
| Rubber                        | 2.05E+01        |
| Plastic                       | 9.05E+01        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 3.25E+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  | 1.89E+01            |
| Am-243  | 7.77E-02            |
| Cm-244  | 3.37E+00            |
| Cs-137  | 5.33E-07            |
| Np-237  | 1.37E-04            |
| Pu-238  | 3.60E-02            |
| Pu-239  | 7.75E-01            |
| Pu-240  | 1.51E-01            |
| Pu-241  | 1.28E+00            |
| Pu-242  | 8.72E-06            |
| Sr-90   | 5.30E-07            |
| Th-229  | 2.15E-13            |
| Th-230  | 4.27E-12            |
| Th-232  | 9.88E-19            |
| U-233   | 1.67E-09            |
| U-234   | 3.09E-07            |
| U-235   | 2.29E-09            |
| U-236   | 1.34E-08            |
| U-238   | 4.06E-15            |

**Haz. Waste No(s).**

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

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           | 12/31/2023 |    |
| Stream Name | Heterogeneous Debris Waste     |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes        |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| 55-gal POC - 12" w/ Liner | 0.0        | 0.0        | 0.0        |
| SWB Dir Ld w/ Liner       | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b>   | <b>1.9</b> | <b>0.0</b> | <b>1.9</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 7.19E+00        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 6.90E+00        |
| Other Inorganic Materials     | 4.78E-01        |
| Cellulose                     | 1.02E+00        |
| Rubber                        | 1.09E+00        |
| Plastic                       | 2.39E+00        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 1.40E+00        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 2.81E+01        |
| Packaging Material, Plastic   | 9.98E+00        |
| Packaging Material, Rubber    | 4.81E-01        |
| Packaging Material, Steel     | 4.00E+02        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.99E-02            |
| Am-243  | 2.46E-02            |
| Cs-137  | 8.57E-05            |
| Np-237  | 5.67E-05            |
| Pu-238  | 3.38E-02            |
| Pu-239  | 1.18E-04            |
| Pu-240  | 2.06E-03            |
| Pu-241  | 1.09E-01            |
| Pu-242  | 4.98E-04            |
| Sr-90   | 8.45E-05            |
| Th-229  | 8.69E-13            |
| Th-230  | 2.93E-10            |
| Th-232  | 1.22E-19            |
| U-233   | 2.20E-09            |
| U-234   | 3.98E-06            |
| U-235   | 1.01E-12            |
| U-236   | 5.48E-10            |
| U-238   | 6.95E-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.

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           | 12/31/2023 |    |
| Stream Name | Heterogeneous Debris Waste                         |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 0.2         | 0.0        | 0.2         |
| SWB Dir Ld w/ Liner         | 15.0        | 0.0        | 15.0        |
| <b>Final Form Total</b>     | <b>15.3</b> | <b>0.0</b> | <b>15.3</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 5.51E+03        |
| Aluminum-based Metal/Alloys   | 1.46E+01        |
| Other Metal/Alloys            | 1.06E+02        |
| Other Inorganic Materials     | 2.78E+01        |
| Cellulose                     | 3.79E+02        |
| Rubber                        | 5.95E+01        |
| Plastic                       | 3.92E+02        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 2.78E+02        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 2.59E+01        |
| Packaging Material, Rubber    | 3.02E+00        |
| Packaging Material, Steel     | 2.35E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 6.51E-01            |
| Am-243  | 2.13E-05            |
| Cs-137  | 2.64E-06            |
| Np-237  | 5.34E-05            |
| Pu-238  | 2.81E+00            |
| Pu-239  | 4.09E-01            |
| Pu-240  | 1.08E-01            |
| Pu-241  | 9.57E-01            |
| Pu-242  | 1.64E-04            |
| Sr-90   | 2.60E-06            |
| Th-229  | 7.98E-13            |
| Th-230  | 1.13E-08            |
| Th-232  | 8.03E-17            |
| U-233   | 2.03E-09            |
| U-234   | 1.73E-04            |
| U-235   | 1.24E-06            |
| U-236   | 1.95E-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.

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  | 12/31/2023               |      |
| Stream Name | Absorbed Waste                                     |                         |                       |                       |                 | Activities Decayed to CY | 2023 |

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

| Final Form Volumes                |            |            |            |
|-----------------------------------|------------|------------|------------|
| Container Type                    | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner       | 2.5        | 0.0        | 2.5        |
| SWB Dir Ld w/ Liner               | 5.6        | 0.0        | 5.6        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 0.8        | 0.0        | 0.8        |
| <b>Final Form Total</b>           | <b>9.0</b> | <b>0.0</b> | <b>9.0</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 5.20E+01        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 1.06E+02        |
| Other Inorganic Materials     | 6.55E-01        |
| Cellulose                     | 2.38E+01        |
| Rubber                        | 9.07E+00        |
| Plastic                       | 7.42E+01        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 1.42E+03        |
| Solidified Organic Material   | 1.23E+01        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 1.30E+02        |
| Packaging Material, Rubber    | 3.34E+00        |
| Packaging Material, Steel     | 1.60E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 2.13E+01            |
| Am-243  | 7.81E-03            |
| Cs-137  | 9.46E-07            |
| Np-237  | 4.19E-04            |
| Pu-238  | 4.82E+01            |
| Pu-239  | 3.50E+01            |
| Pu-240  | 8.54E+00            |
| Pu-241  | 7.05E+01            |
| Pu-242  | 5.82E-04            |
| Sr-90   | 9.46E-07            |
| Th-229  | 2.01E-16            |
| Th-230  | 8.26E-09            |
| Th-232  | 6.23E-20            |
| U-233   | 6.39E-11            |
| U-234   | 8.99E-03            |
| U-235   | 4.05E-05            |
| U-236   | 2.53E-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, F003, F005 |
|--|

**TRUCON Code(s)**

|  |
|--|
| 112/212, 113/213, 124/224, 125/225, 126/226, 129/229 |
|--|

**Waste Stream Description**

Inorganic particulate waste generated in TA-55.

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           | 12/31/2023 |    |
| Stream Name | Homogeneous Inorganic Solids                       |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 50.6        | 0.0        | 50.6        |
| SWB Dir Ld w/ Liner         | 15.0        | 0.0        | 15.0        |
| <b>Final Form Total</b>     | <b>65.7</b> | <b>0.0</b> | <b>65.7</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 5.98E+02        |
| Aluminum-based Metal/Alloys   | 2.44E+01        |
| Other Metal/Alloys            | 7.12E+00        |
| Other Inorganic Materials     | 2.65E+01        |
| Cellulose                     | 8.87E+01        |
| Rubber                        | 1.38E+01        |
| Plastic                       | 7.80E+02        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 4.23E+04        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 1.88E+03        |
| Packaging Material, Rubber    | 3.13E+01        |
| Packaging Material, Steel     | 8.88E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.12E+01            |
| Am-243  | 1.02E-03            |
| Cs-137  | 2.66E-03            |
| Np-237  | 2.65E-04            |
| Pu-238  | 8.05E+00            |
| Pu-239  | 1.46E+01            |
| Pu-240  | 1.82E+00            |
| Pu-241  | 1.79E+01            |
| Pu-242  | 4.24E-04            |
| Sr-90   | 2.31E-03            |
| Th-229  | 1.29E-06            |
| Th-230  | 2.48E-09            |
| Th-232  | 7.97E-07            |
| U-233   | 4.05E-11            |
| U-234   | 2.69E-03            |
| U-235   | 9.88E-05            |
| U-236   | 5.39E-09            |
| U-238   | 6.59E-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.



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           | 12/31/2023 |    |
| Stream Name | Salt Waste   |                         |            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                |            |            |            |
|-----------------------------------|------------|------------|------------|
| Container Type                    | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner       | 0.6        | 0.0        | 0.6        |
| 55-gal POC - 12" w/ Liner         | 0.1        | 0.0        | 0.1        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 0.8        | 0.0        | 0.8        |
| <b>Final Form Total</b>           | <b>1.6</b> | <b>0.0</b> | <b>1.6</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 7.75E+00        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 1.31E+01        |
| Other Inorganic Materials     | 6.82E+00        |
| Cellulose                     | 1.88E-01        |
| Rubber                        | 1.88E-01        |
| Plastic                       | 7.86E+00        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 1.34E+02        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 5.62E+01        |
| Packaging Material, Plastic   | 6.93E+01        |
| Packaging Material, Rubber    | 1.42E+00        |
| Packaging Material, Steel     | 7.01E+02        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 2.22E+01            |
| Am-243  | 2.37E-02            |
| Cs-137  | 1.13E-05            |
| Np-237  | 1.82E-04            |
| Pu-238  | 1.56E+00            |
| Pu-239  | 5.06E+01            |
| Pu-240  | 1.26E+01            |
| Pu-241  | 1.12E+02            |
| Pu-242  | 8.97E-04            |
| Sr-90   | 1.13E-05            |
| Th-229  | 8.73E-17            |
| Th-230  | 2.03E-13            |
| Th-232  | 9.22E-20            |
| U-233   | 2.77E-11            |
| U-234   | 4.41E-07            |
| U-235   | 4.29E-07            |
| U-236   | 3.74E-08            |
| U-238   | 1.39E-14            |

**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)**

|                  |
|------------------|
| 124/224, 125/225 |
|------------------|

**Waste Stream Description**

Consists primarily of inorganic homogeneous solid waste (salt waste) generated in TA-55.

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  | 12/31/2023               |      |
| Stream Name | Absorbed TRU Waste             |                         |                       |                       |                 | Activities Decayed to CY | 2023 |

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

| 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         | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b>     | <b>2.7</b> | <b>0.0</b> | <b>2.7</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.32E+01        |
| Aluminum-based Metal/Alloys   | 2.17E+00        |
| Other Metal/Alloys            | 1.81E-01        |
| Other Inorganic Materials     | 4.61E+00        |
| Cellulose                     | 7.30E+00        |
| Rubber                        | 1.14E+00        |
| Plastic                       | 1.50E+01        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 1.76E+02        |
| Solidified Organic Material   | 8.08E+01        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 3.31E+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  | 7.97E-01            |
| Am-243  | 2.10E-12            |
| Cs-137  | 9.65E-06            |
| Np-237  | 6.06E-03            |
| Pu-238  | 2.38E-01            |
| Pu-239  | 5.38E+00            |
| Pu-240  | 1.23E+00            |
| Pu-241  | 1.68E+01            |
| Pu-242  | 7.67E-05            |
| Sr-90   | 9.84E-06            |
| Th-229  | 8.09E-07            |
| Th-230  | 8.77E-09            |
| Th-232  | 3.59E-18            |
| U-233   | 4.60E-03            |
| U-234   | 4.77E-04            |
| U-235   | 1.19E-05            |
| U-236   | 7.28E-08            |
| U-238   | 2.38E-14            |

**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

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           | 12/31/2023 |    |
| Stream Name | Treated Legacy Nitrate Salt Waste                  |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.6        | 0.0        | 0.6        |
| 55-gal POC - 12" w/ Liner   | 0.0        | 0.0        | 0.0        |
| <b>Final Form Total</b>     | <b>0.7</b> | <b>0.0</b> | <b>0.7</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.03E-01        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 4.35E-02        |
| Other Inorganic Materials     | 0.00E+00        |
| Cellulose                     | 4.35E-03        |
| Rubber                        | 0.00E+00        |
| Plastic                       | 3.62E-01        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 3.70E+02        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 2.81E+01        |
| Packaging Material, Plastic   | 3.08E+01        |
| Packaging Material, Rubber    | 4.72E-01        |
| Packaging Material, Steel     | 1.92E+02        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 5.55E+00            |
| Am-243  | 1.38E-04            |
| Cs-137  | 1.54E-06            |
| Np-237  | 5.94E-05            |
| Pu-238  | 2.51E-02            |
| Pu-239  | 1.59E+00            |
| Pu-240  | 1.35E-01            |
| Pu-241  | 1.55E+00            |
| Pu-242  | 1.78E-05            |
| Sr-90   | 1.54E-06            |
| Th-229  | 2.85E-17            |
| Th-230  | 3.25E-15            |
| Th-232  | 9.86E-22            |
| U-233   | 9.07E-12            |
| U-234   | 7.08E-09            |
| U-235   | 1.57E-10            |
| U-236   | 4.00E-10            |
| U-238   | 2.76E-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, 126/226 |
|------------------|

**Waste Stream Description**

Inorganic homogeneous solids generated in TA-55 and treated at TA-50 and TA-54.

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           | 12/31/2023 |    |
| Stream Name | Contaminated Soil                          |                         |                                |                       | Activities Decayed to CY | 2023       |    |

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

| 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         | 20.7        | 0.0        | 20.7        |
| <b>Final Form Total</b>     | <b>28.7</b> | <b>0.0</b> | <b>28.7</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 5.59E+01        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 4.48E+00        |
| Other Inorganic Materials     | 3.36E+00        |
| Cellulose                     | 6.71E-01        |
| Rubber                        | 0.00E+00        |
| Plastic                       | 8.42E+01        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 2.24E+01        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 1.29E+04        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 3.18E+02        |
| Packaging Material, Rubber    | 8.48E+00        |
| Packaging Material, Steel     | 4.22E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Pu-239  | 1.33E+00            |
| U-235   | 5.91E-08            |

**Haz. Waste No(s).**

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

**TRUCON Code(s)**

|                  |
|------------------|
| 111/211, 127/227 |
|------------------|

**Waste Stream Description**

Mixed contaminated soil generated at the TA-21 DP West Facility.

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           | 12/31/2023 |    |
| Stream Name | Defense Sealed Sources              |                         |                           |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes             |            |            |            |
|--------------------------------|------------|------------|------------|
| Container Type                 | Stored     | Proj.      | Total      |
| 55-gal POC - 12" w/ Liner      | 0.3        | 0.0        | 0.3        |
| 55-gal POC - 6" w/ Liner       | 0.0        | 4.8        | 4.8        |
| 55-gal S100 POC - 6" w/ Liner  | 0.0        | 0.0        | 0.0        |
| 55-gal S300 POC - 12" w/ Liner | 0.0        | 0.0        | 0.0        |
| <b>Final Form Total</b>        | <b>0.4</b> | <b>4.8</b> | <b>5.2</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 3.65E+03        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 6.44E+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 | 1.88E+04        |
| Packaging Material, Plastic   | 5.05E+03        |
| Packaging Material, Rubber    | 5.13E+01        |
| Packaging Material, Steel     | 3.01E+04        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.98E+03            |
| Cs-137  | 5.64E+00            |
| Np-237  | 6.42E-05            |
| Pu-238  | 1.87E+03            |
| Pu-239  | 1.54E+03            |
| Pu-240  | 3.83E+02            |
| Pu-241  | 7.06E+02            |
| Pu-242  | 3.94E-02            |
| Sr-90   | 2.49E-04            |
| Th-229  | 5.62E-12            |
| Th-230  | 4.86E-08            |
| Th-232  | 2.80E-18            |
| U-233   | 6.39E-07            |
| U-234   | 5.31E-02            |
| U-235   | 1.71E-07            |
| U-236   | 1.13E-06            |
| U-238   | 2.43E-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.

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           | 12/31/2023 |    |
| Stream Name | Mixed Waste Sealed Sources          |                         |                           |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes       |            |            |            |
|--------------------------|------------|------------|------------|
| Container Type           | Stored     | Proj.      | Total      |
| 55-gal POC - 6" w/ Liner | 0.0        | 0.0        | 0.0        |
| <b>Final Form Total</b>  | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> |

**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  | 2.09E-01            |
| Np-237  | 6.81E-07            |
| Pu-239  | 2.90E-05            |
| Pu-240  | 1.84E-05            |
| Pu-241  | 2.78E-05            |
| Th-229  | 1.96E-13            |
| Th-232  | 1.34E-21            |
| U-233   | 2.33E-10            |
| U-235   | 1.36E-12            |
| U-236   | 5.44E-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.

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           | 12/31/2023 |    |
| Stream Name | TA-39 Heterogeneous Debris     |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 8.4         | 0.0        | 8.4         |
| SWB Dir Ld w/ Liner         | 73.3        | 0.0        | 73.3        |
| <b>Final Form Total</b>     | <b>81.7</b> | <b>0.0</b> | <b>81.7</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 8.52E+03        |
| Aluminum-based Metal/Alloys   | 1.52E+03        |
| Other Metal/Alloys            | 1.52E+03        |
| Other Inorganic Materials     | 4.71E+03        |
| Cellulose                     | 1.67E+02        |
| Rubber                        | 1.51E+02        |
| Plastic                       | 1.51E+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   | 3.97E+02        |
| Packaging Material, Rubber    | 1.89E+01        |
| Packaging Material, Steel     | 1.24E+04        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.69E+00            |
| Np-237  | 1.43E-02            |
| Pu-238  | 7.28E+00            |
| Pu-239  | 7.49E+00            |
| Pu-240  | 2.82E-01            |
| Pu-241  | 4.45E-01            |
| Pu-242  | 1.64E-05            |
| Th-229  | 6.00E-09            |
| Th-230  | 2.68E-07            |
| Th-232  | 4.56E-16            |
| U-233   | 2.91E-06            |
| U-234   | 1.17E-03            |
| U-235   | 3.47E-07            |
| U-236   | 3.93E-07            |
| U-238   | 1.19E-13            |

**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**

Mixed heterogeneous debris generated during plutonium and uranium R&D operations in the TA-39, Building 69, Two-Stage Gas Gun Facility.

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  | 12/31/2023 |    |
| Stream Name | Debris and Metal                                   |                         |                            | Activities Decayed to CY |                 | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| SWB Dir Ld w/ Liner     | 9.4        | 0.0        | 9.4        |
| <b>Final Form Total</b> | <b>9.4</b> | <b>0.0</b> | <b>9.4</b> |

**Waste Material Parameters**

| Material Parameter            | 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  | 7.02E+00            |
| Pu-239  | 1.74E-02            |
| Th-230  | 2.84E-07            |
| U-234   | 1.18E-03            |
| U-235   | 8.40E-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



Waste Stream ID: **LA-TA-03-27**

**Appendix A**

Waste Profile Report

|                    |  |                                |                            |                              |                                 |                 |    |
|--------------------|--|--------------------------------|----------------------------|------------------------------|---------------------------------|-----------------|----|
| <b>Site</b>        | Los Alamos National Laboratory                     | <b>Summary Category</b>        | S5000                      | <b>Defense Determination</b> | Defense-Related                 | <b>Handling</b> | RH |
| <b>Source Cat.</b> | Facility/Equipment Operation and Maintenance Waste | <b>Waste Matrix Code Group</b> | Heterogeneous Debris Waste |                              | <b>Inventory Date</b>           | 12/31/2023      |    |
| <b>Stream Name</b> | Cell fuel cans and hot trash                       |                                |                            |                              | <b>Activities Decayed to CY</b> | 2023            |    |

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

| 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        |
| <b>Final Form Total</b>      | <b>77.4</b> | <b>0.0</b> | <b>77.4</b> |

**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  | 3.60E+00            |
| Cs-137  | 1.28E+03            |
| Np-237  | 9.98E-06            |
| Pu-238  | 1.47E+00            |
| Pu-239  | 8.02E+01            |
| Pu-240  | 2.51E+00            |
| Pu-241  | 5.77E+01            |
| Pu-242  | 1.52E-03            |
| Sr-90   | 8.88E+02            |
| Th-229  | 5.55E-14            |
| Th-230  | 1.44E-07            |
| Th-232  | 2.71E-15            |
| U-233   | 2.00E-10            |
| U-234   | 1.76E-03            |
| U-235   | 8.25E-03            |
| U-236   | 6.43E-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

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  | 12/31/2023 |    |
| Stream Name | Cement paste from CMR building (mixed)             |                         |                       | Activities Decayed to CY |                 | 2023       |    |

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

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.1        | 0.0        | 1.1        |
| <b>Final Form Total</b>     | <b>1.1</b> | <b>0.0</b> | <b>1.1</b> |

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  | 5.99E+00            |
| Th-230  | 2.54E-07            |
| U-234   | 1.04E-03            |

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           | 12/31/2023 |    |
| Stream Name | CMR soil waste                 |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 2.3        | 0.0        | 2.3        |
| SWB Dir Ld w/ Liner         | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b>     | <b>4.2</b> | <b>0.0</b> | <b>4.2</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 8.39E+01        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 2.74E+01        |
| Other Inorganic Materials     | 1.33E+02        |
| Cellulose                     | 1.07E+02        |
| Rubber                        | 1.09E+01        |
| Plastic                       | 3.15E+02        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 0.00E+00        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 2.10E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 8.71E+01        |
| Packaging Material, Rubber    | 1.66E+00        |
| Packaging Material, Steel     | 5.89E+02        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 4.42E+00            |
| Am-243  | 1.76E-05            |
| Np-237  | 1.38E-05            |
| Pu-238  | 1.13E+01            |
| Pu-239  | 2.43E+01            |
| Pu-240  | 5.74E+00            |
| Pu-241  | 9.55E+01            |
| Pu-242  | 1.53E-02            |
| Pu-244  | 1.66E-08            |
| Th-229  | 2.46E-15            |
| Th-230  | 1.18E-08            |
| Th-232  | 5.02E-18            |
| U-233   | 5.69E-11            |
| U-234   | 1.30E-03            |
| U-235   | 1.20E-06            |
| U-236   | 1.87E-07            |
| U-238   | 7.31E-08            |

**Haz. Waste No(s).**

|   |
|---|
| D004, D005, D006,<br>D007, D008, D009,<br>D010, D011, D018,<br>D019, D021, D022,<br>D026, D027, D028,<br>D029, D030, D035,<br>D036, D037, D038,<br>D039, D040, D043,<br>F001, F002, F004,<br>F005 |
|---|

**TRUCON Code(s)**

|         |
|---------|
| 125/225 |
|---------|

**Waste Stream Description**

Soils contaminated with TRU resulting from facility and equipment operations/maintenance

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           | 12/31/2023 |    |
| Stream Name | SILICON-BASED OIL - LIQUID                         |                         |                     |                       | Activities Decayed to CY | 2023       |    |

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

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

Waste Material Parameters

| Material Parameter            | 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  | 4.65E-02            |
| Th-230  | 1.88E-09            |
| U-234   | 7.86E-06            |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

Absorbed Organics on Vermiculite

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  | 12/31/2023 |    |
| Stream Name | Graphite   |                         |                | Activities Decayed to CY |                 | 2023       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 5.25E+01        |
| Aluminum-based Metal/Alloys   | 1.85E+00        |
| Other Metal/Alloys            | 8.80E-01        |
| Other Inorganic Materials     | 3.25E-01        |
| Cellulose                     | 1.33E+01        |
| Rubber                        | 2.06E+00        |
| Plastic                       | 5.35E+00        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 3.10E+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  | 3.23E-06            |
| Pu-238  | 2.22E-02            |
| Pu-239  | 1.05E+00            |
| Pu-240  | 2.50E-01            |
| Pu-241  | 3.70E-01            |
| Pu-242  | 1.69E-05            |
| Th-229  | 4.32E-13            |
| Th-230  | 2.02E-09            |
| Th-232  | 4.40E-16            |
| U-233   | 3.17E-10            |
| U-234   | 6.23E-06            |
| U-235   | 1.95E-05            |
| U-236   | 3.64E-07            |
| U-238   | 1.29E-13            |

No Hazardous Waste Numbers Provided

TRUCON Code(s)  
116/216, 125/225

**Waste Stream Description**

Graphite and Incinerator solids

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           | 12/31/2023 |    |
| Stream Name | Combustible debris waste (mixed)                   |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 329.3        | 0.0        | 329.3        |
| <b>Final Form Total</b>     | <b>329.3</b> | <b>0.0</b> | <b>329.3</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.21E+04        |
| Aluminum-based Metal/Alloys   | 7.80E+02        |
| Other Metal/Alloys            | 3.71E+02        |
| Other Inorganic Materials     | 1.37E+02        |
| Cellulose                     | 5.60E+03        |
| Rubber                        | 8.70E+02        |
| Plastic                       | 2.26E+03        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 1.31E+03        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 1.21E+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  | 1.01E+02            |
| Np-237  | 1.33E-03            |
| Pu-238  | 1.26E+04            |
| Pu-239  | 2.59E+02            |
| Pu-240  | 7.84E+01            |
| Pu-241  | 1.85E+02            |
| Pu-242  | 1.44E-02            |
| Th-229  | 1.63E-10            |
| Th-230  | 6.03E-04            |
| Th-232  | 1.27E-13            |
| U-233   | 1.25E-07            |
| U-234   | 2.35E+00            |
| U-235   | 1.19E-03            |
| U-236   | 1.09E-04            |
| U-238   | 1.05E-10            |

Haz. Waste No(s).

F001, F002

TRUCON Code(s)

116/216, 125/225

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.

Waste Stream ID: **LA-TA-21-07**

**Appendix A**

Waste Profile Report

|             |  |                         |                            |                       |                          |            |    |
|-------------|--|-------------------------|----------------------------|-----------------------|--------------------------|------------|----|
| Site        | Los Alamos National Laboratory                     | Summary Category        | S5000                      | Defense Determination | Defense-Related          | Handling   | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Waste Matrix Code Group | Heterogeneous Debris Waste |                       | Inventory Date           | 12/31/2023 |    |
| Stream Name | Debris and Metal                                   |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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        |
| <b>Final Form Total</b>     | <b>636.0</b> | <b>0.0</b> | <b>636.0</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 6.32E+04        |
| Aluminum-based Metal/Alloys   | 2.23E+03        |
| Other Metal/Alloys            | 1.06E+03        |
| Other Inorganic Materials     | 3.92E+02        |
| Cellulose                     | 1.60E+04        |
| Rubber                        | 2.48E+03        |
| Plastic                       | 6.45E+03        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 3.73E+03        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 5.86E+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  | 5.60E+01            |
| Np-237  | 7.42E-04            |
| Pu-238  | 1.05E+04            |
| Pu-239  | 3.21E+02            |
| Pu-240  | 5.75E+01            |
| Pu-241  | 9.91E+01            |
| Pu-242  | 4.71E-03            |
| Th-229  | 9.11E-11            |
| Th-230  | 4.00E-04            |
| Th-232  | 9.30E-14            |
| U-233   | 6.99E-08            |
| U-234   | 1.72E+00            |
| U-235   | 2.36E-05            |
| U-236   | 8.02E-05            |
| U-238   | 3.43E-11            |

**Haz. Waste No(s).**

D008

**TRUCON Code(s)**

116/216, 125/225

**Waste Stream Description**

Equipment, Debris, and Metal Parts

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  | 12/31/2023               |      |
| Stream Name | Glass  |                         |                            |                       |                 | Activities Decayed to CY | 2023 |

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

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

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 3.44E+02        |
| Aluminum-based Metal/Alloys   | 1.21E+01        |
| Other Metal/Alloys            | 5.77E+00        |
| Other Inorganic Materials     | 2.13E+00        |
| Cellulose                     | 8.70E+01        |
| Rubber                        | 1.35E+01        |
| Plastic                       | 3.51E+01        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 2.03E+01        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 1.54E+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  | 1.00E+00            |
| Np-237  | 1.35E-05            |
| Pu-238  | 8.10E+01            |
| Pu-239  | 2.99E+00            |
| Pu-240  | 8.41E-01            |
| Pu-241  | 1.73E+00            |
| Pu-242  | 1.25E-04            |
| Th-229  | 1.72E-12            |
| Th-230  | 3.13E-06            |
| Th-232  | 1.42E-15            |
| U-233   | 1.29E-09            |
| U-234   | 1.34E-02            |
| U-235   | 2.52E-07            |
| U-236   | 1.20E-06            |
| U-238   | 9.33E-13            |

No Hazardous Waste Numbers Provided

TRUCON Code(s)  
116/216, 125/225

**Waste Stream Description**

Glass and Glass Residues



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           | 12/31/2023 |    |
| Stream Name | Hepa Filters                                       |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 14.3        | 0.0        | 14.3        |
| <b>Final Form Total</b>     | <b>14.3</b> | <b>0.0</b> | <b>14.3</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.09E+03        |
| Aluminum-based Metal/Alloys   | 3.83E+01        |
| Other Metal/Alloys            | 1.83E+01        |
| Other Inorganic Materials     | 6.74E+00        |
| Cellulose                     | 2.75E+02        |
| Rubber                        | 4.28E+01        |
| Plastic                       | 1.11E+02        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 6.43E+01        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 5.24E+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  | 7.56E-02            |
| Np-237  | 1.05E-06            |
| Pu-238  | 1.32E+03            |
| Pu-239  | 3.59E-01            |
| Pu-240  | 8.36E-02            |
| Pu-241  | 1.20E-01            |
| Pu-242  | 4.86E-06            |
| Th-229  | 1.41E-13            |
| Th-230  | 5.34E-05            |
| Th-232  | 1.47E-16            |
| U-233   | 1.03E-10            |
| U-234   | 2.23E-01            |
| U-235   | 3.07E-08            |
| U-236   | 1.22E-07            |
| U-238   | 3.70E-14            |

No Hazardous Waste Numbers Provided

TRUCON Code(s)  
116/216, 125/225

Waste Stream Description

Filter cells, filter trash, and graphite glass filters

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           | 12/31/2023 |    |
| Stream Name | Non-combustible and combustible debris waste       |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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          |
| <b>Final Form Total</b>     | <b>346.3</b> | <b>0.0</b> | <b>346.3</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.27E+04        |
| Aluminum-based Metal/Alloys   | 8.01E+02        |
| Other Metal/Alloys            | 3.82E+02        |
| Other Inorganic Materials     | 1.41E+02        |
| Cellulose                     | 5.75E+03        |
| Rubber                        | 8.94E+02        |
| Plastic                       | 2.32E+03        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 1.34E+03        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 1.24E+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  | 1.59E+02            |
| Np-237  | 2.06E-03            |
| Pu-238  | 3.96E+04            |
| Pu-239  | 2.89E+02            |
| Pu-240  | 9.73E+01            |
| Pu-241  | 2.96E+02            |
| Pu-242  | 2.62E-02            |
| Th-229  | 1.67E-01            |
| Th-230  | 2.32E-03            |
| Th-232  | 1.51E-13            |
| U-233   | 4.15E+01            |
| U-234   | 8.39E+00            |
| U-235   | 2.09E-03            |
| U-236   | 1.33E-04            |
| U-238   | 1.87E-10            |

No Hazardous Waste Numbers Provided

TRUCON Code(s)  
116/216, 125/225

**Waste Stream Description**

COMBINED COMBUSTIBLE/NON-COMBUSTIBLE LAB TRASH

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           | 12/31/2023 |    |
| Stream Name | Cemented wastewater treatment sludge (mixed)       |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | 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     | 0.00E+00        |
| Cellulose                     | 0.00E+00        |
| Rubber                        | 0.00E+00        |
| Plastic                       | 8.86E+01        |
| Cement                        | 1.43E+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   | 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  | 4.50E+01            |
| Np-237  | 7.12E-04            |
| Pu-239  | 6.67E+00            |
| Th-229  | 1.02E-10            |
| U-233   | 7.36E-08            |
| U-235   | 3.09E-07            |

**Haz. Waste No(s).**

D007, F001, F002

**TRUCON Code(s)**

111/211, 127/227

**Waste Stream Description**

Cemented Wastewater Treatment Sludge Solidified aqueous waste generated from facility and equipment operations and maintenance. Solidified aqueous waste is a dewatered sludge generated by the vacuum filtration of solids from treated aqueous waste slurry. The filter media (diatomaceous earth) with the entrapped filtrate is then placed in drums with dry concreted absorbent.

Waste Stream ID: **LA-TA-21-15**

**Appendix A**

Waste Profile Report

|             |  |                         |                     |                       |                          |            |    |
|-------------|--|-------------------------|---------------------|-----------------------|--------------------------|------------|----|
| Site        | Los Alamos National Laboratory                     | Summary Category        | S3000               | Defense Determination | Defense-Related          | Handling   | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste | Waste Matrix Code Group | Solidified Organics |                       | Inventory Date           | 12/31/2023 |    |
| Stream Name | Solidified organics                                |                         |                     |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 3.4        | 0.0        | 3.4        |
| <b>Final Form Total</b>     | <b>3.4</b> | <b>0.0</b> | <b>3.4</b> |

**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  | 8.36E-01            |
| Np-237  | 1.13E-05            |
| Pu-238  | 8.01E-02            |
| Pu-239  | 5.40E+00            |
| Pu-240  | 9.26E-01            |
| Pu-241  | 1.39E+00            |
| Pu-242  | 5.39E-05            |
| Th-229  | 1.46E-12            |
| Th-230  | 6.85E-09            |
| Th-232  | 1.56E-15            |
| U-233   | 1.09E-09            |
| U-234   | 2.17E-05            |
| U-235   | 4.03E-07            |
| U-236   | 1.32E-06            |
| U-238   | 4.01E-13            |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

**Waste Stream Description**

Contaminated oil absorbed in vermiculite

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           | 12/31/2023 |    |
| Stream Name | SOLIDIFIED INORGANIC PROCESS SOLID                 |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 54.8        | 0.0        | 54.8        |
| <b>Final Form Total</b>     | <b>54.8</b> | <b>0.0</b> | <b>54.8</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 4.20E+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                       | 7.46E+01        |
| Cement                        | 1.17E+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   | 2.01E+03        |
| Packaging Material, Rubber    | 3.08E+01        |
| Packaging Material, Steel     | 7.10E+03        |
| Packaging Material, Lead      | 0.00E+00        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.52E+02            |
| Np-237  | 2.11E-03            |
| Pu-238  | 1.90E+01            |
| Pu-239  | 6.61E+02            |
| Pu-240  | 1.57E+02            |
| Pu-241  | 2.43E+02            |
| Pu-242  | 1.30E-02            |
| Th-229  | 2.82E-10            |
| Th-230  | 1.75E-06            |
| Th-232  | 2.77E-13            |
| U-233   | 2.07E-07            |
| U-234   | 5.39E-03            |
| U-235   | 3.45E-03            |
| U-236   | 2.29E-04            |
| U-238   | 9.90E-11            |

Haz. Waste No(s).

D008

No TRUCON Codes Provided

Waste Stream Description

LEACHED PROCESS RESIDUES

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           | 12/31/2023 |    |
| Stream Name | Process solids                  |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

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

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 4.75E+01        |
| Aluminum-based Metal/Alloys   | 1.67E+00        |
| Other Metal/Alloys            | 7.97E-01        |
| Other Inorganic Materials     | 2.94E-01        |
| Cellulose                     | 1.20E+01        |
| Rubber                        | 1.87E+00        |
| Plastic                       | 4.85E+00        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 2.81E+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  | 7.35E-03            |
| Np-237  | 1.02E-07            |
| Pu-238  | 6.98E-04            |
| Pu-239  | 3.49E-02            |
| Pu-240  | 8.13E-03            |
| Pu-241  | 1.16E-02            |
| Pu-242  | 4.73E-07            |
| Th-229  | 1.37E-14            |
| Th-230  | 6.19E-11            |
| Th-232  | 1.43E-17            |
| U-233   | 1.00E-11            |
| U-234   | 1.93E-07            |
| U-235   | 2.98E-09            |
| U-236   | 1.18E-08            |
| U-238   | 3.60E-15            |

No Hazardous Waste Numbers Provided

TRUCON Code(s)  
116/216, 125/225

Waste Stream Description

Special items (precious metals) requiring tracking by CST-7

Waste Stream ID: **LA-TA-35-02**

**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           | 12/31/2023 |    |
| Stream Name | NON-PN EQUIPMENT               |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid - Dir Ld | 2.7        | 0.0        | 2.7        |
| <b>Final Form Total</b>      | <b>2.7</b> | <b>0.0</b> | <b>2.7</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 3.25E+03        |
| Aluminum-based Metal/Alloys   | 1.18E+03        |
| Other Metal/Alloys            | 1.20E+03        |
| Other Inorganic Materials     | 1.32E+02        |
| Cellulose                     | 2.43E+02        |
| Rubber                        | 2.24E+02        |
| Plastic                       | 2.46E+02        |
| 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   | 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   | 5.25E-07            |

Haz. Waste No(s).

|      |
|------|
| D008 |
|------|

No TRUCON Codes Provided

Waste Stream Description

LAMPRE REACTOR VESSEL SEALED IN CASK VESSEL

Waste Stream ID: **LA-TA-50-01**

**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           | 12/31/2023 |    |
| Stream Name | Cemented TRU Waste                                 |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

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

Waste Material Parameters

| Material Parameter            | 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                       | 2.51E-01        |
| Cement                        | 2.51E+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  | 2.36E-01            |
| Am-243  | 1.74E-06            |
| Np-237  | 4.98E-06            |
| Pu-238  | 9.91E-02            |
| Pu-239  | 1.34E-01            |
| Pu-241  | 1.09E-01            |
| Th-229  | 1.01E-13            |
| Th-230  | 1.01E-07            |
| Th-232  | 4.75E-09            |
| U-233   | 2.16E-10            |
| U-234   | 1.00E-03            |
| U-235   | 9.85E-07            |
| U-238   | 1.17E-07            |

No Hazardous Waste Numbers Provided

TRUCON Code(s)  
111/211

Waste Stream Description

Homogeneous cemented inorganics generated in the TA-50-01 RLWTF pretreatment process.



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           | 12/31/2023 |    |
| Stream Name | Cemented caustic liquid waste (mixed)   |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | 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  | 2.92E-01            |
| Np-237  | 4.82E-06            |
| Pu-239  | 5.70E-03            |
| Th-229  | 7.51E-13            |
| U-233   | 5.20E-10            |
| U-235   | 2.75E-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.

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           | 12/31/2023 |    |
| Stream Name | Homogeneous Inorganic Solids            |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 63.0        | 0.0        | 63.0        |
| <b>Final Form Total</b>     | <b>63.0</b> | <b>0.0</b> | <b>63.0</b> |

**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  | 3.21E-04            |
| Pu-238  | 1.35E+00            |
| Pu-239  | 1.39E+00            |
| Th-229  | 4.21E-11            |
| Th-230  | 4.51E-08            |
| U-233   | 3.17E-08            |
| U-234   | 2.06E-04            |
| U-235   | 6.16E-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.

Waste Stream ID: **LA-TA-50-69**

**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           | 12/31/2023 |    |
| Stream Name | Heterogeneous Debris Waste                         |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.92E+01        |
| Aluminum-based Metal/Alloys   | 1.18E-01        |
| Other Metal/Alloys            | 3.50E+00        |
| Other Inorganic Materials     | 1.90E+01        |
| Cellulose                     | 2.42E+00        |
| Rubber                        | 3.63E+00        |
| Plastic                       | 1.12E+01        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 4.66E-01        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 2.31E+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  | 5.94E-03            |
| Cs-137  | 9.63E-06            |
| Np-237  | 1.00E-06            |
| Pu-238  | 3.12E-05            |
| Pu-239  | 3.14E-03            |
| Pu-240  | 2.16E-04            |
| Pu-241  | 2.38E-03            |
| Pu-242  | 2.16E-08            |
| Th-229  | 4.81E-19            |
| Th-230  | 1.74E-15            |
| Th-232  | 1.58E-24            |
| U-233   | 1.53E-13            |
| U-234   | 1.90E-09            |
| U-235   | 6.60E-11            |
| U-236   | 6.39E-13            |
| U-238   | 3.35E-19            |

**Haz. Waste No(s).**

D005, D006, D007, D008, D009, D010, D011

**TRUCON Code(s)**

125/225

**Waste Stream Description**

Mixed heterogeneous combustible and non-combustible debris from TA-50.

Waste Stream ID: **LA-TA-55-04**

**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           | 12/31/2023 |    |
| Stream Name | TA-55 metal waste              |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 31.9         | 0.0        | 31.9         |
| 55-gal POC - 12" w/ Liner   | 6.0          | 0.0        | 6.0          |
| SLB2 Dir Ld                 | 29.6         | 0.0        | 29.6         |
| SWB Dir Ld w/ Liner         | 75.2         | 0.0        | 75.2         |
| <b>Final Form Total</b>     | <b>142.6</b> | <b>0.0</b> | <b>142.6</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 6.95E+03        |
| Aluminum-based Metal/Alloys   | 2.81E+01        |
| Other Metal/Alloys            | 8.33E+02        |
| Other Inorganic Materials     | 4.51E+03        |
| Cellulose                     | 5.75E+02        |
| Rubber                        | 8.63E+02        |
| Plastic                       | 2.66E+03        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 1.11E+02        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 3.43E+03        |
| Packaging Material, Plastic   | 2.20E+03        |
| Packaging Material, Rubber    | 5.01E+01        |
| Packaging Material, Steel     | 3.40E+04        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.59E+02            |
| Am-243  | 9.11E-06            |
| Np-237  | 5.63E-04            |
| Pu-238  | 1.80E+03            |
| Pu-239  | 9.03E+02            |
| Pu-240  | 2.34E+02            |
| Pu-241  | 4.77E+03            |
| Pu-242  | 9.04E-01            |
| Pu-244  | 9.76E-07            |
| Th-229  | 2.69E-16            |
| Th-230  | 1.86E-07            |
| Th-232  | 1.32E-17            |
| U-233   | 8.55E-11            |
| U-234   | 2.02E-01            |
| U-235   | 6.83E-05            |
| U-236   | 3.02E-06            |
| U-238   | 1.63E-07            |

**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)**

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

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           | 12/31/2023 |    |
| Stream Name | Combustible debris waste (mixed)                   |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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        |
| <b>Final Form Total</b>     | <b>56.6</b> | <b>0.0</b> | <b>56.6</b> |

**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  | 3.07E+02            |
| Np-237  | 5.52E-03            |
| Pu-238  | 1.57E+02            |
| Pu-239  | 3.14E+02            |
| Pu-240  | 1.56E+02            |
| Pu-241  | 6.81E+02            |
| Pu-242  | 8.97E-02            |
| Th-229  | 1.06E-09            |
| Th-230  | 1.12E-04            |
| Th-232  | 2.45E-12            |
| U-233   | 6.68E-07            |
| U-234   | 2.88E-01            |
| U-235   | 7.64E-03            |
| U-236   | 1.23E-03            |
| U-238   | 1.78E-03            |

**Haz. Waste No(s).**

|  |
|--|
| D004, D005, D006,<br>D007, D008, D009,<br>D010, D011, D018,<br>D019, D021, D022,<br>D035, D038, D039,<br>D040, F001, F002,<br>F005 |
|--|

**TRUCON Code(s)**

|  |
|--|
| 115/215, 116/216,<br>117/217, 118/218,<br>119/219, 122/222,<br>123/223, 125/225,<br>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.

