Mr. Steve Zappe, WIPP Project Leader  
Hazardous Waste Permits Program  
Hazardous and Radioactive Materials Bureau  
New Mexico Environment Department  
2905 E. Rodeo Park Drive, Bldg. 1  
Santa Fe, NM  87505

Subject: Transmittal of Approved Savannah River Site (SRS) Waste Stream Profile  
Form SR-W027-235F-HET, TRU Mixed Heterogeneous Debris

Dear Mr. Zappe:

The Department of Energy, Carlsbad Field Office (CBFO) has approved the Savannah River Site Waste Stream Profile Form SR-W027-235F-HET. Enclosed is a copy of the approved form as required by Section B-4(b)(1) of the WIPP Hazardous Waste Facility Permit No. NM4890139088-TSDF.

If you have any questions on this matter, please contact me at (505) 234-7357 or (505) 706-0066.

Sincerely,

[Signature]

Kerry W. Watson  
CBFO Assistant Manager  
Office of National TRU Program

Enclosure

cc: w/o enclosure  
J. Kieling, NMED  
C. Walker, TechLaw  
M. Strum, WTS  
K. Dunbar, WRES  
L. Greene, WRES  
CBFO M&RC
# CCP Waste Stream Profile Form

**Waste Stream Information**

<table>
<thead>
<tr>
<th>(1) Waste Stream Profile Number:</th>
<th>SR-W027-235F-HET</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) Generator site name:</td>
<td>SRS</td>
</tr>
<tr>
<td>(3) Technical contact:</td>
<td>Steven Rose</td>
</tr>
<tr>
<td>(4) Date of audit report approval by NMED:</td>
<td>April 9, 2003</td>
</tr>
<tr>
<td>(5) If no, provide the name and EPA ID of the original generator:</td>
<td>N/A</td>
</tr>
<tr>
<td>Did your facility generate this waste?</td>
<td>Yes ☒ No ☐</td>
</tr>
<tr>
<td>Did you receive any of this waste from another source?</td>
<td>No ☐</td>
</tr>
<tr>
<td>(6) WIPP ID:</td>
<td>W027-235F-HET</td>
</tr>
<tr>
<td>(7) Summary Category Group:</td>
<td>S5000</td>
</tr>
<tr>
<td>(8) Waste Matrix Code Group:</td>
<td>Heterogeneous Debris</td>
</tr>
<tr>
<td>(9) Waste Stream Name:</td>
<td>Heterogeneous Debris from Building 235F</td>
</tr>
<tr>
<td>(10) Description from the TWBIR:</td>
<td>This waste is primarily solids consisting of mainly booties, lab coats, floor sweepings, labware, rags, and other job control wastes.</td>
</tr>
<tr>
<td>(11) Defense TRU Waste:</td>
<td>Yes ☒ No ☐</td>
</tr>
<tr>
<td>(11) Check One:</td>
<td>CH ☒ RH ☐</td>
</tr>
</tbody>
</table>

| (12) Number of SWBs:          | 1,600 (55-gallon) current total |
| (11) Number of Drums:         | 57 (55-gallon) additional projected |
| (13) Batch Data report numbers supporting this waste stream characterization: | See CIS form CCP-TP-002-A4 (page 20 of 27) |
| (14) List applicable EPA Hazardous Waste Codes: | D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D035, F002, F003 |

**Acceptable Knowledge Information**

[For the following, enter supporting the documentation used (i.e., references and dates)]

<table>
<thead>
<tr>
<th>Required Program Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>(15) Map of site: CCP-AK-SRS-6, Rev. 0, February 9, 2004, Attachment 2</td>
</tr>
<tr>
<td>(15) Facility mission description: CCP-AK-SRS-6, Rev. 0, February 9, 2004, Sections 2.0 and 4.2</td>
</tr>
<tr>
<td>(15) Description of operations that generate waste: CCP-AK-SRS-6, Rev. 0, February 9, 2004, Section 4.3</td>
</tr>
<tr>
<td>(15) Waste identification/categoryization schemes: CCP-AK-SRS-6, Rev. 0, February 9, 2004, Section 4.5</td>
</tr>
<tr>
<td>(15) Types and quantities of waste generated: CCP-AK-SRS-6, Rev. 0, February 9, 2004, Section 4.4.1</td>
</tr>
<tr>
<td>(15) Correlation of waste streams generated from the same building and process, as appropriate: CCP-AK-SRS-6, Rev. 0, February 9, 2004, Section 4.4.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Required Waste Stream Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>(16) Area(s) and building(s) from which the waste stream was generated: CCP-AK-SRS-6, Rev. 0, February 9, 2004, Section 5.1</td>
</tr>
<tr>
<td>(16) Waste stream volume and time period of generation: CCP-AK-SRS-6, Rev. 0, February 9, 2004, Section 5.2</td>
</tr>
<tr>
<td>(16) Waste generating process description for each building: CCP-AK-SRS-6, Rev. 0, February 9, 2004, Section 4.3 and 5.3</td>
</tr>
<tr>
<td>(16) Process flow diagrams: CCP-AK-SRS-6, Rev. 0, February 9, 2004, Attachment 2, Figures 5 through 8</td>
</tr>
</tbody>
</table>

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CCP Waste Stream Profile Form

(16) Material inputs or other information identifying chemical/radionuclide content and physical waste form: CCP-AK-SRS-6, Rev. 0, February 9, 2004, Section 5.4

(16) Which Defense Activity generated the waste: (check one)
- [ ] Weapons activities including defense inertial confinement fusion
- [ ] Naval Reactors development
- [ ] Verification and control technology
- [ ] Defense research and development
- [ ] Defense nuclear waste and material by products management
- [ ] Defense nuclear material production
- [ ] Defense nuclear waste and materials security and safeguards and security investigations

Supplemental Documentation
(17) Process design documents: None Compiled
(17) Standard operating procedures: P001-P139, D010, D017
(17) Safety Analysis Reports: D002, D005, D006, D007, D011
(17) Waste packaging logs: M019, M020, M023, P039
(17) Test plans/research project reports: D010, D034, D036-D054, D057
(17) Site databases: D019, M016, M021, M022
(17) Information from site personnel: C004, C008, C013, C014
(17) Standard industry documents: None Compiled
(17) Previous analytical data: C025, C075-C077, M025
(17) Material safety data sheets: M008
(17) Sampling and analysis data from comparable/surrogate Waste: C025, M025
(17) Laboratory notebooks: None Compiled

