

## AR TARGET SHEET

The following document was too large to scan as one unit, therefore, it has been broken down into sections.

EDMC#: 0057160  
SECTION: 2 OF 4

DOCUMENT #: DOE/RL 2002-21 Rev 000

TITLE: CY 2001 Hanford Site Mixed  
Waste Land Disposal Restrictions  
Report Volumes 1 and 2

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Assessment has been completed. Reference to most recent assessment: Oct. 2000, A&E-00-ASS-072

Assessment has been scheduled. Scheduled date: Assessment currently scheduled for July 2003

Other. Explain: NA

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

NA

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

Projection volumes for this waste stream are expected to fluctuate as 221-T Canyon cleanout continues. The generation rates will be updated as necessary.

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted: See Section 3.3 for discussion on waste min.

If yes, provide document number or other identification: N/A

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: See Section 3.3 for discussion on waste min.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

- 3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

This waste will be generated as part of cleanup activities from the 221-T. In addition, this waste is generated from various onsite and offsite generators. Waste minimization techniques are incorporated to the extent practical at the T Plant Complex including segregation of low-level waste from mixed waste.

### 3.3 Waste minimization schedule

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m3

#### 3.3.2 Projected future waste volume reductions:

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

#### 3.3.3 Bases and assumptions used in above estimates:

The T Plant Complex has submitted a P2/Wmin fiscal year 2002 goal to reduce, where possible, mixed waste generation. For FY 2002 to 2006, new goals will be evaluated and identified on a year-by-year basis. The T Plant Complex does not track waste reduction by treatability groups. Routine and non-routine generated waste is reported quarterly to the Waste Minimization/Pollution Prevention Group.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 **Plant/unit name:** Tank Farm Facilities/LDR Compliant, DST and SST Containerized Waste      **Waste stream** LDR Compliant Waste
- Treatability/aggregated group identifier: MLLW-01
- Treatability/aggregated group name: LDR compliant waste

1.2 **Applicable profile number(s) for this waste stream:**

930-03

1.3 **Waste stream source information**

1.3.1 **General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

This waste stream includes the long length contaminated equipment removed from the Double Shell Tank (DST) and Single Shell Tank (SST) systems, which can include transfer pumps, mixer pumps, instrument trees, sluicers, dip tubes, water lances and air lances.

1.3.2 **History of how and where the waste was/is generated:**

The LLCE equipment has been removed from tanks in the SST and/or DST systems.

1.3.3 **Source of the hazardous constituents:**

LLCE removed from the tank farms has contacted tank waste, and could contain residues of that waste.

1.3.4 **Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Process knowledge and analytical data. Document "Tank Farm Solid Waste Characterization Guide with Sampling and Analysis Attachment", HNF-SD-WM-PLN-119, REV. 01 describes the basis for historical and process knowledge; and sampling plan for tank farm solid waste.

1.3.5 **Additional notes:**

None

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

2.1 **Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)
- Tank                 DST                         SST
- Other (explain):

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.1.1 How was the waste managed prior to storage?**

Waste was in 90 day accumulation and storage area.

**2.1.2 Timeframe when waste was placed into storage:**

Waste was sent for disposal.

**2.2 Inventory locations:**

Building/room number	Number of containers/tanks
NA	

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 0

Date of inventory values: 12/31/01

Comments on waste inventory: NA

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: NA

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list: This waste stream meets the LDR requirements and it is targeted for disposal at the mixed waste trenches.

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	50.290		
2003	50.290		
2004	50.290		
2005	50.290		
2006	50.290		
Totals	251.450		

**2.7 DOE Storage Compliance Assessment information:**

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

- Assessment has been completed. Reference to most recent assessment: NA
- Assessment has been scheduled. Scheduled date: NA
- Other. Explain: NA

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

N/A

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

- Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

- Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

- Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

NA

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

- Yes  No

If yes, provide date assessment conducted:

07/13/00

If yes, provide document number or other identification:

Pollution Prevention Opportunity  
ASSESSMEN. Long Length Equipment  
removal RH, TRU, and MLW segregation.  
Completed on 7/13/00

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA:

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**  
Segregation of LLW from Mixed Waste

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m3

**3.3.2 Projected future waste volume reductions:**

<u>Year</u>	<u>m3</u>	<u>and/or</u>	<u>kg</u>
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

**3.3.3 Bases and assumptions used in above estimates:**

No volume reduction is expected.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 Plant/unit name:** WRAP/2336-W, LDR Compliant      **Waste stream** LDR Compliant  
Treatability/aggregated group identifier: MLLW-01  
Treatability/aggregated group name: LDR compliant waste

**1.2 Applicable profile number(s) for this waste stream:**

WSRd 931-2

**1.3 Waste stream source information**

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Can consist of soils, debris, particulates, etc. with LDR compliant levels of hazardous constituents, and/or state-only dangerous constituents. This waste does not include hazardous debris other than incidental debris material commingled with the non-debris.

**1.3.2 History of how and where the waste was/is generated:**

The waste was generated within the WRAP facility. It consists of material and equipment from glovebox cleanout, contaminated with regulated cutting fluid. Waste minimization activities will prevent this from happening again.

**1.3.3 Source of the hazardous constituents:**

See 1.3.1 and 1.3.2

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Process knowledge.

**1.3.5 Additional notes:**

This is a one time WRAP generated waste resulting from work performed on a facility glovebox with a regulated cutting fluid.

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

**2.1 Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                 DST                         SST  
 Other (explain): NA

**2.1.1 How was the waste managed prior to storage?**

Waste was generated and packaged at WRAP.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 2.1.2 Timeframe when waste was placed into storage:

MLLW at WRAP is recently generated waste that is being verified for waste shipment.

### 2.2 Inventory locations:

Building/room number	Number of containers/tanks
2336W	1

### 2.3 Current inventory for this stream (stored waste only, not accumulation areas)

Total volume (cubic meters): 0.2  
 Date of inventory values: 12/26/01  
 Comments on waste inventory: Inventory is not expected to be generated in the future. Inventory based on Drum Management System (DMS) printout dated 12/26/2001.

### 2.4 Is storage capacity at this location potentially an issue for this waste stream?

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: Due to proximity to and interchange with CWC, there is no storage capacity issue at WRAP.

### 2.5 Planned management areas for storage of this waste: Current location CWC

DST  Other area(s) list:

None

### 2.6 Estimated generation projection by calendar year:

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

### 2.7 DOE Storage Compliance Assessment information:

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Assessment has been completed. Reference to most recent assessment DOE #A&E-DWR-01-011,  
July 2001

Assessment has been scheduled. Scheduled date:

Other. Explain:

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

None

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: NA

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

To the extent practical, all mixed waste is segregated and packaged separately from LLW or TRU

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

wastes. To minimize the generation of mixed waste, WRAP actively seeks nondangerous alternatives for the dangerous constituents in their processes. Minimization goals are set annually and tracked quarterly, and waste treatment is used to destroy the hazardous constituents, as allowable.

### 3.3 Waste minimization schedule

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m3

### 3.3.2 Projected future waste volume reductions:

<u>Year</u>	<u>m3</u>	<u>and/or</u>	<u>kg</u>
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

### 3.3.3 Bases and assumptions used in above estimates:

Since subject waste has already been generated and is being directly disposed of, no additional waste minimization activities are planned.

## LDR REPORT TREATABILITY GROUP DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION

- 1.1 Treatability group/aggregated stream identifier** MLLW-02  
**Treatability group/aggregated stream name:** Inorganic non-debris
- 1.2 Description of waste (list WSRd numbers for this waste stream, as applicable):**

This treatability group is for non-debris waste that contains hazardous constituents that either requires non-thermal treatment (specified technology) or non-thermal treatment is BDAT for meeting the applicable LDR treatment standards (concentration-based standards). The applicable WSRds for this treatability group are: ALI, IXI, LPI, PAI, SSA, H3C, H3M, H3S, 420, 421, 425, 426, 428, 429, 44A, 500(183-H only), 500-0, 500-1, 504-0, 505(except 505-3), 521, 523, 525, 801, 812, 820, 821, 82A, 830, 900, 902, 904, 90A. This waste consists of many different inorganic solids (e.g., particulates, absorbed liquids, sludges, resin beads, soils) and lab packs that are contaminated with regulated metals and other inorganics. This waste treatability group does not include hazardous debris other than incidental debris material commingled with the non-debris. The inventory is primarily from the closure of the 183-H Solar Evaporation Basins.