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           | 12/31/2023 |    |
| Stream Name | Metal debris waste (mixed)                         |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 2.3        | 0.0        | 2.3        |
| <b>Final Form Total</b>     | <b>2.3</b> | <b>0.0</b> | <b>2.3</b> |

**Waste Material Parameters**

| Material Parameter            | 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  | 4.05E-01            |
| Np-237  | 4.94E-06            |
| Pu-238  | 2.73E+01            |
| Pu-239  | 7.09E-01            |
| Pu-240  | 2.53E-01            |
| Pu-241  | 8.68E-01            |
| Pu-242  | 6.73E-05            |
| Th-229  | 5.27E-13            |
| Th-230  | 2.63E-06            |
| Th-232  | 3.59E-16            |
| U-233   | 4.33E-10            |
| U-234   | 8.42E-03            |
| U-235   | 5.70E-08            |
| U-236   | 3.31E-07            |
| U-238   | 2.47E-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.

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           | 12/31/2023 |    |
| Stream Name | Non-combustible and combustible debris waste (mixed) |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 66.8         | 0.0        | 66.8         |
| SLB2 Dir Ld                 | 133.0        | 0.0        | 133.0        |
| <b>Final Form Total</b>     | <b>199.8</b> | <b>0.0</b> | <b>199.8</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.04E+04        |
| Aluminum-based Metal/Alloys   | 4.20E+01        |
| Other Metal/Alloys            | 1.24E+03        |
| Other Inorganic Materials     | 6.74E+03        |
| Cellulose                     | 8.60E+02        |
| Rubber                        | 1.29E+03        |
| Plastic                       | 3.98E+03        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 1.65E+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    | 5.22E+01        |
| Packaging Material, Steel     | 3.06E+04        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 2.74E+02            |
| Am-243  | 1.26E-04            |
| Np-237  | 6.28E-04            |
| Pu-238  | 3.06E+02            |
| Pu-239  | 2.42E+02            |
| Pu-240  | 1.49E+02            |
| Pu-241  | 4.86E+03            |
| Pu-242  | 2.51E-01            |
| Pu-244  | 2.85E-08            |
| Th-229  | 2.27E-12            |
| Th-230  | 3.60E-06            |
| Th-232  | 1.72E-14            |
| U-233   | 1.02E-08            |
| U-234   | 5.90E-02            |
| U-235   | 8.31E-04            |
| U-236   | 6.52E-05            |
| U-238   | 1.20E-02            |

**Haz. Waste No(s).**

|  |
|--|
| D004, D005, D006,<br>D007, D008, D009,<br>D010, D011, D018,<br>D019, D021, D022,<br>D035, D038, D039,<br>D040, F001, F002,<br>F005 |
|--|

**TRUCON Code(s)**

|  |
|--|
| 115/215, 116/216,<br>117/217, 118/218,<br>119/219, 122/222,<br>123/223, 125/225,<br>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.

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           | 12/31/2023 |    |
| Stream Name | LEACHED PROCESS RESIDUES                           |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | 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  | 3.74E-02            |
| Np-237  | 4.26E-07            |
| Pu-238  | 2.08E+01            |
| Pu-239  | 1.71E-02            |
| Pu-240  | 8.59E-03            |
| Pu-241  | 9.13E-02            |
| Pu-242  | 7.09E-06            |
| Th-229  | 3.95E-14            |
| Th-230  | 1.78E-06            |
| Th-232  | 1.06E-17            |
| U-233   | 3.48E-11            |
| U-234   | 6.08E-03            |
| U-235   | 1.56E-09            |
| U-236   | 1.04E-08            |
| U-238   | 4.51E-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.



Waste Stream ID: **LA-TA-55-400**

**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           | 12/31/2023 |    |
| Stream Name | NON-RCRA DEBRIS RLUOB          |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

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

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 3.20E+01        |
| Aluminum-based Metal/Alloys   | 1.29E-01        |
| Other Metal/Alloys            | 3.84E+00        |
| Other Inorganic Materials     | 2.08E+01        |
| Cellulose                     | 2.65E+00        |
| Rubber                        | 3.97E+00        |
| Plastic                       | 1.23E+01        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 5.10E-01        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 3.08E+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  | 3.61E-01            |
| Np-237  | 1.29E-06            |
| Pu-238  | 5.28E-01            |
| Pu-239  | 1.31E-01            |
| Pu-240  | 9.34E-02            |
| Pu-241  | 9.64E+00            |
| Pu-242  | 1.00E-02            |
| Pu-244  | 1.11E-08            |
| Th-229  | 2.32E-16            |
| Th-230  | 5.29E-10            |
| Th-232  | 6.82E-20            |
| U-233   | 5.36E-12            |
| U-234   | 5.83E-05            |
| U-235   | 4.91E-09            |
| U-236   | 2.76E-09            |
| U-238   | 1.56E-12            |

No Hazardous Waste Numbers Provided

TRUCON Code(s)  
125/225

Waste Stream Description

Debris waste resulting from analytical processes at the Radiological Laboratory/Utility/Office Building.

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           | 12/31/2023 |    |
| Stream Name | Empty containers               |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| SWB Dir Ld w/ Liner     | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b> | <b>1.9</b> | <b>0.0</b> | <b>1.9</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.33E+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                        | 3.61E-01        |
| Plastic                       | 2.38E+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  | 2.09E-02            |
| Am-243  | 4.12E-06            |
| Cs-137  | 9.61E-09            |
| Np-237  | 6.01E-07            |
| Pu-238  | 3.39E-03            |
| Pu-239  | 4.68E-03            |
| Pu-240  | 3.88E-05            |
| Pu-241  | 4.69E-03            |
| Pu-242  | 1.43E-08            |
| Sr-90   | 9.05E-09            |
| Th-229  | 1.28E-13            |
| Th-230  | 9.45E-11            |
| Th-232  | 4.55E-20            |
| U-233   | 8.06E-11            |
| U-234   | 4.70E-07            |
| U-235   | 5.27E-09            |
| U-236   | 4.61E-11            |
| U-238   | 1.28E-07            |

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

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           | 12/31/2023 |    |
| Stream Name | Empty containers               |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| SWB Dir Ld w/ Liner     | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b> | <b>1.9</b> | <b>0.0</b> | <b>1.9</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.24E+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                        | 9.82E-01        |
| Plastic                       | 6.36E+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  | 1.50E-01            |
| Am-243  | 7.82E-06            |
| Cs-137  | 8.25E-08            |
| Np-237  | 1.37E-06            |
| Pu-238  | 1.05E-02            |
| Pu-239  | 2.36E-02            |
| Pu-240  | 1.77E-03            |
| Pu-241  | 1.02E-01            |
| Pu-242  | 1.89E-07            |
| Sr-90   | 8.21E-08            |
| Th-229  | 2.19E-15            |
| Th-230  | 1.32E-10            |
| Th-232  | 1.16E-20            |
| U-233   | 1.69E-11            |
| U-234   | 4.81E-06            |
| U-235   | 7.91E-08            |
| U-236   | 1.57E-10            |
| U-238   | 8.78E-17            |

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

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           | 12/31/2023 |    |
| Stream Name | Empty containers               |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |             |            |             |
|-------------------------|-------------|------------|-------------|
| Container Type          | Stored      | Proj.      | Total       |
| SWB Dir Ld w/ Liner     | 90.2        | 0.0        | 90.2        |
| <b>Final Form Total</b> | <b>90.2</b> | <b>0.0</b> | <b>90.2</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 3.09E+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                        | 1.15E+02        |
| Plastic                       | 3.73E+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  | 2.19E+02            |
| Am-243  | 2.17E-02            |
| Cs-137  | 1.26E-03            |
| Np-237  | 4.54E-03            |
| Pu-238  | 2.15E+01            |
| Pu-239  | 4.69E+01            |
| Pu-240  | 1.02E+01            |
| Pu-241  | 1.92E+02            |
| Pu-242  | 3.13E-04            |
| Sr-90   | 1.26E-03            |
| Th-229  | 2.58E-06            |
| Th-230  | 9.29E-08            |
| Th-232  | 1.13E-16            |
| U-233   | 3.89E-08            |
| U-234   | 5.11E-03            |
| U-235   | 1.49E-05            |
| U-236   | 1.45E-06            |
| 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

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           | 12/31/2023 |    |
| Stream Name | Empty containers               |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |             |            |             |
|-------------------------|-------------|------------|-------------|
| Container Type          | Stored      | Proj.      | Total       |
| SWB Dir Ld w/ Liner     | 11.3        | 0.0        | 11.3        |
| <b>Final Form Total</b> | <b>11.3</b> | <b>0.0</b> | <b>11.3</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 5.87E+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                        | 6.27E-01        |
| 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   | 1.36E+01        |
| Packaging Material, Rubber    | 2.18E+00        |
| Packaging Material, Steel     | 1.74E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.95E-01            |
| Am-243  | 2.37E-06            |
| Cs-137  | 4.67E-08            |
| Np-237  | 3.31E-06            |
| Pu-238  | 1.80E+01            |
| Pu-239  | 3.23E-01            |
| Pu-240  | 7.45E-02            |
| Pu-241  | 5.40E-01            |
| Pu-242  | 4.26E-09            |
| Sr-90   | 4.56E-08            |
| Th-229  | 1.15E-13            |
| Th-230  | 4.94E-07            |
| Th-232  | 1.22E-17            |
| U-233   | 1.85E-10            |
| U-234   | 3.98E-03            |
| U-235   | 2.15E-07            |
| U-236   | 3.31E-08            |
| U-238   | 1.54E-07            |

**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

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           | 12/31/2023 |    |
| Stream Name | LBL-Non Mixed Waste                   |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | 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  | 5.35E-03            |
| Am-243  | 8.99E-04            |
| Cm-244  | 6.22E-04            |
| Cs-137  | 7.20E-08            |
| Np-237  | 8.54E-06            |
| Pu-238  | 3.17E-03            |
| Pu-239  | 3.08E-04            |
| Pu-240  | 1.00E-05            |
| Pu-241  | 9.07E-05            |
| Pu-242  | 5.12E-20            |
| Pu-244  | 6.70E-17            |
| Th-229  | 4.11E-18            |
| Th-230  | 4.11E-16            |
| Th-232  | 5.60E-07            |
| U-233   | 1.31E-12            |
| U-234   | 8.94E-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

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           | 12/31/2023 |    |
| Stream Name | LBL - Mixed Waste                     |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | 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  | 8.73E-06            |
| Am-243  | 1.20E-08            |
| Np-237  | 5.80E-08            |
| Pu-239  | 5.50E-05            |
| Pu-241  | 3.77E-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

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  | 12/31/2023 |    |
| Stream Name | R&D Glovebox Waste                     |                         |                            | Activities Decayed to CY |                 | 2023       |    |

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

| Final Form Volumes           |             |              |              |
|------------------------------|-------------|--------------|--------------|
| Container Type               | Stored      | Proj.        | Total        |
| 55-gal Drum Dir Ld w/o Liner | 25.6        | 157.5        | 183.1        |
| 55-gal POC - 12" w/ Liner    | 0.5         | 2.4          | 3.0          |
| SWB Dir Ld w/o Liner         | 7.5         | 52.6         | 60.2         |
| <b>Final Form Total</b>      | <b>33.7</b> | <b>212.6</b> | <b>246.3</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 9.06E+03        |
| Aluminum-based Metal/Alloys   | 2.52E+03        |
| Other Metal/Alloys            | 5.42E+03        |
| Other Inorganic Materials     | 5.03E+02        |
| Cellulose                     | 4.39E+03        |
| Rubber                        | 4.45E+03        |
| Plastic                       | 1.41E+04        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 9.94E+02        |
| Solidified Organic Material   | 1.16E+03        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 1.71E+03        |
| Packaging Material, Plastic   | 4.70E+02        |
| Packaging Material, Rubber    | 1.22E+02        |
| Packaging Material, Steel     | 3.97E+04        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 5.89E+02            |
| Am-243  | 1.80E-02            |
| Cm-244  | 1.07E+02            |
| Cs-137  | 6.40E-01            |
| Np-237  | 4.00E-02            |
| Pu-238  | 6.92E+02            |
| Pu-239  | 6.46E+02            |
| Pu-240  | 3.23E+02            |
| Pu-241  | 1.82E+03            |
| Pu-242  | 6.32E-02            |
| Pu-244  | 1.74E-10            |
| Sr-90   | 6.39E-01            |
| Th-229  | 1.54E-07            |
| Th-230  | 9.95E-05            |
| Th-232  | 1.61E-05            |
| U-233   | 1.75E-02            |
| U-234   | 2.77E-02            |
| U-235   | 7.32E-04            |
| U-236   | 9.55E-07            |
| U-238   | 8.80E-03            |

**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).



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           | 12/31/2023 |    |
| Stream Name | Pyrochemical salt waste                |                         |            |                       | Activities Decayed to CY | 2023       |    |

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

| 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    | 0.0        | 1.5        | 1.5        |
| <b>Final Form Total</b>      | <b>0.3</b> | <b>1.5</b> | <b>1.7</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 6.14E+01        |
| Aluminum-based Metal/Alloys   | 3.00E-01        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 3.34E+02        |
| Cellulose                     | 0.00E+00        |
| Rubber                        | 0.00E+00        |
| Plastic                       | 3.09E+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 | 8.71E+02        |
| Packaging Material, Plastic   | 2.39E+02        |
| Packaging Material, Rubber    | 3.78E+00        |
| Packaging Material, Steel     | 3.44E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.00E+00            |
| Cm-244  | 1.26E-02            |
| Np-237  | 1.62E-05            |
| Pu-238  | 5.60E-01            |
| Pu-239  | 9.19E+00            |
| Pu-240  | 1.87E+00            |
| Pu-241  | 9.91E+00            |
| Pu-242  | 2.09E-04            |
| Th-229  | 2.97E-15            |
| Th-230  | 7.30E-12            |
| Th-232  | 1.37E-18            |
| U-233   | 6.83E-11            |
| U-234   | 1.59E-06            |
| U-235   | 9.05E-09            |
| U-236   | 5.54E-08            |
| U-238   | 3.24E-14            |

**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.

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           | 12/31/2023 |    |
| Stream Name | Combined metal scrap & incidental combust |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |              |            |              |
|-------------------------|--------------|------------|--------------|
| Container Type          | Stored       | Proj.      | Total        |
| SLB2 Dir Ld             | 184.8        | 0.0        | 184.8        |
| <b>Final Form Total</b> | <b>184.8</b> | <b>0.0</b> | <b>184.8</b> |

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    | 2.04E+01        |
| Packaging Material, Steel     | 3.05E+04        |
| Packaging Material, Lead      | 0.00E+00        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 5.06E+00            |
| Cm-244  | 4.01E-03            |
| Np-237  | 2.44E-05            |
| Pu-238  | 3.44E-01            |
| Pu-239  | 6.95E+00            |
| Pu-240  | 1.74E+00            |
| Pu-241  | 2.46E+01            |
| Pu-242  | 3.21E-04            |
| Th-229  | 3.78E-13            |
| Th-230  | 1.24E-09            |
| Th-232  | 3.26E-16            |
| U-233   | 8.19E-10            |
| U-234   | 1.65E-05            |
| U-235   | 1.10E-07            |
| U-236   | 8.25E-07            |
| U-238   | 7.96E-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.

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           | 12/31/2023 |    |
| Stream Name | Sealed Sources                         |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 4.2        | 0.0        | 4.2        |
| <b>Final Form Total</b>      | <b>4.2</b> | <b>0.0</b> | <b>4.2</b> |

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  | 7.72E+01            |
| Am-243  | 1.04E-05            |
| Cm-244  | 4.93E-04            |
| Cs-137  | 1.11E-02            |
| Np-237  | 4.12E-04            |
| Pu-238  | 1.16E+01            |
| Pu-239  | 6.00E-01            |
| Pu-240  | 1.92E-03            |
| Pu-241  | 2.02E-01            |
| Pu-244  | 9.54E-22            |
| Sr-90   | 3.37E-02            |
| Th-229  | 6.96E-12            |
| Th-230  | 4.18E-08            |
| Th-232  | 3.59E-19            |
| U-233   | 1.46E-08            |
| U-234   | 5.56E-04            |
| U-235   | 4.37E-07            |
| U-236   | 9.09E-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

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           | 12/31/2023 |    |
| Stream Name | Solidified Waste                       |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |            |             |             |
|------------------------------|------------|-------------|-------------|
| Container Type               | Stored     | Proj.       | Total       |
| 55-gal Drum Dir Ld w/o Liner | 5.7        | 13.9        | 19.5        |
| <b>Final Form Total</b>      | <b>5.7</b> | <b>13.9</b> | <b>19.5</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.56E+02        |
| Aluminum-based Metal/Alloys   | 2.92E+01        |
| Other Metal/Alloys            | 8.20E+01        |
| Other Inorganic Materials     | 0.00E+00        |
| Cellulose                     | 1.83E+02        |
| Rubber                        | 1.24E+02        |
| Plastic                       | 1.19E+03        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 4.58E+03        |
| Solidified Organic Material   | 7.30E+02        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 0.00E+00        |
| Packaging Material, Rubber    | 1.10E+01        |
| Packaging Material, Steel     | 2.53E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.08E+01            |
| Am-243  | 3.96E-05            |
| Cm-244  | 2.28E-02            |
| Cs-137  | 1.12E-04            |
| Np-237  | 3.10E-03            |
| Pu-238  | 1.74E+00            |
| Pu-239  | 6.86E+01            |
| Pu-240  | 1.91E+01            |
| Pu-241  | 2.47E+02            |
| Pu-242  | 6.81E-03            |
| Sr-90   | 1.12E-04            |
| Th-229  | 3.44E-05            |
| Th-230  | 6.09E-09            |
| Th-232  | 7.14E-05            |
| U-233   | 3.92E+00            |
| U-234   | 6.62E-03            |
| U-235   | 3.25E-04            |
| U-236   | 5.64E-08            |
| U-238   | 6.06E-03            |

**Haz. Waste No(s).**

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D028, D029, 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.

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           | 12/31/2023 |    |
| Stream Name | AmO2 Bagout/ Silver Bagout                         |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | 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  | 2.91E+01            |
| Np-237  | 1.14E-04            |
| Th-229  | 1.05E-12            |
| U-233   | 2.97E-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).

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           | 12/31/2023 |    |
| Stream Name | Returned Smoke Detector Sources     |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 1.7        | 0.0        | 1.7        |
| <b>Final Form Total</b>      | <b>1.7</b> | <b>0.0</b> | <b>1.7</b> |

Waste Material Parameters

| Material Parameter            | 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  | 3.70E+00            |
| Np-237  | 1.70E-05            |
| Th-229  | 2.12E-13            |
| U-233   | 5.15E-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.

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           | 12/31/2023 |    |
| Stream Name | Combined metal scrap and incidental combustibles |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |             |             |              |
|-------------------------|-------------|-------------|--------------|
| Container Type          | Stored      | Proj.       | Total        |
| SWB Dir Ld w/o Liner    | 79.0        | 67.7        | 146.6        |
| <b>Final Form Total</b> | <b>79.0</b> | <b>67.7</b> | <b>146.6</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.02E+05        |
| Aluminum-based Metal/Alloys   | 5.20E+02        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 5.20E+02        |
| Cellulose                     | 0.00E+00        |
| Rubber                        | 5.20E+02        |
| Plastic                       | 5.20E+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    | 2.83E+01        |
| Packaging Material, Steel     | 2.26E+04        |
| Packaging Material, Lead      | 0.00E+00        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 9.94E+00            |
| Np-237  | 1.27E-04            |
| Pu-238  | 1.76E+01            |
| Pu-239  | 1.33E+02            |
| Pu-240  | 3.02E+01            |
| Pu-241  | 9.89E+01            |
| Pu-242  | 1.66E-03            |
| Th-229  | 6.89E-12            |
| Th-230  | 1.02E-07            |
| Th-232  | 8.83E-15            |
| U-233   | 8.58E-09            |
| U-234   | 1.08E-03            |
| U-235   | 2.62E-06            |
| U-236   | 1.79E-05            |
| U-238   | 5.16E-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.

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           | 12/31/2023 |    |
| Stream Name | ORNL Analytical Chemistry CH-TRU Debris Waste |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/o Liner | 25.2        | 0.0        | 25.2        |
| 55-gal POC - 6" w/ Liner     | 0.0         | 0.0        | 0.0         |
| <b>Final Form Total</b>      | <b>25.2</b> | <b>0.0</b> | <b>25.2</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 6.67E+02        |
| Aluminum-based Metal/Alloys   | 5.25E+00        |
| Other Metal/Alloys            | 5.42E+01        |
| Other Inorganic Materials     | 2.90E+02        |
| Cellulose                     | 9.97E+01        |
| Rubber                        | 3.32E+01        |
| Plastic                       | 5.97E+02        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 0.00E+00        |
| Solidified Organic Material   | 3.50E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 8.94E+01        |
| Packaging Material, Plastic   | 1.54E+01        |
| Packaging Material, Rubber    | 1.44E+01        |
| Packaging Material, Steel     | 3.40E+03        |
| Packaging Material, Lead      | 0.00E+00        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 4.51E+00            |
| Am-243  | 1.01E-02            |
| Cm-244  | 5.62E+00            |
| Cs-137  | 2.74E+00            |
| Np-237  | 1.33E-04            |
| Pu-238  | 1.28E+01            |
| Pu-239  | 4.52E+00            |
| Pu-240  | 2.18E+00            |
| Pu-241  | 2.37E+01            |
| Pu-242  | 3.60E-03            |
| Pu-244  | 2.84E-13            |
| Sr-90   | 2.63E+00            |
| Th-229  | 1.61E-05            |
| Th-230  | 7.28E-09            |
| Th-232  | 4.00E-07            |
| U-233   | 1.76E+00            |
| U-234   | 7.92E-03            |
| U-235   | 1.71E-04            |
| U-236   | 6.45E-09            |
| U-238   | 6.79E-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



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           | 12/31/2023 |    |
| Stream Name | ORNL Analytical Chemistry Laboratory Operations RH-TRU Debris Waste |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                         |            |            |            |
|--|------------|------------|------------|
| Container Type                             | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 3.8        | 0.0        | 3.8        |
| <b>Final Form Total</b>                    | <b>3.8</b> | <b>0.0</b> | <b>3.8</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 8.40E+01        |
| Aluminum-based Metal/Alloys   | 6.62E-01        |
| Other Metal/Alloys            | 7.06E+00        |
| Other Inorganic Materials     | 3.66E+01        |
| Cellulose                     | 1.26E+01        |
| Rubber                        | 4.19E+00        |
| Plastic                       | 7.52E+01        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 2.21E-01        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 1.71E+02        |
| 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  | 1.33E+00            |
| Am-243  | 9.50E-12            |
| Cm-244  | 1.19E+01            |
| Cs-137  | 2.13E+00            |
| Np-237  | 4.32E-07            |
| Pu-238  | 3.92E+00            |
| Pu-239  | 4.77E-02            |
| Pu-240  | 2.37E-01            |
| Pu-241  | 2.05E-06            |
| Pu-242  | 3.13E-03            |
| Pu-244  | 2.74E-10            |
| Sr-90   | 3.10E+00            |
| Th-229  | 6.33E-07            |
| Th-230  | 3.33E-08            |
| Th-232  | 1.73E-19            |
| U-233   | 7.19E-03            |
| U-234   | 3.63E-03            |
| U-235   | 1.39E-04            |
| U-236   | 7.01E-09            |
| 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

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           | 12/31/2023 |    |
| Stream Name | Curium Recovery Facility CH-TRU Waste              |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 3.2        | 0.0        | 3.2        |
| <b>Final Form Total</b>      | <b>3.2</b> | <b>0.0</b> | <b>3.2</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 3.84E+02        |
| Aluminum-based Metal/Alloys   | 7.11E-01        |
| Other Metal/Alloys            | 1.21E+01        |
| Other Inorganic Materials     | 1.49E+01        |
| Cellulose                     | 7.11E+01        |
| Rubber                        | 1.35E+01        |
| Plastic                       | 2.77E+01        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 0.00E+00        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 1.87E+02        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 0.00E+00        |
| Packaging Material, Rubber    | 1.77E+00        |
| Packaging Material, Steel     | 4.08E+02        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.15E-01            |
| Am-243  | 8.58E-03            |
| Cm-244  | 1.75E+00            |
| Cs-137  | 4.55E-04            |
| Np-237  | 9.99E-06            |
| Pu-238  | 4.61E-01            |
| Pu-239  | 4.58E-05            |
| Pu-240  | 2.82E-02            |
| Pu-241  | 8.12E-01            |
| Pu-242  | 3.46E-05            |
| Sr-90   | 4.55E-04            |
| Th-229  | 1.89E-08            |
| Th-230  | 5.99E-14            |
| Th-232  | 2.06E-22            |
| U-233   | 2.15E-03            |
| U-234   | 1.30E-07            |
| U-235   | 4.51E-15            |
| U-236   | 8.35E-11            |
| U-238   | 5.37E-16            |

**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

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           | 12/31/2023 |    |
| Stream Name | ORNL General Research & Development CH-TRU Debris Waste |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/o Liner | 13.4        | 0.0        | 13.4        |
| 55-gal POC - 12" w/ Liner    | 0.0         | 0.0        | 0.0         |
| 55-gal POC - 6" w/ Liner     | 0.0         | 0.0        | 0.0         |
| <b>Final Form Total</b>      | <b>13.5</b> | <b>0.0</b> | <b>13.5</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.26E+02        |
| Aluminum-based Metal/Alloys   | 5.61E+01        |
| Other Metal/Alloys            | 5.61E+01        |
| Other Inorganic Materials     | 2.26E+02        |
| Cellulose                     | 4.16E+02        |
| Rubber                        | 2.74E+02        |
| Plastic                       | 1.14E+02        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 0.00E+00        |
| Solidified Organic Material   | 1.37E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 7.28E+01        |
| Packaging Material, Plastic   | 1.54E+01        |
| Packaging Material, Rubber    | 7.79E+00        |
| Packaging Material, Steel     | 1.92E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.55E+00            |
| Am-243  | 2.86E-01            |
| Cm-244  | 6.11E+00            |
| Cs-137  | 1.60E-03            |
| Np-237  | 1.12E-02            |
| Pu-238  | 2.80E+00            |
| Pu-239  | 1.58E+00            |
| Pu-240  | 1.25E-01            |
| Pu-241  | 1.07E+01            |
| Pu-242  | 6.50E-01            |
| Pu-244  | 3.01E-13            |
| Sr-90   | 1.60E-03            |
| Th-229  | 2.34E-06            |
| Th-230  | 1.84E-11            |
| Th-232  | 5.37E-06            |
| U-233   | 1.72E-09            |
| U-234   | 2.04E-05            |
| U-235   | 3.90E-07            |
| U-236   | 5.18E-10            |
| U-238   | 8.38E-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

Waste Stream ID: **OR-GRSC-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           | 12/31/2023 |    |
| Stream Name | ORNL Graphite Reactor Storage Canal Cleanup CH-TRU Waste |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 1.1        | 0.0        | 1.1        |
| <b>Final Form Total</b>      | <b>1.1</b> | <b>0.0</b> | <b>1.1</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 6.54E+00        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 0.00E+00        |
| Cellulose                     | 2.62E+00        |
| Rubber                        | 2.62E+00        |
| Plastic                       | 2.62E+00        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 2.39E+02        |
| Solidified Organic Material   | 7.85E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 0.00E+00        |
| Packaging Material, Rubber    | 5.90E-01        |
| Packaging Material, Steel     | 1.36E+02        |
| Packaging Material, Lead      | 0.00E+00        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 4.28E-03            |
| Am-243  | 4.40E-04            |
| Cm-244  | 1.26E-03            |
| Cs-137  | 4.28E-02            |
| Np-237  | 1.39E-10            |
| Pu-238  | 2.22E-03            |
| Pu-239  | 8.97E-03            |
| Pu-240  | 7.13E-04            |
| Pu-241  | 6.11E-03            |
| Pu-242  | 6.01E-07            |
| Sr-90   | 4.32E-02            |
| Th-229  | 1.74E-10            |
| Th-230  | 1.44E-10            |
| Th-232  | 5.20E-24            |
| U-233   | 1.98E-05            |
| U-234   | 1.57E-04            |
| U-235   | 6.74E-06            |
| U-236   | 2.11E-12            |
| U-238   | 1.56E-04            |

Haz. Waste No(s).

D006, D008

TRUCON Code(s)

125/225

Waste Stream Description

Waste consists of CH-TRU debris from Graphite Reactor storage canal cleanup at ORNL

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           | 12/31/2023 |    |
| Stream Name | RH-TRU from ORGR Storage Canal Cleanup |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| 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        |
| <b>Final Form Total</b>                    | <b>1.3</b> | <b>0.0</b> | <b>1.3</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.29E+00        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 0.00E+00        |
| Cellulose                     | 2.29E+00        |
| Rubber                        | 0.00E+00        |
| Plastic                       | 2.29E+00        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 2.96E+02        |
| Solidified Organic Material   | 2.29E+00        |
| 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  | 2.24E-02            |
| Cm-244  | 4.73E-02            |
| Cs-137  | 1.57E+00            |
| Np-237  | 7.24E-10            |
| Pu-238  | 7.90E-02            |
| Pu-239  | 3.16E-01            |
| Pu-240  | 2.51E-02            |
| Pu-241  | 2.33E-01            |
| Pu-242  | 2.10E-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   | 2.39E-04            |
| U-236   | 7.43E-11            |
| U-238   | 5.50E-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

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           | 12/31/2023 |    |
| Stream Name | Irradiated Fuels Examination Laboratory CH-TRU Waste |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 9.5        | 0.0        | 9.5        |
| <b>Final Form Total</b>      | <b>9.5</b> | <b>0.0</b> | <b>9.5</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 8.22E+02        |
| Aluminum-based Metal/Alloys   | 2.64E+01        |
| Other Metal/Alloys            | 1.87E+01        |
| Other Inorganic Materials     | 4.97E+01        |
| Cellulose                     | 2.15E+02        |
| Rubber                        | 7.93E+01        |
| Plastic                       | 3.44E+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   | 0.00E+00        |
| 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  | 1.27E+00            |
| Am-243  | 1.26E-01            |
| Cm-244  | 1.40E+00            |
| Cs-137  | 4.03E-01            |
| Np-237  | 3.56E-04            |
| Pu-238  | 2.87E-01            |
| Pu-239  | 1.01E-01            |
| Pu-240  | 9.51E-02            |
| Pu-241  | 2.36E+00            |
| Pu-242  | 9.19E-03            |
| Sr-90   | 1.18E-01            |
| Th-229  | 3.48E-08            |
| Th-230  | 1.13E-09            |
| Th-232  | 6.95E-22            |
| U-233   | 3.95E-03            |
| U-234   | 1.22E-03            |
| U-235   | 2.60E-05            |
| U-236   | 2.82E-10            |
| U-238   | 5.59E-04            |

**Haz. Waste No(s).**

D004, D005, D006, D007, D008, D009, D010, D011, 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

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           | 12/31/2023 |    |
| Stream Name | ORNL Isotopes Facilities CH-TRU Debris Waste |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/o Liner | 38.6        | 0.0        | 38.6        |
| 55-gal POC - 12" w/ Liner    | 0.2         | 0.0        | 0.2         |
| 55-gal POC - 6" w/ Liner     | 0.0         | 0.0        | 0.0         |
| <b>Final Form Total</b>      | <b>38.9</b> | <b>0.0</b> | <b>38.9</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.88E+03        |
| Aluminum-based Metal/Alloys   | 9.84E+01        |
| Other Metal/Alloys            | 5.38E+02        |
| Other Inorganic Materials     | 1.16E+02        |
| Cellulose                     | 9.38E+02        |
| Rubber                        | 5.15E+02        |
| Plastic                       | 1.70E+03        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 0.00E+00        |
| Solidified Organic Material   | 1.16E+01        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 2.30E+02        |
| Packaging Material, Plastic   | 5.40E+01        |
| Packaging Material, Rubber    | 2.25E+01        |
| Packaging Material, Steel     | 5.69E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 2.15E+02            |
| Am-243  | 3.48E-01            |
| Cm-244  | 7.59E+02            |
| Cs-137  | 1.08E-01            |
| Np-237  | 6.26E-02            |
| Pu-238  | 2.10E+02            |
| Pu-239  | 1.04E+01            |
| Pu-240  | 1.48E+01            |
| Pu-241  | 5.19E+02            |
| Pu-242  | 4.89E-01            |
| Pu-244  | 9.98E-04            |
| Sr-90   | 5.69E-02            |
| Th-229  | 1.10E-04            |
| Th-230  | 2.80E-08            |
| Th-232  | 1.85E-05            |
| U-233   | 1.06E+00            |
| U-234   | 3.05E-02            |
| U-235   | 3.24E-04            |
| U-236   | 7.81E-05            |
| U-238   | 4.10E-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

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           | 12/31/2023 |    |
| Stream Name | ORNL Isotopes Facilities RH-TRU Debris Waste |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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 | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b>                    | <b>2.2</b> | <b>0.0</b> | <b>2.2</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 7.73E+01        |
| Aluminum-based Metal/Alloys   | 4.06E+00        |
| Other Metal/Alloys            | 2.22E+01        |
| Other Inorganic Materials     | 4.77E+00        |
| Cellulose                     | 3.86E+01        |
| Rubber                        | 2.12E+01        |
| Plastic                       | 6.99E+01        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 4.77E-01        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 3.42E+02        |
| Packaging Material, Rubber    | 1.06E+00        |
| Packaging Material, Steel     | 2.29E+03        |
| Packaging Material, Lead      | 0.00E+00        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.67E+01            |
| Am-243  | 5.11E-03            |
| Cm-244  | 2.51E+02            |
| Cs-137  | 3.80E-05            |
| Np-237  | 3.50E-04            |
| Pu-239  | 2.55E+00            |
| Pu-240  | 4.78E+00            |
| Pu-241  | 4.98E-01            |
| Pu-244  | 3.89E-19            |
| Sr-90   | 3.80E-05            |
| Th-229  | 1.68E-16            |
| Th-230  | 1.20E-05            |
| Th-232  | 1.00E-03            |
| U-233   | 5.33E-11            |
| U-235   | 2.51E-10            |
| U-236   | 1.41E-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



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           | 12/31/2023 |    |
| Stream Name | ORNL-Liquid Waste Treatment CH-TRU Debris Waste    |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 4.8        | 0.0        | 4.8        |
| <b>Final Form Total</b>      | <b>4.8</b> | <b>0.0</b> | <b>4.8</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.21E+02        |
| Aluminum-based Metal/Alloys   | 1.43E+00        |
| Other Metal/Alloys            | 7.17E-01        |
| Other Inorganic Materials     | 2.87E+00        |
| Cellulose                     | 1.43E+01        |
| Rubber                        | 7.17E-01        |
| Plastic                       | 4.59E+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    | 2.71E+00        |
| Packaging Material, Steel     | 6.26E+02        |
| Packaging Material, Lead      | 0.00E+00        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 4.31E-01            |
| Am-243  | 7.94E-04            |
| Cm-244  | 2.31E-02            |
| Cs-137  | 4.05E-01            |
| Np-237  | 4.68E-05            |
| Pu-238  | 1.13E-01            |
| Pu-239  | 1.01E+00            |
| Pu-240  | 5.99E-03            |
| Pu-241  | 9.81E-02            |
| Pu-242  | 1.73E-05            |
| Sr-90   | 4.11E-01            |
| Th-229  | 8.77E-05            |
| Th-230  | 4.38E-05            |
| Th-232  | 6.84E-05            |
| U-233   | 3.74E-03            |
| U-234   | 3.10E-03            |
| U-235   | 5.06E-05            |
| U-236   | 3.20E-05            |
| U-238   | 1.12E-04            |

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.