Sampling and Analysis Information

For the following, when applicable, enter procedure title(s), number(s) and date(s)
(18) Radiography: See CIS form CCP-TP-002-A3 (page 17 of 27)
(18) Visual Examination: See CIS form CCP-TP-002-A3 (page 17 of 27)

Headspace Gas Analysis
(19) VOCs: See CIS form CCP-TP-002-A3 (page 17-18 of 27)
(19) Flammable: See CIS form CCP-TP-002-A3 (page 17-18 of 27)
(19) Other gases (specify): N/A

Homogeneous Solids/Soils/Gravel Sample Analysis
(20) Total metals: N/A
(20) PCBs: N/A
(20) VOCs: N/A
(20) Nonhalogenated VOCs: N/A
(20) Semi-VOCs: N/A
(20) Other (specify): N/A

Comments: N/A
Waste Stream Profile Form Certification:

I hereby certify that I have reviewed the information in this Waste Stream Profile Form, and it is complete and accurate to the best of my knowledge. I understand that this information will be made available to regulatory agencies and that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

<table>
<thead>
<tr>
<th>Signature of Site Project Manager</th>
<th>Printed Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>(21) S. B. Rose</td>
<td>5-6-04</td>
<td></td>
</tr>
</tbody>
</table>

NOTE:  
(1) Use back of sheet or continuation sheets, if required.  
(2) If radiography, visual examination, headspace gas analysis, and/or homogeneous solids/soils/gravel sample analysis were used to determine EPA Hazardous Waste Codes, attach signed Characterization Information Summary documenting this determination.
SUMMATION OF ASPECTS OF AK SUMMARY REPORT: SR-W027-235F-HET

Overview:
Beginning operations in 1960, the Savannah River Site (SRS) Building 235-F converted Np-237 oxide into billets for extrusion into reactor targets that were subsequently irradiated and processed to recover Pu-238 and then converted to an oxide. The Pu-238 was ultimately fabricated into various types of fuel forms in the Plutonium Fuel Form Facility (PuFF) within Building 235-F. The Metallography Laboratory (Met Lab) and the Plutonium Experimental Facility (PEF) were also located in Building 235-F. The Met Lab supported the PuFF operation by preparing and examining the product. The PEF developed and demonstrated processes for the production of fuel forms. The fuel forms were used for defense and non-defense programs. The wastes generated from these processes were not segregated based on defense vs. non-defense use of the final products.

As a result of various activities conducted in support of the mission (e.g., operation, maintenance, construction, repair, cleaning, facility modifications, and decommissioning), the facility generated TRU waste. Waste contaminated primarily with defense-related Pu-238 and Np-237 material was generated by these activities at SRS.

This summation of the AK Summary Report includes information to support Waste Stream Profile Form (WSPF) Number SR-W027-235F-HET for Heterogeneous Debris Waste relating to the facility's history, configuration, equipment, process operations, and waste management practices. Information contained in this summary was obtained from numerous sources, including facility safety basis documentation, historical document archives, generator and storage facility waste records and documents including SRS Burial Ground Records and databases, and interviews with operational and waste management personnel. Additional details are discussed in CCP-AK-SRS-6, Central Characterization Project Acceptable Knowledge Summary Report for Savannah River Site Waste Stream: SR-W027-235F-HET, Revision 0, dated February 9, 2004.

Waste Stream Identification Summary:

| Site Where TRU Waste Was Generated: | Savannah River Site |
| Waste Stream Name: | Heterogeneous Debris from Building 235-F |
| Waste Stream Number: | SR-W027-235F-HET |
| Dates of Waste Generation: | December 1972 to present |
| Facility Where TRU Waste Was Generated: | Building 235-F |
| Summary Category Group: | S5000 – Debris Waste |
| Waste Matrix Code Group: | Heterogeneous Debris |
| Waste Matrix Code: | S5400 |
| Waste Stream TWBIR Identification: | W027-235F-HET (and wastes re-assigned from T001-235F-HET and W026-235F-HET) |

\(^1\) In the TWBIR, the waste stream T001-235F-HET was initially assigned as a non-hazardous waste stream. Waste stream W026-235F-HET was initially assigned to hazardous job control waste that was generated after January 25, 1990. However, based on the Acceptable Knowledge evaluation, waste streams T001-235F-HET and W026-235F-HET have been combined into the W027-235F-HET waste stream because the waste was generated from similar activities, and is similar in material, physical form, and hazardous constituents.

WS SF
Page 4 of 27
Waste Stream Volume:
1,600 drums (55-gallon) current total
57 drums (55-gallon) additional projected

RCRA Hazardous Waste Codes:
D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D035, F002, F003

TRUPACT-II Content Code (TRUCON):

Waste Stream Description and Physical Form:

The activity that generated waste from Building 235-F is production of nuclear materials and related support activities (i.e., research and development operations in the PEF; metallography laboratory operations; and routine maintenance, waste repackaging, and post-production cleanup of these facilities).

The waste is similar in material and physical form in that the drums contain a variety of organic and inorganic debris waste items (e.g., plastic sheeting, paper wipes, metal hardware, filters, rags, motors, hand tools, cardboard, rope, brushes, leaded gloves, glassware, etc.). There may be drums that contain a mixture of debris and a small amount of sludge from the sludge removal activities. Any drums identified by radiography with predominantly sludge will be removed from this debris waste stream.

Based on the AK evaluation, Waste Matrix Code S5400, Heterogeneous Debris, is applied to this waste stream. The definition of this Waste Matrix Code is provided in the DOE Waste Treatability Group Guidance. This category includes waste that is at least 50% by volume debris materials that do not meet the criteria for assignment as either an Inorganic Debris (S5100) or Organic Debris (S5300).

Point of Generation - Area and Building of Generation

This waste stream was generated within Building 235-F and includes the wastes generated from the Actinide Billet Line, Plutonium Fuel Form, Plutonium Examination Facility, and Metallography Laboratory processes. Wastes were also generated as a result of maintenance, renovation, and decommissioning activities within the building.