### 2.0 WASTE STREAM INVENTORY AND GENERATION

- 2.1 Current total inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 2,742.852

- 2.2 Estimated generation projection by calendar year**

Year	m3	and/or	kg
2002	13.800		
2003	11.228		
2004	17.850		
2005	17.750		
2006	<u>13.213</u>		
Totals	73.841		

### 3.0 WASTE STREAM CHARACTERIZATION

- 3.1 Radiological characteristics**

**3.1.1 Mixed waste type**       High-level     Transuranic     Low-level

**3.1.2 Handling (as currently packaged/stored)**     Contact-handled     Remote-handled

**3.1.3 Comments on radiological characteristics (e.g., more specific content, treatment concerns caused by radiation, confidence level):**

Since this waste is a general category based on dangerous waste characteristics, the radiological characteristics are expected to vary greatly. There is a high level of confidence that this waste is MLLW. The waste as packaged is considered Contact-Handled (i.e., less than or equal to 200mR/hr on outside package surface); however, the dose rate of some waste inside the package may exceed 200mR/hr.

## LDR REPORT TREATABILITY GROUP DATA SHEET

### 3.2 Matrix characteristics (physical content)

3.2.1 Matrix constituent table (each constituent listed should constitute at least 1% of the total volume or mass)

3.2.2 Confidence level for matrix characteristic data in Section 3.2.1:

Low  Medium  High

3.2.3 Comments on matrix characteristics and/or confidence level:

Waste received under the Waste Specification System (WSS) has a high confidence level. Waste received prior to the WSS has a medium to low confidence level and will require matrix characterization verifications prior to treatment and disposal. If, during the verification process, it is determined that some of the waste does not meet the MLLW-02 waste stream description, then it will be reassigned into the appropriate waste stream (e.g., MLLW-03 through -10). The majority of this waste is from the closure of the 183-H Solar Evaporation Basins which has been characterized extensively.

### 3.3 Regulated contaminated characteristics

3.3.1 Wastewater/non-wastewater under RCRA

Wastewater  Non-wastewater  Unknown

3.3.2 Regulated contaminant table including treatment requirements and UHCs, if applicable

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
D001	Ignitable	Ignitable Charac.	***	***	DEACT and meet 40 CFR 268.48
D002	Corrosive	Corrosive Charac.	***	***	DEACT and meet 40 CFR 268.48
D003	Reactive	Reactive Cyanides	***	***	590/30 mg/kg
D004	TC-Arsenic	NA	***	***	5.0 mg/l TCLP and meet 40 CFR 268.48
D005	TC-Barium	NA	***	***	21 mg/l TCLP and meet 40 CFR 268.48
D006	TC-Cadmium	Cadmium Charac.	***	***	0.11 mg/l TCLP and meet 40 CFR 268.48

## LDR REPORT TREATABILITY GROUP DATA SHEET

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
D007	TC-Chromium	NA	***	***	0.60 mg/l TCLP and meet 40 CFR 268.48
D008	TC-Lead	Lead Charac.	***	***	0.75 mg/l TCLP and meet 40 CFR 268.48
D009	TC-Mercury	Low Mercury	<260 mg/kg	***	0.20 mg/l TCLP and meet 40 CFR 268.48
D010	TC-Selenium	NA	***	***	5.7 mg/l TCLP and meet 40 CFR 268.48
D011	TC-Silver	NA	***	***	0.14 mg/l TCLP and meet 40 CFR 268.48
F001	1,1,1-Trichloroethane	Spent Solvent	<6.0 mg/kg	***	6.0 mg/kg
F002	Methylene Chloride	Spent Solvent	<30 mg/kg	***	30 mg/kg
F003	Acetone & Hexone	Spent Solvent	<160 mg/kg	***	160 mg/kg
F004	o-Cresol & p-Cresol	Spent Solvent	<5.6 mg/kg	***	5.6 mg/kg
F005	Methyl Ethyl Ketone	Spent Solvent	<36 mg/kg	***	36 mg/kg
P029	Copper Cyanide	NA	10/0.32 mg/kg	Analysis	590/30 mg/kg
P030	Cyanides	NA	10/0.32 mg/kg	Analysis	590/30 mg/kg
P098	Potassium Cyanide	NA	10/0.32 mg/kg	Analysis	590/30 mg/kg
P106	Sodium Cyanide	NA	10/0.32 mg/kg	Analysis	590/30 mg/kg
P120	Vanadium Pentoxide	NA	32.3 mg/kg (max)	Analysis	STABL
U123	Formic Acid (Formate)	NA	366 mg/kg (max)	Analysis	STABL (equivalency)
WP02	Persistent, DW	NA	***	***	None
WSC2	Solid Corrosive	NA	<=2.5 pH	Process Knowledge	Remove Solid Acid Charac.
WT01	Toxic, EHW	NA	***	***	None (1)
WT02	Toxic, DW	NA	***	***	None

## LDR REPORT TREATABILITY GROUP DATA SHEET

\*LDR subcategory marked NA if no existing subcategory adequately describes this waste, or if there are no defined subcategories for the waste number (40 CFR 268.40).

\*\*If the waste is not consistent in concentration or the concentration is unknown, this may not apply. Describe in Section 3.3.6.

\*\*\*The concentration varies and is based on process knowledge and/or analytical data.

(1) Mixed extremely hazardous wastes may be land-disposed in Washington State in DOE facilities in accordance with RCW 70.105.050 (2).

UHCs TBD on a per-package basis during waste receipt, from characterization activities, or when the waste is sent for treatment.

### 3.3.3 List any waste numbers from Section 3.3.2 for which the stream already meets established LDR treatment standards

- List: F001-F005 (Tank Farm contacted waste); P030, P098, P106 and P029 (183H Basin Waste)
- No LDR treatment required (e.g., TRUM waste destined for WIPP, exclusion, etc.)
- None (i.e., all constituents/waste numbers of this waste stream still require treatment)

### 3.3.4 Does this waste stream contain PCBs?

- Yes  No  Unknown If no or unknown, skip to Section 3.3.5

#### 3.3.4.1 Is waste stream subject to TSCA regulations for PCBs?

- Yes  No  Unknown

#### 3.3.4.2 Indicate the PCB concentration range (ppm)

- <50  ≥ 50  Unknown

### 3.3.5 What is the confidence level for the regulated contaminant characteristic data?

- Low  Medium  High

### 3.3.6 Comments on regulated contaminant characteristics and/or confidence level:

Waste received under the Waste Specification System (WSS) has a high confidence level. With the exception of the 183-H waste that was verified to the WSS during FY1998, waste received prior to establishment of the WSS has a medium to low confidence level and will require characterization verifications prior to treatment and disposal. If, during the verification process, it is determined that some of the waste does not meet the MLLW-02 waste stream description, then it will be reassigned into the appropriate waste stream (e.g., MLLW-03 through -10).

## 4.0 WASTE STREAM TREATMENT

## LDR REPORT TREATABILITY GROUP DATA SHEET

- 4.1 Is this stream currently being treated?  Yes  No

If yes, provide details: NA

4.2 **Planned treatment**

Check the appropriate box indicating future plans for treating this waste stream to meet applicable regulations, including LDR treatment standards.

- No treatment required (skip to Section 5.0)  Treating or plan to treat off site  
 Treating or plan to treat on site  Treatment options still being assessed

4.3 **Planned treatment method, facility, extent of treatment capacity available:**

Future characterization will determine treatment method, facility, and schedule for a portion of the subject waste. Commercial stabilization is a targeted primary treatment technology for subject waste. Treatment will be performed by means of onsite and offsite commercial treatment contracts, and/or by onsite treatment units (mainly Hanford's T Plant Complex). The onsite treatment capability for this type of waste is very limited at this time (i.e., less than 10 cubic meters per year). Additional onsite treatment capacity or offsite contracts will need to be obtained to meet Hanford's treatment needs.