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           | 12/31/2023 |    |
| Stream Name | ORNL Metal Recovery Facility CH-TRU Debris Waste |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 8.8        | 0.0        | 8.8        |
| <b>Final Form Total</b>      | <b>8.8</b> | <b>0.0</b> | <b>8.8</b> |

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  | 8.79E-01            |
| Am-243  | 1.42E-03            |
| Cm-244  | 1.08E-01            |
| Cs-137  | 1.55E+00            |
| Np-237  | 5.26E-05            |
| Pu-238  | 1.19E-01            |
| Pu-239  | 1.62E+00            |
| Pu-240  | 3.36E-01            |
| Pu-241  | 6.28E-01            |
| Pu-242  | 1.18E-04            |
| Sr-90   | 1.01E+01            |
| Th-229  | 3.00E-07            |
| Th-230  | 1.08E-09            |
| Th-232  | 3.93E-18            |
| U-233   | 8.52E-04            |
| U-234   | 3.00E-05            |
| U-235   | 9.62E-07            |
| U-236   | 3.98E-08            |
| 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

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           | 12/31/2023 |    |
| Stream Name | ORNL Metal Recovery Facility RH-TRU Debris Waste |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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        |
| <b>Final Form Total</b>                    | <b>1.9</b> | <b>0.0</b> | <b>1.9</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.47E+02        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 5.87E+00        |
| Cellulose                     | 1.64E+02        |
| Rubber                        | 5.87E+01        |
| Plastic                       | 8.22E+01        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 1.17E+02        |
| Solidified Organic Material   | 1.17E+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  | 5.23E-02            |
| Cm-244  | 9.08E-03            |
| Cs-137  | 1.91E+00            |
| Np-237  | 3.36E-08            |
| Pu-238  | 3.65E-02            |
| Pu-239  | 3.70E-01            |
| Pu-240  | 4.67E-02            |
| Pu-241  | 3.42E-01            |
| Pu-242  | 4.07E-06            |
| Sr-90   | 3.05E+00            |
| Th-229  | 2.46E-09            |
| Th-230  | 6.98E-08            |
| Th-232  | 1.36E-19            |
| U-233   | 1.40E-05            |
| U-234   | 3.79E-03            |
| U-235   | 1.80E-04            |
| U-236   | 2.76E-09            |
| U-238   | 3.82E-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

Waste Stream ID: **OR-MSRE-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           | 12/31/2023 |    |
| Stream Name | ORNL Molten Salt Reactor Experiment CH-TRU Waste |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.77E+02        |
| Aluminum-based Metal/Alloys   | 9.98E-01        |
| Other Metal/Alloys            | 7.51E+02        |
| Other Inorganic Materials     | 3.59E+01        |
| Cellulose                     | 1.60E+01        |
| Rubber                        | 9.98E-01        |
| Plastic                       | 1.60E+01        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 0.00E+00        |
| Solidified Organic Material   | 9.98E-01        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 0.00E+00        |
| Packaging Material, Rubber    | 2.24E+00        |
| Packaging Material, Steel     | 5.17E+02        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.09E-01            |
| Am-243  | 1.60E-04            |
| Cm-244  | 1.78E+00            |
| Cs-137  | 2.51E+01            |
| Np-237  | 6.48E-05            |
| Pu-238  | 9.34E-03            |
| Pu-239  | 3.02E-01            |
| Pu-240  | 8.40E-02            |
| Pu-241  | 2.14E-01            |
| Pu-242  | 3.71E-06            |
| Pu-244  | 4.84E-15            |
| Sr-90   | 2.28E+01            |
| Th-229  | 1.40E-02            |
| Th-230  | 6.86E-05            |
| Th-232  | 9.79E-14            |
| U-233   | 2.79E+00            |
| U-234   | 1.05E-01            |
| U-235   | 2.29E-05            |
| U-236   | 2.70E-05            |
| U-238   | 5.43E-06            |

**Haz. Waste No(s).**

|                        |
|------------------------|
| D006, D007, D008, D011 |
|------------------------|

**TRUCON Code(s)**

|         |
|---------|
| 125/225 |
|---------|

**Waste Stream Description**

Waste consists of CH-TRU debris from MSRE at ORNL

Waste Stream ID: **OR-MSRE-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           | 12/31/2023 |    |
| Stream Name | ORNL Molten Salt Reactor Experiment RH-TRU Waste |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                         |            |            |            |
|--|------------|------------|------------|
| Container Type                             | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 6.3        | 0.0        | 6.3        |
| <b>Final Form Total</b>                    | <b>6.3</b> | <b>0.0</b> | <b>6.3</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 9.13E+01        |
| Aluminum-based Metal/Alloys   | 2.68E-01        |
| Other Metal/Alloys            | 4.12E+02        |
| Other Inorganic Materials     | 1.83E+01        |
| Cellulose                     | 7.52E+00        |
| Rubber                        | 2.68E-01        |
| Plastic                       | 7.52E+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+02        |
| Packaging Material, Rubber    | 3.54E+00        |
| Packaging Material, Steel     | 5.81E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 4.77E-03            |
| Am-243  | 1.36E-10            |
| Cm-244  | 3.16E-02            |
| Cs-137  | 1.41E-01            |
| Np-237  | 1.31E-05            |
| Pu-238  | 9.55E-03            |
| Pu-239  | 2.53E-03            |
| Pu-240  | 1.19E-03            |
| Pu-241  | 1.78E-02            |
| Pu-242  | 2.05E-05            |
| Pu-244  | 3.32E-06            |
| Sr-90   | 3.92E-02            |
| Th-229  | 2.21E-05            |
| Th-230  | 1.37E-07            |
| Th-232  | 8.65E-22            |
| U-233   | 2.51E-01            |
| U-234   | 1.49E-02            |
| U-235   | 1.83E-06            |
| U-236   | 3.51E-11            |
| U-238   | 1.78E-06            |

**Haz. Waste No(s).**

|                        |
|------------------------|
| D006, D007, D008, D011 |
|------------------------|

**TRUCON Code(s)**

|     |
|-----|
| 325 |
|-----|

**Waste Stream Description**

Waste consists of RH-TRU debris from MSRE at ORNL

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           | 12/31/2023 |    |
| Stream Name | New Brunswick Laboratory CH-TRU Debris Waste |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

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

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.41E+02        |
| Aluminum-based Metal/Alloys   | 9.21E+00        |
| Other Metal/Alloys            | 1.82E+02        |
| Other Inorganic Materials     | 3.11E+02        |
| Cellulose                     | 5.53E+01        |
| Rubber                        | 9.86E+01        |
| Plastic                       | 5.53E+01        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 1.84E+00        |
| Solidified Organic Material   | 6.63E+01        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 0.00E+00        |
| Packaging Material, Rubber    | 2.24E+00        |
| Packaging Material, Steel     | 5.17E+02        |
| Packaging Material, Lead      | 0.00E+00        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.40E+00            |
| Am-243  | 3.01E-04            |
| Cm-244  | 1.46E-02            |
| Cs-137  | 6.68E-04            |
| Np-237  | 7.19E-05            |
| Pu-238  | 2.75E-01            |
| Pu-239  | 2.58E+00            |
| Pu-240  | 1.06E+00            |
| Pu-241  | 8.66E+00            |
| Pu-242  | 2.62E-04            |
| Sr-90   | 6.68E-04            |
| Th-229  | 3.46E-17            |
| Th-230  | 2.00E-09            |
| Th-232  | 2.94E-05            |
| U-233   | 1.10E-11            |
| U-234   | 2.18E-03            |
| U-235   | 7.07E-05            |
| U-236   | 3.13E-09            |
| U-238   | 2.42E-04            |

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

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           | 12/31/2023 |    |
| Stream Name | Nuclear Fuel Services CH-TRU Waste |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/o Liner | 33.4        | 0.0        | 33.4        |
| 85-gal Drum Dir Ld w/o Liner | 8.3         | 0.0        | 8.3         |
| <b>Final Form Total</b>      | <b>41.7</b> | <b>0.0</b> | <b>41.7</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 3.55E+03        |
| Aluminum-based Metal/Alloys   | 2.32E+02        |
| Other Metal/Alloys            | 4.60E+03        |
| Other Inorganic Materials     | 9.34E+03        |
| Cellulose                     | 1.39E+03        |
| Rubber                        | 2.49E+03        |
| Plastic                       | 1.39E+03        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 0.00E+00        |
| Solidified Organic Material   | 2.32E+02        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 0.00E+00        |
| Packaging Material, Rubber    | 2.18E+01        |
| Packaging Material, Steel     | 5.28E+03        |
| Packaging Material, Lead      | 0.00E+00        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 7.40E+00            |
| Am-243  | 1.28E-05            |
| Cm-244  | 3.40E-01            |
| Cs-137  | 5.58E-05            |
| Np-237  | 6.74E-05            |
| Pu-238  | 1.37E+00            |
| Pu-239  | 1.43E+01            |
| Pu-240  | 4.73E+00            |
| Pu-241  | 2.25E+01            |
| Pu-242  | 3.99E-04            |
| Sr-90   | 5.58E-05            |
| Th-229  | 1.58E-05            |
| Th-230  | 4.53E-03            |
| Th-232  | 5.70E-05            |
| U-233   | 2.47E-02            |
| U-234   | 8.52E-04            |
| U-235   | 4.30E-05            |
| U-236   | 1.40E-08            |
| U-238   | 1.31E-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

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           | 12/31/2023 |    |
| Stream Name | Nuclear Fuel Services CH-TRU Homogeneous Waste |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 1.5        | 0.0        | 1.5        |
| 55-gal POC - 12" w/ Liner    | 0.0        | 0.0        | 0.0        |
| <b>Final Form Total</b>      | <b>1.5</b> | <b>0.0</b> | <b>1.5</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.70E+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                       | 3.39E+01        |
| Cement                        | 2.78E+01        |
| Solidified Inorganic Material | 1.72E+02        |
| Solidified Organic Material   | 2.72E+01        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 2.81E+01        |
| Packaging Material, Plastic   | 7.71E+00        |
| Packaging Material, Rubber    | 9.44E-01        |
| Packaging Material, Steel     | 3.00E+02        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.30E+01            |
| Am-243  | 8.28E-04            |
| Cm-244  | 6.01E-02            |
| Cs-137  | 5.47E-05            |
| Np-237  | 1.17E-04            |
| Pu-238  | 3.72E+00            |
| Pu-239  | 2.05E+01            |
| Pu-240  | 7.61E+00            |
| Pu-241  | 6.68E+01            |
| Pu-242  | 1.57E-03            |
| Sr-90   | 5.47E-05            |
| Th-229  | 5.60E-17            |
| Th-230  | 4.83E-13            |
| Th-232  | 5.56E-20            |
| U-233   | 1.78E-11            |
| U-234   | 1.05E-06            |
| U-235   | 2.01E-09            |
| U-236   | 2.25E-08            |
| U-238   | 4.93E-05            |

**Haz. Waste No(s).**

D006, D009

**TRUCON Code(s)**

127/227

**Waste Stream Description**

Waste consists of homogeneous waste from NFS



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           | 12/31/2023 |    |
| Stream Name | Nuclear Fuel Services CH-TRU Soil Waste |                         |                                |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 2.7        | 0.0        | 2.7        |
| <b>Final Form Total</b>     | <b>2.7</b> | <b>0.0</b> | <b>2.7</b> |

**Waste Material Parameters**

| Material Parameter            | 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                       | 6.60E+00        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 0.00E+00        |
| Solidified Organic Material   | 4.40E+01        |
| Soil                          | 2.15E+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  | 1.15E-01            |
| Am-243  | 1.04E-05            |
| Cs-137  | 1.47E-05            |
| Np-237  | 4.92E-07            |
| Pu-238  | 1.60E-02            |
| Pu-239  | 1.56E-01            |
| Pu-240  | 5.49E-02            |
| Pu-241  | 1.64E-01            |
| Pu-242  | 1.10E-05            |
| Sr-90   | 1.47E-05            |
| Th-229  | 2.35E-19            |
| Th-230  | 2.08E-15            |
| Th-232  | 4.01E-22            |
| U-233   | 7.48E-14            |
| U-234   | 4.52E-09            |
| U-235   | 1.54E-11            |
| U-236   | 1.62E-10            |
| U-238   | 1.70E-16            |

**Haz. Waste No(s).**

F002

**TRUCON Code(s)**

111/211

**Waste Stream Description**

Waste consists of soils from NFS

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           | 12/31/2023 |    |
| Stream Name | ORNL Oxide CH-TRU Debris Waste          |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes       |            |            |            |
|--------------------------|------------|------------|------------|
| Container Type           | Stored     | Proj.      | Total      |
| 55-gal POC - 6" w/ Liner | 0.6        | 0.0        | 0.6        |
| <b>Final Form Total</b>  | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

**Waste Material Parameters**

| Material Parameter            | 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  | 1.95E+03            |
| Am-243  | 8.69E-05            |
| Cs-137  | 1.41E-04            |
| Np-237  | 1.62E-02            |
| Pu-238  | 5.84E+02            |
| Pu-239  | 2.05E+02            |
| Pu-240  | 5.56E+02            |
| Pu-241  | 1.11E+04            |
| Pu-242  | 2.52E+00            |
| Sr-90   | 1.41E-04            |
| Th-229  | 1.84E-05            |
| Th-230  | 1.21E-05            |
| Th-232  | 5.60E-13            |
| U-233   | 2.09E+00            |
| U-234   | 6.77E-02            |
| U-235   | 5.01E-06            |
| U-236   | 5.88E-04            |
| U-238   | 9.95E-04            |

**Haz. Waste No(s).**

D008

**TRUCON Code(s)**

125/225

**Waste Stream Description**

Waste consists of CH-TRU debris from ORNL oxide handling, packaging, and production activities

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           | 12/31/2023 |    |
| Stream Name | Paducah Gaseous Diffusion Plant CH-TRU Debris Waste |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 7.1        | 0.0        | 7.1        |
| <b>Final Form Total</b>      | <b>7.1</b> | <b>0.0</b> | <b>7.1</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.00E+03        |
| Aluminum-based Metal/Alloys   | 5.64E+01        |
| Other Metal/Alloys            | 4.78E+02        |
| Other Inorganic Materials     | 2.69E+02        |
| Cellulose                     | 7.97E+01        |
| Rubber                        | 5.98E+01        |
| Plastic                       | 2.79E+02        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 1.99E+01        |
| Solidified Organic Material   | 7.97E+01        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 0.00E+00        |
| Packaging Material, Rubber    | 4.01E+00        |
| Packaging Material, Steel     | 9.25E+02        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 2.70E-01            |
| Am-243  | 2.56E-05            |
| Cs-137  | 1.69E-04            |
| Np-237  | 1.24E-01            |
| Pu-238  | 1.40E-01            |
| Pu-239  | 1.13E+00            |
| Pu-240  | 2.39E-01            |
| Pu-241  | 2.59E+00            |
| Pu-242  | 2.49E-05            |
| Sr-90   | 1.69E-04            |
| Th-229  | 5.71E-08            |
| Th-230  | 3.95E-09            |
| Th-232  | 1.74E-21            |
| U-233   | 6.49E-03            |
| U-234   | 4.29E-03            |
| U-235   | 7.44E-04            |
| U-236   | 7.07E-10            |
| U-238   | 1.92E-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

Waste Stream ID: **OR-PUBE-CH-HOM**

**Appendix A**

Waste Profile Report

|             |  |                         |                       |                       |                          |            |    |
|-------------|--|-------------------------|-----------------------|-----------------------|--------------------------|------------|----|
| Site        | Oak Ridge National Laboratory                        | Summary Category        | S3000                 | Defense Determination | Defense-Related          | Handling   | CH |
| Source Cat. | R&D/R&D Laboratory Waste                             | Waste Matrix Code Group | Solidified Inorganics |                       | Inventory Date           | 12/31/2023 |    |
| Stream Name | ORNL Plutonium and Beryllium Solidified CH-TRU Waste |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes        |            |            |            |
|---------------------------|------------|------------|------------|
| Container Type            | Stored     | Proj.      | Total      |
| 55-gal POC - 12" w/ Liner | 0.0        | 0.0        | 0.0        |
| <b>Final Form Total</b>   | <b>0.0</b> | <b>0.0</b> | <b>0.0</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 9.40E+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                        | 5.20E+00        |
| Solidified Inorganic Material | 7.20E+00        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 2.81E+01        |
| Packaging Material, Plastic   | 7.71E+00        |
| Packaging Material, Rubber    | 1.18E-01        |
| Packaging Material, Steel     | 1.10E+02        |
| Packaging Material, Lead      | 0.00E+00        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 6.20E-01            |
| Am-243  | 2.73E-05            |
| Cs-137  | 6.99E-04            |
| Np-237  | 1.38E-05            |
| Pu-238  | 1.94E+00            |
| Pu-239  | 2.19E-03            |
| Pu-240  | 1.45E-03            |
| Pu-241  | 1.23E-02            |
| Pu-242  | 8.73E-07            |
| Sr-90   | 2.09E-03            |
| Th-229  | 1.04E-14            |
| Th-230  | 7.07E-09            |
| Th-232  | 4.23E-21            |
| U-233   | 1.18E-10            |
| U-234   | 3.90E-04            |
| U-235   | 4.31E-12            |
| U-236   | 8.58E-11            |
| U-238   | 2.71E-16            |

Haz. Waste No(s).

D007

TRUCON Code(s)

111/211

Waste Stream Description

Waste consists of solidified plutonium and beryllium waste from neutron sources at REDC

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           | 12/31/2023 |    |
| Stream Name | ORNL Radiochemical Processing Research & Development CH-TRU Debris Waste |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/o Liner | 15.3        | 0.0        | 15.3        |
| 55-gal POC - 6" w/ Liner     | 0.0         | 0.0        | 0.0         |
| <b>Final Form Total</b>      | <b>15.3</b> | <b>0.0</b> | <b>15.3</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 5.53E+02        |
| Aluminum-based Metal/Alloys   | 2.07E+01        |
| Other Metal/Alloys            | 7.67E+01        |
| Other Inorganic Materials     | 6.34E+01        |
| Cellulose                     | 3.19E+02        |
| Rubber                        | 7.82E+01        |
| Plastic                       | 3.53E+02        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 0.00E+00        |
| Solidified Organic Material   | 1.18E+01        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 4.47E+01        |
| Packaging Material, Plastic   | 7.71E+00        |
| Packaging Material, Rubber    | 8.73E+00        |
| Packaging Material, Steel     | 2.05E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 7.45E+00            |
| Am-243  | 1.33E+00            |
| Cm-244  | 5.55E+00            |
| Cs-137  | 1.17E+01            |
| Np-237  | 3.98E-04            |
| Pu-238  | 1.47E+00            |
| Pu-239  | 7.85E+00            |
| Pu-240  | 3.64E+00            |
| Pu-241  | 4.87E+01            |
| Pu-242  | 7.27E-04            |
| Pu-244  | 5.80E-04            |
| Sr-90   | 1.53E+00            |
| Th-229  | 4.51E-05            |
| Th-230  | 1.77E-07            |
| Th-232  | 1.79E-05            |
| U-233   | 4.63E-02            |
| U-234   | 1.01E-03            |
| U-235   | 3.91E-05            |
| U-236   | 5.42E-08            |
| U-238   | 3.51E-05            |

**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

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           | 12/31/2023 |    |
| Stream Name | ORNL Radiochemical Processing Research & Development RH-TRU Debris Waste |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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 | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b>                    | <b>2.2</b> | <b>0.0</b> | <b>2.2</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.65E+02        |
| Aluminum-based Metal/Alloys   | 6.16E+00        |
| Other Metal/Alloys            | 2.29E+01        |
| Other Inorganic Materials     | 1.89E+01        |
| Cellulose                     | 9.50E+01        |
| Rubber                        | 2.33E+01        |
| Plastic                       | 1.05E+02        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 3.52E+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    | 1.06E+00        |
| Packaging Material, Steel     | 2.29E+03        |
| Packaging Material, Lead      | 0.00E+00        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 5.80E-02            |
| Cm-244  | 5.01E-01            |
| Cs-137  | 2.33E+01            |
| Np-237  | 1.84E-08            |
| Pu-238  | 6.93E-01            |
| Pu-239  | 1.25E-02            |
| Pu-240  | 1.79E-02            |
| Pu-241  | 1.56E+00            |
| Pu-242  | 1.04E-04            |
| Sr-90   | 4.56E+00            |
| Th-229  | 5.76E-07            |
| Th-230  | 2.42E-09            |
| Th-232  | 3.46E-05            |
| U-233   | 6.55E-03            |
| U-234   | 2.64E-04            |
| U-235   | 6.43E-06            |
| U-236   | 5.28E-10            |
| U-238   | 1.85E-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

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           | 12/31/2023 |    |
| Stream Name | Radiochemical Engineering Development Center CH-TRU Waste |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                 |             |              |              |
|------------------------------------|-------------|--------------|--------------|
| Container Type                     | Stored      | Proj.        | Total        |
| 55-gal Drum Dir Ld w/o Liner       | 78.8        | 91.4         | 170.1        |
| 55-gal POC - 12" w/ Liner          | 0.8         | 0.0          | 0.8          |
| 55-gal POC - 6" w/ Liner           | 0.0         | 0.0          | 0.0          |
| SWB Dir Ld w/o Liner               | 0.0         | 9.4          | 9.4          |
| SWB w/ 4 - 55-gal Drums w/o Liners | 0.8         | 0.0          | 0.8          |
| <b>Final Form Total</b>            | <b>80.4</b> | <b>100.8</b> | <b>181.2</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 5.76E+03        |
| Aluminum-based Metal/Alloys   | 2.79E+02        |
| Other Metal/Alloys            | 1.75E+02        |
| Other Inorganic Materials     | 2.24E+03        |
| Cellulose                     | 8.38E+02        |
| Rubber                        | 2.27E+02        |
| Plastic                       | 7.95E+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 | 5.84E+02        |
| Packaging Material, Plastic   | 1.46E+02        |
| Packaging Material, Rubber    | 1.00E+02        |
| Packaging Material, Steel     | 2.58E+04        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.23E+02            |
| Am-243  | 1.35E+00            |
| Cm-244  | 9.96E+02            |
| Cs-137  | 3.57E+00            |
| Np-237  | 2.36E+00            |
| Pu-238  | 3.67E+03            |
| Pu-239  | 1.79E+01            |
| Pu-240  | 1.66E+01            |
| Pu-241  | 1.88E+02            |
| Pu-242  | 3.32E-01            |
| Pu-244  | 1.31E-02            |
| Sr-90   | 3.61E+01            |
| Th-229  | 1.07E-04            |
| Th-230  | 4.51E-03            |
| Th-232  | 1.34E-05            |
| U-233   | 4.30E-01            |
| U-234   | 5.78E-01            |
| U-235   | 2.19E-04            |
| U-236   | 9.85E-05            |
| U-238   | 6.71E-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

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           | 12/31/2023 |    |
| Stream Name | Radiochemical Engineering Development Center RH-TRU Waste |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                         |             |             |              |
|--|-------------|-------------|--------------|
| Container Type                             | Stored      | Proj.       | Total        |
| RH Can NS15 w/ Liner                       | 3.7         | 7.8         | 11.5         |
| RH Can NS30 w/ Liner                       | 4.0         | 0.0         | 4.0          |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 47.3        | 44.1        | 91.4         |
| <b>Final Form Total</b>                    | <b>54.9</b> | <b>51.9</b> | <b>106.8</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.66E+04        |
| Aluminum-based Metal/Alloys   | 4.50E+00        |
| Other Metal/Alloys            | 2.66E+03        |
| Other Inorganic Materials     | 7.54E+03        |
| Cellulose                     | 3.00E+03        |
| Rubber                        | 7.46E+02        |
| Plastic                       | 3.88E+03        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 5.44E+02        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 3.33E+04        |
| Packaging Material, Rubber    | 5.13E+01        |
| Packaging Material, Steel     | 1.22E+05        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.81E+02            |
| Am-243  | 2.85E+01            |
| Cm-244  | 4.40E+03            |
| Cs-137  | 1.42E+02            |
| Np-237  | 4.34E-01            |
| Pu-238  | 1.28E+03            |
| Pu-239  | 1.74E+01            |
| Pu-240  | 7.20E+01            |
| Pu-241  | 7.72E+02            |
| Pu-242  | 8.74E-01            |
| Pu-244  | 2.79E-07            |
| Sr-90   | 2.43E+03            |
| Th-229  | 3.86E-09            |
| Th-230  | 8.70E-08            |
| Th-232  | 5.07E-16            |
| U-233   | 4.39E-04            |
| U-234   | 9.48E-02            |
| U-235   | 3.94E-04            |
| U-236   | 1.03E-04            |
| U-238   | 9.47E-03            |

**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



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           | 12/31/2023 |    |
| Stream Name | ORNL Reactor Fuels Research & Development CH-TRU Debris Waste |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/o Liner | 16.2        | 0.0        | 16.2        |
| 55-gal POC - 12" w/ Liner    | 0.0         | 0.0        | 0.0         |
| 55-gal POC - 6" w/ Liner     | 0.0         | 0.0        | 0.0         |
| <b>Final Form Total</b>      | <b>16.3</b> | <b>0.0</b> | <b>16.3</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 4.04E+02        |
| Aluminum-based Metal/Alloys   | 7.34E+01        |
| Other Metal/Alloys            | 1.83E+02        |
| Other Inorganic Materials     | 3.67E+01        |
| Cellulose                     | 3.12E+02        |
| Rubber                        | 2.57E+02        |
| Plastic                       | 4.77E+02        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 9.17E+01        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 1.62E+02        |
| Packaging Material, Plastic   | 3.08E+01        |
| Packaging Material, Rubber    | 9.56E+00        |
| Packaging Material, Steel     | 2.40E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.37E+01            |
| Am-243  | 3.24E-03            |
| Cm-244  | 5.48E+00            |
| Cs-137  | 6.25E-01            |
| Np-237  | 7.51E-04            |
| Pu-238  | 3.64E+01            |
| Pu-239  | 3.73E+01            |
| Pu-240  | 1.84E+01            |
| Pu-241  | 1.76E+02            |
| Pu-242  | 7.01E-03            |
| Sr-90   | 4.98E-02            |
| Th-229  | 1.09E-02            |
| Th-230  | 6.65E-08            |
| Th-232  | 4.63E-05            |
| U-233   | 1.52E+01            |
| U-234   | 7.23E-02            |
| U-235   | 3.33E-04            |
| U-236   | 4.62E-06            |
| U-238   | 3.36E-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

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           | 12/31/2023 |    |
| Stream Name | ORNL Reactor Fuels Research & Development RH-TRU Debris Waste |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                         |             |             |             |
|--|-------------|-------------|-------------|
| Container Type                             | Stored      | Proj.       | Total       |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 28.4        | 37.8        | 66.2        |
| <b>Final Form Total</b>                    | <b>28.4</b> | <b>37.8</b> | <b>66.2</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 7.48E+03        |
| Aluminum-based Metal/Alloys   | 1.70E+03        |
| Other Metal/Alloys            | 1.53E+03        |
| Other Inorganic Materials     | 1.53E+03        |
| Cellulose                     | 2.38E+03        |
| Rubber                        | 5.10E+02        |
| Plastic                       | 1.36E+03        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 1.70E+02        |
| Solidified Organic Material   | 3.40E+02        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 2.99E+03        |
| Packaging Material, Rubber    | 3.72E+01        |
| Packaging Material, Steel     | 6.10E+04        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.73E+02            |
| Am-243  | 1.36E-01            |
| Cm-244  | 3.77E+02            |
| Cs-137  | 4.35E+03            |
| Np-237  | 1.55E-03            |
| Pu-238  | 2.52E+02            |
| Pu-239  | 2.30E+01            |
| Pu-240  | 4.60E+01            |
| Pu-241  | 4.49E+03            |
| Pu-242  | 1.50E-01            |
| Pu-244  | 4.30E-09            |
| Sr-90   | 2.30E+03            |
| Th-229  | 4.50E-05            |
| Th-230  | 5.43E-07            |
| Th-232  | 1.66E-05            |
| U-233   | 5.12E+00            |
| U-234   | 7.97E-02            |
| U-235   | 8.26E-04            |
| U-236   | 9.61E-04            |
| U-238   | 1.17E-02            |

**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

Waste Stream ID: **OR-RF-RH-HET-A**

**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           | 12/31/2023 |    |
| Stream Name | ORNL Reactor Fuels Research & Development RH-TRU Debris Waste |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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        |
| <b>Final Form Total</b>                    | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.59E+01        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 2.00E+01        |
| Cellulose                     | 4.74E+01        |
| Rubber                        | 0.00E+00        |
| Plastic                       | 1.41E+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   | 2.85E+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  | 1.63E-01            |
| Am-243  | 1.98E-04            |
| Cs-137  | 3.38E-04            |
| Np-237  | 1.49E-05            |
| Pu-238  | 2.95E-02            |
| Pu-239  | 1.24E-01            |
| Pu-240  | 6.14E-02            |
| Pu-241  | 1.26E+00            |
| Pu-242  | 1.82E-05            |
| Sr-90   | 2.76E-05            |
| Th-229  | 2.08E-03            |
| Th-230  | 8.49E-08            |
| Th-232  | 6.21E-11            |
| U-233   | 1.12E+00            |
| U-234   | 9.24E-03            |
| U-235   | 9.60E-08            |
| U-236   | 7.17E-07            |
| U-238   | 5.12E-08            |

Haz. Waste No(s).

D006, D007, D008, D009, D011, D019, F001, F002, F005

TRUCON Code(s)

325

Waste Stream Description

Waste consists of RH-TRU debris from reactor fuels R&D at ORNL

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           | 12/31/2023 |    |
| Stream Name | Contact-Handled Transuranic Sources at ORNL |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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    | 0.0        | 0.0        | 0.0        |
| <b>Final Form Total</b>      | <b>8.9</b> | <b>0.0</b> | <b>8.9</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.24E+03        |
| Aluminum-based Metal/Alloys   | 1.09E+01        |
| Other Metal/Alloys            | 3.91E+02        |
| Other Inorganic Materials     | 1.74E+02        |
| Cellulose                     | 6.52E+01        |
| Rubber                        | 1.09E+01        |
| Plastic                       | 2.82E+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 | 2.81E+01        |
| Packaging Material, Plastic   | 7.71E+00        |
| Packaging Material, Rubber    | 5.07E+00        |
| Packaging Material, Steel     | 1.25E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 7.24E+01            |
| Am-243  | 3.11E-03            |
| Cm-244  | 1.32E-01            |
| Cs-137  | 9.56E-03            |
| Np-237  | 7.47E-03            |
| Pu-238  | 2.12E+01            |
| Pu-239  | 8.60E+00            |
| Pu-240  | 2.03E+00            |
| Pu-241  | 1.26E+01            |
| Pu-242  | 3.04E-04            |
| Pu-244  | 5.90E-16            |
| Sr-90   | 3.37E-04            |
| Th-229  | 1.34E-07            |
| Th-230  | 4.10E-09            |
| Th-232  | 1.47E-17            |
| U-233   | 1.52E-02            |
| U-234   | 4.46E-03            |
| U-235   | 2.13E-04            |
| U-236   | 2.99E-06            |
| U-238   | 3.17E-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.

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           | 12/31/2023 |    |
| Stream Name | ORNL Solid Waste Storage Area 5 North 7802N Trench Area Debris Waste |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 0.6        | 0.0        | 0.6        |
| <b>Final Form Total</b>      | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

Waste Material Parameters

| Material Parameter            | 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  | 1.94E-01            |
| Am-243  | 1.90E-04            |
| Cm-244  | 2.92E-01            |
| Cs-137  | 1.29E-04            |
| Np-237  | 8.04E-05            |
| Pu-238  | 5.53E-05            |
| Pu-239  | 1.69E-03            |
| Pu-240  | 5.65E-04            |
| Pu-241  | 1.89E-03            |
| Pu-242  | 5.49E-08            |
| Sr-90   | 1.29E-04            |
| Th-229  | 1.50E-07            |
| Th-230  | 1.26E-10            |
| Th-232  | 4.11E-24            |
| U-233   | 1.71E-02            |
| U-234   | 1.37E-04            |
| U-235   | 1.66E-13            |
| U-236   | 1.67E-12            |
| U-238   | 8.52E-19            |

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

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           | 12/31/2023 |    |
| Stream Name | ORNL Solid Waste Storage Area 5 North 7802N Trench Area Soil Waste |                         |                                |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 2.7        | 0.0        | 2.7        |
| <b>Final Form Total</b>     | <b>2.7</b> | <b>0.0</b> | <b>2.7</b> |

**Waste Material Parameters**

| Material Parameter            | 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  | 1.73E-01            |
| Am-243  | 1.64E-04            |
| Cm-244  | 2.54E+01            |
| Cs-137  | 1.75E-05            |
| Np-237  | 7.70E-06            |
| Pu-238  | 1.18E-01            |
| Pu-239  | 7.27E-02            |
| Pu-240  | 2.48E-02            |
| Pu-241  | 1.89E-01            |
| Pu-242  | 1.05E-05            |
| Sr-90   | 1.75E-05            |
| Th-229  | 1.23E-06            |
| Th-230  | 1.23E-11            |
| Th-232  | 1.01E-06            |
| U-233   | 1.18E-12            |
| U-234   | 1.34E-05            |
| U-235   | 2.91E-07            |
| U-236   | 7.29E-11            |
| U-238   | 1.63E-16            |

**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

Waste Stream ID: **OR-TDYN-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           | 12/31/2023 |    |
| Stream Name | Teledyne Isotopes CH-TRU Waste          |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.66E+01        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 9.06E+01        |
| Cellulose                     | 5.33E+00        |
| Rubber                        | 5.33E+00        |
| Plastic                       | 5.33E+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    | 2.36E-01        |
| Packaging Material, Steel     | 5.44E+01        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.65E-04            |
| Cs-137  | 2.20E-07            |
| Np-237  | 1.19E-09            |
| Pu-238  | 6.79E-02            |
| Pu-239  | 6.00E-03            |
| Sr-90   | 2.17E-07            |
| Th-229  | 7.56E-18            |
| Th-230  | 1.29E-09            |
| U-233   | 2.57E-14            |
| U-234   | 1.50E-05            |
| U-235   | 5.91E-11            |

**Haz. Waste No(s).**

D008

**TRUCON Code(s)**

125/225

**Waste Stream Description**

Waste consists of CH-TRU debris from Teledyne Isotopes stored at ORNL

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           | 12/31/2023 |    |
| Stream Name | ER CH TRU Soils               |                         |                                |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 9.0        | 0.0        | 9.0        |
| <b>Final Form Total</b>     | <b>9.0</b> | <b>0.0</b> | <b>9.0</b> |

**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  | 1.82E-02            |
| Cs-137  | 2.26E+01            |
| Np-237  | 2.25E-03            |
| Pu-238  | 4.10E-01            |
| Pu-239  | 1.07E+00            |
| Pu-240  | 3.80E-03            |
| Pu-241  | 4.86E+00            |
| Pu-242  | 5.91E-04            |
| Sr-90   | 2.11E-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.



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           | 12/31/2023 |    |
| Stream Name | ER RH TRU Soils               |                         |                                |                       | Activities Decayed to CY | 2023       |    |

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

| 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        |
| <b>Final Form Total</b>                    | <b>10.1</b> | <b>0.0</b> | <b>10.1</b> |

**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  | 5.44E+00            |
| Cm-244  | 2.95E-01            |
| Cs-137  | 6.75E+00            |
| Np-237  | 8.06E-06            |
| Pu-238  | 1.24E-01            |
| Pu-239  | 1.42E+00            |
| Pu-240  | 7.98E-01            |
| Pu-241  | 1.13E+02            |
| Pu-242  | 7.61E-04            |
| Sr-90   | 2.01E+00            |
| Th-229  | 2.73E-04            |
| Th-230  | 9.39E-07            |
| Th-232  | 1.46E-17            |
| U-233   | 6.20E-01            |
| U-234   | 2.04E-02            |
| U-235   | 3.42E-04            |
| U-236   | 1.18E-07            |
| U-238   | 1.00E-02            |

No Hazardous Waste Numbers Provided

TRUCON Code(s)  
311

**Waste Stream Description**

This waste is made up of soils.

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           | 12/31/2023 |    |
| Stream Name | Radiochemical Processing Research and Development RH-TRU Waste |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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        |
| <b>Final Form Total</b>                    | <b>1.9</b> | <b>0.0</b> | <b>1.9</b> |

**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  | 2.15E-01            |
| Cm-244  | 3.38E-02            |
| Cs-137  | 6.55E-01            |
| Np-237  | 2.07E-07            |
| Pu-238  | 2.77E-02            |
| Pu-239  | 2.34E-01            |
| Pu-240  | 1.24E-01            |
| Pu-241  | 6.41E-01            |
| Pu-242  | 4.33E-04            |
| Sr-90   | 2.43E-01            |
| Th-229  | 1.83E-05            |
| Th-230  | 3.11E-08            |
| Th-232  | 8.16E-19            |
| U-233   | 6.92E-02            |
| U-234   | 1.13E-03            |
| U-235   | 3.98E-05            |
| U-236   | 1.10E-08            |
| 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

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           | 12/31/2023 |    |
| Stream Name | RH-TRU Non Mixed Debris Waste from 100-D           |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-30G1 w/ Liner    | 0.6        | 0.0        | 0.6        |
| <b>Final Form Total</b> | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

Waste Material Parameters

| Material Parameter            | 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  | 1.14E-02            |
| Am-243  | 1.34E-05            |
| Cs-137  | 3.53E-01            |
| Np-237  | 2.27E-06            |
| Pu-238  | 5.54E-03            |
| Pu-239  | 8.37E-03            |
| Pu-240  | 1.08E-02            |
| Pu-241  | 4.93E-01            |
| Pu-242  | 4.21E-06            |
| Sr-90   | 2.49E-01            |
| Th-229  | 5.17E-14            |
| Th-230  | 9.24E-12            |
| Th-232  | 9.54E-19            |
| U-233   | 1.07E-10            |
| U-234   | 1.80E-07            |
| U-235   | 2.19E-06            |
| U-236   | 3.51E-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.

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           | 12/31/2023 |    |
| Stream Name | 105-C, 105KE, and 105-N Bldg. TRU CH Mixed Debris  |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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         | 0.0        | 5.6         |
| <b>Final Form Total</b>     | <b>43.9</b> | <b>0.0</b> | <b>43.9</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 8.00E+03        |
| Aluminum-based Metal/Alloys   | 4.08E+02        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 2.65E+03        |
| Cellulose                     | 1.63E+03        |
| Rubber                        | 1.43E+03        |
| Plastic                       | 3.02E+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   | 1.41E+03        |
| Packaging Material, Rubber    | 2.26E+01        |
| Packaging Material, Steel     | 5.82E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.69E+00            |
| Cs-137  | 1.42E-01            |
| Np-237  | 6.93E-06            |
| Pu-238  | 2.68E-01            |
| Pu-239  | 1.47E+00            |
| Pu-240  | 7.05E-01            |
| Pu-241  | 1.26E+01            |
| Pu-242  | 3.18E-05            |
| Sr-90   | 2.68E-01            |
| Th-229  | 8.07E-14            |
| Th-230  | 2.07E-09            |
| Th-232  | 1.01E-16            |
| U-233   | 2.01E-10            |
| U-234   | 2.16E-05            |
| U-235   | 2.80E-07            |
| U-236   | 2.92E-07            |
| U-238   | 5.56E-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.

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  | 12/31/2023 |    |
| Stream Name | NLOP sludge  |                         |                       | Activities Decayed to CY |                 | 2023       |    |

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

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 69.1        | 0.0        | 69.1        |
| <b>Final Form Total</b>     | <b>69.1</b> | <b>0.0</b> | <b>69.1</b> |

Waste Material Parameters

| Material Parameter            | 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   | 2.54E+03        |
| Packaging Material, Rubber    | 3.88E+01        |
| Packaging Material, Steel     | 8.95E+03        |
| Packaging Material, Lead      | 0.00E+00        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 4.24E+01            |
| Cs-137  | 8.37E+01            |
| Np-237  | 7.75E-04            |
| Pu-238  | 4.20E+00            |
| Pu-239  | 2.31E+01            |
| Pu-240  | 1.27E+01            |
| Pu-241  | 2.94E+02            |
| Pu-242  | 6.06E-03            |
| Sr-90   | 4.10E+02            |
| Th-229  | 2.77E-11            |
| Th-230  | 5.64E-06            |
| Th-232  | 6.74E-14            |
| U-233   | 4.40E-08            |
| U-234   | 4.10E-02            |
| U-235   | 1.54E-03            |
| U-236   | 9.38E-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.

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           | 12/31/2023 |    |
| Stream Name | 105-C, 105KE, and 105-N Bldg RH-TRU Mixed Debris   |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |             |            |             |
|-------------------------|-------------|------------|-------------|
| Container Type          | Stored      | Proj.      | Total       |
| RH SCA-30G1 w/ Liner    | 65.2        | 8.3        | 73.5        |
| <b>Final Form Total</b> | <b>65.2</b> | <b>8.3</b> | <b>73.5</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.94E+04        |
| Aluminum-based Metal/Alloys   | 9.88E+02        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 6.42E+03        |
| Cellulose                     | 3.95E+03        |
| Rubber                        | 3.46E+03        |
| Plastic                       | 6.92E+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   | 6.36E+03        |
| Packaging Material, Rubber    | 7.88E+01        |
| Packaging Material, Steel     | 2.73E+05        |
| Packaging Material, Lead      | 2.88E+05        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.08E+01            |
| Cm-244  | 1.29E-02            |
| Cs-137  | 1.56E+02            |
| Np-237  | 5.78E-05            |
| Pu-238  | 2.29E+00            |
| Pu-239  | 8.81E+00            |
| Pu-240  | 4.71E+00            |
| Pu-241  | 5.51E+01            |
| Pu-242  | 1.31E-04            |
| Sr-90   | 7.41E+01            |
| Th-229  | 1.12E-12            |
| Th-230  | 5.30E-08            |
| Th-232  | 1.11E-15            |
| U-233   | 2.17E-09            |
| U-234   | 3.81E-04            |
| U-235   | 2.39E-05            |
| U-236   | 2.51E-06            |
| U-238   | 5.07E-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.

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           | 12/31/2023 |    |
| Stream Name | 105KE TRU RH Non-mixed solidified inorganics       |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |              |            |              |
|-------------------------|--------------|------------|--------------|
| Container Type          | Stored       | Proj.      | Total        |
| RH SCA-30G1 w/ Liner    | 129.5        | 0.0        | 129.5        |
| <b>Final Form Total</b> | <b>129.5</b> | <b>0.0</b> | <b>129.5</b> |

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   | 1.12E+04        |
| Packaging Material, Rubber    | 1.39E+02        |
| Packaging Material, Steel     | 4.81E+05        |
| Packaging Material, Lead      | 5.07E+05        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 7.47E+02            |
| Cs-137  | 2.79E+03            |
| Np-237  | 6.21E-02            |
| Pu-238  | 7.67E+01            |
| Pu-239  | 4.07E+02            |
| Pu-240  | 2.36E+02            |
| Pu-241  | 2.07E+03            |
| Pu-242  | 9.85E-02            |
| Sr-90   | 3.83E+03            |
| Th-229  | 3.26E-09            |
| Th-230  | 1.90E-04            |
| Th-232  | 1.30E-10            |
| U-233   | 4.42E-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.

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           | 12/31/2023 |    |
| Stream Name | 1706-KEL facility TRU RH Mixed Debris |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-30G1 w/ Liner    | 0.6        | 0.0        | 0.6        |
| <b>Final Form Total</b> | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

**Waste Material Parameters**

| Material Parameter            | 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   | 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  | 1.06E-02            |
| Cs-137  | 2.95E-03            |
| Np-237  | 4.16E-08            |
| Pu-238  | 1.56E-03            |
| Pu-239  | 6.89E-03            |
| Pu-240  | 3.88E-03            |
| Pu-241  | 6.14E-02            |
| Pu-242  | 1.56E-07            |
| Sr-90   | 2.63E-03            |
| Th-229  | 4.27E-16            |
| Th-230  | 3.67E-12            |
| Th-232  | 4.80E-19            |
| U-233   | 1.14E-12            |
| U-234   | 6.03E-08            |
| U-235   | 8.82E-11            |
| U-236   | 1.50E-09            |
| U-238   | 3.15E-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%.



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           | 12/31/2023 |    |
| Stream Name | Misc 200 Area TRU Mixed Debris |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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         | 323.4        | 329.0        |
| <b>Final Form Total</b>     | <b>96.4</b> | <b>323.4</b> | <b>419.7</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 3.69E+05        |
| Aluminum-based Metal/Alloys   | 8.34E+04        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 2.18E+04        |
| Cellulose                     | 1.60E+04        |
| Rubber                        | 5.52E+03        |
| Plastic                       | 2.19E+04        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 3.51E+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    | 1.15E+02        |
| Packaging Material, Steel     | 6.25E+04        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.76E+01            |
| Cs-137  | 3.96E-02            |
| Np-237  | 9.21E-05            |
| Pu-238  | 1.54E+00            |
| Pu-239  | 6.75E+00            |
| Pu-240  | 3.78E+00            |
| Pu-241  | 6.35E+01            |
| Pu-242  | 1.56E-04            |
| Sr-90   | 5.36E-03            |
| Th-229  | 1.63E-12            |
| Th-230  | 6.36E-09            |
| Th-232  | 7.98E-16            |
| U-233   | 3.31E-09            |
| U-234   | 7.93E-05            |
| U-235   | 2.38E-07            |
| U-236   | 1.90E-06            |
| U-238   | 1.84E-04            |

**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.

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           | 12/31/2023 |    |
| Stream Name | Soil from Groundwater projects and remediation activities |                         |                                |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |             |               |               |
|-----------------------------|-------------|---------------|---------------|
| Container Type              | Stored      | Proj.         | Total         |
| 55-gal Drum Dir Ld w/ Liner | 10.7        | 4846.6        | 4857.3        |
| SWB Dir Ld w/ Liner         | 0.0         | 135.4         | 135.4         |
| <b>Final Form Total</b>     | <b>10.7</b> | <b>4982.0</b> | <b>4992.7</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.07E+05        |
| Aluminum-based Metal/Alloys   | 6.84E+02        |
| Other Metal/Alloys            | 1.43E+05        |
| Other Inorganic Materials     | 7.51E+05        |
| Cellulose                     | 1.74E+05        |
| Rubber                        | 2.30E+03        |
| Plastic                       | 4.43E+04        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 7.67E+02        |
| Solidified Organic Material   | 7.44E+03        |
| Soil                          | 1.66E+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  | 2.87E+03            |
| Cs-137  | 3.69E+00            |
| Np-237  | 1.38E-02            |
| Pu-238  | 3.44E+01            |
| Pu-239  | 3.23E+02            |
| Pu-240  | 1.25E+02            |
| Pu-241  | 1.02E+03            |
| Pu-242  | 9.75E-03            |
| Pu-244  | 1.06E-08            |
| Sr-90   | 5.52E+01            |
| Th-229  | 4.55E-08            |
| Th-230  | 9.95E-05            |
| Th-232  | 4.32E-05            |
| U-233   | 4.01E-05            |
| U-234   | 6.73E-03            |
| U-235   | 5.49E-03            |
| U-236   | 3.29E-04            |
| U-238   | 8.67E-02            |

**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. Includes soils and debris from the 6652H building and the weather station.