Description of Waste Generating Process

The waste was generated in Building 235-F during the production of nuclear materials in the Actinide Billet Line (ABL) and Plutonium Fuel Form (PuFF) facilities and related support activities (i.e., research and development operations in the Plutonium Examination Facility (PEF); Metallography Laboratory operations; and routine maintenance, waste repackaging, and post-production cleanup of these facilities). These facilities are no longer in operation. Future TRU waste may be generated from surveillance and maintenance activities.

The primary operation of the ABL was to manufacture neptunium oxide and aluminum powder billet assemblies. The principal operations involved in billet assembly production are blending of Np-237 oxide and aluminum powder, die preparation, cold pressing, loading compacts in an aluminum billet, welding, and leak testing.

The primary function for the PuFF facility was to produce encapsulated Pu-238 oxide fuel forms. The fuel form was made by hot pressing a blended Pu-238 oxide shard mixture prepared from calcined plutonium oxalate powder. After final heat treatment, the fuel pellet was encapsulated in iridium-clad vent sets by tungsten inert gas welding.
The Metallography Laboratory (Met Lab) prepared and examined samples of Pu-238 oxide fuel pellets, shard intermediates, and welded iridium.

The PEF provided capability for developing and demonstrating processes for the production of fuel forms. The PEF was primarily intended for technical support for the operations of the PuFF facility and to provide development of improved processes and fuel forms. Processing involved converting oxide powder into fuel forms for heat sources by powder ceramic and metallurgical processes.

During the years in which Building 235-F was in production, numerous preventive and periodic maintenance activities resulted in waste generation. Typical activities included filter replacement, cleaning, equipment repairs and replacement, maintenance, and decontamination. Waste has also been generated from various renovation and decommissioning activities.

**RCRA Determinations**

**Hazardous Waste Determinations**

Waste generated in this facility does not qualify for any of the exclusions outlined in 40 CFR 260 or 261. Radiography or visual examination confirms the absence of liquids and containerized gases, therefore the waste are not ignitable, corrosive, or reactive.

Following is a table of hazardous chemicals and metals identified as applicable to this waste stream:

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>arsenic</td>
<td>Methylene chloride</td>
</tr>
<tr>
<td>barium</td>
<td>Trichlorofluoromethane (Freon 11)</td>
</tr>
<tr>
<td>cadmium</td>
<td>1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)</td>
</tr>
<tr>
<td>chromium</td>
<td>1,1,1-Trichloroethane</td>
</tr>
<tr>
<td>lead</td>
<td>acetone</td>
</tr>
<tr>
<td>mercury</td>
<td>xylene</td>
</tr>
<tr>
<td>selenium</td>
<td></td>
</tr>
<tr>
<td>silver</td>
<td></td>
</tr>
<tr>
<td>benzene</td>
<td></td>
</tr>
<tr>
<td>Carbon tetrachloride</td>
<td></td>
</tr>
<tr>
<td>Methyl ethyl ketone</td>
<td></td>
</tr>
</tbody>
</table>

**Ignitability**

Ignitable materials are not present in Building 235-F TRU waste stream. The waste does not exhibit the characteristic of ignitability as identified in 40 CFR 261.21. Liquids with flashpoints <140°F were used. However, radiography or visual examination of the waste during the Central Characterization Project confirmation activities ensures the absence of liquids in the waste stream. Ignitable compressed gases (e.g. aerosol cans) were used in the building, but radiography or visual examination ensures the absence of non-punctured aerosol cans. The F003 hazardous waste code is conservatively applied to the waste stream because solvents were used even though the waste is not ignitable. The hazardous waste code for ignitability (D001) does not apply to this waste stream.
Corrosivity

Corrosive materials are not present in this waste stream. The waste does not exhibit the characteristic of corrosivity as identified in 40 CFR 261.22. This waste is not liquid. The corrosivity characteristic (D002) does not apply to this waste stream.

Reactivity

Aluminum powder was used in the manufacturing of actinide billets, but the aluminum powder would have been present only in minute quantities from wiped surfaces and would have oxidized once it was removed from the glove bag and during subsequent storage. The waste stream does not exhibit the characteristic of reactivity as identified in 40 CFR 261.23. Therefore, the waste code for reactivity (D003) is not assigned to this waste stream.

Toxicity Characteristic

The wastes in this waste stream exhibit the characteristic of toxicity per 40 CFR 261.24 for the following metal and organic contaminants:

Arsenic (D004)
Arsenic was detected in samples of tank sludge and therefore is an indication that arsenic was used in the building and may be present in this debris waste stream. Small amounts of sludge may be present in this debris waste stream. Based on this information, the D004 hazardous waste code has been conservatively applied to this waste stream.

Barium (D005)
Barium was an ingredient in some paints used in the building. Based on this information, the D005 hazardous waste code has been conservatively applied to this waste stream.

Cadmium (D006)
Cadmium was detected in samples of tank sludge and therefore is an indication that cadmium was used in the building and may be present in this debris waste stream. Small amounts of sludge may be present in this debris waste stream. Cadmium and cadmium nitrate were used in the Plutonium Examination Facility. Based on this information, the D006 hazardous waste code was conservatively assigned to this waste stream.

Chromium (D007)
Chromium was an ingredient in commercial products (e.g. paints) used in the building. Chromium and chromium nitrate were used in the Plutonium Examination Facility. Chromium was also detected in samples of tank sludge and therefore is another indicator that it was used in the building and may be present in this debris waste stream. Small amounts of sludge may be present in this debris waste stream. Based on this information, the D007 hazardous waste code was conservatively assigned to this waste stream.

Lead (D008)
Sources of lead include various forms of shielding such as leaded rubber gloves, shielding plates, lead shot, spacers, and glass windows. Lead was also present in the paint used in the area. Lead was also detected in samples of tank sludge and therefore is another indicator that it was used in the building and may be present in this debris waste stream. Small amounts of sludge may be present in this debris waste stream. Based on this information, the D008 hazardous waste code was conservatively assigned to the waste stream.

Mercury (D009)
Sources of mercury in the waste include mercury vapor bulbs in the Plutonium Fuel Form facility cells, batteries, and thermometers. Mercuric nitrate was used in the Plutonium Examination Facility. Mercury was also detected in samples of tank sludge and therefore is another indicator.
that it was used in the building and may be present in this debris waste stream. Small amounts of sludge may be present in this debris waste stream. Based on this information, the D009 hazardous waste code has been conservatively assigned to this waste stream.