4.4 **Treatment schedule information:**

Treatment will be performed as necessary to support the results of the active M-91 TPA negotiations.

4.5 **Applicable Tri-Party Agreement milestone numbers (including permitting):**

None

4.6 **Proposed new Tri-Party Agreement treatment milestones:**

An M-91 TPA Change request was submitted to Ecology on 2/13/02.

4.7 **If treating or planning to treat on site, was or will waste minimization be addressed in developing and/or selecting the treatment method?**

- Yes  No  Unknown

If yes, describe: To the extent practical, all mixed waste is segregated and packaged separately from LLW or TRU wastes. The volume of mixed waste is reduced by in-drum compaction when possible, and where it does not interfere with future treatment activities. To minimize the generation of mixed waste, generators actively seek nondangerous alternatives for the dangerous constituents in their processes. Minimization goals are set annually and tracked quarterly, and waste treatment is used to destroy the hazardous constituents, as allowable.

4.8 **List or describe treatability equivalency petitions, rulemaking petitions, and case-by-case exemptions needed for treatment:**

Obtained a treatability equivalency from EPA/Ecology to allow stabilization in lieu of combustion treatment for formic acid (U123) for waste originating from the closure of the 183-H Solar Evaporation Basins.

4.9 **Key assumptions:**

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### 5.0 WASTE STREAM DISPOSAL

**After treatment, how will the waste stream be disposed of (include description, locations, milestone numbers, variances required, etc., as applicable)?**

Subject waste will be disposed of in mixed waste trenches located on the Hanford site.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 Plant/unit name:** 200 LEF/200 ETF, RCRA Powder, Inorg. Non-debris      **Waste stream** RCRA Powder, Non-LDR Compliant
- Treatability/aggregated group identifier: MLLW-02
- Treatability/aggregated group name: Inorganic non-debris

**1.2 Applicable profile number(s) for this waste stream:**

2LEF-525-0001-00

**1.3 Waste stream source information**

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Secondary waste (dry powder) generated during treatment of RCRA wastewaters from various generators on the Hanford Site.

**1.3.2 History of how and where the waste was/is generated:**

Generated from the treatment of wastewater through ETF. The contaminants are destroyed or removed from the wastewater and dried to powder.

**1.3.3 Source of the hazardous constituents:**

Wastewaters from various generators on the Hanford Site, for example, 242-A Evaporator Process Condensate, Mixed Waste Burial Trench leachate, WSCF laboratory wastewater, etc.

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Wastewaters are characterized using analytical data and process knowledge in accordance with the RCRA waste analysis plan for LERF/ETF.

**1.3.5 Additional notes:**

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

**2.1 Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)
- Tank                     DST                     SST
- Other (explain):

**2.1.1 How was the waste managed prior to storage?**

Waste was in the process of being generated.

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### 2.1.2 Timeframe when waste was placed into storage:

No waste in storage as of 12/01.

### 2.2 Inventory locations:

Building/room number	Number of containers/tanks
ETF	0 drums

### 2.3 Current inventory for this stream (stored waste only, not accumulation areas)

Total volume (cubic meters): 0

Date of inventory values: 12/31/01

Comments on waste inventory:

### 2.4 Is storage capacity at this location potentially an issue for this waste stream?

Yes  No

If yes, what is the total estimated storage capacity? \_\_\_\_\_

When is this capacity expected to be reached \_\_\_\_\_

Bases and assumptions used:

### 2.5 Planned management areas for storage of this waste: Current location CWC

DST  Other area(s) list:

None

### 2.6 Estimated generation projection by calendar year:

Year	m3	and/or	kg
2002	1.300		
2003	1.300		
2004	1.300		
2005	1.300		
2006	1.300		
Totals	6.500		

### 2.7 DOE Storage Compliance Assessment information:

Assessment has been completed. Reference to most recent assessment: 09/2000, A&E-00-ASS-070

Assessment has been scheduled. Scheduled date:

Other. Explain:

### 2.8 Applicable Tri-Party Agreement milestones related to storage at this location:

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

N/A

- 2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

- 2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain:

- 2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

Sampling and analysis is performed to determine compliance with treatability standard on a case-by-case basis. No commitment is necessary because characterization occurs as part of normal waste transfer activities. CWC will be required to perform any further sampling and analysis after treatment.

If yes, provide Tri-Party Agreement milestone number(s):

- 2.12 Other key assumptions related to storage, inventory, and generation information:**

### 3.0 WASTE MINIMIZATION

- 3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

If yes, provide document number or other identification:

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: No assessment planned at this time.

- 3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

The ETF destroys or removes contaminants from wastewater and dries them to powder. The wastewaters are segregated and processed to minimize the generation of secondary wastes which require further treatment.

- 3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m<sup>3</sup>

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 3.3.2 Projected future waste volume reductions:

<u>Year</u>	<u>m3</u>	<u>and/or</u>	<u>kg</u>
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	<u>0.000</u>		<u>          </u>
Totals	0.000		

### 3.3.3 Bases and assumptions used in above estimates:

NA

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 Plant/unit name:** 222-S/222-S Inorganic Non-debris, **Waste stream** 222-S Inorganic Non-debris  
 Dangerous Mixed Waste Storage  
 Area (DMWSA)
- Treatability/aggregated group identifier:** MLLW-02
- Treatability/aggregated group name:** Inorganic non-debris

**1.2 Applicable profile number(s) for this waste stream:**

None

**1.3 Waste stream source information**

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Liquid and/or solid waste generated as unused or expired standards and reagents, as unused samples, and from the use of chemicals during analytical procedures.

**1.3.2 History of how and where the waste was/is generated:**

222-S generates waste during laboratory activity (e.g. analytical procedures, 219-S, maintenance operations and hot cell operations).

**1.3.3 Source of the hazardous constituents:**

Hazardous constituents were already in the samples received from Hanford generators (e.g. Tank Farms, PFP, K- Basin, etc.), or entered the waste stream during sample analysis, or as unused/expired standards and reagents.

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Waste Stream Fact Sheet, Content Inventory Sheet, and Generator knowledge.

**1.3.5 Additional notes:**

None

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

**2.1 Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)
- Tank                     DST                     SST
- Other (explain):

**2.1.1 How was the waste managed prior to storage?**

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Per the Hanford Facility Dangerous Waste Permit Application, 222-S Laboratory Complex  
(DOE/RL-91-27 Revision 1)

### 2.1.2 Timeframe when waste was placed into storage:

4/1997 - 12/31/2001

### 2.2 Inventory locations:

Building/room number	Number of containers/tanks
HS-0083A	1
HS-0083B	2
HS-0082B	1

### 2.3 Current inventory for this stream (stored waste only, not accumulation areas)

Total volume (cubic meters): 0.832

Date of inventory values: 1/14/02

Comments on waste inventory: This data is from Solid Waste Information and Tracking System (SWITS) specific to 222-S Laboratory Complex.

### 2.4 Is storage capacity at this location potentially an issue for this waste stream?

Yes  No

If yes, what is the total estimated storage capacity? n/a

When is this capacity expected to be reached n/a

Bases and assumptions used: n/a

### 2.5 Planned management areas for storage of this waste: Current location CWC

DST  Other area(s) list:

None

### 2.6 Estimated generation projection by calendar year:

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

### 2.7 DOE Storage Compliance Assessment information:

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

- Assessment has been completed. Reference to most recent assessment: A&E-SEC-01-018
- Assessment has been scheduled. Scheduled date:
- Other. Explain:

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**  
M-20-22

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**  
 Yes  No

If yes, summarize releases and quantities and provide date:  
n/a

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**  
 Yes  No

If yes, explain: n/a

**2.11 Is further characterization necessary?**  
 Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):  
n/a

If yes, provide Tri-Party Agreement milestone number(s): n/a

**2.12 Other key assumptions related to storage, inventory, and generation information:**

This waste stream would routinely enter 219-S. In some cases, non-routine generated waste may be lab-packed and stored in the dangerous mixed waste storage area (DMWSA).

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**  
 Yes  No

If yes, provide date assessment conducted: 9/2000

If yes, provide document number or other identification: Operating and analytical procedures at 222S Laboratory

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA:

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

222-S personnel minimize waste through proper planning during Automated Job Hazard Analysis (AJHA) and pre-jobs and by optimizing use of lab ware. 222-S personnel seek innovative technology that will allow waste minimization.