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           | 12/31/2023 |    |
| Stream Name | Groundwater TRU RH Soils |                         |                                |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-30G1 w/ Liner    | 0.6        | 0.0        | 0.6        |
| <b>Final Form Total</b> | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

**Waste Material Parameters**

| Material Parameter            | 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   | 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  | 3.71E-04            |
| Cs-137  | 1.03E-04            |
| Np-237  | 9.68E-10            |
| Pu-239  | 1.70E-03            |
| Pu-240  | 1.70E-03            |
| Sr-90   | 4.11E-04            |
| Th-229  | 3.91E-18            |
| Th-230  | 1.43E-11            |
| Th-232  | 1.69E-18            |
| U-233   | 1.67E-14            |
| U-234   | 1.94E-07            |
| U-235   | 7.89E-09            |
| U-236   | 4.48E-09            |
| U-238   | 1.90E-07            |

No Hazardous Waste Numbers Provided

TRUCON Code(s)  
111/211

**Waste Stream Description**

RH soils from Groundwater projects.

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           | 12/31/2023 |    |
| Stream Name | 201C TRU Mixed Solid Inorganic |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 14.5        | 0.0        | 14.5        |
| <b>Final Form Total</b>     | <b>14.5</b> | <b>0.0</b> | <b>14.5</b> |

**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   | 5.32E+02        |
| Packaging Material, Rubber    | 8.14E+00        |
| Packaging Material, Steel     | 1.88E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 2.79E+01            |
| Cs-137  | 2.04E+00            |
| Np-237  | 1.09E-04            |
| Pu-238  | 8.45E-04            |
| Pu-239  | 1.88E+00            |
| Pu-240  | 4.63E-01            |
| Pu-241  | 2.64E-02            |
| Pu-242  | 6.76E-07            |
| Sr-90   | 5.20E+01            |
| Th-229  | 1.00E-12            |
| Th-230  | 1.47E-11            |
| Th-232  | 4.87E-17            |
| U-233   | 2.84E-09            |
| U-234   | 2.65E-07            |
| U-235   | 2.22E-08            |
| U-236   | 1.65E-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.

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           | 12/31/2023 |    |
| Stream Name | 202S TRU Mixed Debris   |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |            |             |             |
|-----------------------------|------------|-------------|-------------|
| Container Type              | Stored     | Proj.       | Total       |
| 55-gal Drum Dir Ld w/ Liner | 1.3        | 45.4        | 46.6        |
| <b>Final Form Total</b>     | <b>1.3</b> | <b>45.4</b> | <b>46.6</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.05E+02        |
| Aluminum-based Metal/Alloys   | 3.51E+01        |
| Other Metal/Alloys            | 2.95E+01        |
| Other Inorganic Materials     | 0.00E+00        |
| Cellulose                     | 1.28E+02        |
| Rubber                        | 2.95E+01        |
| Plastic                       | 2.04E+03        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 1.38E+02        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 1.71E+03        |
| Packaging Material, Rubber    | 2.62E+01        |
| Packaging Material, Steel     | 6.04E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.86E+00            |
| Cs-137  | 3.23E-06            |
| Np-237  | 7.84E-05            |
| Pu-238  | 3.79E-01            |
| Pu-239  | 2.42E+00            |
| Pu-240  | 9.05E-01            |
| Pu-241  | 3.28E+00            |
| Pu-242  | 1.04E-04            |
| Sr-90   | 2.87E-06            |
| Th-229  | 2.35E-12            |
| Th-230  | 8.90E-10            |
| Th-232  | 1.12E-16            |
| U-233   | 4.18E-09            |
| U-234   | 1.46E-05            |
| U-235   | 3.10E-08            |
| U-236   | 3.48E-07            |
| U-238   | 2.10E-13            |

**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.

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           | 12/31/2023 |    |
| Stream Name | 209E TRU Mixed Debris    |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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         | 92.1         | 0.0        | 92.1         |
| <b>Final Form Total</b>     | <b>106.4</b> | <b>0.0</b> | <b>106.4</b> |

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   | 6.36E+02        |
| Packaging Material, Rubber    | 2.58E+01        |
| Packaging Material, Steel     | 1.61E+04        |
| Packaging Material, Lead      | 0.00E+00        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 2.75E+03            |
| Cs-137  | 4.10E-06            |
| Np-237  | 3.18E-02            |
| Pu-238  | 4.92E+02            |
| Pu-239  | 3.83E+03            |
| Pu-240  | 1.40E+03            |
| Pu-241  | 9.11E+03            |
| Pu-242  | 2.05E-01            |
| Sr-90   | 3.65E-06            |
| Th-229  | 6.78E-10            |
| Th-230  | 9.51E-06            |
| Th-232  | 1.47E-13            |
| U-233   | 1.38E-06            |
| U-234   | 9.48E-02            |
| U-235   | 2.87E-03            |
| U-236   | 4.96E-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.

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           | 12/31/2023 |    |
| Stream Name | 209E TRU RH Mixed Debris |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-30G1 w/ Liner    | 0.6        | 0.0        | 0.6        |
| <b>Final Form Total</b> | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

**Waste Material Parameters**

| Material Parameter            | 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   | 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  | 2.71E+00            |
| Np-237  | 3.17E-05            |
| Pu-238  | 4.77E-01            |
| Pu-239  | 3.49E+00            |
| Pu-240  | 1.22E+00            |
| Pu-241  | 6.94E+00            |
| Pu-242  | 1.52E-04            |
| Th-229  | 1.10E-12            |
| Th-230  | 1.72E-09            |
| Th-232  | 2.28E-16            |
| U-233   | 1.72E-09            |
| U-234   | 2.29E-05            |
| U-235   | 5.50E-08            |
| U-236   | 5.79E-07            |
| U-238   | 3.78E-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.

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           | 12/31/2023 |    |
| Stream Name | 216-Z-9 TRU Mixed Soil                             |                         |                                |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 227.6        | 0.0        | 227.6        |
| <b>Final Form Total</b>     | <b>227.6</b> | <b>0.0</b> | <b>227.6</b> |

**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   | 8.36E+03        |
| Packaging Material, Rubber    | 1.28E+02        |
| Packaging Material, Steel     | 2.95E+04        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.51E+03            |
| Np-237  | 5.93E-03            |
| Pu-238  | 3.43E+02            |
| Pu-239  | 4.49E+03            |
| Pu-240  | 1.06E+03            |
| Pu-241  | 9.33E+03            |
| Pu-242  | 6.32E-02            |
| Th-229  | 6.03E-11            |
| Th-230  | 6.82E-07            |
| Th-232  | 1.11E-13            |
| U-233   | 1.62E-07            |
| U-234   | 1.22E-02            |
| U-235   | 5.31E-05            |
| U-236   | 3.76E-04            |
| U-238   | 1.18E-10            |

**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.



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           | 12/31/2023 |    |
| Stream Name | 221U Solidified sludge                             |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | 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  | 1.27E-04            |
| Cs-137  | 2.36E-04            |
| Np-237  | 4.73E-10            |
| Pu-238  | 1.46E-05            |
| Pu-239  | 6.79E-04            |
| Pu-240  | 1.55E-04            |
| Pu-241  | 5.43E-04            |
| Pu-242  | 1.32E-08            |
| Sr-90   | 2.11E-04            |
| Th-229  | 4.20E-18            |
| Th-230  | 2.91E-14            |
| Th-232  | 1.63E-20            |
| U-233   | 1.20E-14            |
| U-234   | 5.20E-10            |
| U-235   | 8.02E-12            |
| U-236   | 5.50E-11            |
| U-238   | 2.46E-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.

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           | 12/31/2023 |    |
| Stream Name | U Plant Tank 10 Waste   |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |             |            |             |
|-------------------------|-------------|------------|-------------|
| Container Type          | Stored      | Proj.      | Total       |
| RH SCA-30G1 w/ Liner    | 12.8        | 0.0        | 12.8        |
| <b>Final Form Total</b> | <b>12.8</b> | <b>0.0</b> | <b>12.8</b> |

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   | 1.10E+03        |
| Packaging Material, Rubber    | 1.37E+01        |
| Packaging Material, Steel     | 4.74E+04        |
| Packaging Material, Lead      | 5.00E+04        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 2.48E+01            |
| Am-243  | 2.11E-06            |
| Cm-244  | 4.62E-01            |
| Cs-137  | 3.97E+02            |
| Np-237  | 6.30E-02            |
| Pu-238  | 5.97E+00            |
| Pu-239  | 4.86E+01            |
| Pu-240  | 1.38E+01            |
| Pu-241  | 3.76E+02            |
| Pu-242  | 1.40E-03            |
| Sr-90   | 3.00E+02            |
| Th-229  | 3.32E-09            |
| Th-230  | 3.24E-05            |
| Th-232  | 9.46E-06            |
| U-233   | 4.60E-06            |
| U-234   | 2.52E-01            |
| U-235   | 2.64E-04            |
| U-236   | 5.72E-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.

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  | 12/31/2023 |    |
| Stream Name | 222S TRU Mixed Debris    |                         |                            | Activities Decayed to CY |                 | 2023       |    |

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

| Final Form Volumes          |             |             |             |
|-----------------------------|-------------|-------------|-------------|
| Container Type              | Stored      | Proj.       | Total       |
| 55-gal Drum Dir Ld w/ Liner | 68.0        | 20.2        | 88.2        |
| SWB Dir Ld w/ Liner         | 5.6         | 0.0         | 5.6         |
| <b>Final Form Total</b>     | <b>73.7</b> | <b>20.2</b> | <b>93.8</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 8.19E+04        |
| Aluminum-based Metal/Alloys   | 1.62E+04        |
| Other Metal/Alloys            | 1.93E+00        |
| Other Inorganic Materials     | 5.45E+03        |
| Cellulose                     | 8.28E+03        |
| Rubber                        | 3.27E+03        |
| Plastic                       | 9.19E+03        |
| Cement                        | 3.46E+00        |
| Solidified Inorganic Material | 3.18E+00        |
| Solidified Organic Material   | 9.50E-01        |
| Soil                          | 1.37E+03        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 3.25E+03        |
| Packaging Material, Rubber    | 5.06E+01        |
| Packaging Material, Steel     | 1.23E+04        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.86E+01            |
| Am-243  | 3.11E-05            |
| Cs-137  | 9.24E-02            |
| Np-237  | 3.01E-03            |
| Pu-238  | 1.55E+00            |
| Pu-239  | 8.22E+00            |
| Pu-240  | 4.00E+00            |
| Pu-241  | 6.63E+01            |
| Pu-242  | 2.43E-04            |
| Sr-90   | 8.23E-02            |
| Th-229  | 2.69E-05            |
| Th-230  | 4.97E-09            |
| Th-232  | 4.93E-16            |
| U-233   | 2.35E-02            |
| U-234   | 7.12E-05            |
| U-235   | 5.19E-07            |
| U-236   | 1.54E-06            |
| U-238   | 1.03E-02            |

**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.

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           | 12/31/2023 |    |
| Stream Name | 222S TRU RH Mixed Debris |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-30G1 w/ Liner    | 3.5        | 0.0        | 3.5        |
| <b>Final Form Total</b> | <b>3.5</b> | <b>0.0</b> | <b>3.5</b> |

**Waste Material Parameters**

| Material Parameter            | 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   | 3.05E+02        |
| Packaging Material, Rubber    | 3.78E+00        |
| Packaging Material, Steel     | 1.31E+04        |
| Packaging Material, Lead      | 1.38E+04        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.70E-01            |
| Am-243  | 1.89E-02            |
| Cs-137  | 1.52E-01            |
| Np-237  | 2.07E-03            |
| Pu-238  | 3.93E-02            |
| Pu-239  | 4.67E+00            |
| Pu-240  | 1.20E-01            |
| Pu-241  | 6.39E+00            |
| Pu-242  | 4.17E-04            |
| Pu-244  | 1.73E-06            |
| Sr-90   | 2.47E-01            |
| Th-229  | 4.87E-04            |
| Th-230  | 1.62E-10            |
| Th-232  | 2.53E-17            |
| U-233   | 3.26E-01            |
| U-234   | 2.03E-06            |
| U-235   | 7.95E-06            |
| U-236   | 6.03E-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.

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           | 12/31/2023 |    |
| Stream Name | 231-Z TRU Mixed Debris   |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |              |             |              |
|-----------------------------|--------------|-------------|--------------|
| Container Type              | Stored       | Proj.       | Total        |
| 55-gal Drum Dir Ld w/ Liner | 175.8        | 4.2         | 180.0        |
| SWB Dir Ld w/ Liner         | 342.2        | 28.2        | 370.4        |
| <b>Final Form Total</b>     | <b>517.9</b> | <b>32.4</b> | <b>550.3</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.67E+05        |
| Aluminum-based Metal/Alloys   | 7.23E+02        |
| Other Metal/Alloys            | 2.69E+03        |
| Other Inorganic Materials     | 2.54E+04        |
| Cellulose                     | 3.28E+04        |
| Rubber                        | 6.02E+03        |
| Plastic                       | 4.31E+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   | 7.05E+03        |
| Packaging Material, Rubber    | 1.73E+02        |
| Packaging Material, Steel     | 8.04E+04        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.68E+02            |
| Am-243  | 5.65E-05            |
| Cs-137  | 1.89E-02            |
| Np-237  | 7.71E-03            |
| Pu-238  | 5.83E+01            |
| Pu-239  | 5.00E+02            |
| Pu-240  | 1.59E+02            |
| Pu-241  | 1.99E+03            |
| Pu-242  | 1.36E-02            |
| Sr-90   | 1.66E-02            |
| Th-229  | 2.16E-10            |
| Th-230  | 7.37E-06            |
| Th-232  | 9.62E-05            |
| U-233   | 3.91E-07            |
| U-234   | 6.27E-02            |
| U-235   | 1.16E-03            |
| U-236   | 6.14E-05            |
| U-238   | 4.87E-02            |

**Haz. Waste No(s).**

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D034, D035, D037, 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.

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  | 12/31/2023 |    |
| Stream Name | 231Z TRU Mixed Solid Inorganic |                         |                       | Activities Decayed to CY |                 | 2023       |    |

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

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

Waste Material Parameters

| Material Parameter            | 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  | 1.61E-06            |
| Pu-238  | 7.55E-05            |
| Pu-239  | 3.09E-01            |
| Pu-240  | 1.07E-01            |
| Pu-241  | 7.29E-02            |
| Pu-242  | 9.52E-06            |
| Th-229  | 1.94E-13            |
| Th-230  | 2.40E-12            |
| Th-232  | 1.51E-16            |
| U-233   | 1.52E-10            |
| U-234   | 1.12E-08            |
| U-235   | 1.34E-08            |
| U-236   | 1.39E-07            |
| U-238   | 6.50E-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.

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           | 12/31/2023 |    |
| Stream Name | 233S TRU Mixed Debris   |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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        |
| <b>Final Form Total</b>     | <b>44.1</b> | <b>0.0</b> | <b>44.1</b> |

**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  | 1.47E+01            |
| Cs-137  | 2.21E-03            |
| Np-237  | 3.07E-03            |
| Pu-238  | 2.11E+00            |
| Pu-239  | 1.59E+01            |
| Pu-240  | 7.14E+00            |
| Pu-241  | 6.74E+01            |
| Pu-242  | 1.46E-03            |
| Sr-90   | 1.97E-03            |
| Th-229  | 9.73E-11            |
| Th-230  | 8.62E-09            |
| Th-232  | 8.81E-16            |
| U-233   | 1.71E-07            |
| U-234   | 1.12E-04            |
| U-235   | 1.23E-06            |
| U-236   | 2.75E-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.

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           | 12/31/2023 |    |
| Stream Name | 233S solidified inorganic waste |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 5.3        | 0.0        | 5.3        |
| <b>Final Form Total</b>     | <b>5.3</b> | <b>0.0</b> | <b>5.3</b> |

**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   | 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  | 3.88E-01            |
| Cs-137  | 4.57E-06            |
| Np-237  | 3.13E-04            |
| Pu-238  | 8.37E-02            |
| Pu-239  | 3.65E-01            |
| Pu-240  | 1.47E-01            |
| Pu-241  | 4.51E-01            |
| Pu-242  | 9.33E-05            |
| Sr-90   | 3.74E-06            |
| Th-229  | 1.16E-11            |
| Th-230  | 2.29E-10            |
| Th-232  | 2.11E-17            |
| U-233   | 1.89E-08            |
| U-234   | 3.50E-06            |
| U-235   | 5.03E-09            |
| U-236   | 6.09E-08            |
| U-238   | 2.03E-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



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           | 12/31/2023 |    |
| Stream Name | 300 Area TRU Mixed Debris |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 30.0        | 0.0        | 30.0        |
| SWB Dir Ld w/ Liner         | 20.7        | 0.0        | 20.7        |
| <b>Final Form Total</b>     | <b>50.7</b> | <b>0.0</b> | <b>50.7</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 4.95E+03        |
| Aluminum-based Metal/Alloys   | 5.20E+01        |
| Other Metal/Alloys            | 6.21E+03        |
| Other Inorganic Materials     | 1.93E+03        |
| Cellulose                     | 1.81E+03        |
| Rubber                        | 1.23E+02        |
| Plastic                       | 1.54E+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   | 1.13E+03        |
| Packaging Material, Rubber    | 2.09E+01        |
| Packaging Material, Steel     | 7.08E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.28E+02            |
| Am-243  | 3.35E-02            |
| Cm-244  | 2.70E+00            |
| Cs-137  | 1.53E+02            |
| Np-237  | 4.49E-03            |
| Pu-238  | 5.47E+01            |
| Pu-239  | 1.83E+02            |
| Pu-240  | 1.56E+02            |
| Pu-241  | 2.46E+03            |
| Pu-242  | 1.09E-01            |
| Sr-90   | 1.75E-02            |
| Th-229  | 7.97E-05            |
| Th-230  | 9.13E-06            |
| Th-232  | 6.39E-03            |
| U-233   | 7.56E-02            |
| U-234   | 5.01E-02            |
| U-235   | 1.89E-03            |
| U-236   | 5.53E-05            |
| U-238   | 3.71E-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.

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           | 12/31/2023 |    |
| Stream Name | 300 Area Mixed Solidified Inorganics |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 5.5        | 0.0        | 5.5        |
| <b>Final Form Total</b>     | <b>5.5</b> | <b>0.0</b> | <b>5.5</b> |

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   | 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  | 1.34E+01            |
| Cs-137  | 1.64E-03            |
| Np-237  | 1.21E-04            |
| Pu-238  | 2.60E+00            |
| Pu-239  | 1.50E+01            |
| Pu-240  | 7.67E+00            |
| Pu-241  | 6.84E+01            |
| Pu-242  | 1.27E-03            |
| Sr-90   | 2.01E-03            |
| Th-229  | 2.40E-12            |
| Th-230  | 2.50E-08            |
| Th-232  | 8.07E-16            |
| U-233   | 4.98E-09            |
| U-234   | 2.72E-04            |
| U-235   | 6.46E-06            |
| U-236   | 2.72E-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.

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           | 12/31/2023 |    |
| Stream Name | 300 Area TRU RH Mixed and Non-Mixed Debris         |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |              |            |              |
|-------------------------|--------------|------------|--------------|
| Container Type          | Stored       | Proj.      | Total        |
| RH SCA-30G1 w/ Liner    | 161.7        | 0.0        | 161.7        |
| <b>Final Form Total</b> | <b>161.7</b> | <b>0.0</b> | <b>161.7</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.99E+04        |
| Aluminum-based Metal/Alloys   | 2.44E-02        |
| Other Metal/Alloys            | 1.56E+00        |
| Other Inorganic Materials     | 3.86E+04        |
| Cellulose                     | 7.23E+02        |
| Rubber                        | 5.74E-01        |
| Plastic                       | 5.38E+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   | 1.40E+04        |
| Packaging Material, Rubber    | 1.73E+02        |
| Packaging Material, Steel     | 6.01E+05        |
| Packaging Material, Lead      | 6.34E+05        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.04E+03            |
| Am-243  | 3.42E+00            |
| Cm-244  | 4.16E+02            |
| Cs-137  | 1.46E+05            |
| Np-237  | 2.74E-02            |
| Pu-238  | 2.46E+02            |
| Pu-239  | 6.78E+01            |
| Pu-240  | 7.83E+01            |
| Pu-241  | 3.82E+03            |
| Pu-242  | 2.66E-01            |
| Pu-244  | 2.97E-11            |
| Sr-90   | 8.52E+04            |
| Th-229  | 2.03E-04            |
| Th-230  | 8.97E-06            |
| Th-232  | 1.01E-11            |
| U-233   | 1.77E-01            |
| U-234   | 7.97E-02            |
| U-235   | 7.02E-02            |
| U-236   | 1.57E-02            |
| U-238   | 4.48E-02            |

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

Waste Stream Description

Typically, drums contain both combustible and noncombustible waste items. Combustible waste may include wood, plastics, paper, and rags. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids. If present, boxes typically contain larger waste items (e.g., whole or sectioned glove boxes, ducting, and process vessels). Both drums and boxes may be used for disposal of high-efficiency particulate air filters.

Waste Stream ID: **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           | 12/31/2023 |    |
| Stream Name | 308 TRU Mixed Debris    |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 35.3         | 0.0        | 35.3         |
| SWB Dir Ld w/ Liner         | 308.3        | 0.0        | 308.3        |
| <b>Final Form Total</b>     | <b>343.6</b> | <b>0.0</b> | <b>343.6</b> |

**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   | 1.67E+03        |
| Packaging Material, Rubber    | 7.94E+01        |
| Packaging Material, Steel     | 5.21E+04        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 2.12E+04            |
| Am-243  | 1.85E-03            |
| Cs-137  | 1.44E-01            |
| Np-237  | 8.31E-02            |
| Pu-238  | 5.45E+03            |
| Pu-239  | 9.47E+03            |
| Pu-240  | 6.13E+03            |
| Pu-241  | 7.47E+04            |
| Pu-242  | 5.80E+00            |
| Sr-90   | 1.29E-01            |
| Th-229  | 7.89E-05            |
| Th-230  | 2.65E-05            |
| Th-232  | 5.30E-04            |
| U-233   | 7.48E-02            |
| U-234   | 3.35E-01            |
| U-235   | 1.41E-02            |
| U-236   | 2.18E-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.

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  | 12/31/2023 |    |
| Stream Name | 308 Building TRU Solid Inorganics |                         |                       | Activities Decayed to CY |                 | 2023       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | 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  | 2.84E-06            |
| Pu-238  | 4.36E-02            |
| Pu-239  | 3.34E-01            |
| Pu-240  | 1.27E-01            |
| Pu-241  | 3.69E-01            |
| Pu-242  | 1.53E-05            |
| Th-229  | 2.24E-13            |
| Th-230  | 8.89E-10            |
| Th-232  | 1.20E-16            |
| U-233   | 2.16E-10            |
| U-234   | 5.13E-06            |
| U-235   | 1.18E-08            |
| U-236   | 1.35E-07            |
| U-238   | 8.57E-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.

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           | 12/31/2023 |    |
| Stream Name | 325 TRU Mixed and Non-Mixed Debris |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |              |             |              |
|-----------------------------|--------------|-------------|--------------|
| Container Type              | Stored       | Proj.       | Total        |
| 55-gal Drum Dir Ld w/ Liner | 680.2        | 48.7        | 728.9        |
| SWB Dir Ld w/ Liner         | 148.5        | 37.6        | 186.1        |
| <b>Final Form Total</b>     | <b>828.7</b> | <b>86.3</b> | <b>915.0</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 4.78E+04        |
| Aluminum-based Metal/Alloys   | 1.81E+02        |
| Other Metal/Alloys            | 5.35E+03        |
| Other Inorganic Materials     | 1.59E+04        |
| Cellulose                     | 8.45E+03        |
| Rubber                        | 2.28E+03        |
| Plastic                       | 1.54E+04        |
| Cement                        | 5.77E+02        |
| Solidified Inorganic Material | 4.56E+01        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 2.25E+02        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 2.70E+04        |
| Packaging Material, Rubber    | 4.46E+02        |
| Packaging Material, Steel     | 1.23E+05        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 5.95E+02            |
| Am-243  | 1.30E-01            |
| Cm-244  | 2.57E+01            |
| Cs-137  | 8.61E+00            |
| Np-237  | 4.86E-02            |
| Pu-238  | 6.56E+02            |
| Pu-239  | 5.72E+02            |
| Pu-240  | 2.48E+02            |
| Pu-241  | 5.08E+03            |
| Pu-242  | 3.64E-02            |
| Pu-244  | 1.35E-11            |
| Sr-90   | 2.45E+01            |
| Th-229  | 2.45E-04            |
| Th-230  | 4.84E-05            |
| Th-232  | 8.20E-03            |
| U-233   | 1.60E-01            |
| U-234   | 8.83E-01            |
| U-235   | 2.54E-02            |
| U-236   | 4.98E-05            |
| U-238   | 5.38E-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.

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  | 12/31/2023 |    |
| Stream Name | 325 TRU Mixed Solid Inorganic |                         |                       | Activities Decayed to CY |                 | 2023       |    |

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

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 22.9        | 6.3        | 29.2        |
| <b>Final Form Total</b>     | <b>22.9</b> | <b>6.3</b> | <b>29.2</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.58E+02        |
| Aluminum-based Metal/Alloys   | 4.63E+01        |
| Other Metal/Alloys            | 7.01E+02        |
| Other Inorganic Materials     | 2.09E+03        |
| Cellulose                     | 9.17E+01        |
| Rubber                        | 5.46E+01        |
| Plastic                       | 1.08E+03        |
| Cement                        | 4.56E+03        |
| Solidified Inorganic Material | 1.31E+03        |
| Solidified Organic Material   | 2.12E+03        |
| Soil                          | 4.51E+02        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 1.07E+03        |
| Packaging Material, Rubber    | 1.64E+01        |
| Packaging Material, Steel     | 3.78E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 6.20E+01            |
| Am-243  | 1.83E-01            |
| Cm-244  | 5.00E+01            |
| Cs-137  | 2.28E-01            |
| Np-237  | 7.92E-03            |
| Pu-238  | 1.54E+01            |
| Pu-239  | 5.04E+01            |
| Pu-240  | 2.11E+01            |
| Pu-241  | 4.21E+02            |
| Pu-242  | 4.63E-03            |
| Pu-244  | 4.60E-12            |
| Sr-90   | 9.75E-01            |
| Th-229  | 2.73E-06            |
| Th-230  | 1.76E-06            |
| Th-232  | 1.05E-04            |
| U-233   | 3.74E-05            |
| U-234   | 1.62E-02            |
| U-235   | 5.41E-04            |
| U-236   | 7.81E-06            |
| U-238   | 8.84E-03            |

**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.

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           | 12/31/2023 |    |
| Stream Name | 325 TRU RH Mixed and Non-Mixed Debris |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |              |             |              |
|-------------------------|--------------|-------------|--------------|
| Container Type          | Stored       | Proj.       | Total        |
| RH SCA-30G1 w/ Liner    | 169.7        | 64.2        | 234.0        |
| <b>Final Form Total</b> | <b>169.7</b> | <b>64.2</b> | <b>234.0</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.39E+04        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 2.85E+04        |
| Cellulose                     | 1.44E+03        |
| Rubber                        | 2.63E+02        |
| Plastic                       | 2.84E+03        |
| Cement                        | 2.83E+03        |
| Solidified Inorganic Material | 0.00E+00        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 1.30E+01        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 2.02E+04        |
| Packaging Material, Rubber    | 2.51E+02        |
| Packaging Material, Steel     | 8.70E+05        |
| Packaging Material, Lead      | 9.17E+05        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.82E+02            |
| Am-243  | 8.44E-01            |
| Cm-244  | 4.84E+01            |
| Cs-137  | 6.58E+02            |
| Np-237  | 1.29E-01            |
| Pu-238  | 7.72E+02            |
| Pu-239  | 7.51E+01            |
| Pu-240  | 4.26E+01            |
| Pu-241  | 2.03E+03            |
| Pu-242  | 5.50E-02            |
| Sr-90   | 2.64E+03            |
| Th-229  | 2.17E-04            |
| Th-230  | 4.61E-06            |
| Th-232  | 1.33E-03            |
| U-233   | 2.74E-01            |
| U-234   | 6.58E-02            |
| U-235   | 2.32E-03            |
| U-236   | 1.44E-03            |
| U-238   | 4.88E-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.



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           | 12/31/2023 |    |
| Stream Name | B325 Solidified sludges  |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-30G1 w/ Liner    | 3.4        | 0.0        | 3.4        |
| <b>Final Form Total</b> | <b>3.4</b> | <b>0.0</b> | <b>3.4</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 3.51E+00        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 3.21E+01        |
| Other Inorganic Materials     | 8.57E+01        |
| Cellulose                     | 1.07E+01        |
| Rubber                        | 2.08E+00        |
| Plastic                       | 1.25E+01        |
| Cement                        | 8.55E+01        |
| Solidified Inorganic Material | 2.50E+01        |
| Solidified Organic Material   | 1.12E+01        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 2.95E+02        |
| Packaging Material, Rubber    | 3.66E+00        |
| Packaging Material, Steel     | 1.27E+04        |
| Packaging Material, Lead      | 1.34E+04        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.78E+00            |
| Am-243  | 8.86E-03            |
| Cm-244  | 6.63E-01            |
| Cs-137  | 8.07E+01            |
| Np-237  | 1.37E-04            |
| Pu-238  | 8.11E-01            |
| Pu-239  | 3.56E-01            |
| Pu-240  | 3.30E-01            |
| Pu-241  | 1.70E+01            |
| Pu-242  | 9.53E-04            |
| Pu-244  | 2.94E-13            |
| Sr-90   | 7.15E+02            |
| Th-229  | 2.06E-09            |
| Th-230  | 9.35E-08            |
| Th-232  | 4.21E-09            |
| U-233   | 9.10E-08            |
| U-234   | 1.14E-03            |
| U-235   | 3.63E-05            |
| U-236   | 1.88E-04            |
| U-238   | 8.37E-04            |

**Haz. Waste No(s).**

|   |
|---|
| D004, D005, D006,<br>D007, D008, D009,<br>D010, D011, D018,<br>D019, D028, D029,<br>D030, D033, D034,<br>D036, D038, D039,<br>D040, D043, F001,<br>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.

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           | 12/31/2023 |    |
| Stream Name | 618 - 10&11 Burial Grounds TRU Mixed Debris        |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

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

Waste Material Parameters

| Material Parameter            | 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  | 3.08E+00            |
| Am-243  | 4.35E-04            |
| Cs-137  | 8.93E-02            |
| Np-237  | 3.88E-04            |
| Pu-238  | 1.15E+00            |
| Pu-239  | 6.54E+00            |
| Pu-240  | 2.52E+00            |
| Pu-241  | 1.50E+01            |
| Pu-242  | 2.90E-04            |
| Sr-90   | 1.04E-01            |
| Th-229  | 3.54E-12            |
| Th-230  | 7.56E-10            |
| Th-232  | 9.03E-17            |
| U-233   | 1.15E-08            |
| U-234   | 2.33E-05            |
| U-235   | 9.63E-05            |
| U-236   | 5.23E-07            |
| 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

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           | 12/31/2023 |    |
| Stream Name | 618 - 10&11 Burial Grounds TRU RH Mixed Debris     |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-30G3 w/ Liner    | 0.4        | 0.0        | 0.4        |
| <b>Final Form Total</b> | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.07E+02        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 1.12E+01        |
| Other Inorganic Materials     | 3.92E+02        |
| Cellulose                     | 5.30E+01        |
| Rubber                        | 1.00E+01        |
| Plastic                       | 1.50E+01        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 0.00E+00        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 1.07E+02        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 3.74E+01        |
| Packaging Material, Rubber    | 3.36E-01        |
| Packaging Material, Steel     | 3.70E+03        |
| Packaging Material, Lead      | 6.79E+03        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.40E+00            |
| Cs-137  | 2.89E+02            |
| Np-237  | 3.16E-06            |
| Pu-238  | 2.14E-01            |
| Pu-239  | 1.23E+00            |
| Pu-240  | 4.72E-01            |
| Pu-241  | 2.50E+00            |
| Sr-90   | 3.35E+02            |
| Th-229  | 9.71E-15            |
| Th-230  | 1.43E-10            |
| Th-232  | 1.69E-17            |
| U-233   | 4.74E-11            |
| U-234   | 4.41E-06            |
| U-235   | 1.84E-04            |
| U-236   | 9.79E-08            |
| 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.

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           | 12/31/2023 |    |
| Stream Name | Argonne Nat Lab TRU Mixed Debris |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 13.9        | 0.0        | 13.9        |
| <b>Final Form Total</b>     | <b>13.9</b> | <b>0.0</b> | <b>13.9</b> |

**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  | 6.35E+01            |
| Cs-137  | 6.40E-07            |
| Np-237  | 7.18E-04            |
| Pu-238  | 2.10E+02            |
| Pu-239  | 4.56E+01            |
| Pu-240  | 2.32E+01            |
| Pu-241  | 1.29E+02            |
| Pu-242  | 8.11E-04            |
| Sr-90   | 5.61E-07            |
| Th-229  | 6.25E-11            |
| Th-230  | 1.30E-05            |
| Th-232  | 1.45E-05            |
| U-233   | 5.71E-08            |
| U-234   | 4.98E-02            |
| U-235   | 1.07E-03            |
| U-236   | 2.62E-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).

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           | 12/31/2023 |    |
| Stream Name | Bartlesville RH-TRU Debris                         |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-30G1 w/ Liner    | 0.6        | 0.0        | 0.6        |
| <b>Final Form Total</b> | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

**Waste Material Parameters**

| Material Parameter            | 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   | 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  | 4.38E-01            |
| Np-237  | 6.16E-06            |
| Pu-238  | 3.89E-07            |
| Pu-239  | 3.38E-06            |
| Pu-240  | 1.63E-06            |
| Pu-241  | 2.47E-06            |
| Pu-242  | 4.72E-10            |
| Th-229  | 7.04E-13            |
| Th-230  | 1.11E-14            |
| Th-232  | 2.11E-21            |
| U-233   | 5.69E-10            |
| U-234   | 5.47E-11            |
| U-235   | 1.40E-13            |
| U-236   | 2.03E-12            |
| U-238   | 3.08E-18            |

No Hazardous Waste Numbers Provided

TRUCON Code(s)  
125/225

**Waste Stream Description**

Drums contains noncombustible waste items. Noncombustible waste items may include metals, glass, concrete, and absorbed liquids.

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           | 12/31/2023 |    |
| Stream Name | Battelle Columbus TRU Mixed Debris                 |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 18.9        | 0.0        | 18.9        |
| SWB Dir Ld w/ Liner         | 9.4         | 0.0        | 9.4         |
| <b>Final Form Total</b>     | <b>28.3</b> | <b>0.0</b> | <b>28.3</b> |

**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   | 7.05E+02        |
| Packaging Material, Rubber    | 1.24E+01        |
| Packaging Material, Steel     | 3.90E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.58E+01            |
| Np-237  | 1.13E-03            |
| Pu-238  | 8.36E+01            |
| Pu-239  | 1.49E+01            |
| Pu-240  | 6.68E+00            |
| Pu-241  | 1.12E+02            |
| Pu-242  | 3.22E-04            |
| Th-229  | 3.50E-11            |
| Th-230  | 2.53E-06            |
| Th-232  | 4.04E-06            |
| U-233   | 6.18E-08            |
| U-234   | 2.28E-02            |
| U-235   | 6.82E-04            |
| U-236   | 2.57E-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.

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           | 12/31/2023 |    |
| Stream Name | BATCO TRU RH Mixed and Non-Mixed Debris            |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |             |            |             |
|-------------------------|-------------|------------|-------------|
| Container Type          | Stored      | Proj.      | Total       |
| RH SCA-30G1 w/ Liner    | 10.9        | 0.0        | 10.9        |
| <b>Final Form Total</b> | <b>10.9</b> | <b>0.0</b> | <b>10.9</b> |

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            | 1.52E+03        |
| 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   | 9.42E+02        |
| Packaging Material, Rubber    | 1.17E+01        |
| Packaging Material, Steel     | 4.05E+04        |
| Packaging Material, Lead      | 4.27E+04        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 4.44E+00            |
| Am-243  | 2.52E-02            |
| Cm-244  | 1.23E+00            |
| Cs-137  | 4.19E+01            |
| Np-237  | 2.74E-05            |
| Pu-238  | 2.78E+00            |
| Pu-239  | 4.21E-01            |
| Pu-240  | 6.90E-01            |
| Pu-241  | 2.01E+01            |
| Pu-242  | 1.83E-03            |
| Sr-90   | 2.66E+01            |
| Th-229  | 2.14E-11            |
| Th-230  | 8.71E-08            |
| Th-232  | 7.22E-14            |
| U-233   | 1.24E-08            |
| U-234   | 5.38E-04            |
| U-235   | 1.66E-05            |
| U-236   | 6.99E-05            |
| U-238   | 3.23E-04            |

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.

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           | 12/31/2023 |    |
| Stream Name | Bettis TRU Non-Mixed Debris                        |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-30G1 w/ Liner    | 0.6        | 0.0        | 0.6        |
| <b>Final Form Total</b> | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

Waste Material Parameters

| Material Parameter            | 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   | 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  | 6.08E-03            |
| Cs-137  | 7.21E-05            |
| Np-237  | 2.24E-08            |
| Pu-238  | 1.89E-03            |
| Pu-239  | 9.83E-03            |
| Pu-240  | 5.53E-03            |
| Pu-241  | 3.31E-02            |
| Pu-242  | 2.20E-07            |
| Sr-90   | 6.44E-05            |
| Th-229  | 1.97E-16            |
| Th-230  | 1.78E-08            |
| Th-232  | 5.82E-19            |
| U-233   | 5.66E-13            |
| U-234   | 1.61E-04            |
| U-235   | 5.91E-06            |
| U-236   | 1.97E-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.



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           | 12/31/2023 |    |
| Stream Name | Babcock and Wilcox TRU Mixed Debris |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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         |
| <b>Final Form Total</b>     | <b>134.4</b> | <b>0.0</b> | <b>134.4</b> |

**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  | 2.98E+02            |
| Cs-137  | 1.69E-01            |
| Np-237  | 1.55E-03            |
| Pu-238  | 4.75E+01            |
| Pu-239  | 2.50E+02            |
| Pu-240  | 1.25E+02            |
| Pu-241  | 1.91E+03            |
| Pu-242  | 1.12E-02            |
| Sr-90   | 1.51E-01            |
| Th-229  | 2.23E-11            |
| Th-230  | 1.18E-06            |
| Th-232  | 1.32E-14            |
| U-233   | 5.16E-08            |
| U-234   | 1.15E-02            |
| U-235   | 2.63E-04            |
| U-236   | 4.45E-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.

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           | 12/31/2023 |    |
| Stream Name | Babcock & Wilcox solidified inorganics |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 9.7        | 0.0        | 9.7        |
| <b>Final Form Total</b>     | <b>9.7</b> | <b>0.0</b> | <b>9.7</b> |

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   | 3.55E+02        |
| Packaging Material, Rubber    | 5.43E+00        |
| Packaging Material, Steel     | 1.25E+03        |
| Packaging Material, Lead      | 0.00E+00        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 4.18E+01            |
| Cs-137  | 2.58E-06            |
| Np-237  | 2.97E-04            |
| Pu-238  | 7.04E+00            |
| Pu-239  | 4.28E+01            |
| Pu-240  | 2.16E+01            |
| Pu-241  | 2.02E+02            |
| Pu-242  | 2.90E-03            |
| Sr-90   | 2.31E-06            |
| Th-229  | 5.90E-12            |
| Th-230  | 1.12E-07            |
| Th-232  | 2.67E-15            |
| U-233   | 1.19E-08            |
| U-234   | 1.07E-03            |
| U-235   | 2.94E-05            |
| U-236   | 8.33E-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.

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           | 12/31/2023 |    |
| Stream Name | Babcock and Wilcox TRU RH Mixed Debris |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-30G1 w/ Liner    | 1.1        | 0.0        | 1.1        |
| <b>Final Form Total</b> | <b>1.1</b> | <b>0.0</b> | <b>1.1</b> |

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   | 9.52E+01        |
| Packaging Material, Rubber    | 1.18E+00        |
| Packaging Material, Steel     | 4.09E+03        |
| Packaging Material, Lead      | 4.31E+03        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.14E+00            |
| Np-237  | 5.33E-06            |
| Pu-238  | 1.76E-01            |
| Pu-239  | 7.59E-01            |
| Pu-240  | 4.29E-01            |
| Pu-241  | 7.63E+00            |
| Pu-242  | 1.73E-05            |
| Th-229  | 8.08E-14            |
| Th-230  | 6.36E-10            |
| Th-232  | 8.02E-17            |
| U-233   | 1.77E-10            |
| U-234   | 8.47E-06            |
| U-235   | 1.20E-08            |
| U-236   | 2.03E-07            |
| U-238   | 4.30E-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.