**Selenium (D010)**
Selenium was detected in samples of tank sludge and therefore is an indication that selenium was used in the building and may be present in this debris waste stream. Small amounts of sludge may be present in this debris waste stream. Based on this information, the D010 hazardous waste code has been conservatively applied to this waste stream.

**Silver (D011)**
Silver chloride and silver nitrate were used in the Plutonium Examination Facility. Silver was detected in samples of tank sludge and therefore is another indicator that silver was used in the building and may be present in this debris waste stream. Small amounts of sludge may be present in this debris waste stream. Based on this information, the D011 hazardous waste code has been conservatively applied to this waste stream.

**Benzene (D018)**
Benzene was a candidate seal pot fluid and an ingredient in paints used in the building. Based on this information, the D018 hazardous waste code has been conservatively applied to this waste stream.

**Carbon Tetrachloride (D019)**
Carbon tetrachloride was used in the Plutonium Examination Facility. Based on this information, the D019 hazardous waste code has been conservatively applied to this waste stream.

**Methyl ethyl ketone (D035)**
Methyl ethyl ketone was an ingredient in paints and adhesives used in the building. Based on this information, the D035 hazardous waste code has been conservatively applied to this waste stream.

**Listed Waste**
The material in this waste stream was mixed with or derived from waste listed in 40 CFR 261, Subpart D as a hazardous waste from non-specific sources. Methylene chloride, 1,1,1-trichloroethane, trichlorofluoromethane, 1,1,2-trichloro-1,2,2-trifluoroethane, xylene, and acetone were used for their solvent properties. Example solvent uses include routine housekeeping, laboratory equipment cleaning, cleaning to facilitate equipment repair, various mechanical repairs, and associated maintenance. Based on this information, this waste stream has been conservatively assigned the F002, and F003 hazardous waste codes.

**K, P, or U Listed Waste**
The material in this waste stream is not hazardous from specific sources since it was not generated from any of the processes listed in 40 CFR 261.32; nor does it consist of discarded chemical products, off-specification compounds, container residues or spill residue listed in 40 CFR 261.33. Therefore, the material in this waste stream is not K-listed or U- or P-listed.

**Beryllium**
Beryllium may be present in the waste stream but does not meet the definition of a P015-listed waste. Building 235-F did not process beryllium materials. Beryllium exists only as a contaminant in the plutonium fuel forms and billets fabricated in Building 235-F. Individual drums will contain less than one weight percent beryllium.
Conclusion

The following EPA hazardous waste codes are assigned to waste stream SR-W027-235F-HET: D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D035, F002, and F003.

Polychlorinated Biphenyls

No PCB containing components are identified in this waste stream. To ensure the waste does not contain PCBs, items such as transformers, capacitors, and lamp ballasts are managed as prohibited items when identified by radiography or visual examination.

Prohibited Items

The absence of prohibited items is determined and documented through acceptable knowledge and confirmation activities. Radiography or visual examination is performed on each container in this waste stream as a confirmation activity. The following items have been determined as not present in the waste:

- Liquids
- Non-radioactive pyrophoric materials
- Waste incompatible with backfill, seal and panel closure materials, container and packaging materials, or other wastes
- Explosives or compressed gases
- PCBs in concentration greater than or equal to 50 ppm
- Waste exhibiting the characteristics of ignitability, corrosivity, or reactivity
- Non-mixed hazardous wastes

Headspace Gas/Volatile Organic Compound Information

Lot #1 of waste stream SR-W027-235F-HET consists of a total of 31 drums. No target analytes were detected above PRQL. 1,1,1-Trichloroethane was detected in 13 drums and was the most commonly detected target analyte in Lot #1. Butanol was the next most commonly detected target analyte (three drums). Other target analytes including 1,1-dichloroethane, methylene chloride, toluene, trichloroethylene, acetone, methanol, and methyl ethyl ketone were detected once or twice in Lot #1. Four TICs were identified in <25% of the drums sampled and were identified as 2-Methyl, 2-Propanol, Isopropyl alcohol, (S)-2Hydroxypropanoic acid, and Tetrahydro-3-Furanol. No additional hazardous waste codes were added to the waste stream based on headspace gas sampling (HSGS). HSGS analysis confirms the acceptable knowledge for this waste stream. The specifics of this information are included in the attached Characterization Information Summary report.

Radionuclide Information

Radiological Characterization

This waste stream is contaminated primarily with Pu-238 and Np-237. An unknown portion of the hazardous waste from Building 235-F may contain <100 nCi/g TRU alpha contamination, but is managed by the site as TRU mixed waste. Each payload container shipped to WIPP will be certified in accordance with procedure CCP-PO-002, CCP Transuranic Waste Certification Plan, as containing >100 nCi/g of alpha emitting isotopes with half-lives greater than 20 years. This waste stream contains the following radioisotopes:

<table>
<thead>
<tr>
<th>WIPP Tracked Radionuclides</th>
<th>Other Radionuclides</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sr-90</td>
<td>C-14</td>
</tr>
<tr>
<td>Cs-137</td>
<td>C-60</td>
</tr>
<tr>
<td>U-233</td>
<td>H-3</td>
</tr>
<tr>
<td>U-234</td>
<td>I-129</td>
</tr>
<tr>
<td>U-238</td>
<td>Ni-59</td>
</tr>
<tr>
<td>Pu-238</td>
<td>Np-237</td>
</tr>
<tr>
<td>Pu-239</td>
<td>Pu-241</td>
</tr>
<tr>
<td>Pu-240</td>
<td>Se-79</td>
</tr>
<tr>
<td>Pu-242</td>
<td>Sn-126</td>
</tr>
<tr>
<td>Am-241</td>
<td>Tc-99</td>
</tr>
<tr>
<td></td>
<td>Th-232¹</td>
</tr>
<tr>
<td></td>
<td>U-235</td>
</tr>
<tr>
<td></td>
<td>U-236</td>
</tr>
</tbody>
</table>

¹ Th-232 was used as a surrogate during facility startup; therefore, there is the potential that some drums may contain significant amounts of thorium. Additionally, thorium is listed as an impurity in the Pu used in PuFF.
## AK Source Documents