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):** 7.3 m3

**3.3.2 Projected future waste volume reductions:**

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
<b>Totals</b>	0.000		

**3.3.3 Bases and assumptions used in above estimates:**

DOE/RL-2000-79 -"Pollution Prevention Accomplishments" document reported waste reductions for CY 2000. The waste reduction volume reported above in Section 3.3.1 is a total waste minimization volume for similar waste streams across the 222-S Laboratory; this waste stream may be a portion of what was reported. 222-S has no waste minimization goals for this waste stream; therefore, no projected future waste volume reductions are reported above in Section 3.3.2. However, the analytical process generating this stream is continuously evaluated for waste minimization opportunities.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

**1.1 Plant/unit name:** 324/324, Inorg. Non-debris      **Waste stream** Inorganic Discarded  
Chemical/Waste  
**Treatability/aggregated group identifier:** MLLW-02  
**Treatability/aggregated group name:** Inorganic non-debris

**1.2 Applicable profile number(s) for this waste stream:**

NA

**1.3 Waste stream source information**

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Discarded/unused chemical products or waste

**1.3.2 History of how and where the waste was/is generated:**

Chemical products were used for maintenance or clean-up activities.

**1.3.3 Source of the hazardous constituents:**

In the chemical products

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Process knowledge

**1.3.5 Additional notes:**

None

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

**2.1 Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                 DST                         SST  
 Other (explain):

**2.1.1 How was the waste managed prior to storage?**

NA

**2.1.2 Timeframe when waste was placed into storage:**

NA

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.2 Inventory locations:**

Building/room number	Number of containers/tanks
NA	

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 0  
 Date of inventory values: 12/31/01  
 Comments on waste inventory: NA

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: Waste is being accumulated in SAA

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list: NA

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	0.600		
2003	1.200		
2004	2.400		
2005	7.400		
2006	2.100		
Totals	13.700		

**2.7 DOE Storage Compliance Assessment information:**

Assessment has been completed. Reference to most recent assessment

Assessment has been scheduled. Scheduled date:

Other. Explain: NA

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

None

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: Not scheduled at this time

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

Waste minimization is achieved by substitution of less hazardous materials, waste segregation and disposal of hazardous waste.

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m3

**3.3.2 Projected future waste volume reductions:**

Year      m3      and/or      kg

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

2002	0.000
2003	0.000
2004	0.000
2005	0.000
2006	0.000
Totals	0.000

### 3.3.3 Bases and assumptions used in above estimates:

None

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

**1.1 Plant/unit name:** 327/327, Inorg. Non-debris      **Waste stream** Inorganic Discarded  
Chemical/Waste  
**Treatability/aggregated group identifier:** MLLW-02  
**Treatability/aggregated group name:** Inorganic non-debris

**1.2 Applicable profile number(s) for this waste stream:**

NA

**1.3 Waste stream source information**

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Discarded/unused chemical products or waste

**1.3.2 History of how and where the waste was/is generated:**

Chemical products were used for maintenance or clean-up activities

**1.3.3 Source of the hazardous constituents:**

In the chemical products

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Process knowledge

**1.3.5 Additional notes:**

None

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

**2.1 Current storage method**

Container (pad)     Container (covered)     Container (retrievably buried)

Tank                     DST                     SST

Other (explain):

**2.1.1 How was the waste managed prior to storage?**

NA

**2.1.2 Timeframe when waste was placed into storage:**

NA

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 2.2 Inventory locations:

Building/room number	Number of containers/tanks
NA	

### 2.3 Current inventory for this stream (stored waste only, not accumulation areas)

Total volume (cubic meters): 0  
 Date of inventory values: 12/31/01  
 Comments on waste inventory: NA

### 2.4 Is storage capacity at this location potentially an issue for this waste stream?

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: Waste is being accumulated in SAA

### 2.5 Planned management areas for storage of this waste: Current location CWC

DST  Other area(s) list: NA

None

### 2.6 Estimated generation projection by calendar year:

Year	m3	and/or	kg
2002	1.000		
2003	1.600		
2004	2.000		
2005	1.600		
2006	2.000		
Totals	8.200		

### 2.7 DOE Storage Compliance Assessment information:

Assessment has been completed. Reference to most recent assessment

Assessment has been scheduled. Scheduled date:

Other. Explain: NA

### 2.8 Applicable Tri-Party Agreement milestones related to storage at this location:

None

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

- 2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**  
 Yes  No  
If yes, summarize releases and quantities and provide date:  
NA
- 2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**  
 Yes  No  
If yes, explain: NA
- 2.11 Is further characterization necessary?**  
 Yes  No  Unknown at this time  
If yes, provide details and schedule (also see treatment/characterization plan volume for further information):  
NA  
If yes, provide Tri-Party Agreement milestone number(s): NA
- 2.12 Other key assumptions related to storage, inventory, and generation information:**  
None

### 3.0 WASTE MINIMIZATION

- 3.1 Has a waste minimization assessment been completed for this stream?**  
 Yes  No  
If yes, provide date assessment conducted: NA  
If yes, provide document number or other identification: NA  
If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: Not scheduled at this time
- 3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**  
Waste minimization is achieved by substitution of less hazardous materials, waste segregation and disposal of hazardous waste.
- 3.3 Waste minimization schedule**
- 3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m3
- 3.3.2 Projected future waste volume reductions:**
- |       |       |        |       |
|-------|-------|--------|-------|
| Year  | m3    | and/or | kg    |
| _____ | _____ | _____  | _____ |

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

2002	0.000
2003	0.000
2004	0.000
2005	0.000
2006	0.000
Totals	0.000

### 3.3.3 Bases and assumptions used in above estimates:

None

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 **Plant/unit name:** CWC/CWC, Inorg. Non-debris      **Waste stream** Inorganic Solids and Labpacks
- Treatability/aggregated group identifier:** MLLW-02
- Treatability/aggregated group name:** Inorganic non-debris

- 1.2 **Applicable profile number(s) for this waste stream:**

NA

- 1.3 **Waste stream source information**

- 1.3.1 **General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

This waste stream consists of many different inorganic solids including particulates, absorbed liquids, sludges, labpacks, paint waste, salt waste, etc. This waste does not include hazardous debris other than incidental debris material commingled with the non-debris.

- 1.3.2 **History of how and where the waste was/is generated:**

The waste was generated at many onsite locations and by offsite generators. The inventory was primarily from the closure of the 183-H Solar Basins.

- 1.3.3 **Source of the hazardous constituents:**

See 1.3.1 and 1.3.2

- 1.3.4 **Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Analytical data and process knowledge

- 1.3.5 **Additional notes:**

None

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

- 2.1 **Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)
- Tank                     DST                             SST
- Other (explain):

- 2.1.1 **How was the waste managed prior to storage?**

Accumulated and packaged by waste generators prior to storage at CWC.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 2.1.2 Timeframe when waste was placed into storage:

Waste storage in CWC began in 1987 and it has continued since then.

### 2.2 Inventory locations:

Building/room number	Number of containers/tanks
CWC	Approx. 9981

### 2.3 Current inventory for this stream (stored waste only, not accumulation areas)

Total volume (cubic meters): 2738.18

Date of inventory values: 12/31/01

Comments on waste inventory: Based on the inventory residing at CWC as reported in SWITS for WSRds 420, 421, 422, 425, 426, 428, 505 (183-H) 521, 523, 524, 525, 900, 902, ALI, H3C, H3G, H3M, H3S, IXI, LPI, PAI, and SSA.

### 2.4 Is storage capacity at this location potentially an issue for this waste stream?

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: No issues with CWC storage based on 20 year waste generation forecast.