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           | 12/31/2023 |    |
| Stream Name | Kerr McGee TRU Mixed Debris                        |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

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

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 4.10E+02        |
| Aluminum-based Metal/Alloys   | 5.50E+00        |
| Other Metal/Alloys            | 2.41E+01        |
| Other Inorganic Materials     | 1.10E+02        |
| Cellulose                     | 1.71E+02        |
| Rubber                        | 2.63E+01        |
| Plastic                       | 1.90E+02        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 0.00E+00        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 3.00E-01        |
| 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  | 4.88E+00            |
| Np-237  | 1.93E-05            |
| Pu-238  | 1.60E+01            |
| Pu-239  | 4.12E+00            |
| Pu-240  | 2.17E+00            |
| Pu-241  | 3.20E+01            |
| Pu-242  | 2.41E-04            |
| Th-229  | 2.02E-13            |
| Th-230  | 3.84E-08            |
| Th-232  | 2.67E-16            |
| U-233   | 5.32E-10            |
| U-234   | 6.26E-04            |
| U-235   | 2.87E-07            |
| U-236   | 8.34E-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.

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           | 12/31/2023 |    |
| Stream Name | Kerr McGee TRU Mixed Solid Inorganic               |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 4.8        | 0.0        | 4.8        |
| <b>Final Form Total</b>     | <b>4.8</b> | <b>0.0</b> | <b>4.8</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.50E+02        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 3.90E-01        |
| Other Inorganic Materials     | 2.15E+03        |
| Cellulose                     | 3.99E+01        |
| Rubber                        | 4.90E+00        |
| Plastic                       | 1.66E+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  | 6.29E+00            |
| Np-237  | 2.53E-05            |
| Pu-238  | 1.01E+00            |
| Pu-239  | 7.17E+00            |
| Pu-240  | 3.52E+00            |
| Pu-241  | 2.68E+01            |
| Pu-242  | 4.45E-04            |
| Th-229  | 2.63E-13            |
| Th-230  | 8.60E-09            |
| Th-232  | 4.34E-16            |
| U-233   | 6.97E-10            |
| U-234   | 9.12E-05            |
| U-235   | 2.38E-06            |
| U-236   | 1.35E-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.

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           | 12/31/2023 |    |
| Stream Name | Tank Farms TRU Mixed Debris |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

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

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 4.51E+01        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 3.99E+01        |
| Other Inorganic Materials     | 2.32E+01        |
| Cellulose                     | 3.37E+00        |
| Rubber                        | 1.69E-02        |
| Plastic                       | 3.99E+00        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 9.76E-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  | 7.87E-03            |
| Cs-137  | 4.14E-02            |
| Np-237  | 3.31E-08            |
| Pu-238  | 6.70E-04            |
| Pu-239  | 5.50E-03            |
| Pu-240  | 1.41E-03            |
| Pu-241  | 7.20E-03            |
| Sr-90   | 3.69E-02            |
| Th-229  | 3.53E-16            |
| Th-230  | 1.57E-12            |
| Th-232  | 1.74E-19            |
| U-233   | 9.28E-13            |
| U-234   | 2.59E-08            |
| U-235   | 7.04E-11            |
| U-236   | 5.42E-10            |

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.

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           | 12/31/2023 |    |
| Stream Name | Tank Farms Absorbed Oils                           |                         |                     |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-30G1 w/ Liner    | 0.6        | 0.0        | 0.6        |
| <b>Final Form Total</b> | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

**Waste Material Parameters**

| Material Parameter            | 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   | 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  | 1.53E-03            |
| Cs-137  | 8.73E-02            |
| Np-237  | 4.98E-09            |
| Pu-238  | 2.10E-05            |
| Pu-239  | 7.19E-04            |
| Pu-240  | 1.54E-04            |
| Sr-90   | 8.13E-01            |
| Th-229  | 3.16E-17            |
| Th-230  | 2.87E-14            |
| Th-232  | 1.12E-20            |
| U-233   | 1.08E-13            |
| U-234   | 6.16E-10            |
| U-235   | 7.08E-12            |
| U-236   | 4.56E-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.

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           | 12/31/2023 |    |
| Stream Name | Energy Systems Group TRU Mixed Debris              |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 17.0        | 0.0        | 17.0        |
| <b>Final Form Total</b>     | <b>17.0</b> | <b>0.0</b> | <b>17.0</b> |

**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  | 2.15E+01            |
| Cs-137  | 1.62E+00            |
| Np-237  | 1.11E-04            |
| Pu-238  | 4.29E+00            |
| Pu-239  | 2.63E+01            |
| Pu-240  | 1.28E+01            |
| Pu-241  | 1.90E+02            |
| Pu-242  | 3.22E-03            |
| Sr-90   | 1.55E+00            |
| Th-229  | 1.33E-07            |
| Th-230  | 3.02E-06            |
| Th-232  | 1.35E-15            |
| U-233   | 1.26E-04            |
| U-234   | 2.74E-02            |
| U-235   | 5.18E-04            |
| U-236   | 4.56E-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.



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           | 12/31/2023 |    |
| Stream Name | Energy Systems Group TRU Solid Inorganics          |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

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

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  | 3.18E-02            |
| Cs-137  | 2.94E-03            |
| Np-237  | 1.07E-07            |
| Pu-238  | 8.06E-03            |
| Pu-239  | 1.82E-01            |
| Pu-240  | 4.91E-02            |
| Pu-241  | 3.97E-01            |
| Pu-242  | 5.39E-05            |
| Sr-90   | 2.63E-03            |
| Th-229  | 8.83E-16            |
| Th-230  | 2.29E-09            |
| Th-232  | 5.16E-18            |
| U-233   | 2.60E-12            |
| U-234   | 2.09E-05            |
| U-235   | 7.59E-07            |
| U-236   | 1.74E-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.

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           | 12/31/2023 |    |
| Stream Name | Energy Systems Group RH TRU Mixed Debris           |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |             |            |             |
|-------------------------|-------------|------------|-------------|
| Container Type          | Stored      | Proj.      | Total       |
| RH SCA-30G1 w/ Liner    | 42.1        | 0.0        | 42.1        |
| <b>Final Form Total</b> | <b>42.1</b> | <b>0.0</b> | <b>42.1</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 5.02E+02        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 5.70E+01        |
| Other Inorganic Materials     | 2.42E+04        |
| Cellulose                     | 1.12E+02        |
| Rubber                        | 4.30E+00        |
| Plastic                       | 3.99E+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   | 3.65E+03        |
| Packaging Material, Rubber    | 4.52E+01        |
| Packaging Material, Steel     | 1.57E+05        |
| Packaging Material, Lead      | 1.65E+05        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.70E+00            |
| Cs-137  | 1.43E+00            |
| Np-237  | 1.35E-05            |
| Pu-238  | 5.09E-01            |
| Pu-239  | 2.52E+00            |
| Pu-240  | 1.34E+00            |
| Pu-241  | 2.26E+01            |
| Pu-242  | 5.01E-05            |
| Sr-90   | 4.03E-01            |
| Th-229  | 1.18E-13            |
| Th-230  | 1.01E-09            |
| Th-232  | 1.41E-16            |
| U-233   | 3.40E-10            |
| U-234   | 1.81E-05            |
| U-235   | 2.98E-08            |
| U-236   | 4.75E-07            |
| U-238   | 9.34E-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           | 12/31/2023 |    |
| Stream Name | Energy Systems Group RH TRU Homogenous solids      |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |             |            |             |
|-------------------------|-------------|------------|-------------|
| Container Type          | Stored      | Proj.      | Total       |
| RH SCA-30G1 w/ Liner    | 10.7        | 0.0        | 10.7        |
| <b>Final Form Total</b> | <b>10.7</b> | <b>0.0</b> | <b>10.7</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 3.25E+02        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 6.25E+00        |
| Other Inorganic Materials     | 0.00E+00        |
| Cellulose                     | 0.00E+00        |
| Rubber                        | 0.00E+00        |
| Plastic                       | 1.56E+03        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 7.27E+03        |
| Solidified Organic Material   | 0.00E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 9.23E+02        |
| Packaging Material, Rubber    | 1.14E+01        |
| Packaging Material, Steel     | 3.97E+04        |
| Packaging Material, Lead      | 4.18E+04        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 9.57E-01            |
| Cs-137  | 2.36E-02            |
| Np-237  | 3.40E-06            |
| Pu-238  | 1.56E-01            |
| Pu-239  | 6.57E-01            |
| Pu-240  | 3.71E-01            |
| Pu-241  | 7.74E+00            |
| Pu-242  | 1.50E-05            |
| Sr-90   | 2.11E-02            |
| Th-229  | 2.93E-14            |
| Th-230  | 3.11E-10            |
| Th-232  | 3.91E-17            |
| U-233   | 8.50E-11            |
| U-234   | 5.55E-06            |
| U-235   | 7.77E-09            |
| U-236   | 1.32E-07            |
| U-238   | 2.78E-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).

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           | 12/31/2023 |    |
| Stream Name | Exxon TRU Mixed Debris                             |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 55.0        | 0.0        | 55.0        |
| <b>Final Form Total</b>     | <b>55.0</b> | <b>0.0</b> | <b>55.0</b> |

**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  | 3.14E+02            |
| Np-237  | 2.04E-03            |
| Pu-238  | 1.12E+02            |
| Pu-239  | 7.69E+01            |
| Pu-240  | 6.56E+01            |
| Pu-241  | 1.14E+03            |
| Pu-242  | 8.00E-02            |
| Th-229  | 3.41E-11            |
| Th-230  | 1.05E-06            |
| Th-232  | 6.91E-15            |
| U-233   | 7.49E-08            |
| U-234   | 1.15E-02            |
| U-235   | 9.95E-05            |
| U-236   | 2.33E-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.

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           | 12/31/2023 |    |
| Stream Name | FFTF TRU Non-Mixed Debris |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.1        | 0.0        | 1.1        |
| <b>Final Form Total</b>     | <b>1.1</b> | <b>0.0</b> | <b>1.1</b> |

**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  | 1.31E-02            |
| Cs-137  | 8.79E-03            |
| Np-237  | 4.89E-08            |
| Pu-238  | 3.30E-03            |
| Pu-239  | 1.10E-02            |
| Pu-240  | 9.51E-03            |
| Pu-241  | 5.45E-02            |
| Sr-90   | 5.86E-03            |
| Th-229  | 4.35E-16            |
| Th-230  | 6.57E-12            |
| Th-232  | 1.00E-18            |
| U-233   | 1.25E-12            |
| U-234   | 1.17E-07            |
| U-235   | 1.31E-10            |
| U-236   | 3.38E-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.

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           | 12/31/2023 |    |
| Stream Name | FFTF RH-TRU Non-Mixed Debris |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-30G1 w/ Liner    | 0.6        | 0.0        | 0.6        |
| <b>Final Form Total</b> | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

Waste Material Parameters

| Material Parameter            | 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   | 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  | 3.11E-03            |
| Am-243  | 3.53E-11            |
| Cs-137  | 4.03E-01            |
| Np-237  | 1.29E-08            |
| Pu-238  | 7.08E-04            |
| Pu-239  | 2.35E-03            |
| Pu-240  | 2.02E-03            |
| Pu-241  | 2.10E-02            |
| Sr-90   | 4.26E-04            |
| Th-229  | 1.51E-16            |
| Th-230  | 1.94E-12            |
| Th-232  | 2.89E-19            |
| U-233   | 3.76E-13            |
| U-234   | 2.96E-08            |
| U-235   | 3.24E-11            |
| U-236   | 8.36E-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.

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           | 12/31/2023 |    |
| Stream Name | GE San Jose and Vallecitos TRU Mixed Debris |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 23.3         | 0.0        | 23.3         |
| SWB Dir Ld w/ Liner         | 77.1         | 0.0        | 77.1         |
| <b>Final Form Total</b>     | <b>100.4</b> | <b>0.0</b> | <b>100.4</b> |

**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   | 9.49E+02        |
| Packaging Material, Rubber    | 2.80E+01        |
| Packaging Material, Steel     | 1.49E+04        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.20E+02            |
| Cs-137  | 2.33E-05            |
| Np-237  | 8.99E-04            |
| Pu-238  | 2.44E+01            |
| Pu-239  | 1.42E+02            |
| Pu-240  | 6.17E+01            |
| Pu-241  | 5.87E+02            |
| Pu-242  | 9.74E-03            |
| Sr-90   | 2.08E-05            |
| Th-229  | 1.63E-11            |
| Th-230  | 7.41E-06            |
| Th-232  | 6.49E-15            |
| U-233   | 3.48E-08            |
| U-234   | 6.76E-02            |
| U-235   | 1.42E-03            |
| U-236   | 2.19E-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.

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           | 12/31/2023 |    |
| Stream Name | GE Vallecitos TRU Homogeneous Solids |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | 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  | 1.02E+01            |
| Cs-137  | 5.61E-08            |
| Np-237  | 3.91E-05            |
| Pu-238  | 1.67E+00            |
| Pu-239  | 7.02E+00            |
| Pu-240  | 3.96E+00            |
| Pu-241  | 8.13E+01            |
| Pu-242  | 1.60E-04            |
| Sr-90   | 5.12E-08            |
| Th-229  | 3.96E-13            |
| Th-230  | 7.71E-08            |
| Th-232  | 4.89E-16            |
| U-233   | 1.06E-09            |
| U-234   | 6.77E-04            |
| U-235   | 2.05E-05            |
| U-236   | 1.53E-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.



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           | 12/31/2023 |    |
| Stream Name | GE San Jose and Vallecitos TRU RH Non-Mixed Debris |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-30G1 w/ Liner    | 6.5        | 0.0        | 6.5        |
| <b>Final Form Total</b> | <b>6.5</b> | <b>0.0</b> | <b>6.5</b> |

**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  | 1.27E+01            |
| Cs-137  | 7.13E+00            |
| Np-237  | 1.48E-04            |
| Pu-238  | 1.24E+00            |
| Pu-239  | 6.48E+01            |
| Pu-240  | 1.47E+01            |
| Pu-241  | 2.51E+01            |
| Pu-242  | 1.26E-03            |
| Sr-90   | 5.27E+00            |
| Th-229  | 1.36E-11            |
| Th-230  | 3.18E-07            |
| Th-232  | 1.72E-14            |
| U-233   | 1.21E-08            |
| U-234   | 9.42E-04            |
| U-235   | 3.81E-05            |
| U-236   | 1.74E-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.

Waste Stream ID: **RLHAN-01**

**Appendix A**

Waste Profile Report

|             |  |                         |                            |                       |                          |            |    |
|-------------|--|-------------------------|----------------------------|-----------------------|--------------------------|------------|----|
| Site        | Hanford (Richland) Site                | Summary Category        | S5000                      | Defense Determination | Defense-Related          | Handling   | CH |
| Source Cat. | Other/Multiple Sources                 | Waste Matrix Code Group | Heterogeneous Debris Waste |                       | Inventory Date           | 12/31/2023 |    |
| Stream Name | Trench Designation Debris waste stream |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                |              |            |              |
|-----------------------------------|--------------|------------|--------------|
| Container Type                    | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner       | 256.2        | 0.0        | 256.2        |
| SWB Dir Ld w/ Liner               | 223.7        | 0.0        | 223.7        |
| SWB w/ 4 - 55-gal Drums w/ Liners | 26.9         | 0.0        | 26.9         |
| <b>Final Form Total</b>           | <b>506.8</b> | <b>0.0</b> | <b>506.8</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.53E+04        |
| Aluminum-based Metal/Alloys   | 5.38E+01        |
| Other Metal/Alloys            | 3.61E+03        |
| Other Inorganic Materials     | 5.04E+03        |
| Cellulose                     | 1.32E+04        |
| Rubber                        | 4.54E+03        |
| Plastic                       | 2.35E+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   | 1.07E+04        |
| Packaging Material, Rubber    | 2.14E+02        |
| Packaging Material, Steel     | 8.05E+04        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 4.63E+02            |
| Am-243  | 6.98E-03            |
| Cm-244  | 6.75E-01            |
| Cs-137  | 2.50E+00            |
| Np-237  | 1.27E-02            |
| Pu-238  | 8.10E+01            |
| Pu-239  | 3.83E+02            |
| Pu-240  | 1.78E+02            |
| Pu-241  | 2.93E+03            |
| Pu-242  | 1.31E-02            |
| Sr-90   | 2.20E+00            |
| Th-229  | 3.02E-04            |
| Th-230  | 3.20E-06            |
| Th-232  | 7.62E-05            |
| U-233   | 2.15E-01            |
| U-234   | 2.83E-02            |
| U-235   | 9.00E-04            |
| U-236   | 6.85E-05            |
| U-238   | 1.36E-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.

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           | 12/31/2023 |    |
| Stream Name | Trench Designation waste stream |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |             |            |             |
|-------------------------|-------------|------------|-------------|
| Container Type          | Stored      | Proj.      | Total       |
| RH SCA-30G1 w/ Liner    | 13.3        | 0.0        | 13.3        |
| <b>Final Form Total</b> | <b>13.3</b> | <b>0.0</b> | <b>13.3</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 5.65E+02        |
| Aluminum-based Metal/Alloys   | 1.96E+00        |
| Other Metal/Alloys            | 1.32E+02        |
| Other Inorganic Materials     | 1.86E+02        |
| Cellulose                     | 4.91E+02        |
| Rubber                        | 1.66E+02        |
| Plastic                       | 5.93E+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   | 1.15E+03        |
| Packaging Material, Rubber    | 1.43E+01        |
| Packaging Material, Steel     | 4.95E+04        |
| Packaging Material, Lead      | 5.22E+04        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.49E+01            |
| Am-243  | 6.30E-05            |
| Cs-137  | 1.78E+00            |
| Np-237  | 1.24E-04            |
| Pu-238  | 1.65E+00            |
| Pu-239  | 9.53E+00            |
| Pu-240  | 3.69E+00            |
| Pu-241  | 7.95E+01            |
| Pu-242  | 1.48E-04            |
| Sr-90   | 1.43E+00            |
| Th-229  | 2.11E-06            |
| Th-230  | 3.29E-09            |
| Th-232  | 3.88E-16            |
| U-233   | 2.00E-03            |
| U-234   | 5.88E-05            |
| U-235   | 1.13E-07            |
| U-236   | 1.31E-06            |
| U-238   | 2.76E-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.

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           | 12/31/2023 |    |
| Stream Name | International Atomic Energy Agency TRU Non-Mixed Debris |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | 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  | 7.94E-01            |
| Cs-137  | 1.33E-05            |
| Np-237  | 3.33E-06            |
| Pu-238  | 3.84E-01            |
| Pu-239  | 2.21E-01            |
| Pu-240  | 2.84E-01            |
| Pu-241  | 9.93E-01            |
| Pu-242  | 4.19E-04            |
| Sr-90   | 1.19E-05            |
| Th-229  | 3.54E-14            |
| Th-230  | 9.03E-10            |
| Th-232  | 3.50E-17            |
| U-233   | 9.31E-11            |
| U-234   | 1.48E-05            |
| U-235   | 2.83E-09            |
| U-236   | 1.09E-07            |
| U-238   | 8.45E-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.

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           | 12/31/2023 |    |
| Stream Name | Lawrence Berkeley Nat Lab TRU Mixed Debris |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-30G1 w/ Liner    | 0.6        | 0.0        | 0.6        |
| <b>Final Form Total</b> | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

**Waste Material Parameters**

| Material Parameter            | 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   | 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  | 8.72E-02            |
| Cm-244  | 8.34E+00            |
| Np-237  | 1.05E-06            |
| Pu-238  | 9.91E-03            |
| Pu-239  | 5.20E-02            |
| Pu-240  | 1.17E-01            |
| Pu-241  | 1.56E-01            |
| Pu-242  | 1.19E-06            |
| Th-229  | 1.02E-13            |
| Th-230  | 2.69E-10            |
| Th-232  | 8.61E-17            |
| U-233   | 8.82E-11            |
| U-234   | 1.35E-06            |
| U-235   | 2.10E-09            |
| U-236   | 1.02E-07            |
| U-238   | 7.54E-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.

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           | 12/31/2023 |    |
| Stream Name | Lawrence Livermore TRU Mixed Debris |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 1.1        | 0.0        | 1.1        |
| <b>Final Form Total</b>     | <b>1.1</b> | <b>0.0</b> | <b>1.1</b> |

**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  | 2.46E-01            |
| Np-237  | 3.64E-06            |
| Pu-238  | 2.47E-02            |
| Pu-239  | 4.58E-01            |
| Pu-240  | 1.39E-01            |
| Pu-241  | 2.87E-01            |
| Pu-242  | 9.27E-06            |
| Th-229  | 5.29E-13            |
| Th-230  | 2.21E-07            |
| Th-232  | 2.54E-16            |
| U-233   | 3.74E-10            |
| U-234   | 4.84E-04            |
| U-235   | 2.19E-05            |
| U-236   | 2.06E-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.

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           | 12/31/2023 |    |
| Stream Name | P11 Criticality Facility TRU Mixed Debris |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| SWB Dir Ld w/ Liner     | 7.5        | 0.0        | 7.5        |
| <b>Final Form Total</b> | <b>7.5</b> | <b>0.0</b> | <b>7.5</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 4.21E+02        |
| Aluminum-based Metal/Alloys   | 2.11E+02        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 4.21E+02        |
| Cellulose                     | 2.10E+02        |
| Rubber                        | 0.00E+00        |
| Plastic                       | 2.10E+02        |
| Cement                        | 2.11E+02        |
| Solidified Inorganic Material | 1.80E+00        |
| Solidified Organic Material   | 1.80E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 9.08E+00        |
| Packaging Material, Rubber    | 1.45E+00        |
| Packaging Material, Steel     | 1.16E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 2.26E-01            |
| Cs-137  | 1.64E-06            |
| Np-237  | 1.24E-06            |
| Pu-238  | 3.46E-02            |
| Pu-239  | 2.49E-01            |
| Pu-240  | 1.01E-01            |
| Pu-241  | 1.71E+00            |
| Pu-242  | 3.92E-06            |
| Th-229  | 2.07E-14            |
| Th-230  | 8.12E-11            |
| Th-232  | 1.25E-17            |
| U-233   | 4.43E-11            |
| U-234   | 1.34E-06            |
| U-235   | 3.19E-09            |
| U-236   | 3.90E-08            |
| U-238   | 7.91E-15            |

**Haz. Waste No(s).**

D005, D006, D007

**TRUCON Code(s)**

125/225

**Waste Stream Description**

Misc. demolition debris.

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           | 12/31/2023 |    |
| Stream Name | 2345Z TRU Mixed and Non-Mixed Debris               |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |               |            |               |
|-----------------------------|---------------|------------|---------------|
| Container Type              | Stored        | Proj.      | Total         |
| 55-gal Drum Dir Ld w/ Liner | 2160.7        | 0.0        | 2160.7        |
| SLB2 Dir Ld                 | 709.4         | 0.0        | 709.4         |
| SWB Dir Ld w/ Liner         | 3290.0        | 0.0        | 3290.0        |
| <b>Final Form Total</b>     | <b>6160.1</b> | <b>0.0</b> | <b>6160.1</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 4.80E+05        |
| Aluminum-based Metal/Alloys   | 1.46E+03        |
| Other Metal/Alloys            | 2.94E+04        |
| Other Inorganic Materials     | 3.24E+05        |
| Cellulose                     | 8.94E+04        |
| Rubber                        | 4.98E+04        |
| Plastic                       | 1.64E+05        |
| Cement                        | 6.04E+03        |
| Solidified Inorganic Material | 4.20E+02        |
| Solidified Organic Material   | 3.37E+03        |
| Soil                          | 1.40E+03        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 8.33E+04        |
| Packaging Material, Rubber    | 1.93E+03        |
| Packaging Material, Steel     | 9.04E+05        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 6.22E+03            |
| Am-243  | 8.27E-02            |
| Cs-137  | 3.55E-01            |
| Np-237  | 2.72E+00            |
| Pu-238  | 1.25E+03            |
| Pu-239  | 8.74E+03            |
| Pu-240  | 3.35E+03            |
| Pu-241  | 5.14E+04            |
| Pu-242  | 5.52E-01            |
| Sr-90   | 3.27E-01            |
| Th-229  | 3.02E-04            |
| Th-230  | 1.04E-05            |
| Th-232  | 1.68E-04            |
| U-233   | 5.73E-01            |
| U-234   | 2.00E-01            |
| U-235   | 6.07E-03            |
| U-236   | 5.94E-04            |
| U-238   | 8.93E-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.



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           | 12/31/2023 |    |
| Stream Name | 2345Z TRU HMOX                                     |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 8.4        | 0.0        | 8.4        |
| <b>Final Form Total</b>     | <b>8.4</b> | <b>0.0</b> | <b>8.4</b> |

**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   | 3.08E+02        |
| Packaging Material, Rubber    | 4.72E+00        |
| Packaging Material, Steel     | 1.09E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 2.20E+03            |
| Np-237  | 8.41E-03            |
| Pu-238  | 4.12E+02            |
| Pu-239  | 8.12E+02            |
| Pu-240  | 6.30E+02            |
| Pu-241  | 5.67E+03            |
| Pu-242  | 5.63E-01            |
| Th-229  | 7.64E-11            |
| Th-230  | 8.21E-07            |
| Th-232  | 6.63E-14            |
| U-233   | 2.17E-07            |
| U-234   | 1.46E-02            |
| U-235   | 4.86E-04            |
| U-236   | 2.24E-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).

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           | 12/31/2023 |    |
| Stream Name | PFP Absorbed Plutonium Nitrate Solutions |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 16.2        | 0.0        | 16.2        |
| <b>Final Form Total</b>     | <b>16.2</b> | <b>0.0</b> | <b>16.2</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 8.91E+01        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 1.05E-01        |
| Other Inorganic Materials     | 2.66E+01        |
| Cellulose                     | 5.99E+01        |
| Rubber                        | 6.32E-01        |
| Plastic                       | 1.84E+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   | 5.94E+02        |
| Packaging Material, Rubber    | 9.09E+00        |
| Packaging Material, Steel     | 2.09E+03        |
| Packaging Material, Lead      | 0.00E+00        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.30E+02            |
| Cs-137  | 4.15E-05            |
| Np-237  | 1.02E-03            |
| Pu-238  | 2.63E+01            |
| Pu-239  | 2.13E+02            |
| Pu-240  | 6.84E+01            |
| Pu-241  | 5.41E+02            |
| Pu-242  | 1.36E-02            |
| Sr-90   | 3.71E-05            |
| Th-229  | 1.90E-11            |
| Th-230  | 1.71E-06            |
| Th-232  | 7.20E-15            |
| U-233   | 4.02E-08            |
| U-234   | 1.60E-02            |
| U-235   | 8.53E-05            |
| U-236   | 2.43E-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).

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           | 12/31/2023 |    |
| Stream Name | PFP Comprehensive Homogenous Solids                |                         |                     |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 75.2        | 0.0        | 75.2        |
| <b>Final Form Total</b>     | <b>75.2</b> | <b>0.0</b> | <b>75.2</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 3.52E+02        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 9.74E+00        |
| Other Inorganic Materials     | 0.00E+00        |
| Cellulose                     | 2.29E+02        |
| Rubber                        | 4.48E+00        |
| Plastic                       | 3.26E+02        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 0.00E+00        |
| Solidified Organic Material   | 1.77E+03        |
| Soil                          | 8.04E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 2.76E+03        |
| Packaging Material, Rubber    | 4.22E+01        |
| Packaging Material, Steel     | 9.74E+03        |
| Packaging Material, Lead      | 0.00E+00        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 5.65E+02            |
| Cs-137  | 2.40E-03            |
| Np-237  | 3.87E-03            |
| Pu-238  | 9.49E+01            |
| Pu-239  | 1.05E+03            |
| Pu-240  | 3.41E+02            |
| Pu-241  | 3.45E+03            |
| Pu-242  | 4.09E-02            |
| Sr-90   | 2.14E-03            |
| Th-229  | 6.74E-11            |
| Th-230  | 6.12E-07            |
| Th-232  | 3.59E-14            |
| U-233   | 1.46E-07            |
| U-234   | 7.20E-03            |
| U-235   | 1.51E-04            |
| U-236   | 1.21E-04            |
| U-238   | 1.95E-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-SZ, 232-Z, 236-Z, 2736-ZB, 242-Z, and 291-Z Buildings.

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           | 12/31/2023 |    |
| Stream Name | 2345Z RH-TRU Mixed Debris                          |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |             |            |             |
|-------------------------|-------------|------------|-------------|
| Container Type          | Stored      | Proj.      | Total       |
| RH SCA-30G1 w/ Liner    | 65.9        | 0.0        | 65.9        |
| <b>Final Form Total</b> | <b>65.9</b> | <b>0.0</b> | <b>65.9</b> |

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   | 5.70E+03        |
| Packaging Material, Rubber    | 7.07E+01        |
| Packaging Material, Steel     | 2.45E+05        |
| Packaging Material, Lead      | 2.58E+05        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 6.40E+02            |
| Am-243  | 5.92E-12            |
| Cs-137  | 3.98E-04            |
| Np-237  | 7.07E-03            |
| Pu-238  | 1.13E+02            |
| Pu-239  | 3.11E+02            |
| Pu-240  | 1.52E+02            |
| Pu-241  | 2.10E+03            |
| Pu-242  | 4.47E-02            |
| Sr-90   | 3.56E-04            |
| Th-229  | 1.49E-10            |
| Th-230  | 2.80E-07            |
| Th-232  | 1.60E-14            |
| U-233   | 3.03E-07            |
| U-234   | 4.51E-03            |
| U-235   | 2.17E-05            |
| U-236   | 5.40E-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.

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           | 12/31/2023 |    |
| Stream Name | 2345Z RH-TRU Homogenous solids                     |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-30G1 w/ Liner    | 7.9        | 0.0        | 7.9        |
| <b>Final Form Total</b> | <b>7.9</b> | <b>0.0</b> | <b>7.9</b> |

**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   | 6.85E+02        |
| Packaging Material, Rubber    | 8.50E+00        |
| Packaging Material, Steel     | 2.94E+04        |
| Packaging Material, Lead      | 3.10E+04        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.21E+01            |
| Np-237  | 8.11E-05            |
| Pu-238  | 1.53E+00            |
| Pu-239  | 1.44E+01            |
| Pu-240  | 5.12E+00            |
| Pu-241  | 4.46E+01            |
| Pu-242  | 6.78E-04            |
| Th-229  | 1.38E-12            |
| Th-230  | 4.14E-08            |
| Th-232  | 5.39E-16            |
| U-233   | 3.01E-09            |
| U-234   | 4.02E-04            |
| U-235   | 1.30E-05            |
| U-236   | 1.82E-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.

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           | 12/31/2023 |    |
| Stream Name | 202A and 202AL TRU Mixed Debris                    |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 384.7        | 0.0        | 384.7        |
| SWB Dir Ld w/ Liner         | 103.4        | 0.0        | 103.4        |
| <b>Final Form Total</b>     | <b>488.1</b> | <b>0.0</b> | <b>488.1</b> |

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    | 2.36E+02        |
| Packaging Material, Steel     | 6.58E+04        |
| Packaging Material, Lead      | 0.00E+00        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.91E+03            |
| Am-243  | 4.50E-04            |
| Cs-137  | 8.41E+00            |
| Np-237  | 1.95E-02            |
| Pu-238  | 1.24E+03            |
| Pu-239  | 7.00E+03            |
| Pu-240  | 2.67E+03            |
| Pu-241  | 4.91E+04            |
| Pu-242  | 6.27E-01            |
| Sr-90   | 7.51E+00            |
| Th-229  | 1.75E-03            |
| Th-230  | 2.89E-06            |
| Th-232  | 2.81E-13            |
| U-233   | 1.66E+00            |
| U-234   | 4.78E-02            |
| U-235   | 2.11E-04            |
| U-236   | 9.48E-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.

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           | 12/31/2023 |    |
| Stream Name | 202A & 202AL TRU RH Mixed Debris                   |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |             |            |             |
|-------------------------|-------------|------------|-------------|
| Container Type          | Stored      | Proj.      | Total       |
| RH SCA-30G1 w/ Liner    | 60.1        | 0.0        | 60.1        |
| <b>Final Form Total</b> | <b>60.1</b> | <b>0.0</b> | <b>60.1</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.01E+03        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 5.04E+01        |
| Other Inorganic Materials     | 1.51E+03        |
| Cellulose                     | 1.01E+03        |
| Rubber                        | 3.43E+03        |
| Plastic                       | 2.52E+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   | 5.20E+03        |
| Packaging Material, Rubber    | 6.44E+01        |
| Packaging Material, Steel     | 2.23E+05        |
| Packaging Material, Lead      | 2.35E+05        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 2.06E+01            |
| Np-237  | 3.00E-04            |
| Pu-238  | 1.14E+00            |
| Pu-239  | 5.25E+01            |
| Pu-240  | 1.50E+01            |
| Pu-241  | 8.39E+00            |
| Pu-242  | 1.56E-03            |
| Th-229  | 3.84E-11            |
| Th-230  | 3.82E-08            |
| Th-232  | 2.23E-14            |
| U-233   | 2.92E-08            |
| U-234   | 1.74E-04            |
| U-235   | 2.33E-06            |
| U-236   | 2.01E-05            |
| U-238   | 1.09E-11            |

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.

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           | 12/31/2023 |    |
| Stream Name | Rocky Flats TRU Mixed Debris                       |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 255.6        | 0.0        | 255.6        |
| <b>Final Form Total</b>     | <b>255.6</b> | <b>0.0</b> | <b>255.6</b> |

**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  | 1.28E-03            |
| Pu-238  | 3.18E+00            |
| Pu-239  | 1.27E+02            |
| Pu-240  | 3.03E+01            |
| Pu-241  | 6.37E+01            |
| Pu-242  | 2.50E-03            |
| Th-229  | 1.22E-10            |
| Th-230  | 1.13E-03            |
| Th-232  | 3.37E-14            |
| U-233   | 1.07E-07            |
| U-234   | 3.16E+00            |
| U-235   | 1.44E-01            |
| U-236   | 3.51E-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.



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           | 12/31/2023 |    |
| Stream Name | GE San Jose TRU Mixed Debris |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

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

**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  | 5.52E+01            |
| Np-237  | 6.46E-04            |
| Pu-238  | 6.33E+00            |
| Pu-239  | 3.30E+01            |
| Pu-240  | 1.86E+01            |
| Pu-241  | 1.04E+02            |
| Pu-242  | 7.46E-04            |
| Th-229  | 6.00E-11            |
| Th-230  | 2.30E-06            |
| Th-232  | 2.18E-14            |
| U-233   | 5.31E-08            |
| U-234   | 6.65E-03            |
| U-235   | 2.54E-04            |
| U-236   | 2.21E-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.

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           | 12/31/2023 |    |
| Stream Name | SWOC TRU Mixed and Non-Mixed Debris |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |              |             |              |
|-----------------------------|--------------|-------------|--------------|
| Container Type              | Stored       | Proj.       | Total        |
| 55-gal Drum Dir Ld w/ Liner | 46.0         | 10.1        | 56.1         |
| SWB Dir Ld w/ Liner         | 94.0         | 18.8        | 112.8        |
| <b>Final Form Total</b>     | <b>140.0</b> | <b>28.9</b> | <b>168.9</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 3.51E+04        |
| Aluminum-based Metal/Alloys   | 4.09E+01        |
| Other Metal/Alloys            | 2.76E+02        |
| Other Inorganic Materials     | 5.52E+02        |
| Cellulose                     | 5.98E+02        |
| Rubber                        | 1.51E+03        |
| Plastic                       | 6.49E+03        |
| Cement                        | 2.28E+01        |
| Solidified Inorganic Material | 1.05E+02        |
| Solidified Organic Material   | 5.43E+01        |
| Soil                          | 1.50E+01        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 2.19E+03        |
| Packaging Material, Rubber    | 5.33E+01        |
| Packaging Material, Steel     | 2.47E+04        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 2.04E+02            |
| Am-243  | 2.88E-06            |
| Cs-137  | 5.32E-01            |
| Np-237  | 7.08E-05            |
| Pu-238  | 5.45E+01            |
| Pu-239  | 1.92E+02            |
| Pu-240  | 1.04E+02            |
| Pu-241  | 3.52E+03            |
| Pu-242  | 1.50E-01            |
| Sr-90   | 6.11E-04            |
| Th-229  | 1.31E-08            |
| Th-230  | 2.09E-10            |
| Th-232  | 7.56E-19            |
| U-233   | 1.48E-03            |
| U-234   | 2.35E-04            |
| U-235   | 7.90E-06            |
| U-236   | 3.06E-07            |
| U-238   | 2.66E-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.

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           | 12/31/2023 |    |
| Stream Name | Ward TRU Mixed Debris   |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |              |            |              |
|-----------------------------|--------------|------------|--------------|
| Container Type              | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/ Liner | 37.6         | 0.0        | 37.6         |
| SWB Dir Ld w/ Liner         | 110.9        | 0.0        | 110.9        |
| <b>Final Form Total</b>     | <b>148.5</b> | <b>0.0</b> | <b>148.5</b> |

**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    | 4.25E+01        |
| Packaging Material, Steel     | 2.20E+04        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 6.48E+01            |
| Cs-137  | 1.49E-07            |
| Np-237  | 1.12E-02            |
| Pu-238  | 1.22E+01            |
| Pu-239  | 4.59E+01            |
| Pu-240  | 2.39E+01            |
| Pu-241  | 3.83E+02            |
| Pu-242  | 4.82E-03            |
| Sr-90   | 1.34E-07            |
| Th-229  | 3.03E-10            |
| Th-230  | 2.00E-06            |
| Th-232  | 2.51E-15            |
| U-233   | 5.76E-07            |
| U-234   | 1.83E-02            |
| U-235   | 6.40E-04            |
| U-236   | 8.48E-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.

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           | 12/31/2023 |    |
| Stream Name | WARD solidified inorganics |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| 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        |
| <b>Final Form Total</b>     | <b>33.7</b> | <b>0.0</b> | <b>33.7</b> |

**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  | 1.28E+02            |
| Cs-137  | 5.73E-07            |
| Np-237  | 6.05E-04            |
| Pu-238  | 2.30E+01            |
| Pu-239  | 5.90E+01            |
| Pu-240  | 3.89E+01            |
| Pu-241  | 4.84E+02            |
| Pu-242  | 3.16E-02            |
| Th-229  | 8.69E-12            |
| Th-230  | 1.80E-07            |
| Th-232  | 6.40E-15            |
| U-233   | 1.96E-08            |
| U-234   | 1.81E-03            |
| U-235   | 3.88E-05            |
| U-236   | 1.73E-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.

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           | 12/31/2023 |    |
| Stream Name | CH TRU Project Generated Waste (PGW) |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 1.5        | 0.0        | 1.5        |
| <b>Final Form Total</b>      | <b>1.5</b> | <b>0.0</b> | <b>1.5</b> |

Waste Material Parameters

| Material Parameter            | 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  | 2.99E-02            |
| Cs-137  | 2.97E-01            |
| Np-237  | 7.39E-08            |
| Pu-238  | 1.14E-02            |
| Pu-239  | 5.82E-02            |
| Pu-240  | 3.28E-02            |
| Pu-241  | 2.17E-01            |
| Pu-242  | 8.45E-06            |
| Sr-90   | 1.31E-02            |
| Th-229  | 2.19E-12            |
| Th-230  | 1.10E-08            |
| Th-232  | 2.42E-05            |
| U-233   | 3.12E-09            |
| U-234   | 1.50E-04            |
| U-235   | 5.05E-06            |
| U-236   | 7.76E-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

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           | 12/31/2023 |    |
| Stream Name | TRU Waste from SNL/NM - Remote Handled |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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        |
| <b>Final Form Total</b>                     | <b>3.2</b> | <b>0.0</b> | <b>3.2</b> |

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  | 1.45E+01            |
| Cs-137  | 1.31E+02            |
| Np-237  | 3.58E-05            |
| Pu-238  | 6.46E+00            |
| Pu-239  | 1.77E+01            |
| Pu-240  | 1.13E+01            |
| Pu-241  | 1.08E+02            |
| Pu-242  | 5.48E-03            |
| Sr-90   | 9.75E+01            |
| Th-229  | 7.20E-10            |
| Th-230  | 4.49E-06            |
| Th-232  | 5.30E-16            |
| U-233   | 1.02E-06            |
| U-234   | 6.11E-02            |
| U-235   | 1.96E-03            |
| U-236   | 2.69E-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

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           | 12/31/2023 |    |
| Stream Name | CH TRU Debris waste from Z-machine |                         |                           |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |             |             |             |
|-------------------------|-------------|-------------|-------------|
| Container Type          | Stored      | Proj.       | Total       |
| SWB Dir Ld w/o Liner    | 13.2        | 75.2        | 88.4        |
| <b>Final Form Total</b> | <b>13.2</b> | <b>75.2</b> | <b>88.4</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 4.20E+04        |
| Aluminum-based Metal/Alloys   | 3.18E+02        |
| Other Metal/Alloys            | 2.75E+02        |
| Other Inorganic Materials     | 2.88E+00        |
| Cellulose                     | 0.00E+00        |
| Rubber                        | 5.43E+01        |
| Plastic                       | 3.37E+01        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 0.00E+00        |
| Solidified Organic Material   | 5.12E+01        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 0.00E+00        |
| Packaging Material, Rubber    | 1.71E+01        |
| Packaging Material, Steel     | 1.36E+04        |
| Packaging Material, Lead      | 0.00E+00        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 6.63E-01            |
| Np-237  | 1.17E-06            |
| Pu-238  | 4.67E-01            |
| Pu-239  | 1.31E+01            |
| Pu-240  | 3.09E+00            |
| Pu-241  | 1.92E+01            |
| Pu-242  | 2.77E-04            |
| Th-229  | 5.55E-19            |
| Th-230  | 1.10E-12            |
| Th-232  | 5.62E-19            |
| U-233   | 1.77E-13            |
| U-234   | 1.27E-06            |
| U-235   | 1.70E-08            |
| U-236   | 1.19E-07            |
| U-238   | 9.33E-11            |

No Hazardous Waste Numbers Provided

TRUCON Code(s)  
125/225

Waste Stream Description

CH debris waste from the Z-machine, Pu ICE experiments. Waste generated at SNL/NM, but is LANL waste

Waste Stream ID: 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           | 12/31/2023 |    |
| Stream Name | CH TRU solidified waste      |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

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

Waste Material Parameters

| Material Parameter            | 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  | 3.30E-01            |
| Cs-137  | 5.63E-03            |
| Np-237  | 1.24E-06            |
| Pu-238  | 1.66E-01            |
| Pu-239  | 4.91E-01            |
| Pu-240  | 2.17E-01            |
| Pu-241  | 1.16E+00            |
| Pu-242  | 2.02E-04            |
| Th-229  | 1.11E-14            |
| Th-230  | 1.35E-09            |
| Th-232  | 2.28E-17            |
| U-233   | 3.18E-11            |
| U-234   | 1.51E-05            |
| U-235   | 4.29E-07            |
| U-236   | 7.70E-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.