<table>
<thead>
<tr>
<th>Source Document Number</th>
<th>Title, Number, Revision</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>C004</td>
<td>Record of Communication - Interview with Dennis McCaskill and Dave Koester</td>
<td>09/08/03</td>
</tr>
<tr>
<td>C008</td>
<td>Record of Communication, Interview with Sally Thomas</td>
<td>09/25/03</td>
</tr>
<tr>
<td>C013</td>
<td>Record of Communication, Interview with Penny Spitzer, Brenda Legons, Frances Corley</td>
<td>09/25/03</td>
</tr>
<tr>
<td>C014</td>
<td>Record of Communication, Interview with Randy Yourchak, Jeff Schaade, Johnette George</td>
<td>09/25/03</td>
</tr>
<tr>
<td>C025</td>
<td>235-F Condensate Tank Resolution, NMP-SPF-91-121</td>
<td>03/12/91</td>
</tr>
<tr>
<td>C075</td>
<td>235-F Drums Inspection, AID-CMA-99-110</td>
<td>11/02/99</td>
</tr>
<tr>
<td>C076</td>
<td>Inspection Report For Lead Paint From Conduit In Room #1003 at 235-F, AID-CMA-2001-00110</td>
<td>10/29/01</td>
</tr>
<tr>
<td>C077</td>
<td>Lead Inspection of the 235-F Airlock #153, AID-CMA-98-0148</td>
<td>09/14/98</td>
</tr>
<tr>
<td>D002</td>
<td>Safety Analysis of the 238PuO2 Experimental Facility, DPSTSA-700-30</td>
<td>02/78</td>
</tr>
<tr>
<td>D005</td>
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<td>P132</td>
<td>Cutting Open Returned GPHS Shipping Container, DPSOL 235-F-PuFF-3166, Rev. 0</td>
<td>04/82</td>
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<td>P133</td>
<td>Dye Check of Iridium Weld, DPSOL 235-F-PuFF-3167M, Rev. 2</td>
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<td>P136</td>
<td>Removal of Material From Liquid Waste Handling Cabinet, DPSOL 235-F-PuFF-3180, Rev. 0</td>
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<td>P137</td>
<td>Decontamination of Test Welds in Cell 7, DPSOL 235-F-PuFF-3191, Rev. 0</td>
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<td>P138</td>
<td>Decontamination of Fueled Clad In Cell 7 Using SC200, DPSOL 235-F-PuFF-3192, Rev. 0</td>
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<td>P139</td>
<td>Neutralizing Decontamination Solutions Used in Decontamination Apparatus in Cell 7, DPSOL 235-F - PuFF – 4703</td>
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The following convention was used to assign the Source Document Tracking Number:

- C: Correspondance
- D: Documents (e.g. published reports)
- M: Miscellaneous (e.g. unpublished data)
- P: Procedures
- U: Unpublished Documents
CHARACTERIZATION
INFORMATION SUMMARY

There are drums in Lot 1 that are designated for Overpacking / Load Management purposes only. Refer to the Correlation of Container Identification Numbers to identify these containers.

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CCP Characterization Information Summary Cover Page

WSP #: SW-W027-2354-WET
Lot #: 1

AK Expert Review: [Signature] Date: 4/21/04

STR Review (if necessary): [Signature] Date:

SFQAO Review: [Signature] Date: 4/12/04

SFPM Review: [Signature] Date: 4/18/04

SFQAO signature indicates that the information presented in this package is consistent with analytical batch reports.

SFPM signature certifies that through Acceptable Knowledge testing and analysis that the waste identified in this summary is not corrosive, ignitable, reactive, or incompatible with the TSDF.

A summary of the Acceptable Knowledge regarding this waste stream containing specific information about the corrosivity, reactivity, and ignitability of the waste stream is included as an attachment to the Waste Stream Profile Form. By reference, that information is included in this lot.

List of procedures used:

Radiography:
CCP-TP-011, CCP Radiography Inspection Operating Procedures, March 8, 2004
CCP-TP-011, CCP Radiography Inspection Operating Procedures, July 31, 2003
CCP-TP-011, CCP Radiography Inspection Operating Procedures, May 18, 2002
CCP-TP-011, CCP Radiography Inspection Operating Procedures, October 18, 2001
CCP-TP-011, CCP Radiography Inspection Operating Procedures, August 29, 2001
CCP-TP-011, CCP Radiography Inspection Operating Procedures, August 1, 2001
CCP-TP-011, CCP Radiography Inspection Operating Procedures, July 2, 2001
CCP-TP-011, CCP Radiography Inspection Operating Procedures, June 1, 2001
CCP-TP-011, CCP Radiography Inspection Operating Procedures, May 21, 2001
CCP-TP-011, CCP Radiography Inspection Operating Procedures, April 27, 2001

Visual Examination:
SW15.7-SOP-TVEF-01, TVEF Operations, September 30, 2002
SW15.7-SOP-TVEF-01, TVEF Operations, June 4, 2001
CCP-TP-085, CCP TRU Visual Examination Facility Operating Procedures, October 17, 2003
CCP-TP-085, CCP TRU Visual Examination Facility Operating Procedures, August 13, 2003

CCP-TP-087, CCP Scale Operations, July 15, 2003
CCP-TP-088, CCP Program data Generation Level Review for YE, October 20, 2003
CCP-TP-088, CCP Program data Generation Level Review for YE, July 16, 2003

Headspace Gas Analysis:
CCP-TP-007, CCP Single Sample Manifold Headspace Gas Sampling and Analysis Procedure, March 01, 2004
CCP-TP-007, CCP Single Sample Manifold Headspace Gas Sampling and Analysis Procedure, October 31, 2003
CCP-TP-007, CCP Single Sample Manifold Headspace Gas Sampling and Analysis Procedure, April 30, 2003
CCP-TP-007, CCP Single Sample Manifold Headspace Gas Sampling and Analysis Procedure, February 2, 2002
CCP-TP-007, CCP Single Sample Manifold Headspace Gas Sampling and Analysis Procedure, October 18, 2002
CCP-TP-007, CCP Single Sample Manifold Headspace Gas Sampling and Analysis Procedure, September 28, 2002
CCP-TP-007, CCP Single Sample Manifold Headspace Gas Sampling and Analysis Procedure, September 4, 2002
CCP-TP-007, CCP Single Sample Manifold Headspace Gas Sampling and Analysis Procedure, July 23, 2002
CCP-TP-007, CCP Single Sample Manifold Headspace Gas Sampling and Analysis Procedure, January 28, 2002
CCP-TP-007, CCP Single Sample Manifold Headspace Gas Sampling and Analysis Procedure, December 7, 2001
CCP-TP-007, CCP Single Sample Manifold Headspace Gas Sampling and Analysis Procedure, August 30, 2001