### 2.5 Planned management areas for storage of this waste: Current location CWC

DST  Other area(s) list:

None

### 2.6 Estimated generation projection by calendar year:

Year	m3	and/or	kg
2002	4.390		
2003	0.510		
2004	5.540		
2005	0.760		
2006	0.660		
Totals	11.860		

### 2.7 DOE Storage Compliance Assessment information:

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

- Assessment has been completed. Reference to most recent assessment: A&E-SEC-02-001
- Assessment has been scheduled. Scheduled date:
- Other. Explain:

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**  
M-20-12

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**  
 Yes  No

If yes, summarize releases and quantities and provide date:  
NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**  
 Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**  
 Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

If necessary, waste will be re-characterized just prior to treatment for most efficient use of resources to meet current disposal requirements. Characterization will be performed as necessary to support the results of the active M-91 TPA negotiations.

If yes, provide Tri-Party Agreement milestone number(s): None

**2.12 Other key assumptions related to storage, inventory, and generation information:**  
The waste generation projections are for waste expected to be received from offsite generators.

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**  
 Yes  No

If yes, provide date assessment conducted: NA

If yes, provide document number or other identification: NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: None planned - waste not generated at CWC

**LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET**

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

These activities occur before the wastes are shipped to CWC. There are few opportunities to reduce waste volumes placed into storage.

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m3

**3.3.2 Projected future waste volume reductions:**

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

**3.3.3 Bases and assumptions used in above estimates:**

There is no projected waste generation by CWC.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 **Plant/unit name:** PFP/234-5Z, Inorg. Non-debris      **Waste stream** Lab Chemical Wastes,  
Inorganic Non-debris
- Treatability/aggregated group identifier: MLLW-02
- Treatability/aggregated group name: Inorganic non-debris

1.2 **Applicable profile number(s) for this waste stream:**

BWHC-402-0001-00, BWHC-404-0003-03, PFPX-420-0001-00, BWHC-428-0001-00, BWHC-428-0002-00

1.3 **Waste stream source information**

1.3.1 **General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Spent expired chemicals or lab generated waste.

1.3.2 **History of how and where the waste was/is generated:**

Laboratory operations

1.3.3 **Source of the hazardous constituents:**

Intrinsically hazardous

1.3.4 **Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Analytical data, process knowledge

1.3.5 **Additional notes:**

None

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

2.1 **Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)
- Tank                 DST                         SST
- Other (explain):

2.1.1 **How was the waste managed prior to storage?**

NA- Waste is not stored; once generated, waste goes directly to satellite accumulation area.

2.1.2 **Timeframe when waste was placed into storage:**

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

NA- Waste is placed directly into satellite accumulation area upon generation.

### 2.2 Inventory locations:

Building/room number	Number of containers/tanks
234-5Z	

### 2.3 Current inventory for this stream (stored waste only, not accumulation areas)

Total volume (cubic meters): 0  
 Date of inventory values: 12/31/01  
 Comments on waste inventory: None

### 2.4 Is storage capacity at this location potentially an issue for this waste stream?

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: NA

### 2.5 Planned management areas for storage of this waste: Current location CWC

DST  Other area(s) list:

None

### 2.6 Estimated generation projection by calendar year:

Year	m3	and/or	kg
2002	5.870		
2003	5.710		
2004	5.870		
2005	5.870		
2006	6.125		
Totals	29.445		

### 2.7 DOE Storage Compliance Assessment information:

Assessment has been completed. Reference to most recent assessment

PFM Compliance  
Assessment, A&E-SEC-01-  
015

Assessment has been scheduled. Scheduled date:

Other. Explain:

### 2.8 Applicable Tri-Party Agreement milestones related to storage at this location:

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

None

- 2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

- 2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

- 2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

Will be characterized when disposed.

If yes, provide Tri-Party Agreement milestone number(s): NA

- 2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

- 3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

CY2001

If yes, provide document number or other identification:

PFP 2001 Waste Minimization Evaluation  
for LDR Report Waste Streams, Letter  
#M2100-02-016

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA:

- 3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

PFP has a waste minimization program. A hierarchical approach to environmental management is applied to all types of pollution and waste generating activities. Pollution prevention and waste minimization, through source reduction, is the preferred option, followed by environmentally safe recycling. Treatment to reduce the quantity, toxicity, and/or mobility will be considered only when prevention or recycling is not possible or practical. Environmentally safe disposal is the last option. Segregation is applicable in all of these activities.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

PFP routinely evaluates the chemicals in the labs to ensure that there is an identified use for them. Chemicals with no justifiable use will be either recycled, if possible, or discarded as waste and not reordered.

### 3.3 Waste minimization schedule

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m<sup>3</sup>

### 3.3.2 Projected future waste volume reductions:

Year	m <sup>3</sup>	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

### 3.3.3 Bases and assumptions used in above estimates:

PFP is currently in a clean up and stabilization mode. Clean up and stabilization operations tend to increase production of waste. PFP has a waste minimization program and is currently undergoing a Site Strategic Pollution Prevention Opportunity Assessment, which will identify if there are further opportunities to reduce waste production or produce waste in a less hazardous form. PFP is currently evaluating all the chemicals in the labs to insure that there is an identified use for them. Chemicals with no justifiable use will be either recycled, if possible, or discarded as waste and not reordered.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 Plant/unit name:** T Plant Complex/Inorg. Non-debris **Waste stream** Storage-Inorganic Non-debris
- Treatability/aggregated group identifier: MLLW-02
- Treatability/aggregated group name: Inorganic non-debris

**1.2 Applicable profile number(s) for this waste stream:**

WSRd: 420, 428 and 521

**1.3 Waste stream source information**

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Mixed waste solids, sorbed liquids and soils, subcategory - Other solids (non-thermal treatment). This waste does not include hazardous debris other than incidental debris material commingled with the non-debris.

**1.3.2 History of how and where the waste was/is generated:**

Generated at T Plant Complex, various other onsite locations, and by offsite generators.

**1.3.3 Source of the hazardous constituents:**

See 1.3.1 and 1.3.2

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Analytical data and process knowledge

**1.3.5 Additional notes:**

None

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

**2.1 Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)
- Tank                     DST                     SST
- Other (explain): NA

**2.1.1 How was the waste managed prior to storage?**

Waste generated at numerous onsite locations and by offsite generators

**2.1.2 Timeframe when waste was placed into storage:**

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

1996 to present

### 2.2 Inventory locations:

Building/room number	Number of containers/tanks
T PLANT COMPLEX	12

### 2.3 Current inventory for this stream (stored waste only, not accumulation areas)

Total volume (cubic meters): 3.84  
 Date of inventory values: 12/28/01  
 Comments on waste inventory: Inventory will fluctuate as T Plant Complex generates or performs treatment/verification of onsite/offsite generators waste.

### 2.4 Is storage capacity at this location potentially an issue for this waste stream?

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: NA

### 2.5 Planned management areas for storage of this waste: Current location CWC

DST  Other area(s) list: NA

None

### 2.6 Estimated generation projection by calendar year:

Year	m3	and/or	kg
2002	0.040		
2003	0.040		
2004	0.040		
2005	0.040		
2006	0.040		
Totals	0.200		

### 2.7 DOE Storage Compliance Assessment information:

Assessment has been completed. Reference to most recent assessment: Oct. 2000, A&E-00-ASS-072

Assessment has been scheduled. Scheduled date: Assessment currently scheduled for July 2003

Other. Explain: NA

### 2.8 Applicable Tri-Party Agreement milestones related to storage at this location:

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

NA

- 2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

- 2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

- 2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): NA

- 2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

- 3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: See Section 3.3 for discussion on waste min.

- 3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

Waste minimization techniques are used, where possible, during treatment processing.

- 3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m<sup>3</sup>

**3.3.2 Projected future waste volume reductions:**

Year m<sup>3</sup> and/or kg

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

2002	0.000
2003	0.000
2004	0.000
2005	0.000
2006	0.000
Totals	0.000

### 3.3.3 Bases and assumptions used in above estimates:

The T Plant Complex has submitted a P2/Wmin fiscal year 2002 goal to reduce, where possible, mixed waste generation. For FY 2002 to 2006, new goals will be evaluated and identified on a year-by-year basis. The T Plant Complex does not track waste reduction by treatability groups. Routine and non-routine generated waste is reported quarterly to the Waste Minimization/Pollution Prevention Group. This information is available on the following URL: <http://apsql05.rl.gov/polprev/default.asp>

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 Plant/unit name:** Tank Farm Facilities/Inorg. Non-debris DST and SST Containerized Waste      **Waste stream** Inorganic Non-debris
- Treatability/aggregated group identifier: MLLW-02
- Treatability/aggregated group name: Inorganic non-debris

- 1.2 Applicable profile number(s) for this waste stream:**  
420-01 and 421-01.