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           | 12/31/2023 |    |
| Stream Name | CH TRU sealed source         |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

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

Waste Material Parameters

| Material Parameter            | 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  | 1.35E+00            |
| Cs-137  | 1.52E-07            |
| Np-237  | 5.31E-06            |
| Pu-238  | 7.83E-08            |
| Pu-239  | 6.13E-02            |
| Th-229  | 4.86E-14            |
| Th-230  | 1.56E-16            |
| U-233   | 1.38E-10            |
| U-234   | 2.78E-12            |
| U-235   | 7.25E-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.

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           | 12/31/2023 |    |
| Stream Name | D&D from AHCF                |                         |                        |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-30G1 w/o Liner   | 0.0        | 0.7        | 0.7        |
| <b>Final Form Total</b> | <b>0.0</b> | <b>0.7</b> | <b>0.7</b> |

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

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           | 12/31/2023 |    |
| Stream Name | D&D Debris                        |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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        |
| <b>Final Form Total</b>     | <b>6.3</b> | <b>0.0</b> | <b>6.3</b> |

**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  | 2.71E+00            |
| Np-237  | 7.25E-08            |
| Pu-238  | 2.67E-03            |
| Pu-239  | 2.58E-01            |
| Pu-241  | 2.38E-02            |
| Pu-242  | 6.86E-04            |
| Sr-90   | 1.06E-01            |
| Th-229  | 2.92E-16            |
| Th-230  | 1.54E-07            |
| U-233   | 1.25E-12            |
| 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.

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  | 12/31/2023 |    |
| Stream Name | D&D Debris                        |                         |                            | Activities Decayed to CY |                 | 2023       |    |

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

| 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        |
| <b>Final Form Total</b>                    | <b>1.9</b> | <b>0.0</b> | <b>1.9</b> |

**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  | 3.07E-01            |
| Cs-137  | 7.65E+00            |
| Np-237  | 7.99E-07            |
| Pu-238  | 1.10E-02            |
| Pu-239  | 6.93E-01            |
| Pu-241  | 5.39E-02            |
| Pu-242  | 2.80E-03            |
| Sr-90   | 2.30E+00            |
| Th-229  | 3.23E-15            |
| Th-230  | 6.45E-07            |
| Th-232  | 1.86E-15            |
| U-233   | 1.38E-11            |
| 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.

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           | 12/31/2023 |    |
| Stream Name | Process cell and sump cleanout sediment |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| 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        |
| <b>Final Form Total</b>                    | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

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  | 4.58E-02            |
| Cs-137  | 1.09E+01            |
| Np-237  | 1.18E-07            |
| Pu-238  | 6.03E-03            |
| Pu-239  | 5.54E-01            |
| Pu-241  | 8.55E-02            |
| Pu-242  | 4.27E-03            |
| Sr-90   | 2.40E-01            |
| Th-229  | 4.73E-16            |
| Th-230  | 2.98E-07            |
| U-233   | 2.02E-12            |
| 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

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  | 12/31/2023               |      |
| Stream Name | SR-AGNS-HOM              |                         |                       |                       |                 | Activities Decayed to CY | 2023 |

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

| 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        |
| <b>Final Form Total</b>           | <b>1.3</b> | <b>0.0</b> | <b>1.3</b> |

**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  | 6.86E-01            |
| Np-237  | 6.73E-04            |
| Pu-238  | 7.36E-01            |
| Pu-239  | 1.34E+00            |
| Pu-240  | 3.17E-01            |
| Pu-241  | 8.54E+00            |
| Pu-242  | 5.52E-05            |
| Th-229  | 1.54E-11            |
| Th-230  | 1.00E-08            |
| Th-232  | 2.80E-17            |
| U-233   | 3.19E-08            |
| U-234   | 1.11E-04            |
| U-235   | 4.34E-06            |
| U-236   | 1.03E-07            |
| U-238   | 9.27E-05            |

**Haz. Waste No(s).**

|  |
|--|
| D004, D005, D006, D007, D008, D009, D011, F005 |
|--|

**TRUCON Code(s)**

|         |
|---------|
| 111/211 |
|---------|

**Waste Stream Description**

This waste is comprised of aqueous liquids solidified with lime and cement in a 55-gallon drum and aqueous liquid that had been absorbed using Florco-X and then later solidified with cement and water inside a 55-gallon drum.

Waste Stream ID: **SR-BCLDP.003**

**Appendix A**

Waste Profile Report

|             |                                      |                         |                     |                       |                          |            |    |
|-------------|--------------------------------------|-------------------------|---------------------|-----------------------|--------------------------|------------|----|
| Site        | Savannah River Site                  | Summary Category        | S3000               | Defense Determination | Defense-Related          | Handling   | RH |
| Source Cat. | Discarding Excess/Expired Materials  | Waste Matrix Code Group | Solidified Organics |                       | Inventory Date           | 12/31/2023 |    |
| Stream Name | BCL JN-1 Hydraulic Sludge and Debris |                         |                     |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-55G1 w/o Liner   | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b> | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

**Waste Material Parameters**

| Material Parameter            | 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    | 9.20E-02        |
| Packaging Material, Steel     | 1.30E+03        |
| Packaging Material, Lead      | 9.34E-01        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.11E-02            |
| Am-243  | 2.28E-05            |
| Cm-244  | 1.37E-03            |
| Cs-137  | 6.63E-03            |
| Np-237  | 3.72E-07            |
| Pu-238  | 2.31E-02            |
| Pu-239  | 3.24E-03            |
| Pu-240  | 5.30E-03            |
| Pu-241  | 2.62E-01            |
| Pu-242  | 1.58E-05            |
| Sr-90   | 6.53E-03            |
| Th-229  | 3.53E-14            |
| Th-230  | 4.41E-10            |
| Th-232  | 1.02E-16            |
| U-233   | 4.74E-11            |
| U-234   | 5.13E-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 RH Hydraulic Sludge and Debris.

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           | 12/31/2023 |    |
| Stream Name | CH Mixed TRU Cartridge Water Filters(S5000) |                         |                        |                       | Activities Decayed to CY | 2023       |    |

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

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

Waste Material Parameters

| Material Parameter            | 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  | 9.98E-03            |
| Am-243  | 2.74E-05            |
| Cs-137  | 8.69E-04            |
| Np-237  | 3.95E-06            |
| Pu-238  | 4.50E-02            |
| Pu-239  | 8.24E-04            |
| Pu-240  | 1.35E-03            |
| Pu-242  | 1.61E-08            |
| Sr-90   | 8.43E-04            |
| Th-229  | 9.15E-13            |
| Th-230  | 1.99E-09            |
| Th-232  | 3.96E-19            |
| U-233   | 6.90E-10            |
| U-234   | 1.22E-05            |
| U-235   | 1.69E-07            |
| U-236   | 8.02E-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.



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           | 12/31/2023 |    |
| Stream Name | BCL JN-4 CH TRU Heterogeneous Debris |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| SWB Dir Ld w/o Liner    | 3.8        | 0.0        | 3.8        |
| <b>Final Form Total</b> | <b>3.8</b> | <b>0.0</b> | <b>3.8</b> |

Waste Material Parameters

| Material Parameter            | 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  | 1.05E-01            |
| Np-237  | 3.22E-07            |
| Pu-238  | 2.74E+01            |
| Pu-239  | 1.00E-01            |
| Pu-240  | 4.63E-02            |
| Pu-241  | 6.61E-01            |
| Pu-242  | 1.43E-05            |
| Th-229  | 1.97E-15            |
| Th-230  | 3.75E-08            |
| Th-232  | 3.39E-18            |
| U-233   | 6.81E-12            |
| U-234   | 8.04E-04            |
| U-235   | 9.86E-10            |
| U-236   | 1.37E-08            |
| U-238   | 2.22E-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

Waste Stream ID: **SR-CH-PP**

**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           | 12/31/2023 |    |
| Stream Name | CH TRU waste from the Proposed NNSA Pit Production Mission |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |            |              |              |
|------------------------------|------------|--------------|--------------|
| Container Type               | Stored     | Proj.        | Total        |
| 55-gal Drum Dir Ld w/o Liner | 0.0        | 229.5        | 229.5        |
| <b>Final Form Total</b>      | <b>0.0</b> | <b>229.5</b> | <b>229.5</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.32E+04        |
| Aluminum-based Metal/Alloys   | 9.37E+01        |
| Other Metal/Alloys            | 2.77E+03        |
| Other Inorganic Materials     | 1.50E+04        |
| Cellulose                     | 1.91E+03        |
| Rubber                        | 2.87E+03        |
| Plastic                       | 8.88E+03        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 3.69E+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    | 1.29E+02        |
| Packaging Material, Steel     | 2.97E+04        |
| Packaging Material, Lead      | 0.00E+00        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 9.75E+02            |
| Am-243  | 4.46E-02            |
| Cm-244  | 1.15E+01            |
| Cs-137  | 9.08E-04            |
| Np-237  | 2.24E-02            |
| Pu-238  | 4.13E+03            |
| Pu-239  | 2.76E+03            |
| Pu-240  | 9.15E+02            |
| Pu-241  | 1.39E+04            |
| Pu-242  | 2.58E-01            |
| Sr-90   | 9.66E-04            |
| Th-229  | 1.50E-05            |
| Th-230  | 1.02E-06            |
| Th-232  | 6.08E-14            |
| U-233   | 1.70E+00            |
| U-234   | 1.11E+00            |
| U-235   | 3.12E-03            |
| U-236   | 1.23E-02            |
| U-238   | 4.77E-01            |

No Hazardous Waste Numbers Provided

No TRUCON Codes Provided

Waste Stream Description

CH TRU waste resulting from processing of aged weapons grade Pu.

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           | 12/31/2023 |    |
| Stream Name | CH TRU - Heterogeneous debris from the DWPF laboratory |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | 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  | 9.44E-02            |
| Cs-137  | 2.34E-03            |
| Np-237  | 1.26E-06            |
| Pu-238  | 1.82E-02            |
| Pu-239  | 3.10E-03            |
| Pu-240  | 4.88E-02            |
| Pu-241  | 4.62E-02            |
| Sr-90   | 2.28E-03            |
| Th-229  | 4.42E-06            |
| Th-230  | 7.46E-11            |
| Th-232  | 1.03E-17            |
| U-233   | 2.96E-03            |
| U-234   | 9.34E-07            |
| U-235   | 4.10E-07            |
| U-236   | 2.46E-08            |
| U-238   | 1.16E-05            |

No Hazardous Waste Numbers Provided

TRUCON Code(s)  
125/225

**Waste Stream Description**

CH TRU waste consisting of contaminated laboratory debris

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           | 12/31/2023 |    |
| Stream Name | Commingled waste from HBL and 235F. |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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        |
| <b>Final Form Total</b>     | <b>2.5</b> | <b>0.0</b> | <b>2.5</b> |

**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  | 3.56E-04            |
| Np-237  | 1.72E-04            |
| Pu-238  | 1.26E+00            |
| Pu-239  | 9.42E-04            |
| Pu-240  | 5.15E-04            |
| Pu-241  | 1.74E-02            |
| Pu-242  | 6.13E-07            |
| Th-229  | 3.26E-12            |
| Th-230  | 1.72E-09            |
| Th-232  | 3.76E-20            |
| U-233   | 7.42E-09            |
| U-234   | 3.69E-05            |
| U-235   | 9.28E-12            |
| U-236   | 1.53E-10            |
| U-238   | 9.51E-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 |
|---------|

**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).

Waste Stream ID: **SR-KAC-HET-2**

**Appendix A**

Waste Profile Report

|             |   |                         |                            |                       |                          |            |    |
|-------------|---|-------------------------|----------------------------|-----------------------|--------------------------|------------|----|
| Site        | Savannah River Site   | Summary Category        | S5000                      | Defense Determination | Defense-Related          | Handling   | CH |
| Source Cat. | Facility/Equipment Operation and Maintenance Waste                        | Waste Matrix Code Group | Heterogeneous Debris Waste |                       | Inventory Date           | 12/31/2023 |    |
| Stream Name | CH TRU Heterogeneous debris from the K-Area downblend of 26.9 MT material |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |            |             |             |
|------------------------------|------------|-------------|-------------|
| Container Type               | Stored     | Proj.       | Total       |
| 55-gal Drum Dir Ld w/o Liner | 0.0        | 17.6        | 17.6        |
| <b>Final Form Total</b>      | <b>0.0</b> | <b>17.6</b> | <b>17.6</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 4.30E+02        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 0.00E+00        |
| Cellulose                     | 3.97E+01        |
| Rubber                        | 3.68E+02        |
| Plastic                       | 2.77E+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   | 0.00E+00        |
| Packaging Material, Rubber    | 9.91E+00        |
| Packaging Material, Steel     | 2.28E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.25E+01            |
| Np-237  | 8.27E-05            |
| Pu-238  | 4.17E+00            |
| Pu-239  | 3.45E+01            |
| Pu-240  | 8.95E+00            |
| Pu-241  | 9.52E+01            |
| Pu-242  | 2.95E-03            |
| Th-229  | 3.96E-17            |
| Th-230  | 5.42E-13            |
| Th-232  | 6.53E-20            |
| U-233   | 1.26E-11            |
| U-234   | 1.18E-06            |
| U-235   | 6.56E-05            |
| U-236   | 2.65E-08            |
| U-238   | 2.31E-06            |

No Hazardous Waste Numbers Provided

TRUCON Code(s)  
125/225

**Waste Stream Description**

This waste stream consists of plutonium contaminated debris resulting from downblend and packaging Pu oxide.

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           | 12/31/2023 |    |
| Stream Name | CH Mixed TRU Heterogeneous debris from the K Area Plutonium surveillance program |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | 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  | 1.64E-01            |
| Np-237  | 1.52E-06            |
| Pu-238  | 4.71E-02            |
| Pu-239  | 4.21E-01            |
| Pu-240  | 1.09E-01            |
| Pu-241  | 7.20E-01            |
| Pu-242  | 3.60E-05            |
| Th-229  | 2.22E-14            |
| Th-230  | 6.44E-11            |
| Th-232  | 7.96E-18            |
| U-233   | 5.42E-11            |
| U-234   | 1.38E-06            |
| U-235   | 8.04E-07            |
| U-236   | 3.23E-08            |
| U-238   | 2.81E-08            |

**Haz. Waste No(s).**

D006, D008

**TRUCON Code(s)**

125/225

**Waste Stream Description**

This waste stream consists of plutonium contaminated debris resulting from destructive and non-destructive containers used to store plutonium material.

Waste Stream ID: **SR-KAC-HET-B**

**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           | 12/31/2023 |    |
| Stream Name | CH TRU Heterogeneous debris from the K-Area downblend of the 6 MT and 7.1 MT materials |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |            |             |             |
|------------------------------|------------|-------------|-------------|
| Container Type               | Stored     | Proj.       | Total       |
| 55-gal Drum Dir Ld w/o Liner | 4.0        | 52.9        | 56.9        |
| <b>Final Form Total</b>      | <b>4.0</b> | <b>52.9</b> | <b>56.9</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.39E+03        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 0.00E+00        |
| Cellulose                     | 1.28E+02        |
| Rubber                        | 1.19E+03        |
| Plastic                       | 8.94E+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    | 3.20E+01        |
| Packaging Material, Steel     | 7.37E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 4.25E+01            |
| Np-237  | 3.13E-04            |
| Pu-238  | 1.35E+01            |
| Pu-239  | 1.14E+02            |
| Pu-240  | 2.96E+01            |
| Pu-241  | 2.74E+02            |
| Pu-242  | 9.75E-03            |
| Th-229  | 4.92E-13            |
| Th-230  | 1.60E-09            |
| Th-232  | 1.94E-16            |
| U-233   | 3.82E-09            |
| U-234   | 1.15E-04            |
| U-235   | 2.17E-04            |
| U-236   | 2.62E-06            |
| U-238   | 7.63E-06            |

No Hazardous Waste Numbers Provided

TRUCON Code(s)  
125/225

**Waste Stream Description**

This waste stream consists of plutonium contaminated debris resulting from downblend and packaging Pu oxide, as well as surveillances.

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           | 12/31/2023 |    |
| Stream Name | K-Area Pu Oxide waste associated with the 6 MT and 7.1 MT materials |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |             |              |              |
|-------------------------|-------------|--------------|--------------|
| Container Type          | Stored      | Proj.        | Total        |
| 55-gal CCO w/ Liner     | 21.6        | 308.3        | 329.9        |
| <b>Final Form Total</b> | <b>21.6</b> | <b>308.3</b> | <b>329.9</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.10E+05        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 3.56E+04        |
| Other Inorganic Materials     | 4.45E+04        |
| Cellulose                     | 0.00E+00        |
| Rubber                        | 0.00E+00        |
| Plastic                       | 5.93E+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 | 5.95E+05        |
| Packaging Material, Plastic   | 1.99E+05        |
| Packaging Material, Rubber    | 3.04E+03        |
| Packaging Material, Steel     | 2.09E+06        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 2.34E+05            |
| Np-237  | 1.51E-01            |
| Pu-238  | 5.51E+04            |
| Pu-239  | 4.10E+05            |
| Pu-240  | 1.38E+05            |
| Pu-241  | 1.02E+06            |
| Pu-242  | 4.78E+01            |
| Th-229  | 3.84E-11            |
| Th-230  | 2.89E-06            |
| Th-232  | 4.04E-13            |
| U-233   | 6.56E-07            |
| U-234   | 3.14E-01            |
| U-235   | 8.08E-04            |
| U-236   | 8.19E-03            |
| U-238   | 1.48E-08            |

No Hazardous Waste Numbers Provided

TRUCON Code(s)  
130/230

**Waste Stream Description**

The plutonium oxide material is being blended and packaged specifically for disposal at WIPP.



Waste Stream ID: **SR-KAC-PuOx-2**

**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           | 12/31/2023 |    |
| Stream Name | K-Area Pu Oxide waste associated with 26.9 MT material |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |              |              |
|-------------------------|------------|--------------|--------------|
| Container Type          | Stored     | Proj.        | Total        |
| 55-gal CCO w/ Liner     | 0.0        | 121.0        | 121.0        |
| <b>Final Form Total</b> | <b>0.0</b> | <b>121.0</b> | <b>121.0</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 7.72E+04        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 1.30E+04        |
| Other Inorganic Materials     | 1.63E+04        |
| Cellulose                     | 0.00E+00        |
| Rubber                        | 0.00E+00        |
| Plastic                       | 2.17E+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 | 2.18E+05        |
| Packaging Material, Plastic   | 7.29E+04        |
| Packaging Material, Rubber    | 1.12E+03        |
| Packaging Material, Steel     | 7.65E+05        |
| Packaging Material, Lead      | 0.00E+00        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.55E+04            |
| Np-237  | 1.15E-03            |
| Pu-238  | 6.88E+03            |
| Pu-239  | 1.61E+05            |
| Pu-240  | 3.55E+04            |
| Pu-241  | 1.53E+05            |
| Pu-242  | 4.95E+00            |
| Th-229  | 1.44E-16            |
| Th-230  | 8.93E-10            |
| Th-232  | 2.59E-16            |
| U-233   | 6.28E-11            |
| U-234   | 1.94E-03            |
| U-235   | 1.59E-05            |
| U-236   | 1.05E-04            |
| U-238   | 7.68E-11            |

No Hazardous Waste Numbers Provided

TRUCON Code(s)  
130/230

Waste Stream Description

The plutonium oxide material is being blended and packaged specifically for disposal at WIPP.

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           | 12/31/2023 |    |
| Stream Name | CH TRU Heterogeneous debris from the Los Alamos Scientific Laboratory (LASL) |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 4.6        | 0.0        | 4.6        |
| <b>Final Form Total</b>      | <b>4.6</b> | <b>0.0</b> | <b>4.6</b> |

**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  | 4.42E+00            |
| Am-243  | 1.74E-06            |
| Cs-137  | 9.76E-06            |
| Np-237  | 2.24E-04            |
| Pu-238  | 1.76E+03            |
| Pu-239  | 2.16E+00            |
| Pu-240  | 3.42E+00            |
| Pu-241  | 2.25E+01            |
| Pu-242  | 4.34E-03            |
| Sr-90   | 1.15E-05            |
| Th-229  | 5.85E-07            |
| Th-230  | 3.34E-05            |
| Th-232  | 2.98E-07            |
| U-233   | 6.66E-04            |
| U-234   | 3.89E-01            |
| U-235   | 5.17E-06            |
| U-236   | 1.01E-06            |
| U-238   | 6.74E-12            |

**Haz. Waste No(s).**

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

**TRUCON Code(s)**

125/225

**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.

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           | 12/31/2023 |    |
| Stream Name | CH Mixed TRU/F listed solvents - Heterogeneous debris from Mound Laboratories |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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        |
| <b>Final Form Total</b>      | <b>14.6</b> | <b>0.0</b> | <b>14.6</b> |

**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  | 5.22E-01            |
| Am-243  | 1.20E-06            |
| Cm-244  | 4.21E-05            |
| Cs-137  | 7.83E-05            |
| Np-237  | 1.02E-04            |
| Pu-238  | 8.08E+01            |
| Pu-239  | 1.22E+00            |
| Pu-240  | 1.88E-01            |
| Pu-241  | 3.34E+00            |
| Pu-242  | 1.19E-04            |
| Sr-90   | 7.72E-05            |
| Th-229  | 2.01E-05            |
| Th-230  | 3.59E-05            |
| Th-232  | 3.64E-06            |
| U-233   | 2.55E-02            |
| U-234   | 1.70E-02            |
| U-235   | 6.80E-06            |
| U-236   | 5.00E-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, 127/227

**Waste Stream Description**

This waste stream is primarily solids consisting of booties, lab coats, floor sweeping, labware, rags, and other job control waste.

Waste Stream ID: **SR-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           | 12/31/2023 |    |
| Stream Name | CH TRU Heterogeneous debris from the Mound Plant   |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 10.7        | 0.0        | 10.7        |
| SWB Dir Ld w/o Liner        | 3.8         | 0.0        | 3.8         |
| <b>Final Form Total</b>     | <b>14.5</b> | <b>0.0</b> | <b>14.5</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 8.64E+02        |
| Aluminum-based Metal/Alloys   | 1.74E+00        |
| Other Metal/Alloys            | 1.07E+01        |
| Other Inorganic Materials     | 9.94E+01        |
| Cellulose                     | 2.79E+02        |
| Rubber                        | 3.65E+01        |
| Plastic                       | 1.62E+02        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 8.66E+00        |
| Solidified Organic Material   | 3.99E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 3.93E+02        |
| Packaging Material, Rubber    | 6.74E+00        |
| Packaging Material, Steel     | 1.97E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 8.70E+00            |
| Am-243  | 2.88E-05            |
| Cm-244  | 1.26E-02            |
| Cs-137  | 3.39E-02            |
| Np-237  | 8.64E-04            |
| Pu-238  | 3.94E+03            |
| Pu-239  | 5.02E+00            |
| Pu-240  | 6.82E+00            |
| Pu-241  | 4.64E+01            |
| Pu-242  | 8.33E-03            |
| Sr-90   | 3.34E-02            |
| Th-229  | 1.30E-11            |
| Th-230  | 6.66E-05            |
| Th-232  | 2.46E-05            |
| U-233   | 3.30E-08            |
| U-234   | 8.56E-01            |
| U-235   | 1.58E-05            |
| U-236   | 1.82E-06            |
| U-238   | 5.80E-05            |

**Haz. Waste No(s).**

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D030, D032, D034, D037, D043, F002, F004, F005

**TRUCON Code(s)**

125/225

**Waste Stream Description**

This CH TRU waste stream consists of debris shipped to the SRS from the Mound Plant in 1971 and 1972.

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           | 12/31/2023 |    |
| Stream Name | CH Mixed TRU Soil / Gravel (S4000) |                         |                                |                       | Activities Decayed to CY | 2023       |    |

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

| 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        |
| <b>Final Form Total</b>      | <b>2.1</b> | <b>0.0</b> | <b>2.1</b> |

**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  | 1.59E-02            |
| Cs-137  | 3.79E-06            |
| Np-237  | 2.19E-06            |
| Pu-238  | 1.01E+00            |
| Pu-239  | 2.60E-02            |
| Pu-240  | 3.77E-03            |
| Pu-241  | 3.10E-02            |
| Pu-242  | 5.02E-06            |
| Sr-90   | 3.73E-06            |
| Th-229  | 4.08E-14            |
| Th-230  | 1.83E-08            |
| Th-232  | 2.75E-19            |
| U-233   | 9.32E-11            |
| U-234   | 2.14E-04            |
| U-235   | 2.56E-10            |
| U-236   | 1.12E-09            |
| U-238   | 7.78E-15            |

**Haz. Waste No(s).**

D004, D005, D006, D007, D008, D009, D010, D011, F002, F003, F004, F005, F007, F009

**TRUCON Code(s)**

111/211, 127/227

**Waste Stream Description**

Soil mixed with absorbent and some commingled debris.

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           | 12/31/2023 |    |
| Stream Name | Heterogeneous Debris Waste from the NIST |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | 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   | 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  | 6.51E+00            |
| Np-237  | 2.28E-05            |
| Pu-238  | 7.69E+00            |
| Pu-239  | 2.58E+00            |
| Pu-240  | 6.10E-01            |
| Pu-241  | 1.64E+01            |
| Pu-242  | 1.09E-04            |
| Th-229  | 1.72E-13            |
| Th-230  | 5.64E-08            |
| Th-232  | 4.27E-14            |
| U-233   | 5.36E-10            |
| U-234   | 6.81E-04            |
| U-235   | 6.29E-06            |
| U-236   | 7.88E-05            |
| U-238   | 2.50E-07            |

No Hazardous Waste Numbers Provided

TRUCON Code(s)  
125/225

**Waste Stream Description**

This material consist of a combination of unirradiated PuO/UO fuel pellets, Pacemaker source and solidified Pu solutions.

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           | 12/31/2023 |    |
| Stream Name | RH TRU Heterogeneous debris from the HB-Line       |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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 | 0.6        | 0.0        | 0.6        |
| RH SCA-55G1 w/o Liner                      | 2.9        | 0.0        | 2.9        |
| <b>Final Form Total</b>                    | <b>3.9</b> | <b>0.0</b> | <b>3.9</b> |

**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   | 2.85E+02        |
| Packaging Material, Rubber    | 1.64E+00        |
| Packaging Material, Steel     | 1.93E+04        |
| Packaging Material, Lead      | 1.31E+01        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 4.39E-01            |
| Np-237  | 2.44E+00            |
| Pu-238  | 1.41E+03            |
| Pu-239  | 1.19E+00            |
| Pu-240  | 6.16E-01            |
| Pu-241  | 2.12E+01            |
| Pu-242  | 7.11E-04            |
| Th-229  | 3.74E-08            |
| Th-230  | 2.98E-06            |
| Th-232  | 7.47E-15            |
| U-233   | 9.44E-05            |
| U-234   | 5.44E-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)**

125/225, 321, 322, 325

**Waste Stream Description**

This waste stream is composed of dry heterogeneous organic and inorganic debris.

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           | 12/31/2023 |    |
| Stream Name | RH TRU spent Berl saddles from H-Canyon dissolver off-gas system. |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-55G1 w/o Liner   | 3.2        | 0.0        | 3.2        |
| <b>Final Form Total</b> | <b>3.2</b> | <b>0.0</b> | <b>3.2</b> |

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   | 0.00E+00        |
| Packaging Material, Rubber    | 1.38E+00        |
| Packaging Material, Steel     | 1.95E+04        |
| Packaging Material, Lead      | 1.40E+01        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Np-237  | 9.04E-04            |
| Pu-238  | 2.06E+00            |
| Pu-239  | 1.92E-02            |
| Pu-240  | 1.31E-02            |
| Pu-242  | 2.26E-04            |
| Th-229  | 1.71E-11            |
| Th-230  | 2.36E-08            |
| Th-232  | 9.56E-19            |
| U-233   | 3.89E-08            |
| U-234   | 2.86E-04            |
| U-235   | 1.89E-10            |
| U-236   | 3.88E-09            |
| U-238   | 3.51E-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).



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           | 12/31/2023 |    |
| Stream Name | RH TRU Heterogeneous debris from the 235F facility. |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-55G1 w/o Liner   | 1.1        | 0.0        | 1.1        |
| <b>Final Form Total</b> | <b>1.1</b> | <b>0.0</b> | <b>1.1</b> |

**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   | 0.00E+00        |
| Packaging Material, Rubber    | 4.60E-01        |
| Packaging Material, Steel     | 6.50E+03        |
| Packaging Material, Lead      | 4.67E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.61E+02            |
| Np-237  | 3.57E-02            |
| Pu-238  | 3.63E+02            |
| Pu-239  | 3.00E+00            |
| Pu-240  | 7.92E-01            |
| Pu-241  | 3.66E+03            |
| Pu-242  | 2.88E-04            |
| Th-229  | 6.71E-10            |
| Th-230  | 4.97E-07            |
| Th-232  | 5.78E-17            |
| U-233   | 1.53E-06            |
| U-234   | 1.07E-02            |
| U-235   | 2.95E-08            |
| U-236   | 2.34E-07            |
| U-238   | 4.47E-13            |

**Haz. Waste No(s).**

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D035, F002

**TRUCON Code(s)**

125/225

**Waste Stream Description**

This waste stream is composed of metal equipment and debris.

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           | 12/31/2023 |    |
| Stream Name | RH TRU Heterogeneous debris from the 772F and 772-1F laboratories. |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-55G1 w/o Liner   | 0.4        | 0.0        | 0.4        |
| <b>Final Form Total</b> | <b>0.4</b> | <b>0.0</b> | <b>0.4</b> |

**Waste Material Parameters**

| Material Parameter            | 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   | 0.00E+00        |
| Packaging Material, Rubber    | 1.84E-01        |
| Packaging Material, Steel     | 2.60E+03        |
| Packaging Material, Lead      | 1.87E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 9.26E-03            |
| Cs-137  | 5.47E-01            |
| Np-237  | 4.00E-06            |
| Pu-238  | 3.11E-02            |
| Pu-239  | 2.68E-02            |
| Pu-240  | 8.15E-03            |
| Pu-241  | 3.17E-02            |
| Pu-242  | 1.33E-06            |
| Sr-90   | 5.29E-01            |
| Th-229  | 3.33E-13            |
| Th-230  | 6.08E-10            |
| Th-232  | 1.71E-16            |
| U-233   | 3.61E-10            |
| U-234   | 4.12E-06            |
| U-235   | 1.87E-08            |
| U-236   | 1.68E-07            |
| U-238   | 4.35E-15            |

**Haz. Waste No(s).**

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D028, D029, F002, F003, F005

**TRUCON Code(s)**

125/225

**Waste Stream Description**

This waste stream is primarily solids consisting of booties, lab coats, floor sweeping, labware, rags, other job control waste, small HEPAs liquids, sludges and resins may also be found in this waste.

Waste Stream ID: **SR-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           | 12/31/2023 |    |
| Stream Name | RH TRU Heterogeneous debris from the SRNL |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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         |
| RH SCA-55G1 w/o Liner                      | 15.8        | 0.0        | 15.8        |
| RH SCA-55G2 w/o Liner                      | 0.2         | 0.0        | 0.2         |
| <b>Final Form Total</b>                    | <b>16.6</b> | <b>0.0</b> | <b>16.6</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 3.24E+03        |
| Aluminum-based Metal/Alloys   | 3.55E+01        |
| Other Metal/Alloys            | 2.17E+02        |
| Other Inorganic Materials     | 2.13E+03        |
| Cellulose                     | 1.16E+03        |
| Rubber                        | 1.76E+03        |
| Plastic                       | 3.64E+03        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 7.35E+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    | 7.36E+00        |
| Packaging Material, Steel     | 9.91E+04        |
| Packaging Material, Lead      | 1.67E+03        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 2.66E+00            |
| Am-243  | 8.74E-01            |
| Cm-244  | 5.07E+01            |
| Cs-137  | 1.27E+01            |
| Np-237  | 7.28E-05            |
| Pu-238  | 4.28E+01            |
| Pu-239  | 1.24E+00            |
| Pu-240  | 7.56E-01            |
| Pu-241  | 5.92E+00            |
| Pu-242  | 3.47E-04            |
| Pu-244  | 7.66E-13            |
| Sr-90   | 9.23E+00            |
| Th-229  | 4.27E-12            |
| Th-230  | 2.21E-07            |
| Th-232  | 1.76E-16            |
| U-233   | 5.33E-09            |
| U-234   | 2.47E-03            |
| U-235   | 2.32E-08            |
| U-236   | 3.89E-07            |
| U-238   | 1.02E-12            |

**Haz. Waste No(s).**

|  |
|--|
| D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D043, F002, F004, F005 |
|--|

**TRUCON Code(s)**

|                        |
|------------------------|
| 125/225, 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.

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           | 12/31/2023 |    |
| Stream Name | RH TRU Heterogeneous debris from the FB-Line       |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-55G1 w/o Liner   | 0.8        | 0.0        | 0.8        |
| <b>Final Form Total</b> | <b>0.8</b> | <b>0.0</b> | <b>0.8</b> |

**Waste Material Parameters**

| Material Parameter            | 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   | 0.00E+00        |
| Packaging Material, Rubber    | 3.68E-01        |
| Packaging Material, Steel     | 5.20E+03        |
| Packaging Material, Lead      | 3.74E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 4.22E+00            |
| Cs-137  | 4.77E-06            |
| Np-237  | 2.37E-05            |
| Pu-238  | 1.71E+00            |
| Pu-239  | 1.83E+00            |
| Pu-240  | 1.81E+00            |
| Pu-241  | 1.08E+01            |
| Pu-242  | 8.97E-05            |
| Sr-90   | 4.64E-06            |
| Th-229  | 2.08E-05            |
| Th-230  | 3.92E-08            |
| Th-232  | 4.28E-16            |
| U-233   | 1.31E-02            |
| U-234   | 2.82E-04            |
| U-235   | 3.74E-06            |
| U-236   | 9.64E-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)**

125/225

**Waste Stream Description**

This waste stream consists primarily of dry heterogeneous organic debris.

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           | 12/31/2023 |    |
| Stream Name | RH TRU Heterogeneous debris from the F-Canyon dissolver off-gas system. |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-55G1 w/o Liner   | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b> | <b>1.9</b> | <b>0.0</b> | <b>1.9</b> |

**Waste Material Parameters**

| Material Parameter            | 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   | 0.00E+00        |
| Packaging Material, Rubber    | 8.28E-01        |
| Packaging Material, Steel     | 1.17E+04        |
| Packaging Material, Lead      | 8.41E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 2.05E-03            |
| Np-237  | 6.20E-05            |
| Pu-238  | 4.72E-05            |
| Pu-239  | 1.89E-03            |
| Pu-240  | 1.37E-03            |
| Pu-241  | 7.30E-03            |
| Pu-242  | 5.16E-01            |
| Th-229  | 3.82E-12            |
| Th-230  | 1.91E-05            |
| Th-232  | 8.07E-15            |
| U-233   | 4.83E-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.

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           | 12/31/2023 |    |
| Stream Name | RH Debris from Mound Laboratories |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes                         |            |            |            |
|--|------------|------------|------------|
| Container Type                             | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 2.5        | 0.0        | 2.5        |
| RH SCA-55G1 w/o Liner                      | 0.4        | 0.0        | 0.4        |
| <b>Final Form Total</b>                    | <b>2.9</b> | <b>0.0</b> | <b>2.9</b> |

**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   | 1.14E+02        |
| Packaging Material, Rubber    | 1.60E+00        |
| Packaging Material, Steel     | 4.92E+03        |
| Packaging Material, Lead      | 1.87E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 7.59E-01            |
| Np-237  | 1.78E-06            |
| Pu-238  | 2.16E+03            |
| Pu-239  | 1.66E+00            |
| Pu-240  | 9.05E-01            |
| Pu-241  | 2.65E+01            |
| Pu-242  | 1.08E-03            |
| Th-229  | 1.03E-14            |
| Th-230  | 5.07E-06            |
| Th-232  | 1.12E-16            |
| U-233   | 3.50E-11            |
| U-234   | 8.34E-02            |
| U-235   | 2.12E-08            |
| U-236   | 3.48E-07            |
| U-238   | 2.17E-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)**

125/225, 325

**Waste Stream Description**

Process equipment and exchange resin

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           | 12/31/2023 |    |
| Stream Name | Remote Handled PuBe Sources         |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH Can NS30 w/ Liner    | 0.3        | 0.0        | 0.3        |
| <b>Final Form Total</b> | <b>0.3</b> | <b>0.0</b> | <b>0.3</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.92E+01        |
| Aluminum-based Metal/Alloys   | 5.53E-01        |
| Other Metal/Alloys            | 1.79E-01        |
| Other Inorganic Materials     | 0.00E+00        |
| Cellulose                     | 2.04E+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   | 2.56E+02        |
| Packaging Material, Rubber    | 0.00E+00        |
| Packaging Material, Steel     | 5.48E+02        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 6.21E+00            |
| Np-237  | 3.06E-05            |
| Pu-238  | 8.38E+01            |
| Pu-239  | 1.42E+00            |
| Pu-240  | 8.56E-01            |
| Pu-241  | 2.28E+01            |
| Pu-242  | 1.43E-03            |
| Th-229  | 4.81E-13            |
| Th-230  | 3.03E-07            |
| Th-232  | 1.60E-16            |
| U-233   | 1.04E-09            |
| U-234   | 4.03E-03            |
| U-235   | 2.24E-08            |
| U-236   | 4.06E-07            |
| U-238   | 3.55E-12            |

No Hazardous Waste Numbers Provided

TRUCON Code(s)  
320

**Waste Stream Description**

This waste stream consists of three PuBe sources.

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           | 12/31/2023 |    |
| Stream Name | Remote Handled (RH) Mixed TRU Debris (S5000) |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-55G1 w/o Liner   | 0.2        | 0.0        | 0.2        |
| <b>Final Form Total</b> | <b>0.2</b> | <b>0.0</b> | <b>0.2</b> |

**Waste Material Parameters**

| Material Parameter            | 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   | 0.00E+00        |
| Packaging Material, Rubber    | 9.20E-02        |
| Packaging Material, Steel     | 1.30E+03        |
| Packaging Material, Lead      | 9.34E-01        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 2.66E-02            |
| Am-243  | 1.85E-02            |
| Cm-244  | 1.26E+00            |
| Cs-137  | 4.27E-03            |
| Np-237  | 1.34E-04            |
| Pu-238  | 7.05E-02            |
| Pu-239  | 8.62E-02            |
| Pu-240  | 2.83E-02            |
| Pu-241  | 5.83E-01            |
| Pu-242  | 9.39E-06            |
| Pu-244  | 4.47E-16            |
| Sr-90   | 2.98E-03            |
| Th-229  | 2.54E-12            |
| Th-230  | 9.63E-11            |
| Th-232  | 1.99E-18            |
| U-233   | 5.77E-09            |
| U-234   | 2.07E-06            |
| U-235   | 8.49E-10            |
| U-236   | 8.15E-09            |
| U-238   | 1.46E-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)**

125/225

**Waste Stream Description**

RH Mixed TRU waste resulting from solvent tank emptying and closure in the E-Area of SRS.



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           | 12/31/2023 |    |
| Stream Name | CH TRU - Heterogeneous debris from the D&D of the 211-F-Area |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| SWB Dir Ld w/o Liner    | 1.9        | 0.0        | 1.9        |
| <b>Final Form Total</b> | <b>1.9</b> | <b>0.0</b> | <b>1.9</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 9.88E+01        |
| Aluminum-based Metal/Alloys   | 9.64E-01        |
| Other Metal/Alloys            | 7.53E-02        |
| Other Inorganic Materials     | 9.34E-01        |
| Cellulose                     | 4.37E+00        |
| Rubber                        | 0.00E+00        |
| Plastic                       | 4.34E+01        |
| Cement                        | 2.06E+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    | 3.63E-01        |
| Packaging Material, Steel     | 2.90E+02        |
| Packaging Material, Lead      | 0.00E+00        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 4.74E-03            |
| Am-243  | 1.03E-06            |
| Cm-244  | 7.57E-05            |
| Cs-137  | 3.79E-05            |
| Np-237  | 1.45E-05            |
| Pu-238  | 1.11E+00            |
| Pu-239  | 6.55E-02            |
| Pu-240  | 9.17E-03            |
| Pu-241  | 1.15E-01            |
| Pu-242  | 8.12E-06            |
| Sr-90   | 9.17E-03            |
| Th-229  | 8.11E-10            |
| Th-230  | 1.85E-09            |
| Th-232  | 5.11E-17            |
| U-233   | 1.03E-06            |
| U-234   | 3.68E-05            |
| U-235   | 1.59E-08            |
| U-236   | 1.16E-07            |
| U-238   | 3.28E-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.