CCP-TP-008, CCP Single Sample Manifold Data Handling Procedure, October 31, 2003
CCP-TP-008, CCP Single Sample Manifold Data Handling Procedure, September 1, 2003
CCP-TP-008, CCP Single Sample Manifold Data Handling Procedure, February 5, 2003
CCP-TP-008, CCP Single Sample Manifold Data Handling Procedure, September 28, 2002
CCP-TP-008, CCP Single Sample Manifold Data Handling Procedure, September 20, 2002
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Effective Date: 09/25/2003
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CCP-TP-003, CCP Sampling Design and Data Analysis for RCRA Characterization, August 23, 2002
CCP-TP-003, CCP Sampling Design and Data Analysis for RCRA Characterization, June 3, 2002
CCP-TP-003, CCP Sampling Design and Data Analysis for RCRA Characterization, March 20, 2002
CCP-TP-003, CCP Sampling Design and Data Analysis for RCRA Characterization, March 18, 2002
CCP-TP-003, CCP Sampling Design and Data Analysis for RCRA Characterization, January 17, 2002
CCP-TP-003, CCP Sampling Design and Data Analysis for RCRA Characterization, November 1, 2001
CCP-TP-003, CCP Sampling Design and Data Analysis for RCRA Characterization, October 4, 2001
CCP-TP-003, CCP Sampling Design and Data Analysis for RCRA Characterization, August 1, 2001

CCP-TP-030, CCP WWIS Data Entry and TRU Waste Certification, March 29, 2004
CCP-TP-030, CCP WWIS Data Entry and TRU Waste Certification, December 17, 2003
CCP-TP-030, CCP WWIS Data Entry and TRU Waste Certification, September 19, 2003
CCP-TP-030, CCP WWIS Data Entry and TRU Waste Certification, March 29, 2003
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CCP-TP-030, CCP WWIS Data Entry and TRU Waste Certification, September 19, 2002
CCP-TP-030, CCP WWIS Data Entry and TRU Waste Certification, June 27, 2002
CCP-TP-030, CCP WWIS Data Entry and TRU Waste Certification, May 21, 2002
CCP-TP-030, CCP WWIS Data Entry and TRU Waste Certification, October 24, 2001
CCP-TP-030, CCP WWIS Data Entry and TRU Waste Certification, October 10, 2001
CCP-TP-030, CCP WWIS Data Entry and TRU Waste Certification, September 5, 2001
CCP-TP-030, CCP WWIS Data Entry and TRU Waste Certification, June 8, 2001

WAP Certification:

CCP-PO-001 CCP Transuranic Waste Characterization Quality Assurance Project Plan, March 15, 2004
CCP-PO-001 CCP Transuranic Waste Characterization Quality Assurance Project Plan, January 08, 2004
CCP-PO-001 CCP Transuranic Waste Characterization Quality Assurance Project Plan, February 27, 2001

CCP-PO-002 CCP Transuranic Waste Certification Plan, March 15, 2004
CCP-PO-002 CCP Transuranic Waste Certification Plan, January 08, 2004
CCP-PO-002 CCP Transuranic Waste Certification Plan, January 21, 2002

CCP-PO-004 CCPISRS Interface Document, October 9, 2003
CCP-PO-004 CCPISRS Interface Document, August 4, 2003
CCP-PO-004 CCPISRS Interface Document, April 8, 2003
CCP-PO-004 CCPISRS Interface Document, September 20, 2002
CCP-PO-004 CCPISRS Interface Document, June 27, 2002
CCP-PO-004 CCPISRS Interface Document, May 9, 2002
CCP-PO-004 CCPISRS Interface Document, February 9, 2002
CCP-PO-004 CCPISRS Interface Document, November 2, 2001
CCP-PO-004 CCPISRS Interface Document, October 19, 2001
CCP-PO-004 CCPISRS Interface Document, September 17, 2001
CCP-PO-004 CCPISRS Interface Document, September 10, 2001
CCP-PO-004 CCPISRS Interface Document, August 17, 2001
CCP-PO-004 CCPISRS Interface Document, June 14, 2001
CCP-PO-004 CCPISRS Interface Document, June 7, 2001
CCP-PO-004 CCPISRS Interface Document, April 24, 2001
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Mark Peary  
Signature of Site Project Manager

Mark Peary  
Printed Name

4/12/04  
Date

WSAF
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CIS  
Page 085
## CCP Headspace Gas UCL₉₀ Evaluation Form

**WSPF #:** SR-W027-235F-HET  
**Waste Stream Lot Number:** 1

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<th>ANALYTE</th>
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<th># Samples</th>
<th># Samples above MDL</th>
<th>Maximum (ppmv)</th>
<th>Mean (ppmv)</th>
<th>SD (ppmv)</th>
<th>UCL₉₀ (ppmv)</th>
<th>PRQL (ppmv)</th>
<th>Transformed PRQL (NA or Value)</th>
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<td>Tetrachloroethylene</td>
<td>NO</td>
<td>31</td>
<td>0</td>
<td>2.61</td>
<td>2.68</td>
<td>0.18</td>
<td>2.71</td>
<td>10</td>
<td>NA</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Toluene</td>
<td>LOG</td>
<td>31</td>
<td>1</td>
<td>3.59</td>
<td>0.95</td>
<td>0.55</td>
<td>1.08</td>
<td>10</td>
<td>2.30</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>1,1,1-Trichloroethane</td>
<td>LOG</td>
<td>31</td>
<td>13</td>
<td>8.96</td>
<td>1.48</td>
<td>1.91</td>
<td>1.93</td>
<td>10</td>
<td>2.30</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Trichloroethylene</td>
<td>LOG</td>
<td>31</td>
<td>1</td>
<td>4.57</td>
<td>0.88</td>
<td>0.73</td>
<td>1.04</td>
<td>10</td>
<td>2.30</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>1,1,2-Trichloro-1,2,2-</td>
<td>Trifluoroethane</td>
<td>NO</td>
<td>31</td>
<td>0</td>
<td>3.50</td>
<td>2.34</td>
<td>1.00</td>
<td>2.56</td>
<td>10</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>1,2,4-Trimethylbenzene</td>
<td>NA</td>
<td>0</td>
<td>0</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>10</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>1,3,5-Trimethylbenzene</td>
<td>NA</td>
<td>0</td>
<td>0</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>10</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>
### CCP Headspace Gas UCL90 Evaluation Form