**1.3 Waste stream source information**

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Unused sample portions returned from the analytical laboratories derived from secondary waste associated with tank farm activities, including rain water, soil sample, etc.

**1.3.2 History of how and where the waste was/is generated:**

Portions of samples which were not used for analysis, and are returned to the generator for disposal.

**1.3.3 Source of the hazardous constituents:**

The sample content, or the method of sampling (e.g. sample preservation)

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Process knowledge, Analytical data, MSDS

**1.3.5 Additional notes:**

None.

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

**2.1 Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)
- Tank                     DST                     SST
- Other (explain):

**2.1.1 How was the waste managed prior to storage?**

Managed in SAA or 90 Day Areas

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.1.2 Timeframe when waste was placed into storage:**

**2.2 Inventory locations:**

Building/room number	Number of containers/tanks
NA	

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 0  
 Date of inventory values: 12/31/01  
 Comments on waste inventory: NA

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? \_\_\_\_\_

When is this capacity expected to be reached \_\_\_\_\_

Bases and assumptions used:

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list:

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	0.600		
2003	0.660		
2004	0.700		
2005	0.780		
2006	0.780		
Totals	3.520		

**2.7 DOE Storage Compliance Assessment information:**

Assessment has been completed. Reference to most recent assessment: NA

Assessment has been scheduled. Scheduled date: NA

Other. Explain: NA

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

None

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: Unknown at this time.

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

Discuss with labs ways to reduce the required sample volumes.

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):**

**3.3.2 Projected future waste volume reductions:**

Year \_\_\_\_\_ m<sup>3</sup> and/or \_\_\_\_\_ kg

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

2002	0.000	
2003	0.000	
2004	0.000	
2005	0.000	
2006	<u>0.000</u>	<u>                    </u>
Totals	0.000	

### 3.3.3 Bases and assumptions used in above estimates:

No reduction is expected. We will continue to sample waste streams and receive sample residue and returns.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 Plant/unit name:** WSCF/WSCF, Inorg. Non-debris      **Waste stream** Inorganic Non-debris  
**Treatability/aggregated group identifier:** MLLW-02  
**Treatability/aggregated group name:** Inorganic non-debris

**1.2 Applicable profile number(s) for this waste stream:**

WMFH-505-0011-00, WMFH-505-004-01

**1.3 Waste stream source information**

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

The inorganic non-debris waste stream, sodium sulfate, is generated during analytical processes in the laboratory. Additionally, a silver zeolite waste stream will be managed under the same treatability group as the sodium sulfate waste stream.

**1.3.2 History of how and where the waste was/is generated:**

The sodium sulfate waste stream is a product of an analytical process within the laboratory. Sodium sulfate is generated as a result of analytical methods that utilize accelerated solvent extraction and liquid/liquid extractions. The silver zeolite waste stream is produced as a result of Gamma Energy Analysis (GEA) analysis within the lab. However, this waste stream does not produce large quantities of silver zeolite.

**1.3.3 Source of the hazardous constituents:**

The hazardous constituents are derived from sample contribution and/or the addition of reagents and lab standards during the analytical process. The reagents and standards may be considered regulated constituents and contribute to the hazardous nature of the waste stream.

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Information to characterize these waste streams is obtained from process knowledge and analytical data.

**1.3.5 Additional notes:**

SAA/90-Day Accumulation Areas only, no TSD units at WSCF.

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

**2.1 Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                     DST                             SST

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Other (explain): WSCF has no TSD unit, all waste is managed in an SAA or 90 day pad

**2.1.1 How was the waste managed prior to storage?**

NA

**2.1.2 Timeframe when waste was placed into storage:**

NA

**2.2 Inventory locations:**

Building/room number	Number of containers/tanks
NA	NA

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 0

Date of inventory values: 12/31/01

Comments on waste inventory: NA

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: NA

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list:

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	0.000		
2003	0.208		
2004	0.000		
2005	0.000		
2006	0.208		
Totals	0.416		

**2.7 DOE Storage Compliance Assessment information:**

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

- Assessment has been completed. Reference to most recent assessment
- Assessment has been scheduled. Scheduled date:
- Other. Explain: NA

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

NA

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

- Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

- Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

- Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

NA

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

- Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: No date established at this time

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

None, waste is generated from laboratory operations during analysis of samples.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 3.3 Waste minimization schedule

3.3.1 Reduction achieved during calendar year (volume or mass): 0 kg

### 3.3.2 Projected future waste volume reductions:

<u>Year</u>	<u>m3</u>	<u>and/or</u>	<u>kg</u>
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

### 3.3.3 Bases and assumptions used in above estimates:

NA

## LDR REPORT TREATABILITY GROUP DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION

- 1.1 Treatability group/aggregated stream identifier** MLLW-03  
**Treatability group/aggregated stream name:** Organic non-debris
- 1.2 Description of waste (list WSRd numbers for this waste stream, as applicable):**

This treatability group is for non-debris waste that contains hazardous constituents that either requires thermal treatment (specified technology) or thermal treatment is BDAT for meeting the applicable LDR treatment standards (concentration-based standards). Stabilization of the thermal treatment residue may also be required. The applicable WSRds for this treatability group are: ALO, LPA, LPO, PAO, TSC, 300, 301, 302, 303, 304, 305, 310, 311, 320, 321, 330, 331, 31A, 400, 401, 402, 403, 404, 405, 406, 407, 408, 40A, 40B, 427, 430, 431, 432, 45A, 47A, 500 (except 183H), 501-2, 502 (except 200LEF), 503-2, 504-1, 505-3, 506, 507, 50A, 700, 701, 720, 721, 822, 920, 921, 922, 923. This waste stream consists of many different inorganic and organic solids (e.g., particulates, absorbed liquids, sludges, resins, soils) and labpacks that are contaminated with organic regulated dangerous waste constituents, including PCBs. This waste stream does not include hazardous debris other than incidental debris material commingled with the non-debris.

### 2.0 WASTE STREAM INVENTORY AND GENERATION

- 2.1 Current total inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 799.930

- 2.2 Estimated generation projection by calendar year**

Year	m3	and/or	kg
2002	23.790		
2003	26.150		
2004	27.510		
2005	32.360		
2006	29.550		
Totals	139.360		

### 3.0 WASTE STREAM CHARACTERIZATION

- 3.1 Radiological characteristics**

**3.1.1 Mixed waste type**       High-level     Transuranic     Low-level

**3.1.2 Handling (as currently packaged/stored)**     Contact-handled     Remote-handled

**3.1.3 Comments on radiological characteristics (e.g., more specific content, treatment concerns caused by radiation, confidence level):**

Since this waste is a general category based on dangerous waste characteristics, the radiological characteristics are expected to vary greatly. However there is high confidence that the waste is MLLW. The waste as packaged is considered Contact-Handled (i.e., less than or equal to 200mR/hr on outside package surface); however, the dose rate of some waste inside the package may exceed 200mR/hr.

## LDR REPORT TREATABILITY GROUP DATA SHEET

### 3.2 Matrix characteristics (physical content)

3.2.1 Matrix constituent table (each constituent listed should constitute at least 1% of the total volume or mass)

3.2.2 Confidence level for matrix characteristic data in Section 3.2.1:

Low  Medium  High

3.2.3 Comments on matrix characteristics and/or confidence level:

Waste received under the Waste Specification System (WSS) has a high confidence level that subject waste stream will not contain physical matrix characteristics that do not meet the waste stream description. Waste received prior to the WSS has a medium confidence level and will require matrix characterization verifications prior to treatment and disposal. If, during the verification process, it is determined that some of the waste does not meet the MLLW-03 waste stream description, then it will be reassigned into the appropriate waste stream (e.g., MLLW-02 or 04 through 10).