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           | 12/31/2023 |    |
| Stream Name | Organic Sludge from D&D of the SRS F-Area 800 Series Underground Tanks |                         |                     |                       | Activities Decayed to CY | 2023       |    |

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

| 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        |
| <b>Final Form Total</b>      | <b>4.0</b> | <b>0.0</b> | <b>4.0</b> |

**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  | 1.28E-01            |
| Am-243  | 5.72E-04            |
| Np-237  | 8.10E-02            |
| Pu-238  | 9.14E+00            |
| Pu-239  | 8.69E-01            |
| Pu-240  | 1.65E-01            |
| Pu-241  | 1.61E+00            |
| Pu-242  | 3.77E-01            |
| Th-229  | 2.92E-04            |
| Th-230  | 6.89E-05            |
| Th-232  | 1.10E-12            |
| 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

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           | 12/31/2023 |    |
| Stream Name | Sludge from D&D of the SRS F-Area 800 Series Underground Tanks |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

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

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.08E+02        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 7.84E+00        |
| Cellulose                     | 4.13E+01        |
| Rubber                        | 0.00E+00        |
| Plastic                       | 8.48E+01        |
| Cement                        | 4.48E+02        |
| Solidified Inorganic Material | 2.36E+01        |
| Solidified Organic Material   | 1.47E-01        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 0.00E+00        |
| Packaging Material, Rubber    | 1.53E+00        |
| Packaging Material, Steel     | 3.54E+02        |
| Packaging Material, Lead      | 0.00E+00        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 5.17E-01            |
| Am-243  | 1.60E-04            |
| Cm-244  | 5.93E-03            |
| Cs-137  | 1.05E-03            |
| Np-237  | 1.61E-03            |
| Pu-238  | 1.22E+02            |
| Pu-239  | 7.25E+00            |
| Pu-240  | 1.01E+00            |
| Pu-241  | 1.18E+01            |
| Pu-242  | 3.51E-03            |
| Sr-90   | 4.46E-04            |
| Th-229  | 3.04E-11            |
| Th-230  | 2.45E-07            |
| Th-232  | 6.51E-15            |
| U-233   | 6.93E-08            |
| U-234   | 4.44E-03            |
| U-235   | 7.08E-06            |
| U-236   | 1.33E-05            |
| U-238   | 2.07E-04            |

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011

TRUCON Code(s)

127/227

Waste Stream Description

Absorbed sludge

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           | 12/31/2023 |    |
| Stream Name | CH Mixed TRU Debris (S5000)                        |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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 | 5.9         | 0.0        | 5.9         |
| SWB Dir Ld w/o Liner         | 60.2        | 0.0        | 60.2        |
| <b>Final Form Total</b>      | <b>66.9</b> | <b>0.0</b> | <b>66.9</b> |

**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    | 1.54E+01        |
| Packaging Material, Steel     | 1.02E+04        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 5.06E+00            |
| Am-243  | 3.70E-04            |
| Cm-244  | 9.48E-02            |
| Cs-137  | 3.49E-03            |
| Np-237  | 4.65E-03            |
| Pu-238  | 4.76E+02            |
| Pu-239  | 1.02E+01            |
| Pu-240  | 2.87E+00            |
| Pu-241  | 2.80E+01            |
| Pu-242  | 7.42E-03            |
| Sr-90   | 3.44E-03            |
| Th-229  | 3.55E-07            |
| Th-230  | 6.34E-06            |
| Th-232  | 1.17E-07            |
| U-233   | 4.03E-04            |
| U-234   | 7.58E-02            |
| U-235   | 9.56E-06            |
| U-236   | 8.49E-07            |
| U-238   | 3.50E-04            |

**Haz. Waste No(s).**

D008, F001, F002, F004, F005, F007, F009, U133, U151

**TRUCON Code(s)**

125/225

**Waste Stream Description**

CH Mixed TRU waste resulting from remediation and re-packaging of Mixed "defense related" TRU waste.

Waste Stream ID: **SR-SWMF-HET-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           | 12/31/2023 |    |
| Stream Name | Spill cleanup debris.                      |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.71E+01        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 6.74E+00        |
| Cellulose                     | 5.39E+00        |
| Rubber                        | 0.00E+00        |
| Plastic                       | 5.12E+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   | 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  | 7.16E-02            |
| Am-243  | 8.87E-02            |
| Cm-244  | 6.03E+00            |
| Cs-137  | 9.72E-07            |
| Np-237  | 2.33E-07            |
| Pu-238  | 1.33E-01            |
| Pu-239  | 2.05E-04            |
| Pu-240  | 3.82E-02            |
| Pu-241  | 3.80E-02            |
| Pu-242  | 2.80E-05            |
| Pu-244  | 2.49E-15            |
| Sr-90   | 9.58E-07            |
| Th-229  | 1.47E-15            |
| Th-230  | 1.81E-10            |
| Th-232  | 2.43E-18            |
| U-233   | 5.01E-12            |
| U-234   | 3.89E-06            |
| U-235   | 1.90E-12            |
| U-236   | 1.02E-08            |
| U-238   | 4.35E-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)**

125/225

**Waste Stream Description**

Solid Waste Management Facility debris resulting from spill cleanup activities

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           | 12/31/2023 |    |
| Stream Name | CH Mixed TRU HEPA Filters (S5000)                  |                         |                        |                       | Activities Decayed to CY | 2023       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 5.23E+00        |
| Aluminum-based Metal/Alloys   | 4.93E-02        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 3.25E-01        |
| Cellulose                     | 2.16E+00        |
| Rubber                        | 0.00E+00        |
| Plastic                       | 3.79E+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   | 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  | 6.06E-02            |
| Am-243  | 4.42E-15            |
| Cs-137  | 3.71E-08            |
| Np-237  | 5.07E-07            |
| Pu-238  | 1.45E-02            |
| Pu-239  | 1.96E-01            |
| Pu-240  | 5.27E-02            |
| Pu-241  | 4.08E-01            |
| Pu-242  | 6.64E-06            |
| Sr-90   | 3.66E-08            |
| Th-229  | 4.34E-08            |
| Th-230  | 6.42E-10            |
| Th-232  | 3.85E-18            |
| U-233   | 4.93E-05            |
| U-234   | 7.19E-06            |
| U-235   | 1.48E-07            |
| U-236   | 1.56E-08            |
| U-238   | 1.07E-08            |

**Haz. Waste No(s).**

D005, D007, D009, D011, D019, D022, D028, D029, D043, F002, F005

**TRUCON Code(s)**

119/219

**Waste Stream Description**

HEPA Filters in Filtered Polyethylene Boxes

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           | 12/31/2023 |    |
| Stream Name | CH Mixed TRU/Thirds Heterogeneous debris from 221F |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.78E+01        |
| Aluminum-based Metal/Alloys   | 2.89E-01        |
| Other Metal/Alloys            | 3.41E-01        |
| Other Inorganic Materials     | 4.44E+00        |
| Cellulose                     | 1.94E+01        |
| Rubber                        | 4.62E+00        |
| Plastic                       | 2.05E+01        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 0.00E+00        |
| Solidified Organic Material   | 1.62E-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  | 2.67E-01            |
| Am-243  | 5.05E-07            |
| Cm-244  | 2.46E-03            |
| Cs-137  | 4.77E-05            |
| Np-237  | 3.59E-06            |
| Pu-238  | 2.41E-01            |
| Pu-239  | 9.95E-01            |
| Pu-240  | 2.74E-01            |
| Pu-241  | 2.94E+00            |
| Pu-242  | 1.70E-04            |
| Sr-90   | 4.71E-05            |
| Th-229  | 4.75E-14            |
| Th-230  | 9.29E-09            |
| Th-232  | 3.13E-08            |
| U-233   | 1.25E-10            |
| U-234   | 1.15E-04            |
| U-235   | 1.46E-06            |
| U-236   | 7.31E-08            |
| U-238   | 9.71E-06            |

**Haz. Waste No(s).**

D006, D007, D008, D009, D022, D028, D029, F001, F002, F003, F005

**TRUCON Code(s)**

125/225

**Waste Stream Description**

200 Areas (F and H Separations Facilities). This waste is primarily solids consisting of mainly booties, lab coats, floor sweepings, rags, labware, and other job control wastes. Small HEPAs, liquids, sludges and resins may also be found in this stream. The waste is generated primarily through separation activities in the course of plutonium production, includes small amounts of TRU waste from on site laboratories.

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           | 12/31/2023 |    |
| Stream Name | CH Mixed TRU/Thirds Heterogeneous debris from 221F |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 3.4        | 0.0        | 3.4        |
| <b>Final Form Total</b>     | <b>3.4</b> | <b>0.0</b> | <b>3.4</b> |

**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            | 2.04E+00        |
| Other Inorganic Materials     | 1.38E+02        |
| Cellulose                     | 1.85E-01        |
| Rubber                        | 0.00E+00        |
| Plastic                       | 7.95E+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   | 1.23E+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  | 3.26E-01            |
| Cm-244  | 5.91E-03            |
| Cs-137  | 1.88E-01            |
| Np-237  | 3.38E-06            |
| Pu-238  | 3.58E-02            |
| Pu-239  | 6.77E-01            |
| Pu-240  | 1.71E-01            |
| Pu-241  | 3.40E+00            |
| Pu-242  | 2.96E-05            |
| Sr-90   | 5.22E-02            |
| Th-229  | 7.78E-09            |
| Th-230  | 1.98E-08            |
| Th-232  | 4.94E-16            |
| U-233   | 8.84E-06            |
| U-234   | 2.16E-04            |
| U-235   | 6.83E-06            |
| U-236   | 1.03E-06            |
| U-238   | 2.60E-06            |

**Haz. Waste No(s).**

D006, D007, D008, D009, D011, D019, D022, D028, D029, F002, F005

**TRUCON Code(s)**

125/225

**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.



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           | 12/31/2023 |    |
| Stream Name | CH Mixed TRU Solids (S3000)             |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.11E+00        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 0.00E+00        |
| Cellulose                     | 2.05E+00        |
| Rubber                        | 7.88E-01        |
| Plastic                       | 3.36E+01        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 3.22E+02        |
| Solidified Organic Material   | 5.52E+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  | 6.11E-01            |
| Am-243  | 1.45E-07            |
| Cs-137  | 2.48E-02            |
| Np-237  | 1.99E-05            |
| Pu-238  | 4.24E-01            |
| Pu-239  | 2.30E+00            |
| Pu-240  | 5.18E-01            |
| Pu-241  | 3.59E+00            |
| Pu-242  | 7.32E-05            |
| Sr-90   | 1.28E-05            |
| Th-229  | 4.24E-13            |
| Th-230  | 4.44E-09            |
| Th-232  | 4.58E-17            |
| U-233   | 8.92E-10            |
| U-234   | 5.07E-05            |
| U-235   | 5.16E-08            |
| U-236   | 1.69E-07            |
| U-238   | 3.88E-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

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           | 12/31/2023 |    |
| Stream Name | CH Mixed TRU/Thirds Heterogeneous debris from 772F |                         |                   |                       | Activities Decayed to CY | 2023       |    |

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

| 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 | 5.7         | 0.4        | 6.1         |
| SWB Dir Ld w/o Liner         | 22.6        | 7.5        | 30.1        |
| <b>Final Form Total</b>      | <b>29.5</b> | <b>7.9</b> | <b>37.4</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 4.17E+02        |
| Aluminum-based Metal/Alloys   | 2.45E+01        |
| Other Metal/Alloys            | 3.27E+01        |
| Other Inorganic Materials     | 6.93E+02        |
| Cellulose                     | 2.43E+02        |
| Rubber                        | 1.56E+02        |
| Plastic                       | 1.67E+03        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 3.18E+00        |
| Solidified Organic Material   | 3.22E-01        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 4.63E+01        |
| Packaging Material, Rubber    | 9.94E+00        |
| Packaging Material, Steel     | 5.59E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 9.21E+00            |
| Am-243  | 7.95E-05            |
| Cm-244  | 8.66E-02            |
| Cs-137  | 2.89E-02            |
| Np-237  | 9.03E-03            |
| Pu-238  | 3.11E+02            |
| Pu-239  | 1.47E+01            |
| Pu-240  | 3.66E+00            |
| Pu-241  | 5.08E+01            |
| Pu-242  | 1.68E-03            |
| Sr-90   | 2.83E-02            |
| Th-229  | 2.45E-06            |
| Th-230  | 4.94E-06            |
| Th-232  | 1.92E-05            |
| U-233   | 2.86E-03            |
| U-234   | 6.38E-02            |
| U-235   | 5.82E-05            |
| U-236   | 9.76E-07            |
| U-238   | 4.88E-05            |

**Haz. Waste No(s).**

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D028, D029, F002, F003, F005

**TRUCON Code(s)**

125/225

**Waste Stream Description**

This waste stream is composed of Job Control waste, sludges and resins, HEPA filters and metal equipment.

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           | 12/31/2023 |    |
| Stream Name | CH Mixed TRU/F listed solvents - Heterogeneous debris from 221F |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 9.12E+01        |
| Aluminum-based Metal/Alloys   | 2.54E-01        |
| Other Metal/Alloys            | 3.72E-02        |
| Other Inorganic Materials     | 3.69E+00        |
| Cellulose                     | 7.88E+01        |
| Rubber                        | 1.15E+00        |
| Plastic                       | 3.64E+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   | 6.94E+01        |
| Packaging Material, Rubber    | 1.06E+00        |
| Packaging Material, Steel     | 2.45E+02        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 4.02E-01            |
| Am-243  | 3.85E-07            |
| Cm-244  | 4.07E-05            |
| Cs-137  | 7.81E-07            |
| Np-237  | 4.30E-06            |
| Pu-238  | 9.79E-02            |
| Pu-239  | 1.25E+00            |
| Pu-240  | 3.14E-01            |
| Pu-241  | 2.47E+00            |
| Pu-242  | 2.98E-05            |
| Sr-90   | 7.69E-07            |
| Th-229  | 1.58E-08            |
| Th-230  | 4.72E-09            |
| Th-232  | 2.29E-17            |
| U-233   | 1.80E-05            |
| U-234   | 5.28E-05            |
| U-235   | 2.13E-07            |
| U-236   | 9.29E-08            |
| U-238   | 6.25E-07            |

**Haz. Waste No(s).**

D006, D008, D009, F001, F002, F005

**TRUCON Code(s)**

125/225

**Waste Stream Description**

This waste stream is primarily solids consisting of booties, lab coats, floor sweeping, labware, rags, and other job control waste. This stream differs from SR-W026 because solvent rags are suspected to be in the waste.

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           | 12/31/2023 |    |
| Stream Name | CH TRU HEPA filters                                |                         |                        |                       | Activities Decayed to CY | 2023       |    |

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

| 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 | 0.4         | 3.8         | 4.2         |
| SWB Dir Ld w/o Liner         | 26.3        | 11.3        | 37.6        |
| <b>Final Form Total</b>      | <b>27.0</b> | <b>15.1</b> | <b>42.0</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.82E+02        |
| Aluminum-based Metal/Alloys   | 1.00E+03        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 4.29E+02        |
| Cellulose                     | 2.80E+02        |
| Rubber                        | 3.97E+00        |
| Plastic                       | 5.81E+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+00        |
| Packaging Material, Rubber    | 9.74E+00        |
| Packaging Material, Steel     | 6.37E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 6.78E-01            |
| Am-243  | 5.22E-06            |
| Cs-137  | 5.34E-02            |
| Np-237  | 1.75E-03            |
| Pu-238  | 3.85E+02            |
| Pu-239  | 1.57E+00            |
| Pu-240  | 4.40E-01            |
| Pu-241  | 6.23E+00            |
| Pu-242  | 7.91E-04            |
| Sr-90   | 5.26E-02            |
| Th-229  | 3.31E-11            |
| Th-230  | 7.20E-06            |
| Th-232  | 3.22E-17            |
| U-233   | 7.53E-08            |
| U-234   | 8.39E-02            |
| U-235   | 4.84E-06            |
| U-236   | 1.30E-07            |
| U-238   | 1.23E-12            |

**Haz. Waste No(s).**

D006, D007, D008, D009, D011, D019, D022, D029, D035, D039, D040, D043

**TRUCON Code(s)**

119/219

**Waste Stream Description**

This waste stream is mixed TRU composed of HEPA filters.

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           | 12/31/2023 |    |
| Stream Name | CH Mixed TRU/F listed solvents - Heterogeneous debris from 221H |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner  | 2.5         | 0.0        | 2.5         |
| 55-gal Drum Dir Ld w/o Liner | 0.2         | 0.0        | 0.2         |
| SWB Dir Ld w/o Liner         | 16.9        | 0.0        | 16.9        |
| <b>Final Form Total</b>      | <b>19.7</b> | <b>0.0</b> | <b>19.7</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 5.06E+02        |
| Aluminum-based Metal/Alloys   | 2.36E+01        |
| Other Metal/Alloys            | 7.75E+00        |
| Other Inorganic Materials     | 1.87E+02        |
| Cellulose                     | 1.20E+02        |
| Rubber                        | 3.30E+02        |
| Plastic                       | 1.04E+03        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 2.72E+00        |
| Solidified Organic Material   | 1.90E-01        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 9.25E+01        |
| Packaging Material, Rubber    | 4.80E+00        |
| Packaging Material, Steel     | 2.96E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.72E+00            |
| Am-243  | 3.64E-05            |
| Cm-244  | 4.27E-02            |
| Cs-137  | 2.49E-04            |
| Np-237  | 3.03E-02            |
| Pu-238  | 1.49E+03            |
| Pu-239  | 5.10E+00            |
| Pu-240  | 1.43E+00            |
| Pu-241  | 8.28E+01            |
| Pu-242  | 3.25E-03            |
| Sr-90   | 2.45E-04            |
| Th-229  | 5.70E-06            |
| Th-230  | 2.50E-05            |
| Th-232  | 4.59E-05            |
| U-233   | 7.21E-03            |
| U-234   | 3.21E-01            |
| U-235   | 4.66E-05            |
| U-236   | 3.82E-07            |
| U-238   | 4.86E-05            |

**Haz. Waste No(s).**

D006, D008, D009, D019, D022, D029, D039, D040, D043, F001, F002, F003, F005, U133

**TRUCON Code(s)**

125/225

**Waste Stream Description**

This waste stream is primarily solids consisting of booties, lab coats, floor sweeping, labware, rags, and other job control waste. This stream differs from SR-W026 because solvent rags are suspected to be in the waste. Small HEPA filters, sludges, resins, absorbed liquids, and large metal equipment are also in these waste streams.

Waste Stream ID: **SR-W027-221H-HET-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           | 12/31/2023 |    |
| Stream Name | CH Mixed TRU - Heterogeneous debris from 221H |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| 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 | 22.5        | 4.2         | 26.7        |
| SWB Dir Ld w/o Liner         | 5.6         | 7.5         | 13.2        |
| <b>Final Form Total</b>      | <b>28.7</b> | <b>11.7</b> | <b>40.5</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.89E+03        |
| Aluminum-based Metal/Alloys   | 2.88E+02        |
| Other Metal/Alloys            | 1.23E+01        |
| Other Inorganic Materials     | 6.46E+02        |
| Cellulose                     | 1.76E+02        |
| Rubber                        | 1.06E+03        |
| Plastic                       | 2.18E+03        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 6.17E+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    | 1.79E+01        |
| Packaging Material, Steel     | 5.57E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.01E+01            |
| Am-243  | 2.90E-04            |
| Cs-137  | 1.07E-03            |
| Np-237  | 9.57E-02            |
| Pu-238  | 6.89E+01            |
| Pu-239  | 3.50E+01            |
| Pu-240  | 8.42E+00            |
| Pu-241  | 4.68E+01            |
| Pu-242  | 4.78E-03            |
| Sr-90   | 1.06E-03            |
| Th-229  | 5.66E-07            |
| Th-230  | 1.62E-06            |
| Th-232  | 4.98E-16            |
| U-233   | 7.18E-04            |
| U-234   | 2.04E-02            |
| U-235   | 2.93E-04            |
| U-236   | 2.24E-06            |
| U-238   | 1.79E-05            |

**Haz. Waste No(s).**

D006, D007, D008, D009, D011

**TRUCON Code(s)**

125/225

**Waste Stream Description**

This waste stream is primarily solids consisting of booties, lab coats, floor sweeping, labware, rags, and other job control waste. Small HEPA filters, sludges, resins, absorbed liquids, and large metal equipment are also in this waste stream.

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           | 12/31/2023 |    |
| Stream Name | CH Mixed TRU Absorbed / Stabilized Liquids |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

| 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        |
| <b>Final Form Total</b>      | <b>0.8</b> | <b>0.0</b> | <b>0.8</b> |

**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  | 2.94E-01            |
| Am-243  | 9.68E-08            |
| Cs-137  | 3.77E-03            |
| Np-237  | 1.17E-04            |
| Pu-238  | 6.03E-01            |
| Pu-239  | 6.70E-01            |
| Pu-240  | 1.82E-01            |
| Pu-241  | 1.42E+00            |
| Pu-242  | 6.51E-05            |
| Sr-90   | 3.71E-03            |
| Th-229  | 4.11E-09            |
| Th-230  | 1.17E-07            |
| Th-232  | 2.62E-15            |
| U-233   | 4.68E-06            |
| U-234   | 1.28E-03            |
| U-235   | 2.42E-05            |
| U-236   | 5.35E-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.

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           | 12/31/2023 |    |
| Stream Name | CH Mixed TRU consisting of HEPA Filters from the 235-F. |                         |                        |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 0.2        | 0.0        | 0.2        |
| SWB Dir Ld w/o Liner        | 3.8        | 0.0        | 3.8        |
| <b>Final Form Total</b>     | <b>4.0</b> | <b>0.0</b> | <b>4.0</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.14E+01        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 2.79E+00        |
| Cellulose                     | 1.12E+02        |
| Rubber                        | 0.00E+00        |
| Plastic                       | 7.01E+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    | 8.44E-01        |
| Packaging Material, Steel     | 6.07E+02        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 4.61E-02            |
| Am-243  | 1.90E-13            |
| Cs-137  | 2.44E-07            |
| Np-237  | 7.06E-04            |
| Pu-238  | 3.81E+00            |
| Pu-239  | 2.69E-02            |
| Pu-240  | 1.16E-02            |
| Pu-241  | 1.31E-01            |
| Pu-242  | 2.06E-05            |
| Sr-90   | 2.40E-07            |
| Th-229  | 1.08E-11            |
| Th-230  | 1.02E-07            |
| Th-232  | 6.89E-19            |
| U-233   | 2.73E-08            |
| U-234   | 1.29E-03            |
| U-235   | 1.04E-05            |
| U-236   | 3.10E-09            |
| U-238   | 2.88E-14            |

**Haz. Waste No(s).**

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D035

**TRUCON Code(s)**

119/219

**Waste Stream Description**

This waste stream is composed of spent HEPA Filters.



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           | 12/31/2023 |    |
| Stream Name | CH Mixed TRU/F listed solvents - Heterogeneous debris from 235F |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner  | 2.1         | 0.0        | 2.1         |
| 55-gal Drum Dir Ld w/o Liner | 4.2         | 0.0        | 4.2         |
| SWB Dir Ld w/o Liner         | 5.6         | 0.0        | 5.6         |
| <b>Final Form Total</b>      | <b>11.9</b> | <b>0.0</b> | <b>11.9</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 6.75E+02        |
| Aluminum-based Metal/Alloys   | 1.90E+01        |
| Other Metal/Alloys            | 3.37E+01        |
| Other Inorganic Materials     | 9.46E+01        |
| Cellulose                     | 1.17E+02        |
| Rubber                        | 3.18E+02        |
| Plastic                       | 5.74E+02        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 2.16E+00        |
| Solidified Organic Material   | 1.04E+00        |
| Soil                          | 3.86E-02        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 7.71E+01        |
| Packaging Material, Rubber    | 4.63E+00        |
| Packaging Material, Steel     | 1.69E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.35E+00            |
| Am-243  | 1.80E-05            |
| Cm-244  | 3.04E-03            |
| Cs-137  | 2.55E-05            |
| Np-237  | 5.23E-02            |
| Pu-238  | 1.41E+03            |
| Pu-239  | 1.98E+00            |
| Pu-240  | 8.52E-01            |
| Pu-241  | 4.71E+01            |
| Pu-242  | 1.63E-03            |
| Sr-90   | 2.52E-05            |
| Th-229  | 2.14E-06            |
| Th-230  | 3.26E-05            |
| Th-232  | 1.84E-05            |
| U-233   | 2.70E-03            |
| U-234   | 4.12E-01            |
| U-235   | 3.88E-05            |
| U-236   | 2.27E-07            |
| U-238   | 1.77E-05            |

**Haz. Waste No(s).**

D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D035, F002, F003

**TRUCON Code(s)**

125/225

**Waste Stream Description**

This 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.

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           | 12/31/2023 |    |
| Stream Name | CH mixed TRU S3000 solids from 235F                |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | 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  | 3.54E-02            |
| Np-237  | 1.03E-07            |
| Pu-238  | 4.86E+01            |
| Pu-239  | 3.66E-02            |
| Pu-240  | 2.00E-02            |
| Pu-241  | 6.46E-01            |
| Pu-242  | 2.38E-05            |
| Th-229  | 6.87E-16            |
| Th-230  | 8.08E-08            |
| Th-232  | 1.77E-18            |
| U-233   | 2.24E-12            |
| U-234   | 1.57E-03            |
| U-235   | 3.97E-10            |
| U-236   | 6.52E-09            |
| U-238   | 4.07E-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.

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           | 12/31/2023 |    |
| Stream Name | CH Mixed TRU Debris (S5000)             |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

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

**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  | 3.18E+00            |
| Np-237  | 6.31E-04            |
| Pu-238  | 2.91E-02            |
| Pu-239  | 5.26E-02            |
| Pu-240  | 1.24E-02            |
| Pu-241  | 1.17E+02            |
| Pu-242  | 2.16E-06            |
| Th-229  | 1.19E-11            |
| Th-230  | 3.97E-11            |
| Th-232  | 9.07E-19            |
| U-233   | 2.70E-08            |
| U-234   | 8.53E-07            |
| U-235   | 5.18E-10            |
| U-236   | 3.68E-09            |
| U-238   | 3.36E-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.

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           | 12/31/2023 |    |
| Stream Name | CH Mixed TRU/F listed solvents - Heterogeneous debris from 773A |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes           |             |             |             |
|------------------------------|-------------|-------------|-------------|
| Container Type               | Stored      | Proj.       | Total       |
| 55-gal Drum Dir Ld w/ Liner  | 4.2         | 0.0         | 4.2         |
| 55-gal Drum Dir Ld w/o Liner | 8.2         | 35.1        | 43.3        |
| SWB Dir Ld w/o Liner         | 5.6         | 0.0         | 5.6         |
| <b>Final Form Total</b>      | <b>18.0</b> | <b>35.1</b> | <b>53.1</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.92E+03        |
| Aluminum-based Metal/Alloys   | 3.65E+01        |
| Other Metal/Alloys            | 6.64E+01        |
| Other Inorganic Materials     | 7.52E+02        |
| Cellulose                     | 6.06E+02        |
| Rubber                        | 3.68E+02        |
| Plastic                       | 1.68E+03        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 8.28E+00        |
| Solidified Organic Material   | 1.17E-01        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 1.54E+02        |
| Packaging Material, Rubber    | 2.78E+01        |
| Packaging Material, Steel     | 7.02E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 9.54E+00            |
| Am-243  | 5.71E-02            |
| Cm-244  | 3.84E+00            |
| Cs-137  | 3.61E-02            |
| Np-237  | 1.29E-02            |
| Pu-238  | 5.16E+02            |
| Pu-239  | 2.29E+01            |
| Pu-240  | 5.28E+00            |
| Pu-241  | 6.54E+01            |
| Pu-242  | 1.14E-03            |
| Pu-244  | 2.26E-13            |
| Sr-90   | 3.56E-02            |
| Th-229  | 1.95E-06            |
| Th-230  | 8.66E-06            |
| Th-232  | 2.85E-05            |
| U-233   | 2.47E-03            |
| U-234   | 1.11E-01            |
| U-235   | 5.96E-05            |
| U-236   | 1.41E-06            |
| U-238   | 5.64E-04            |

**Haz. Waste No(s).**

D004, D005, D006, D007, D008, D009, D010, D011, D019, D022, D027, D028, D029, D043, F002, F003, F004, F005

**TRUCON Code(s)**

125/225

**Waste Stream Description**

This 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.

Waste Stream ID: **SR-W027-773A-HET-A**

**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           | 12/31/2023 |    |
| Stream Name | Idaho sample material combined with SRNL waste |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 0.00E+00        |
| Aluminum-based Metal/Alloys   | 2.18E-02        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 7.99E-02        |
| Cellulose                     | 3.63E-02        |
| Rubber                        | 0.00E+00        |
| Plastic                       | 1.31E+00        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 1.02E-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    | 1.18E-01        |
| Packaging Material, Steel     | 2.72E+01        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 9.92E-03            |
| Cs-137  | 9.11E-08            |
| Np-237  | 3.32E-07            |
| Pu-238  | 3.08E-03            |
| Pu-239  | 9.06E-03            |
| Pu-240  | 2.25E-03            |
| Pu-241  | 1.07E-01            |
| Pu-242  | 2.63E-07            |
| Sr-90   | 6.76E-08            |
| Th-229  | 5.62E-16            |
| Th-230  | 3.08E-12            |
| Th-232  | 1.48E-20            |
| U-233   | 4.28E-12            |
| U-234   | 1.25E-07            |
| U-235   | 7.81E-09            |
| U-236   | 2.00E-10            |
| U-238   | 2.62E-07            |

**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 |
|--|

**No TRUCON Codes Provided**

**Waste Stream Description**

Mixed debris waste that contains laboratory sample material originating from Idaho National Laboratory, Fluor Idaho (INL) combined with Savannah River National Laboratory (SRNL) job control waste

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           | 12/31/2023 |    |
| Stream Name | CH Mixed TRU Homogeneous Solids (S3000) |                         |                       |                       | Activities Decayed to CY | 2023       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 2.40E+01        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 2.35E-01        |
| Cellulose                     | 1.17E+00        |
| Rubber                        | 4.70E-01        |
| Plastic                       | 7.05E+00        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 2.28E+01        |
| Solidified Organic Material   | 1.77E+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) |
|---------|---------------------|
| Cs-137  | 1.94E-02            |
| Pu-238  | 7.50E+01            |
| Pu-239  | 4.06E-02            |
| Sr-90   | 1.91E-02            |
| Th-230  | 1.60E-06            |
| U-234   | 1.85E-02            |
| U-235   | 4.00E-10            |

**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.

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           | 12/31/2023 |    |
| Stream Name | CH Mixed TRU - Heterogeneous debris from FB-Line |                         |                   |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 29.0        | 0.0        | 29.0        |
| SWB Dir Ld w/o Liner        | 20.7        | 0.0        | 20.7        |
| <b>Final Form Total</b>     | <b>49.7</b> | <b>0.0</b> | <b>49.7</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.29E+03        |
| Aluminum-based Metal/Alloys   | 1.30E+01        |
| Other Metal/Alloys            | 1.62E+01        |
| Other Inorganic Materials     | 4.36E+02        |
| Cellulose                     | 4.64E+02        |
| Rubber                        | 4.21E+02        |
| Plastic                       | 2.95E+03        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 9.40E+00        |
| Solidified Organic Material   | 2.18E+00        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 1.06E+03        |
| Packaging Material, Rubber    | 2.03E+01        |
| Packaging Material, Steel     | 6.94E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 4.59E+01            |
| Am-243  | 6.54E-05            |
| Cm-244  | 1.17E-01            |
| Cs-137  | 2.00E-04            |
| Np-237  | 2.54E-03            |
| Pu-238  | 1.76E+01            |
| Pu-239  | 1.27E+02            |
| Pu-240  | 3.65E+01            |
| Pu-241  | 3.37E+02            |
| Pu-242  | 6.71E-03            |
| Sr-90   | 1.97E-04            |
| Th-229  | 5.31E-07            |
| Th-230  | 2.96E-07            |
| Th-232  | 3.57E-06            |
| U-233   | 6.04E-04            |
| U-234   | 3.47E-03            |
| U-235   | 1.00E-05            |
| U-236   | 1.08E-05            |
| U-238   | 3.87E-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 |
|------------------|

**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.

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           | 12/31/2023 |    |
| Stream Name | CH mixed TRU from 221H |                         |                            |                       | Activities Decayed to CY | 2023       |    |

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

| Final Form Volumes          |             |            |             |
|-----------------------------|-------------|------------|-------------|
| Container Type              | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/ Liner | 1.7         | 0.0        | 1.7         |
| SWB Dir Ld w/o Liner        | 37.6        | 0.0        | 37.6        |
| <b>Final Form Total</b>     | <b>39.3</b> | <b>0.0</b> | <b>39.3</b> |

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 1.66E+03        |
| Aluminum-based Metal/Alloys   | 4.41E-01        |
| Other Metal/Alloys            | 1.53E+00        |
| Other Inorganic Materials     | 1.37E+02        |
| Cellulose                     | 1.93E+03        |
| Rubber                        | 6.81E+01        |
| Plastic                       | 1.13E+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   | 6.17E+01        |
| Packaging Material, Rubber    | 8.20E+00        |
| Packaging Material, Steel     | 6.02E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 2.51E-01            |
| Am-243  | 1.99E-08            |
| Cm-244  | 1.86E-03            |
| Cs-137  | 7.40E-04            |
| Np-237  | 1.70E-03            |
| Pu-238  | 1.00E+02            |
| Pu-239  | 5.52E-01            |
| Pu-240  | 1.64E-01            |
| Pu-241  | 2.03E+00            |
| Pu-242  | 3.20E-04            |
| Sr-90   | 7.30E-04            |
| Th-229  | 2.60E-11            |
| Th-230  | 1.61E-06            |
| Th-232  | 9.72E-18            |
| U-233   | 6.58E-08            |
| U-234   | 2.07E-02            |
| U-235   | 1.82E-07            |
| U-236   | 4.38E-08            |
| U-238   | 4.46E-13            |

**Haz. Waste No(s).**

D006, D007, D008, D009, D011, D019, D022, D029, D043, F002, F005, U133

**TRUCON Code(s)**

125/225

**Waste Stream Description**

This waste stream is defense related debris consisting of large equipment and job control waste packaged in large steel boxes.



**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, 2023. 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                  |
| NT | Nevada National Security Site              |
| OR | Oak Ridge National Laboratory              |
| RL | Hanford (Richland) Site                    |
| RP | Hanford Site – Office of River Protection  |
| 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        | 12/31/2023 |    |
| Stream Name | Parks Township TRU Waste                   |                         |                            |                       | Activities as of CY   | 2000       |    |

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

| 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        |
| <b>Final Form Total</b>      | <b>9.6</b> | <b>0.0</b> | <b>9.6</b> |

**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.

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        | 12/31/2023 |    |
| Stream Name | Parks Township TRU Waste                   |                         |                            |                       | Activities as of CY   | 2000       |    |

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

| 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        |
| <b>Final Form Total</b>                     | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

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

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      | 12/31/2023 |    |
| Stream Name | To Be Determined          |                         |         |                       | Activities as of CY | N/A        |    |

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

| Final Form Volumes      |            |               |               |
|-------------------------|------------|---------------|---------------|
| Container Type          | Stored     | Proj.         | Total         |
| SWB Dir Ld w/ Liner     | 0.0        | 4000.6        | 4000.6        |
| <b>Final Form Total</b> | <b>0.0</b> | <b>4000.6</b> | <b>4000.6</b> |

**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

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  | 12/31/2023          |      |
| Stream Name | Newly Generated Secondary TRU Waste from Repackaging of MFC RH-TRU |                         |                            |                       |                 | Activities as of CY | 2017 |

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

| 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        |
| <b>Final Form Total</b>                     | <b>2.5</b> | <b>0.0</b> | <b>2.5</b> |

**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.

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      | 12/31/2023 |    |
| Stream Name | SBW Treatment - Steam Reforming - Carbonate Waste Form |                         |                       |                       | Activities as of CY | 2006       |    |

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

| Final Form Volumes           |               |            |               |
|------------------------------|---------------|------------|---------------|
| Container Type               | Stored        | Proj.      | Total         |
| RH Can w/ Remov Lid - Dir Ld | 1335.0        | 0.0        | 1335.0        |
| <b>Final Form Total</b>      | <b>1335.0</b> | <b>0.0</b> | <b>1335.0</b> |

**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     | 7.49E+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 5-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 1500 canisters with a surface dose rate <100 Rem/hr.

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  | 12/31/2023          |      |
| Stream Name | SBW Treatment - Steam Reforming Process - Debris   |                         |                            |                       |                 | Activities as of CY | 2024 |

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

| Final Form Volumes           |            |             |             |
|------------------------------|------------|-------------|-------------|
| Container Type               | Stored     | Proj.       | Total       |
| RH Can w/ Remov Lid - Dir Ld | 0.0        | 89.0        | 89.0        |
| <b>Final Form Total</b>      | <b>0.0</b> | <b>89.0</b> | <b>89.0</b> |

**Waste Material Parameters**

| Material Parameter            | 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.



Waste Stream ID: **NT-W021**

**Appendix B**

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      | 12/31/2023 |    |
| Stream Name | V3XA Spheres                  |                         |                            |                       | Activities as of CY | 2010       |    |

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

| Final Form Volumes      |             |            |             |
|-------------------------|-------------|------------|-------------|
| Container Type          | Stored      | Proj.      | Total       |
| SWB Dir Ld w/o Liner    | 15.0        | 0.0        | 15.0        |
| <b>Final Form Total</b> | <b>15.0</b> | <b>0.0</b> | <b>15.0</b> |

**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) |
|---------|---------------------|
| Pu-238  | 1.36E+00            |
| Pu-239  | 5.10E+01            |
| Pu-240  | 1.17E+01            |
| Pu-241  | 6.80E+01            |
| Pu-242  | 1.04E-03            |
| U-233   | 2.10E-09            |
| U-234   | 6.99E-03            |
| U-235   | 4.80E-05            |
| 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-foot 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. Vessels containing Depleted Uranium (DU) only have been opened, with small amounts of water vapor and some loose debris found inside. The bulk of the materials were found to be trapped within the thick coke layer lining the inner surface of the vessel. No more wastes of this type are planned to be generated.

Waste Stream ID: **OR-TBD-CH-HET**

**Appendix B**

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      | 12/31/2023 |    |
| Stream Name | TBD CH-TRU Debris Waste       |                         |                            |                       | Activities as of CY | 1985       |    |

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

| Final Form Volumes           |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/o Liner | 12.0        | 0.0        | 12.0        |
| <b>Final Form Total</b>      | <b>12.0</b> | <b>0.0</b> | <b>12.0</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 3.71E+02        |
| Aluminum-based Metal/Alloys   | 6.75E+01        |
| Other Metal/Alloys            | 1.69E+02        |
| Other Inorganic Materials     | 3.37E+01        |
| Cellulose                     | 2.87E+02        |
| Rubber                        | 2.36E+02        |
| Plastic                       | 4.39E+02        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 0.00E+00        |
| Solidified Organic Material   | 8.43E+01        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 0.00E+00        |
| Packaging Material, Rubber    | 6.73E+00        |
| Packaging Material, Steel     | 1.55E+03        |
| Packaging Material, Lead      | 0.00E+00        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.38E+01            |
| Am-243  | 3.19E+00            |
| Cm-244  | 2.58E+00            |
| Cs-137  | 1.02E-01            |
| Np-237  | 2.90E-02            |
| Pu-238  | 2.31E+02            |
| Pu-239  | 2.55E+01            |
| Pu-240  | 2.13E+01            |
| Pu-241  | 1.13E+02            |
| Pu-242  | 9.01E-03            |
| Pu-244  | 1.44E-04            |
| Sr-90   | 7.76E-03            |
| Th-229  | 3.49E-03            |
| Th-230  | 2.76E-04            |
| Th-232  | 5.62E-04            |
| U-233   | 2.54E+00            |
| U-234   | 1.17E-02            |
| U-235   | 1.01E-03            |
| U-236   | 2.49E-04            |
| U-238   | 5.50E-04            |

Haz. Waste No(s).