**WSPF #:** SR-W027-235F-HET  
**Waste Stream Lot Number:** 1

<table>
<thead>
<tr>
<th>ANALYTE</th>
<th>Transform Data Used (No, Data-Log, SQT, other)</th>
<th># Samples</th>
<th># Samples above MDL</th>
<th>Maximum (ppmv)</th>
<th>Mean (ppmv)</th>
<th>SD (ppmv)</th>
<th>UCL90 (ppmv)</th>
<th>PRQL (ppmv)</th>
<th>Transformed PRQL (N/A or Value)</th>
<th>UCL90 &gt; PRQL Yes</th>
<th>EPA Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>m-Xylene*</td>
<td>NO</td>
<td>31</td>
<td>0</td>
<td>2.75</td>
<td>2.72</td>
<td>0.03</td>
<td>2.73</td>
<td>10</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>p-Xylene*</td>
<td>NO</td>
<td>31</td>
<td>0</td>
<td>2.75</td>
<td>2.72</td>
<td>0.03</td>
<td>2.73</td>
<td>10</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>o-Xylene</td>
<td>NO</td>
<td>31</td>
<td>0</td>
<td>3.00</td>
<td>2.89</td>
<td>0.13</td>
<td>2.93</td>
<td>10</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Acetone</td>
<td>LOG</td>
<td>31</td>
<td>1</td>
<td>3.32</td>
<td>2.19</td>
<td>0.25</td>
<td>2.25</td>
<td>100</td>
<td>4.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Butanol</td>
<td>LOG</td>
<td>31</td>
<td>3</td>
<td>4.79</td>
<td>2.44</td>
<td>0.62</td>
<td>2.59</td>
<td>100</td>
<td>4.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methanol</td>
<td>LOG</td>
<td>31</td>
<td>1</td>
<td>3.79</td>
<td>2.00</td>
<td>0.34</td>
<td>2.08</td>
<td>100</td>
<td>4.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methyl ethyl ketone</td>
<td>LOG</td>
<td>31</td>
<td>1</td>
<td>3.64</td>
<td>2.35</td>
<td>0.28</td>
<td>2.42</td>
<td>100</td>
<td>4.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methyl isobutyl ketone</td>
<td>NO</td>
<td>31</td>
<td>0</td>
<td>1388</td>
<td>10.52</td>
<td>2.88</td>
<td>11.20</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

*These compounds are from the TRAMPAC and are flammable VOCs that do not appear in the GAP/P or the WIPP WAP. These are not part of the target analysis list, but samples may be analyzed for these compounds.

*These xylene isomers cannot be resolved by the analytical methods employed in the program. Mxyylene and p-xylene will be reported as "Total m-p-Xylene."

*Required only for homogenous solids and soil/gravel waste from Los Alamos National Laboratory and Savannah River Site.

*Required only for homogenous solids and soil/gravel waste from Oak Ridge National Laboratory and Savannah River Site.

**Comments:**

---

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## CCP Headspace Gas Summary Data

**WSP: # SR-W027-2352F-HET**

<table>
<thead>
<tr>
<th>Tentatively Identified Compound</th>
<th>Maximum Observed Estimated Concentrations (ppm)</th>
<th># Samples Containing TIC</th>
<th>% Detected</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-propanol, 2-methyl</td>
<td>35.78</td>
<td>3</td>
<td>9.88</td>
</tr>
<tr>
<td>Isopropyl Alcohol</td>
<td>224.87</td>
<td>3</td>
<td>9.88</td>
</tr>
<tr>
<td>(S)-2-Hydroxypropanoic acid</td>
<td>55.49</td>
<td>2</td>
<td>6.45</td>
</tr>
<tr>
<td>3-Furanol-Tetrahydro</td>
<td>38.61</td>
<td>1</td>
<td>3.23</td>
</tr>
</tbody>
</table>

**Data Confirms Acceptable Knowledge?** Yes ☑ No ☐

If no, describe the basis for assigning the EPA Hazardous Waste Codes:

---

**SPM Signature** [Mark Peachy]  
**Date** 4/12/04
# CCP RTR/VE Summary of Prohibited Items and AK Confirmation

**WSP#: SR-W027-235F-HET**

<table>
<thead>
<tr>
<th>Container Number</th>
<th>RTR Prohibited Items *</th>
<th>Visual Examination Prohibited Items *</th>
<th>AK Confirmation b c</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td>None of the containers in this Lot had a prohibited item detected in the Radiography / NDE process.</td>
<td>None of the containers in this Lot underwent Visual Examination</td>
<td>Consistent with CCP-TP-005 AK Confirmation Checklist</td>
</tr>
</tbody>
</table>

---

a. See Batch Data Reports
b. Attachment 10 of CCP-TP-005, CCP Acceptable Knowledge Documentation
c. If AK has assigned U134 to this waste stream, then any liquids in these containers are prohibited items (not acceptable by the TSDF).