### 3.3 Regulated contaminated characteristics

3.3.1 Wastewater/non-wastewater under RCRA

Wastewater  Non-wastewater  Unknown

3.3.2 Regulated contaminant table including treatment requirements and UHCs, if applicable

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
D001	Ignitable	Low TOC	***	***	DEACT & meet 40 CFR 268.48
D002	Corrosive	Corrosive Charac.	***	***	DEACT & meet 40 CFR 268.48
D004	TC-Arsenic	NA	***	***	5.0 mg/l TCLP & meet 40 CFR 268.48
D005	TC-Barium	NA	***	***	21 mg/l TCLP & meet 40 CFR 268.48
D006	TC-Cadmium	Cadmium Charac.	***	***	0.11 mg/l TCLP & meet 40 CFR 268.48
D007	TC-Chromium	NA	***	***	0.60 mg/l TCLP & meet 40 CFR 268.48

**LDR REPORT TREATABILITY GROUP DATA SHEET**

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
D008	TC-Lead	Lead Charac.	***	***	0.75 mg/l TCLP & meet 40 CFR 268.48
D009	TC-Mercury	Low Mercury	<260 mg/kg	***	0.20 mg/l TCLP & meet 40 CFR 268.48
D010	TC-Selenium	NA	***	***	5.7 mg/l TCLP & meet 40 CFR 268.48
D011	TC-Silver	NA	***	***	0.14 mg/l TCLP & meet 40 CFR 268.48
D012	Endrin	NA	***	***	0.13 mg/kg & meet 40 CFR 268.48
D016	2,4-D	NA	***	***	10 mg/kg & meet 40 CFR 268.48
D018	Benzene	NA	***	***	10 mg/kg & meet 40 CFR 268.48
D019	Carbon Tetrachloride	NA	***	***	6.0 mg/kg & meet 40 CFR 268.48
D020	Chlordane	NA	***	***	0.26 mg/kg & meet 40 CFR 268.48
D021	Chlorobenzene	NA	***	***	6.0 mg/kg & meet 40 CFR 268.48
D022	Chloroform	NA	***	***	6.0 mg/kg & meet 40 CFR 268.48
D023	o-Cresol	NA	***	***	5.6 mg/kg & meet 40 CFR 268.48
D026	Cresol	NA	***	***	11.2 mg/kg & meet 40 CFR 268.48
D027	p-Dichlorobenzene	NA	***	***	6.0 mg/kg & meet 40 CFR 268.48
D028	1,2-Dichloroethane	NA	***	***	6.0 mg/kg & meet 40 CFR 268.48
D029	1,1-Dichloroethylene	NA	***	***	6.0 mg/kg & meet 40 CFR 268.48

## LDR REPORT TREATABILITY GROUP DATA SHEET

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
D030	2,4-Dinitrotoluene	NA	***	***	140 mg/kg & meet 40 CFR 268.48
D031	Heptachlor	NA	***	***	0.066 mg/kg & meet 40 CFR 268.48
D033	Hexachlorobutadiene	NA	***	***	5.6 mg/kg & meet 40 CFR 268.48
D034	Hexachloroethane	NA	***	***	30 mg/kg & meet 40 CFR 268.48
D035	Methyl Ethyl Ketone	NA	***	***	36 mg/kg & meet 40 CFR 268.48
D036	Nitrobenzene	NA	***	***	14 mg/kg & meet 40 CFR 268.48
D037	Pentachlorophenol	NA	***	***	7.4 mg/kg & meet 40 CFR 268.48
D038	Pyridine	NA	***	***	16 mg/kg & meet 40 CFR 268.48
D039	Tetrachloroethylene	NA	***	***	6.0 mg/kg & meet 40 CFR 268.48
D040	Trichlorethylene	NA	***	***	6.0 mg/kg & meet 40 CFR 268.48
D043	Vinyl Chloride	NA	***	***	6.0 mg/kg & meet 40 CFR 268.48
F001	1,1,1-Trichloroethane	Spent Solvent	***	***	6.0 mg/kg
F002	Methylene Chloride	Spent Solvent	***	***	30 mg/kg
F003	Acetone & Hexone	Spent Solvent	***	***	160 mg/kg
F004	o-Cresol & p-Cresol	Spent Solvent	***	***	5.6 mg/kg
F005	Methyl Ethyl Ketone	Spent Solvent	***	***	36 mg/kg
F022	Process Waste Tetra- penta- or hexachloro-benzenes	NA	***	***	Various
P012	Arsenic Trioxide	NA	***	***	5.0 mg/l
P022	Carbon Disulfide	NA	***	***	CMBST
P023	Chloreacetaldehyde	NA	***	***	CMBST
P030	Cyanide	NA	***	***	590/30 mg/kg

## LDR REPORT TREATABILITY GROUP DATA SHEET

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
P102	Propargyl Alcohol	NA	***	***	CMBST
U001	Acetaldehyde	NA	***	***	CMBST
U002	Acetone	NA	***	***	160 mg/kg
U003	Acetonitrile	NA	***	***	CMBST
U004	Acetophenone	NA	***	***	9.7 mg/kg
U006	Acetyl Chloride	NA	***	***	CMBST
U019	Benzene	NA	***	***	10 mg/kg
U025	Bis(2- Chloroethyl)ether	NA	***	***	6.0 mg/kg
U031	n-Butyl Alcohol	NA	***	***	2.6 mg/kg
U044	Chloroform	NA	***	***	6.0 mg/kg
U056	Cyclohexane	NA	***	***	CMBST
U057	Cyclohexanone	NA	***	***	CMBST
U080	Methylene Chloride	NA	***	***	30 mg/kg
U103	Dimethyl Sulfate	NA	***	***	CMBST
U108	1,4-Dioxane	NA	***	***	CMBST
U112	Ethyl Acetate	NA	***	***	CMBST
U117	Ethyl Ether	NA	***	***	160 mg/kg
U121	Trichloromonofluoro methane	NA	***	***	30 mg/kg
U123	Formic Acid	NA	***	***	CMBST
U133	Hydrazine	NA	***	***	CMBST
U134	Hydrogen Fluoride	NA	***	***	NEUTR
U144	Lead Acetate	NA	***	***	0.37 mg/kg
U154	Methanol	NA	***	***	CMBST
U159	Methyl Ethyl Ketone	NA	***	***	36 mg/kg
U160	Methyl Ethyl Ketone Peroxide	NA	***	***	CMBST
U161	Methyl Isobutyl Ketone	NA	***	***	33 mg/kg
U162	Methyl Methacrylate	NA	***	***	160 mg/kg
U165	Naphthalene	NA	***	***	5.6 mg/kg

## LDR REPORT TREATABILITY GROUP DATA SHEET

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
U169	Nitrobenzene	NA	***	***	14 mg/kg
U170	p-Nitropropane	NA	***	***	29 mg/kg
U187	Phenacetin	NA	***	***	16 mg/kg
U188	Phenol	NA	***	***	6.2 mg/kg
U189	Phosphorus Sulfide	NA	***	***	CMBST
U196	Pyridine	NA	***	***	16 mg/kg
U203	Safrole	NA	***	***	22 mg/kg
U210	Tetrachloroethylene	NA	***	***	6.0 mg/kg
U211	Carbon Tetrachloride	NA	***	***	6.0 mg/kg
U213	Tetrahydrofuran	NA	***	***	CMBST
U218	Thioacetamide	NA	***	***	CMBST
U220	Toluene	NA	***	***	10 mg/kg
U226	1,1,1-Trichloroethane	NA	***	***	6.0 mg/kg
U228	Trichloroethylene	NA	***	***	6.0 mg/kg
U239	Xylenes	NA	***	***	30 mg/kg
U359	2-Ethoxyethanol	NA	***	***	CMBST
WP01	Persistent, EHW	NA	***	***	None (1)
WP02	Persistent, DW	NA	***	***	None
WSC2	Solid Corrosive	NA	***	***	Remove Solid Acid Charac.
WT01	Toxic, EHW	NA	***	***	None(1)
WT02	Toxic, DW	NA	***	***	None

\*LDR subcategory marked NA if no existing subcategory adequately describes this waste, or if there are no defined subcategories for the waste number (40 CFR 268.40).

\*\*If the waste is not consistent in concentration or the concentration is unknown, this may not apply. Describe in Section 3.3.6.

\*\*\*The concentration varies and is based on process knowledge and/or analytical data.