D004, D005, D006, D007, D008, D009, D010, D011, D022, F001, F002, F004, F005

TRUCON Code(s)

125/225

Waste Stream Description

CH-TRU Debris Waste Needing Further Evaluation

Waste Stream ID: **OR-TBD-RH-HET**

**Appendix B**

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      | 12/31/2023 |    |
| Stream Name | TBD RH-TRU Debris Waste       |                         |                            |                       | Activities as of CY | 1985       |    |

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

| Final Form Volumes                         |            |            |            |
|--|------------|------------|------------|
| Container Type                             | Stored     | Proj.      | Total      |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/ Liner | 1.9        | 3.2        | 5.0        |
| <b>Final Form Total</b>                    | <b>1.9</b> | <b>3.2</b> | <b>5.0</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 3.22E+03        |
| Aluminum-based Metal/Alloys   | 7.32E+02        |
| Other Metal/Alloys            | 6.58E+02        |
| Other Inorganic Materials     | 7.32E+02        |
| Cellulose                     | 1.02E+03        |
| Rubber                        | 2.19E+02        |
| Plastic                       | 5.85E+02        |
| Cement                        | 0.00E+00        |
| Solidified Inorganic Material | 0.00E+00        |
| Solidified Organic Material   | 1.46E+02        |
| Soil                          | 0.00E+00        |
| Vitrified                     | 0.00E+00        |
| Packaging Material, Cellulose | 0.00E+00        |
| Packaging Material, Plastic   | 2.28E+02        |
| Packaging Material, Rubber    | 2.83E+00        |
| Packaging Material, Steel     | 4.65E+03        |
| Packaging Material, Lead      | 0.00E+00        |

Final Form Radionuclides

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 4.80E-01            |
| Cm-244  | 1.28E+01            |
| Cs-137  | 8.87E+03            |
| Pu-238  | 1.58E+02            |
| Pu-241  | 4.61E+01            |
| Sr-90   | 5.66E+03            |
| U-234   | 4.67E-04            |
| U-235   | 1.24E-03            |
| U-238   | 3.55E-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

Waste Stream ID: **OR-Y12-CH-HET**

**Appendix B**

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  | 12/31/2023          |      |
| Stream Name | Oak Ridge Y-12 CH-TRU Debris Waste      |                         |                            |                       |                 | Activities as of CY | 2016 |

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

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 0.6        | 0.0        | 0.6        |
| <b>Final Form Total</b>      | <b>0.6</b> | <b>0.0</b> | <b>0.6</b> |

**Waste Material Parameters**

| Material Parameter            | 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  | 2.65E-04            |
| Pu-239  | 3.10E-02            |
| Pu-240  | 1.30E-05            |
| U-234   | 5.49E-04            |
| U-235   | 7.47E-05            |
| 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

Waste Stream ID: **RL221T-01**

**Appendix B**

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  | 12/31/2023          |     |
| Stream Name | Waste Generated during operations in building 221T |                         |                            |                       |                 | Activities as of CY | N/A |

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

| Final Form Volumes          |            |            |            |
|-----------------------------|------------|------------|------------|
| Container Type              | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/ Liner | 8.8        | 0.0        | 8.8        |
| <b>Final Form Total</b>     | <b>8.8</b> | <b>0.0</b> | <b>8.8</b> |

**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

Waste Stream ID: **RL300-11**

**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  | 12/31/2023          |      |
| Stream Name | 300 Area TRU RH Non-Mixed Debris                   |                         |                            |                       |                 | Activities as of CY | 2001 |

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

| Final Form Volumes      |              |            |              |
|-------------------------|--------------|------------|--------------|
| Container Type          | Stored       | Proj.      | Total        |
| RH SCA-30G3 w/ Liner    | 109.5        | 0.0        | 109.5        |
| <b>Final Form Total</b> | <b>109.5</b> | <b>0.0</b> | <b>109.5</b> |

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   | 9.29E+03        |
| Packaging Material, Rubber    | 8.36E+01        |
| Packaging Material, Steel     | 9.20E+05        |
| Packaging Material, Lead      | 1.69E+06        |

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)  
125/225

Waste Stream Description

High Cs-137 content, vitrified waste form in heavily shielded casks.

Waste Stream ID: **RLALPHA-08**

**Appendix B**

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      | 12/31/2023 |    |
| Stream Name | Alpha Caissons TRU RH Debris |                         |                            |                       | Activities as of CY | N/A        |    |

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

| Final Form Volumes      |             |            |             |
|-------------------------|-------------|------------|-------------|
| Container Type          | Stored      | Proj.      | Total       |
| RH SCA-30G1 w/ Liner    | 60.9        | 0.0        | 60.9        |
| <b>Final Form Total</b> | <b>60.9</b> | <b>0.0</b> | <b>60.9</b> |

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   | 5.27E+03        |
| Packaging Material, Rubber    | 6.54E+01        |
| Packaging Material, Steel     | 2.27E+05        |
| Packaging Material, Lead      | 2.39E+05        |

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.

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  | 12/31/2023          |      |
| Stream Name | Tank Farms TRU RH Mixed Debris                     |                         |                            |                       |                 | Activities as of CY | 2001 |

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

| Final Form Volumes      |            |            |            |
|-------------------------|------------|------------|------------|
| Container Type          | Stored     | Proj.      | Total      |
| RH SCA-30G1 w/ Liner    | 2.2        | 0.0        | 2.2        |
| <b>Final Form Total</b> | <b>2.2</b> | <b>0.0</b> | <b>2.2</b> |

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   | 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  | 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.



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  | 12/31/2023          |     |
| Stream Name | Future D&D and CERCLA waste projects TRU Debris |                         |                            |                       |                 | Activities as of CY | N/A |

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

| Final Form Volumes          |            |              |              |
|-----------------------------|------------|--------------|--------------|
| Container Type              | Stored     | Proj.        | Total        |
| 55-gal Drum Dir Ld w/ Liner | 0.0        | 75.6         | 75.6         |
| SWB Dir Ld w/ Liner         | 0.0        | 225.6        | 225.6        |
| <b>Final Form Total</b>     | <b>0.0</b> | <b>301.2</b> | <b>301.2</b> |

**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   | 3.05E+03        |
| Packaging Material, Rubber    | 8.60E+01        |
| Packaging Material, Steel     | 4.46E+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 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].

Waste Stream ID: **RLDD-08**

**Appendix B**

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  | 12/31/2023          |     |
| Stream Name | Future D&D and CERCLA waste projects TRU RH Debris |                         |                            |                       |                 | Activities as of CY | N/A |

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

| Final Form Volumes      |            |             |             |
|-------------------------|------------|-------------|-------------|
| Container Type          | Stored     | Proj.       | Total       |
| RH SCA-30G1 w/ Liner    | 0.0        | 33.0        | 33.0        |
| <b>Final Form Total</b> | <b>0.0</b> | <b>33.0</b> | <b>33.0</b> |

**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   | 2.86E+03        |
| Packaging Material, Rubber    | 3.54E+01        |
| Packaging Material, Steel     | 1.23E+05        |
| Packaging Material, Lead      | 1.29E+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].

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      | 12/31/2023 |    |
| Stream Name | PFP CH-TRU Contaminated Soil |                         |                                |                       | Activities as of CY | 2010       |    |

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

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

**Waste Material Parameters**

| Material Parameter            | 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   | 3.08E+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  | 2.09E-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.

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 | 12/31/2023          |      |
| Stream Name | CUPRC TRU Non-Mixed Debris |                         |                            |                       |                | Activities as of CY | 1987 |

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

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

**Waste Material Parameters**

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 0.00E+00        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 5.71E+01        |
| Other Inorganic Materials     | 3.53E+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   | 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  | 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.

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      | 12/31/2023 |    |
| Stream Name | Bismuth Phosphate Process TRU Solids    |                         |                       |                       | Activities as of CY | 2004       |    |

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

| Final Form Volumes           |              |            |              |
|------------------------------|--------------|------------|--------------|
| Container Type               | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/o Liner | 446.9        | 0.0        | 446.9        |
| <b>Final Form Total</b>      | <b>446.9</b> | <b>0.0</b> | <b>446.9</b> |

**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

Waste Stream ID: **RP-W754**

**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      | 12/31/2023 |    |
| Stream Name | 224 Waste                               |                         |                       |                       | Activities as of CY | 2004       |    |

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

| Final Form Volumes           |              |            |              |
|------------------------------|--------------|------------|--------------|
| Container Type               | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/o Liner | 329.3        | 0.0        | 329.3        |
| <b>Final Form Total</b>      | <b>329.3</b> | <b>0.0</b> | <b>329.3</b> |

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.

Waste Stream ID: **RP-W755**

**Appendix B**

Waste Profile Report

|             |   |                         |                       |                       |                     |            |    |
|-------------|---|-------------------------|-----------------------|-----------------------|---------------------|------------|----|
| Site        | Hanford (River Protection) Site         | Summary Category        | S3000                 | Defense Determination | Defense-Related     | Handling   | CH |
| Source Cat. | Materials Production/Recovery Effluents | Waste Matrix Code Group | Solidified Inorganics |                       | Inventory Date      | 12/31/2023 |    |
| Stream Name | Bismuth Phosphate Process TRU Solids    |                         |                       |                       | Activities as of CY | 2004       |    |

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

| Final Form Volumes           |              |            |              |
|------------------------------|--------------|------------|--------------|
| Container Type               | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/o Liner | 809.1        | 0.0        | 809.1        |
| <b>Final Form Total</b>      | <b>809.1</b> | <b>0.0</b> | <b>809.1</b> |

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

Waste Stream ID: **WV-M010a**

**Appendix B**

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 | 12/31/2023          |      |
| Stream Name | TRU Spent Absorbents CH                            |                         |                     |                       |                | Activities as of CY | 2018 |

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

| 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        |
| <b>Final Form Total</b>      | <b>29.8</b> | <b>0.0</b> | <b>29.8</b> |

**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.



Waste Stream ID: **WV-T004a**

**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 | 12/31/2023          |      |
| Stream Name | CH TRU Liquids/Absorbed Liquids   |                         |                       |                       |                | Activities as of CY | 2018 |

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

| Final Form Volumes           |            |            |            |
|------------------------------|------------|------------|------------|
| Container Type               | Stored     | Proj.      | Total      |
| 55-gal Drum Dir Ld w/o Liner | 2.3        | 0.0        | 2.3        |
| <b>Final Form Total</b>      | <b>2.3</b> | <b>0.0</b> | <b>2.3</b> |

**Waste Material Parameters**

| Material Parameter            | 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                        | 2.01E+02        |
| Solidified Inorganic Material | 4.39E+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    | 1.30E+00        |
| Packaging Material, Steel     | 2.99E+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  | 4.71E-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   | 1.68E-01            |
| U-233   | 3.82E-03            |
| U-234   | 1.82E-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.

Waste Stream ID: **WV-T004b**

**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 | 12/31/2023          |      |
| Stream Name | RH TRU Liquids/Absorbed Liquids   |                         |                       |                       |                | Activities as of CY | 2015 |

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

| 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        |
| <b>Final Form Total</b>                     | <b>3.8</b> | <b>0.0</b> | <b>3.8</b> |

**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                        | 2.24E+03        |
| Solidified Inorganic Material | 1.25E+03        |
| Solidified Organic Material   | 0.00E+00        |
| 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  | 2.68E+00            |
| Am-243  | 4.53E-02            |
| Cm-244  | 3.14E-02            |
| Cs-137  | 1.00E+01            |
| Np-237  | 2.73E-04            |
| Pu-238  | 1.95E+00            |
| Pu-239  | 7.49E-01            |
| Pu-240  | 5.52E-01            |
| Pu-241  | 9.97E+00            |
| Pu-242  | 1.50E-02            |
| Sr-90   | 1.86E+01            |
| U-233   | 4.29E-03            |
| U-234   | 2.01E-03            |
| U-235   | 1.10E-05            |
| U-238   | 2.34E-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.

Waste Stream ID: **WV-T006a**

**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 | 12/31/2023          |      |
| Stream Name | CH TRU General Waste              |                         |                            |                       |                | Activities as of CY | 2010 |

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

| Final Form Volumes           |              |            |              |
|------------------------------|--------------|------------|--------------|
| Container Type               | Stored       | Proj.      | Total        |
| 55-gal Drum Dir Ld w/o Liner | 111.5        | 0.0        | 111.5        |
| SWB Dir Ld w/o Liner         | 152.3        | 3.8        | 156.0        |
| <b>Final Form Total</b>      | <b>263.8</b> | <b>3.8</b> | <b>267.6</b> |

**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            | 1.40E+04        |
| Other Inorganic Materials     | 1.45E+04        |
| Cellulose                     | 1.34E+04        |
| Rubber                        | 5.59E+03        |
| Plastic                       | 8.38E+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    | 9.28E+01        |
| Packaging Material, Steel     | 3.85E+04        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 9.16E+01            |
| Am-243  | 1.30E+00            |
| Cm-244  | 3.15E-01            |
| Cs-137  | 1.41E+00            |
| Np-237  | 1.25E-03            |
| Pu-238  | 5.22E+01            |
| Pu-239  | 2.37E+01            |
| Pu-240  | 1.93E+01            |
| Pu-241  | 4.58E+02            |
| Pu-242  | 6.98E-01            |
| Sr-90   | 3.96E+00            |
| U-233   | 5.29E-02            |
| U-234   | 2.65E-02            |
| U-235   | 7.63E-04            |
| U-238   | 5.43E-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.

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 | 12/31/2023          |      |
| Stream Name | RH TRU General Waste              |                         |                            |                       |                | Activities as of CY | 2021 |

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

| Final Form Volumes                          |              |            |              |
|---|--------------|------------|--------------|
| Container Type                              | Stored       | Proj.      | Total        |
| RH Can w/ Remov Lid w/ 3 - 55-gal w/o Liner | 228.1        | 0.6        | 228.7        |
| <b>Final Form Total</b>                     | <b>228.1</b> | <b>0.6</b> | <b>228.7</b> |

**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            | 2.55E+04        |
| Other Inorganic Materials     | 2.54E+04        |
| Cellulose                     | 2.54E+04        |
| Rubber                        | 1.02E+04        |
| Plastic                       | 1.52E+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   | 1.97E+03        |
| Packaging Material, Rubber    | 1.29E+02        |
| Packaging Material, Steel     | 2.11E+05        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 3.71E+02            |
| Am-243  | 8.91E-01            |
| Cm-244  | 5.80E+00            |
| Cs-137  | 3.60E+03            |
| Np-237  | 1.03E-01            |
| Pu-238  | 1.16E+02            |
| Pu-239  | 8.82E+01            |
| Pu-240  | 6.68E+01            |
| Pu-241  | 9.04E+02            |
| Pu-242  | 2.21E-01            |
| Sr-90   | 3.33E+03            |
| U-233   | 1.06E+00            |
| U-234   | 4.99E-01            |
| U-235   | 1.38E-02            |
| U-238   | 9.18E-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.

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 | 12/31/2023          |      |
| Stream Name | CH TRU Mixed Waste                |                         |                            |                       |                | Activities as of CY | 2018 |

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

| Final Form Volumes           |             |            |             |
|------------------------------|-------------|------------|-------------|
| Container Type               | Stored      | Proj.      | Total       |
| 55-gal Drum Dir Ld w/o Liner | 2.5         | 0.0        | 2.5         |
| SLB2 Dir Ld                  | 7.4         | 0.0        | 7.4         |
| SWB Dir Ld w/o Liner         | 7.5         | 0.0        | 7.5         |
| <b>Final Form Total</b>      | <b>17.4</b> | <b>0.0</b> | <b>17.4</b> |

**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     | 1.94E+03        |
| Cellulose                     | 1.94E+03        |
| Rubber                        | 7.75E+02        |
| Plastic                       | 1.16E+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    | 3.68E+00        |
| Packaging Material, Steel     | 2.71E+03        |
| Packaging Material, Lead      | 0.00E+00        |

**Final Form Radionuclides**

| Isotope | Total Activity (Ci) |
|---------|---------------------|
| Am-241  | 1.71E+00            |
| Am-243  | 3.24E-02            |
| Cm-244  | 1.86E-02            |
| Cs-137  | 8.12E-01            |
| Np-237  | 1.55E-05            |
| Pu-238  | 2.72E+00            |
| Pu-239  | 7.44E-01            |
| Pu-240  | 5.69E-01            |
| Pu-241  | 1.29E+01            |
| Pu-242  | 1.01E-01            |
| 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.

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 | 12/31/2023          |      |
| Stream Name | RH TRU Mixed Waste                |                         |                            |                       |                | Activities as of CY | 2021 |

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

| 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        |
| <b>Final Form Total</b>                     | <b>32.1</b> | <b>0.0</b> | <b>32.1</b> |

Waste Material Parameters

| Material Parameter            | Total Mass (kg) |
|-------------------------------|-----------------|
| Iron-based Metal/Alloys       | 6.08E+03        |
| Aluminum-based Metal/Alloys   | 0.00E+00        |
| Other Metal/Alloys            | 0.00E+00        |
| Other Inorganic Materials     | 7.60E+03        |
| Cellulose                     | 0.00E+00        |
| Rubber                        | 1.52E+03        |
| Plastic                       | 2.28E+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  | 4.31E+02            |
| Am-243  | 1.01E+00            |
| Cm-244  | 6.74E+00            |
| Cs-137  | 8.19E+03            |
| Np-237  | 1.14E-01            |
| Pu-238  | 1.27E+02            |
| Pu-239  | 1.33E+02            |
| Pu-240  | 1.01E+02            |
| Pu-241  | 1.46E+03            |
| Pu-242  | 6.71E-01            |
| Sr-90   | 5.27E+03            |
| U-233   | 1.01E+00            |
| U-234   | 4.83E-01            |
| U-235   | 7.54E-02            |
| U-238   | 3.08E-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.

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      | 12/31/2023 |    |
| Stream Name | CH TRU Mixed Liquids/Absorbed Liquids |                         |                       |                       | Activities as of CY | 2017       |    |

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

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

**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.

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      | 12/31/2023 |    |
| Stream Name | RH TRU Mixed Liquids/Absorbed Liquids |                         |                       |                       | Activities as of CY | 2017       |    |

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

| 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        |
| <b>Final Form Total</b>                     | <b>6.9</b> | <b>0.0</b> | <b>6.9</b> |

**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, D008, 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.



**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-2024 TRU waste generator site waste streams to the ATWIR-2023 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-2024 waste stream to its respective ATWIR-2023 waste stream(s). Table C-2 shows the inverse of Table C-1. Table C-2 displays the association of each ATWIR-2023 waste stream to its respective ATWIR-2024 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 |
| 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-2024 to ATWIR-2023 Waste Streams**

| <b>Site Code</b> | <b>ATWIR-2024 Waste Streams</b> | <b>ATWIR-2023 Waste Streams</b> |
|------------------|---------------------------------|---------------------------------|
| AE               | AE-T001                         | AE-T001                         |
| 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-218                       | IN-BN-501, IN-BN650             |
| IN               | IN-BN-522                       | IN-BN-522                       |
| IN               | IN-BN-599                       | IN-BN-599                       |
| IN               | IN-BN-602                       | IN-BN-602                       |
| IN               | IN-BN-RF003                     | IN-BN-RF003                     |
| IN               | IN-BN-RF290                     | IN-BN-RF290                     |
| IN               | IN-BN-RF311                     | IN-BN-RF311                     |
| IN               | IN-BN-RF420                     | IN-BN-RF420                     |
| IN               | IN-BN-RF432                     | IN-BN-RF432                     |
| IN               | IN-BN-RF801                     | IN-BN-RF801                     |
| IN               | IN-BN-SRP-S3000.2A              | IN-BN650                        |
| IN               | IN-BN004                        | IN-BN004                        |
| IN               | IN-BN222                        | IN-BN222                        |
| IN               | IN-BN510.4                      | IN-BN510.4                      |
| IN               | IN-BN538                        | IN-BN538                        |
| 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-BNINW218                     | IN-BNINW218                     |
| IN               | IN-BNSRPS3.1A                   | IN-BN650                        |
| IN               | IN-BNSRPS3.3A                   | IN-BN-SRP-RF123                 |
| IN               | IN-BNSRPS3.3B                   | IN-BN-SRP-RF123                 |
| IN               | IN-DD-001                       | IN-DD-001                       |
| IN               | IN-IC-603                       | IN-IC-603, IN-IW-603            |
| IN               | IN-ID-ANLE-BIN                  | IN-ID-ANLE-BIN                  |
| IN               | IN-ID-ANLW-W269-RH              | IN-ID-ANLW-W269-RH              |
| IN               | IN-ID-Bettis-Pu8Li14B           | IN-ID-Bettis-Pu8Li14B           |

**Table C-1. Crosswalk of ATWIR-2024 to ATWIR-2023 Waste Streams**  
Continued

| Site Code | ATWIR-2024 Waste Streams | ATWIR-2023 Waste Streams   |
|-----------|--------------------------|--|
| 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-INTEC-308-RH       | <i>New Waste Stream</i>  |
| IN        | IN-ID-MFC-SOLID          | IN-ID-MFC-SOLID  |
| IN        | IN-ID-MISC-RH            | IN-ID-MISC-RH  |
| 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-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-MD-811                | IN-MD-811  |
| IN        | IN-MO-545                | IN-MO-545  |
| IN        | IN-NRF-OMC               | IN-NRF-OMC   |
| IN        | IN-NRF-SPC-103           | IN-NRF-SPC-103   |
| IN        | IN-RF-806                | IN-RF-806  |
| IN        | IN-RF-SOURCE-RH          | IN-RF-SOURCE-RH  |
| 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  |
| LA        | LA-CIN01.001             | LA-CIN01.001, LA-CIN02.001, LA-MHD01.001, LA-MHD03.001, LA-MIN02-V.001, LA-MIN05-V.001 |
| LA        | LA-CIN02.001             | LA-CIN02.001, LA-MHD01.001, LA-MIN03-NC.001  |
| LA        | LA-CIN03.001             | LA-CIN03.001   |
| LA        | LA-CIN04.001             | LA-CIN04.001   |
| LA        | LA-LA225D                | LA-LA225D  |
| LA        | LA-LANHD01               | LA-LANHD01   |
| LA        | LA-MHD01-Pits            | LA-MHD01-Pits  |
| LA        | LA-MHD01.001             | LA-CIN01.001, LA-MHD01.001, LA-MHD01-Pits, LA-TA-55-04, LA-TRU-Empty-SWB               |

**Table C-1. Crosswalk of ATWIR-2024 to ATWIR-2023 Waste Streams**  
Continued

| Site Code | ATWIR-2024 Waste Streams | ATWIR-2023 Waste Streams  |
|-----------|--------------------------|---------------------------|
| 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        | 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-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               |
| 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-35-02              | LA-TA-00-03               |
| LA        | LA-TA-50-01              | <i>New Waste Stream</i>   |
| LA        | LA-TA-50-18              | LA-TA-50-18               |
| LA        | LA-TA-50-19              | LA-TA-50-19               |
| LA        | LA-TA-50-69              | <i>New Waste Stream</i>   |
| LA        | LA-TA-55-04              | 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-TA-55-400             | LA-TA-55-400              |
| LA        | LA-TRU-Empty-110         | LA-TRU-Empty-110          |

**Table C-1. Crosswalk of ATWIR-2024 to ATWIR-2023 Waste Streams**  
Continued

| Site Code | ATWIR-2024 Waste Streams | ATWIR-2023 Waste Streams         |
|-----------|--------------------------|----------------------------------|
| LA        | LA-TRU-Empty-55          | LA-MHD01.001, 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-GENR-RH-HET   |
| OR        | OR-GRSC-CH-HET           | OR-GRSC-CH-HET                   |
| OR        | OR-GRSC-RH-HOM           | OR-GRSC-RH-HOM                   |
| 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-LWT-CH-HET                    |
| OR        | OR-MRF-CH-HET            | OR-MRF-CH-HET                    |
| OR        | OR-MRF-RH-HET            | OR-MRF-RH-HET                    |
| OR        | OR-MSRE-CH-HET           | OR-MSRE-CH-HET                   |
| OR        | OR-MSRE-RH-HET           | OR-MSRE-RH-HET                   |
| OR        | OR-NBL-CH-HET            | OR-NBL-CH-HET                    |
| OR        | OR-NFS-CH-HET-A          | OR-NFS-CH-HET-A, OR-NFS-CH-HOM-A |
| OR        | OR-NFS-CH-HOM-A          | OR-NFS-CH-HOM-A                  |
| OR        | OR-NFS-CH-SOIL           | OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL  |
| OR        | OR-OXIDE-CH-HET          | OR-OXIDE-CH-HET                  |
| OR        | OR-PGDP-CH-HET           | OR-PGDP-CH-HET                   |
| OR        | OR-PUBE-CH-HOM           | OR-PUBE-CH-HOM                   |
| 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                     |

**Table C-1. Crosswalk of ATWIR-2024 to ATWIR-2023 Waste Streams**  
Continued

| Site Code | ATWIR-2024 Waste Streams | ATWIR-2023 Waste Streams        |
|-----------|--------------------------|---------------------------------|
| OR        | OR-RF-RH-HET-A           | OR-RF-RH-HET-A                  |
| OR        | OR-SOURCE-CH-HET         | OR-SOURCE-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-TDYN-CH-HET           | OR-TDYN-CH-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-WC14-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, RLALÉ-02, RLN622FD-01 |
| 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                       |
| RL        | RL300-01                 | RL300-01                        |
| RL        | RL300-03                 | RL300-03                        |
| RL        | RL300-08                 | RL300-08, RL308-08              |
| RL        | RL300-11                 | RL300-11                        |
| RL        | RL308-01                 | RL308-01                        |
| RL        | RL308-03                 | RL308-03                        |
| RL        | RL325-01                 | RL325-01                        |

**Table C-1. Crosswalk of ATWIR-2024 to ATWIR-2023 Waste Streams**  
Continued

| Site Code | ATWIR-2024 Waste Streams | ATWIR-2023 Waste Streams |
|-----------|--------------------------|--------------------------|
| RL        | RL325-03                 | RL325-03                 |
| RL        | RL325-08                 | RL325-08                 |
| RL        | RL325-09                 | RL325-09                 |
| RL        | RL618-01                 | RL618-01                 |
| RL        | RL618-08                 | RL618-08                 |
| RL        | RLALPHA-08               | RLALPHA-08               |
| RL        | RLARG-01                 | RLARG-01                 |
| RL        | RLBART-07                | RLBART-07                |
| RL        | RLBAT-01                 | RLBAT-01                 |
| RL        | RLBAT-08                 | RLBAT-08                 |
| RL        | RLBET-08                 | RLBET-08                 |
| RL        | RLBW-01                  | RLBW-01                  |
| RL        | RLBW-03                  | RLBW-03                  |
| RL        | RLBW-08                  | RLBW-08                  |
| RL        | RLCFF-01                 | RLCFF-01                 |
| RL        | RLCFF-03                 | RLCFF-03                 |
| RL        | RLCH2-01                 | RLCH2-01                 |
| RL        | RLCH2-08                 | RLCH2-08                 |
| RL        | 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, RLESG-09       |
| 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-01                 | RLHAN-01                 |
| RL        | RLHAN-08                 | RLHAN-08                 |
| RL        | RLIAEA-03                | RLIAEA-03                |
| RL        | RLMLB-08                 | RLMLB-08                 |
| RL        | RLMLL-01                 | RLMLL-01                 |
| RL        | RLP11-01                 | RLP11-01                 |
| RL        | RLPFP-01                 | RLPFP-01                 |
| RL        | RLPFP-01A                | RLPFP-01A                |



**Table C-1. Crosswalk of ATWIR-2024 to ATWIR-2023 Waste Streams**  
Continued

| Site Code | ATWIR-2024 Waste Streams | ATWIR-2023 Waste Streams |
|-----------|--------------------------|--------------------------|
| RL        | RLPFP-02                 | RLPFP-02                 |
| RL        | RLPFP-03                 | RLPFP-03                 |
| RL        | RLPFP-04                 | RLPFP-04                 |
| 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        | 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                 |
| SA        | SA-W139                  | SA-W139                  |
| SP        | SP-CHHD                  | SP-CHHD                  |
| SP        | SP-RHHD                  | SP-RHHD                  |
| SP        | SP-RHIN                  | SP-RHIN                  |
| SR        | SR-AGNS-HOM              | SR-AGNS-HOM              |
| SR        | SR-BCLDP-HET             | SR-BCLDP-HET             |
| SR        | SR-BCLDP.003             | SR-BCLDP.003             |
| 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-2             | SR-KAC-HET-2             |
| SR        | SR-KAC-HET-A             | SR-KAC-HET-A             |
| SR        | SR-KAC-HET-B             | SR-KAC-HET-B             |
| SR        | SR-KAC-PuOx              | SR-KAC-PuOx              |
| 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               |

**Table C-1. Crosswalk of ATWIR-2024 to ATWIR-2023 Waste Streams**  
Continued

| Site Code | ATWIR-2024 Waste Streams | ATWIR-2023 Waste Streams |
|-----------|--------------------------|--------------------------|
| SR        | SR-MD-SOIL               | SR-MD-SOIL               |
| SR        | SR-NIST-HET              | SR-NIST-HET              |
| SR        | SR-RH-221H.01            | SR-RH-221H.01            |
| SR        | SR-RH-221H.02            | SR-RH-221H.02            |
| SR        | SR-RH-235F.01            | SR-RH-235F.01            |
| SR        | SR-RH-772F.01            | SR-RH-772F.01            |
| SR        | SR-RH-773A.01            | SR-RH-773A.01            |
| SR        | SR-RH-FBL.01             | SR-RH-FBL.01             |
| SR        | SR-RH-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             |
| 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        | 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-HET-A       | SR-W027-773A-HET-A       |
| 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-T006b                 |

**Table C-1. Crosswalk of ATWIR-2024 to ATWIR-2023 Waste Streams**  
Continued

| <b>Site Code</b> | <b>ATWIR-2024 Waste Streams</b> | <b>ATWIR-2023 Waste Streams</b> |
|------------------|---------------------------------|---------------------------------|
| WV               | WV-W024a                        | WV-W024a                        |
| WV               | WV-W024b                        | WV-W024b                        |
| WV               | WV-W050a                        | WV-W050a                        |
| WV               | WV-W050b                        | WV-W050b                        |
| WV               | WV-Z001                         | WV-Z001                         |

Data Source: CID Data Version D.23.00.33 (LANL-CO 2024a). Note: This table contains data for WIPP-bound and potential waste streams only.

**Table C-2. Crosswalk of ATWIR-2023 to ATWIR-2024 Waste Streams**

| <b>Site Code</b> | <b>ATWIR-2023 Waste Streams</b> | <b>ATWIR-2024 Waste Streams</b>                        |
|------------------|---------------------------------|--|
| AE               | AE-T001                         | AE-T001  |
| 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-501                       | IN-BN-218  |
| IN               | IN-BN-522                       | IN-BN-522  |
| IN               | IN-BN-599                       | IN-BN-599  |
| IN               | IN-BN-602                       | IN-BN-602  |
| IN               | IN-BN-RF003                     | IN-BN-RF003  |
| IN               | IN-BN-RF290                     | IN-BN-RF290  |
| IN               | IN-BN-RF311                     | IN-BN-RF311  |
| IN               | IN-BN-RF420                     | IN-BN-RF420  |
| IN               | IN-BN-RF432                     | IN-BN-RF432  |
| IN               | IN-BN-RF801                     | IN-BN-RF801  |
| IN               | IN-BN-SRP-RF123                 | IN-BNSRPS3.3A, IN-BNSRPS3.3B                           |
| IN               | IN-BN004                        | IN-BN004   |
| IN               | IN-BN222                        | IN-BN222   |
| IN               | IN-BN510.4                      | IN-BN510.4   |
| IN               | IN-BN538                        | IN-BN538   |
| IN               | IN-BN539                        | IN-BN539   |
| IN               | IN-BN600                        | IN-BN600   |
| IN               | IN-BN650                        | IN-BN-218, IN-BN650, IN-BNSRPS3.1A, IN-BN-SRP-S3000.2A |
| 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-603                       | IN-IC-603  |
| IN               | IN-ID-ANLE-BIN                  | IN-ID-ANLE-BIN   |
| IN               | IN-ID-ANLW-W269-RH              | IN-ID-ANLW-W269-RH                                     |
| IN               | IN-ID-Bettis-Pu8Li14B           | IN-ID-Bettis-Pu8Li14B                                  |
| IN               | IN-ID-BTO-030                   | IN-ID-BTO-030  |
| IN               | IN-ID-EBR-S5000                 | IN-ID-EBR-S5000  |

**Table C-2. Crosswalk of ATWIR-2023 to ATWIR-2024 Waste Streams**  
Continued

| Site Code | ATWIR-2023 Waste Streams | ATWIR-2024 Waste Streams                                  |
|-----------|--------------------------|---|
| 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-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-TRA-W345-RH        | IN-ID-TRA-W345-RH   |
| IN        | IN-ID-TRU-RHND           | IN-ID-TRU-RHND  |
| IN        | IN-IW-603                | IN-IC-603   |
| IN        | IN-IW-608                | IN-IW-608   |
| IN        | IN-MD-811                | IN-MD-811   |
| IN        | IN-MO-545                | IN-MO-545   |
| IN        | IN-NRF-OMC               | IN-NRF-OMC  |
| IN        | IN-NRF-SPC-103           | IN-NRF-SPC-103  |
| IN        | IN-RF-806                | IN-RF-806   |
| IN        | IN-RF-SOURCE-RH          | IN-RF-SOURCE-RH   |
| 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   |
| LA        | LA-CIN01.001             | LA-CIN01.001, LA-MHD01.001                                |
| LA        | LA-CIN02.001             | LA-CIN01.001, LA-CIN02.001                                |
| LA        | LA-CIN03.001             | LA-CIN03.001  |
| LA        | LA-CIN04.001             | LA-CIN04.001  |
| LA        | LA-LA225D                | LA-LA225D   |
| LA        | LA-LANHD01               | LA-LANHD01  |
| LA        | LA-MHD01-Pits            | LA-MHD01.001, LA-MHD01-Pits                               |
| LA        | LA-MHD01.001             | LA-CIN01.001, LA-CIN02.001, LA-MHD01.001, LA-TRU-Empty-55 |
| LA        | LA-MHD03.001             | LA-CIN01.001, 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  |

**Table C-2. Crosswalk of ATWIR-2023 to ATWIR-2024 Waste Streams**  
Continued

| Site Code | ATWIR-2023 Waste Streams | ATWIR-2024 Waste Streams       |
|-----------|--------------------------|--------------------------------|
| LA        | LA-MIN02-V.001           | LA-CIN01.001, LA-MIN02-V.001   |
| LA        | LA-MIN03-NC.001          | LA-CIN02.001, LA-MIN03-NC.001  |
| LA        | LA-MIN04-S.001           | LA-MIN04-S.001                 |
| LA        | LA-MIN05-V.001           | LA-CIN01.001, 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-35-02                    |
| 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                    |
| 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-MHD01.001, 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-TA-55-400             | LA-TA-55-400                   |
| 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-MHD01.001, LA-TRU-Empty-SWB |
| LB        | LB-T001                  | LB-T001                        |
| LB        | LB-T002                  | LB-T002                        |
| LL        | LL-M001                  | LL-M001                        |
| LL        | LL-T004                  | LL-T004                        |

**Table C-2. Crosswalk of ATWIR-2023 to ATWIR-2024 Waste Streams**  
Continued

| Site Code | ATWIR-2023 Waste Streams | ATWIR-2024 Waste Streams                            |
|-----------|--------------------------|---|
| LL        | LL-W018-S5100            | LL-W018-S5100                                       |
| LL        | LL-W018-SS               | LL-W018-SS  |
| LL        | LL-W019                  | LL-W019   |
| ND        | ND-T001                  | ND-T001   |
| ND        | ND-T002                  | ND-T002   |
| NT        | NT-JAS-01                | NT-JAS-01   |
| NT        | NT-W021                  | NT-W021   |
| OR        | OR-CHEM-CH-HET           | OR-CHEM-CH-HET                                      |
| OR        | OR-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-CH-HET                                      |
| OR        | OR-GRSC-CH-HET           | OR-GRSC-CH-HET                                      |
| OR        | OR-GRSC-RH-HOM           | OR-GRSC-RH-HOM                                      |
| 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-LWT-CH-HET                                       |
| OR        | OR-MRF-CH-HET            | OR-MRF-CH-HET                                       |
| OR        | OR-MRF-RH-HET            | OR-MRF-RH-HET                                       |
| OR        | OR-MSRE-CH-HET           | OR-MSRE-CH-HET                                      |
| OR        | OR-MSRE-RH-HET           | OR-MSRE-RH-HET                                      |
| OR        | OR-NBL-CH-HET            | OR-NBL-CH-HET                                       |
| OR        | OR-NFS-CH-HET-A          | OR-NFS-CH-HET-A                                     |
| OR        | OR-NFS-CH-HOM-A          | OR-NFS-CH-HET-A, OR-NFS-CH-HOM-A,<br>OR-NFS-CH-SOIL |
| 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-PUBE-CH-HOM           | OR-PUBE-CH-HOM                                      |
| 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-RF-RH-HET-A           | OR-RF-RH-HET-A                                      |
| OR        | OR-SOURCE-CH-HET         | OR-SOURCE-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                                       |

**Table C-2. Crosswalk of ATWIR-2023 to ATWIR-2024 Waste Streams**  
Continued

| Site Code | ATWIR-2023 Waste Streams | ATWIR-2024 Waste Streams |
|-----------|--------------------------|--------------------------|
| OR        | OR-TBD-RH-HET            | OR-TBD-RH-HET            |
| OR        | OR-TDYN-CH-HET           | OR-TDYN-CH-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-WC14-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                |
| RL        | RL231Z-01                | RL231Z-01                |
| RL        | RL231Z-03                | RL231Z-03                |
| RL        | RL233S-01                | RL233S-01                |
| RL        | RL233S-03                | RL233S-03                |
| RL        | RL300-01                 | RL300-01                 |
| RL        | RL300-03                 | RL300-03                 |
| RL        | RL300-08                 | RL300-08                 |
| RL        | RL300-11                 | RL300-11                 |
| RL        | RL308-01                 | RL308-01                 |
| RL        | RL308-03                 | RL308-03                 |
| RL        | RL308-08                 | RL300-08                 |
| RL        | RL325-01                 | RL325-01                 |
| RL        | RL325-03                 | RL325-03                 |
| RL        | RL325-08                 | RL325-08                 |
| RL        | RL325-09                 | RL325-09                 |
| RL        | RL618-01                 | RL618-01                 |



**Table C-2. Crosswalk of ATWIR-2023 to ATWIR-2024 Waste Streams**  
Continued

| Site Code | ATWIR-2023 Waste Streams | ATWIR-2024 Waste Streams |
|-----------|--------------------------|--------------------------|
| RL        | RL618-08                 | RL618-08                 |
| RL        | RLALE-02                 | RL200-02                 |
| RL        | RLALPHA-08               | RLALPHA-08               |
| RL        | RLARG-01                 | RLARG-01                 |
| RL        | RLBART-07                | RLBART-07                |
| RL        | RLBAT-01                 | RLBAT-01                 |
| RL        | RLBAT-08                 | RLBAT-08                 |
| RL        | RLBET-08                 | RLBET-08                 |
| RL        | RLBW-01                  | RLBW-01                  |
| RL        | RLBW-03                  | RLBW-03                  |
| RL        | RLBW-08                  | RLBW-08                  |
| RL        | RLCFF-01                 | RLCFF-01                 |
| RL        | RLCFF-03                 | RLCFF-03                 |
| RL        | RLCH2-01                 | RLCH2-01                 |
| RL        | RLCH2-08                 | RLCH2-08                 |
| RL        | 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-08, 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-01                 | RLHAN-01                 |
| RL        | RLHAN-08                 | RLHAN-08                 |
| RL        | RLIAEA-03                | RLIAEA-03                |
| RL        | RLMLB-08                 | RLMLB-08                 |
| RL        | RLMLL-01                 | RLMLL-01                 |
| RL        | RLN622FD-01              | RL200-02                 |
| RL        | RLP11-01                 | RLP11-01                 |
| RL        | RLPFP-01                 | RLPFP-01                 |
| RL        | RLPFP-01A                | RLPFP-01A                |
| RL        | RLPFP-02                 | RLPFP-02                 |
| RL        | RLPFP-03                 | RLPFP-03                 |

**Table C-2. Crosswalk of ATWIR-2023 to ATWIR-2024 Waste Streams**  
Continued

| Site Code | ATWIR-2023 Waste Streams | ATWIR-2024 Waste Streams                       |
|-----------|--------------------------|--|
| RL        | RLPFP-04                 | RLPFP-04                                       |
| 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        | 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                                       |
| SA        | SA-W139                  | SA-W139  |
| SP        | SP-CHHD                  | SP-CHHD  |
| SP        | SP-RHHD                  | SP-RHHD  |
| SP        | SP-RHIN                  | SP-RHIN  |
| SR        | SR-AGNS-HOM              | SR-AGNS-HOM                                    |
| SR        | SR-BCLDP-HET             | SR-BCLDP-HET                                   |
| SR        | SR-BCLDP.003             | SR-BCLDP.003                                   |
| 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               | <i>Depleted Waste Stream - Shipped to WIPP</i> |
| SR        | SR-KAC-HET-2             | SR-KAC-HET-2                                   |
| SR        | SR-KAC-HET-A             | SR-KAC-HET-A                                   |
| SR        | SR-KAC-HET-B             | SR-KAC-HET-B                                   |
| SR        | SR-KAC-PuOx              | SR-KAC-PuOx                                    |
| 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                                     |

**Table C-2. Crosswalk of ATWIR-2023 to ATWIR-2024 Waste Streams**  
Continued

| Site Code | ATWIR-2023 Waste Streams | ATWIR-2024 Waste Streams                                |
|-----------|--------------------------|---|
| SR        | SR-NIST-HET              | SR-NIST-HET   |
| SR        | SR-RH-221H.01            | SR-RH-221H.01   |
| SR        | SR-RH-221H.02            | SR-RH-221H.02   |
| SR        | SR-RH-235F.01            | SR-RH-235F.01   |
| SR        | SR-RH-772F.01            | SR-RH-772F.01   |
| SR        | SR-RH-773A.01            | SR-RH-773A.01   |
| SR        | SR-RH-FBL.01             | SR-RH-FBL.01  |
| SR        | SR-RH-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  |
| 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        | 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-HET-A       | SR-W027-773A-HET-A                                      |
| 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-T006b  |
| WV        | WV-T017b                 | <i>Depleted Waste Stream - Determined to not be TRU</i> |

**Table C-2. Crosswalk of ATWIR-2023 to ATWIR-2024 Waste Streams**  
Continued

| <b>Site Code</b> | <b>ATWIR-2023 Waste Streams</b> | <b>ATWIR-2024 Waste Streams</b> |
|------------------|---------------------------------|---------------------------------|
| WV               | WV-W024a                        | WV-W024a                        |
| WV               | WV-W024b                        | WV-W024b                        |
| WV               | WV-W050a                        | WV-W050a                        |
| WV               | WV-W050b                        | WV-W050b                        |
| WV               | WV-Z001                         | WV-Z001                         |

Data Source: CID Data Version D.23.00.33 (LANL-CO 2024a). Note: This table contains data for WIPP-bound and potential waste streams only.