---

**Signature**

Mark Peancy

**Printed Name**

Mark Peancy

**Date**

4/12/04

---

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CCP Reconciliation with Data Quality Objectives

SPQAO Sampling Completeness

RTR:
Number of valid samples: 31 Number of total samples analyzed: 31
Percent Complete: 100 (QAO is 100%)

NDA:
Number of valid samples: 31 Number of total samples analyzed: 31
Percent Complete: 100 (QAO is 100%)

HSG:
Number of valid samples: 31 Number of total samples collected: 31
Percent Complete: 100 (QAO is ≥90%)
Number of valid samples: 31 Number of total samples analyzed: 31
Percent Complete: 100 (QAO is ≥90%)

Total VOC:
Number of valid samples: N/A (3) Number of total samples collected: N/A (3)
Percent Complete: N/A (3) (QAO is ≥90%)
Number of valid samples: N/A (3) Number of total samples analyzed: N/A (3)
Percent Complete: N/A (3) (QAO is ≥90%)

Total SVOC:
Number of valid samples: N/A (3) Number of total samples collected: N/A (3)
Percent Complete: N/A (3) (QAO is ≥90%)
Number of valid samples: N/A (3) Number of total samples analyzed: N/A (3)
Percent Complete: N/A (3) (QAO is ≥90%)

Total Metals:
Number of valid samples: N/A (3) Number of total samples collected: N/A (3)
Percent Complete: N/A (3) (QAO is ≥90%)
Number of valid samples: N/A (3) Number of total samples analyzed: N/A (3)
Percent Complete: N/A (3) (QAO is ≥90%)

SPQAO Signature and Date:

I certify that sufficient data have been collected to determine the following Program-required waste parameters:
<table>
<thead>
<tr>
<th>WSP#:</th>
<th>SR-W027-235FF-HET</th>
<th>Lot#: 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Y/N/NA</strong></td>
<td><strong>Reconciliation Parameter</strong></td>
<td></td>
</tr>
<tr>
<td>3. Y</td>
<td>The waste matrix code, identified is consistent with the type of sampling and analysis used to characterize the waste.</td>
<td></td>
</tr>
<tr>
<td>4. Y (1)</td>
<td>The TRU activity reported in the BDRs for each container demonstrates with a 95% probability that the container of waste contains TRU radioactive waste.</td>
<td></td>
</tr>
<tr>
<td>5. Y</td>
<td>Potential Flammability. Is there sufficient AK or analytical data to demonstrate that the waste meets the potential flammability limits (Headspace Gas, BDR and Summary Sheet)?</td>
<td></td>
</tr>
<tr>
<td>6. Y (2)</td>
<td>Mean concentrations, upper 90% confidence limit (UCL90) values for the mean concentration, standard deviations, and the number of samples collected for each VOC in the headspace gas of each container were calculated and compared with the program required quantitation limits, as reported in CCP-TP-003-A3, and additional EPA Hazardous Waste codes were assigned as required. Samples were randomly collected (when appropriate).</td>
<td></td>
</tr>
<tr>
<td>7a. N/A (3)</td>
<td>Mean concentrations, UCL90 values for the mean concentration, standard deviations, and the number of samples collected for total VOCs were calculated and compared with the program required quantitation limits and regulatory thresholds, as reported in the Characterization Information Summary, CCP-TP-003-A4, and additional EPA Hazardous Waste codes were assigned as required. Samples were randomly collected.</td>
<td></td>
</tr>
<tr>
<td>7b. N/A (3)</td>
<td>Mean concentrations, upper 90% confidence limit (UCL90) values for the mean concentration, standard deviations, and the number of samples collected for total SVOCs were calculated and compared with the program required quantitation limits and regulatory thresholds, as reported in the Characterization Information Summary, CCP-TP-003-A5, and additional EPA Hazardous Waste Codes were assigned as required. Samples were randomly collected.</td>
<td></td>
</tr>
<tr>
<td>7c. N/A (3)</td>
<td>Mean concentrations, upper 90% confidence limit (UCL90) values for the mean concentration, standard deviations, and the number of samples collected for total metals were calculated and compared with the program required quantitation limits and regulatory thresholds, as reported in the Characterization Information Summary, CCP-TP-003-A6, and additional EPA Hazardous Waste codes were assigned as required. Samples were randomly collected.</td>
<td></td>
</tr>
<tr>
<td>8. Y</td>
<td>The data demonstrates whether the waste stream exhibits are toxicity characteristic under 40 CFR 261, Subpart C.</td>
<td></td>
</tr>
</tbody>
</table>
### CCP Reconciliation with Data Quality Objectives

**WSP#:** SR-W027-235FF-HET  
**Lot#:** 1

<table>
<thead>
<tr>
<th>Y/N/NA</th>
<th>Reconciliation Parameter</th>
</tr>
</thead>
</table>
| 9      | Y  
Waste stream can be classified as hazardous or nonhazardous at the 90-percent confidence level. |
| 10.    | Y  
Sufficient number of waste containers have been visually examined to determine the UCL90 for the misclassification rate is less than 14%. |
| 11.    | Y  
Appropriate packaging configuration and Drum Age Criteria (DAC) is applied and documented in the headspace gas sampling documentation, and the drum age met prior to sampling. |
| 12.    | Y  
TIICs were appropriately identified and reported in accordance with the requirements of Section B3-1 of the QAPjP. |
| 13.    | Y  
The PRQLs for headspace gas VOCs were met for all analyses as evidenced by the analytical batch data reports. |

The overall completeness, comparability, and representativeness QAOSs were met for each of the analytical and testing procedures as specified in the WAP Sections B3-2 through B3-9 prior to submittal of a waste stream profile form for a waste stream or waste stream lot.

<table>
<thead>
<tr>
<th>Completeness</th>
<th>Comparability</th>
<th>Representativeness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiography</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Headspace Gas Sampling And Analysis</td>
<td>N/A (4)</td>
<td>N/A (4)</td>
</tr>
<tr>
<td>Headspace Gas Analysis</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Solids Sampling</td>
<td>N/A (3)</td>
<td>N/A (3)</td>
</tr>
<tr>
<td>Total VOCs</td>
<td>N/A (3)</td>
<td>N/A (3)</td>
</tr>
<tr>
<td>Total SVOCs</td>
<td>N/A (3)</td>
<td>N/A (3)</td>
</tr>
<tr>
<td>Total Metals</td>
<td>N/A (3)</td>
<td>N/A (3)</td>
</tr>
</tbody>
</table>

---

(1) There may be drums in this Lot designated for Overpacking / Load Management whereby the final shipping payload container will contain TRU radioactive waste. Refer to CCP-TP-002-A4 to identify these drums.

(2) No additional EPA Hazardous Waste Codes assigned.

(3) This is an S5000 Summary Category Group Waste Stream.

(4) On Line Sampling System.

(5) None of the containers in this Lot underwent Visual Examination.

---

Signature of Site Project Manager:  
Mark Peary

Printed Name:  
Mark Peary

Date:  
4-12-04

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