(1) Mixed extremely hazardous wastes may be land-disposed in Washington State in DOE facilities in accordance with RCW 70.105.050 (2)

UHCs TBD on a per-package basis during waste receipt, from characterization activities, or when waste is sent for treatment, unless waste package is a lab pack eligible for the alternative treatment standards in 40 CFR 268.42

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## LDR REPORT TREATABILITY GROUP DATA SHEET

**3.3.3 List any waste numbers from Section 3.3.2 for which the stream already meets established LDR treatment standards**

- List: Some of the F001-F005 designated waste may meet LDR treatment standards with out the need for further treatment. This may include soils from the various Tank Farm facilities, and some pump-and-treat filter media, WT02, WP02.
- No LDR treatment required (e.g., TRUM waste destined for WIPP, exclusion, etc.)
- None (i.e., all constituents/waste numbers of this waste stream still require treatment)

**3.3.4 Does this waste stream contain PCBs?**

- Yes  No  Unknown If no or unknown, skip to Section 3.3.5

**3.3.4.1 Is waste stream subject to TSCA regulations for PCBs?**

- Yes  No  Unknown

**3.3.4.2 Indicate the PCB concentration range (ppm)**

- <50  ≥ 50  Unknown

**3.3.5 What is the confidence level for the regulated contaminant characteristic data?**

- Low  Medium  High

**3.3.6 Comments on regulated contaminant characteristics and/or confidence level:**

Waste received under the Waste Specification System (WSS) has a high confidence level that subject waste stream will not have contaminant characteristics that do not meet the waste stream description. Waste received prior to implementation of the WSS has a medium to low confidence level and will require characterization verifications prior to treatment and disposal. If, during the verification process, it is determined that some of the waste does not meet the MLLW-03 waste stream description, then it will be reassigned into the appropriate waste stream (e.g., MLLW-02 or -04 through -10). Some of the waste in this waste stream does contain a wide range of PCB concentrations subject to TSCA regulation. If a waste package is regulated by TSCA, it is identified as such on storage records and tracked in SWITS. Some of the waste has already met the rigors of the WSS for waste storage and treatment that came into effect in 1995. However, there have been several changes to the dangerous waste regulations since then that impose additional characterization requirements on the generator, namely identification of UHCs for all waste designated with a characteristic waste code (i.e., D001 through D043).

### 4.0 WASTE STREAM TREATMENT

**4.1 Is this stream currently being treated?**  Yes  No

If yes, provide details: Thermal treatment at Allied Technology Group (ATG), including waste from this waste stream, began 12/31/2000 and continued in 2001. ATG thermal

## LDR REPORT TREATABILITY GROUP DATA SHEET

treatment meets the requirements for CMBST, organic destruction, and stabilization.

### 4.2 Planned treatment

Check the appropriate box indicating future plans for treating this waste stream to meet applicable regulations, including LDR treatment standards.

- No treatment required (skip to Section 5.0)  Treating or plan to treat off site  
 Treating or plan to treat on site  Treatment options still being assessed

### 4.3 Planned treatment method, facility, extent of treatment capacity available:

Some waste in this waste stream will require further characterization before treatment. Thermal treatment is targeted as the primary treatment technology for the subject waste. Treatment will be performed by means of an offsite commercial treatment contract.

### 4.4 Treatment schedule information:

Treatment schedule runs from FY2000 to FY2010

FY2001 ...120 cubic meters

FY2003 ...120 cubic meters

FY2004 ...120 cubic meters

FY2005 ...120 cubic meters

In addition, treatment will be performed as necessary to support the results of the active M-91 TPA negotiations.

### 4.5 Applicable Tri-Party Agreement milestone numbers (including permitting):

TPA Milestone M-91-12 and M-91-12a.

### 4.6 Proposed new Tri-Party Agreement treatment milestones:

An M-91 TPA change request was submitted to Ecology on 2/13/02.

### 4.7 If treating or planning to treat on site, was or will waste minimization be addressed in developing and/or selecting the treatment method?

- Yes  No  Unknown

If yes, describe: NA

### 4.8 List or describe treatability equivalency petitions, rulemaking petitions, and case-by-case exemptions needed for treatment:

None currently identified.

### 4.9 Key assumptions: None

## 5.0 WASTE STREAM DISPOSAL

**After treatment, how will the waste stream be disposed of (include description, locations, milestone numbers, variances required, etc., as applicable)?**

Subject waste will ultimately be disposed of in mixed waste trenches located on the Hanford Site.



## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Placed into storage as waste is generated.

### 2.2 Inventory locations:

<u>Building/room number</u>	<u>Number of containers/tanks</u>
---------------------------------	---------------------------------------

### 2.3 Current inventory for this stream (stored waste only, not accumulation areas)

Total volume (cubic meters): 0  
Date of inventory values: 12/31/01  
Comments on waste inventory: None

### 2.4 Is storage capacity at this location potentially an issue for this waste stream?

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: NA

### 2.5 Planned management areas for storage of this waste: Current location CWC

DST  Other area(s) list:

None

### 2.6 Estimated generation projection by calendar year:

<u>Year</u>	<u>m3</u>	<u>and/or</u>	<u>kg</u>
2002	1.500		
2003	0.000		
2004	0.000		
2005	0.000		
2006	<u>0.000</u>		
Totals	1.500		

### 2.7 DOE Storage Compliance Assessment information:

Assessment has been completed. Reference to most recent assessment

Assessment has been scheduled. Scheduled date:

Other. Explain: NA

### 2.8 Applicable Tri-Party Agreement milestones related to storage at this location:

DOE is completing Interim Safe Storage of these facilities under Action Memos from EPA and Ecology

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

Assumes same levels of oil generated for the D, DR, F, and H Reactors. This forecast excludes K Reactor.

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: See item 3.2

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

Waste oils are segregated to separate the mixed waste from the oil that designates as a hazardous waste.

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m3

**3.3.2 Projected future waste volume reductions:**

Year m3 and/or kg

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

2002	0.000
2003	0.000
2004	0.000
2005	0.000
2006	0.000
Totals	0.000

### 3.3.3 Bases and assumptions used in above estimates:

NA

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 Plant/unit name:** 222-S/222-S Organic Non-debris, **Waste stream** 222-S Organic Non-debris  
Dangerous Mixed Waste Storage  
Area (DMWSA)
- Treatability/aggregated group identifier: MLLW-03  
Treatability/aggregated group name: Organic non-debris

**1.2 Applicable profile number(s) for this waste stream:**

222S-402-0001-CR; CR -Current Revision

**1.3 Waste stream source information**

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Liquid and solid organic non-debris waste generated during laboratory operations (e.g. chemicals used during analytical procedures, routine maintenance, etc.), unused samples, and unused and expired chemical standards and reagents.

**1.3.2 History of how and where the waste was/is generated:**

This waste is generated at the 222-S Laboratory Complex during analytical procedures, 219-S general operations, and hot cell analytical procedures and operations.

**1.3.3 Source of the hazardous constituents:**

The hazardous constituents come from laboratory standards and reagents and used and unused samples. The majority of samples that are received for analysis are from Tank farms. However, samples from any Hanford generator is possible (i.e. K-Basin East & West, 233S SDG, PFP, ETF, ERDF, etc.).

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Waste Stream Fact Sheets, Request for Sample Analysis (RSA), Materials Safety Data Sheet (MSDS) and Container Disposal Requests (CDR).

**1.3.5 Additional notes:**

None

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

**2.1 Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                 DST                                 SST

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Other (explain):

### 2.1.1 How was the waste managed prior to storage?

Per the Hanford Facility Dangerous Waste Permit Application, 222-S Laboratory Complex (DOE/RL-91-27 Revision 1)

### 2.1.2 Timeframe when waste was placed into storage:

From 08/1995 to the present.

### 2.2 Inventory locations:

Building/room number	Number of containers/tanks
HS-0082B	14
HS-0083A	2
HS-0083B	9

### 2.3 Current inventory for this stream (stored waste only, not accumulation areas)

Total volume (cubic meters): 5.2

Date of inventory values: 1/14/02

Comments on waste inventory: This information is derived from the Solid Waste Information and Tracking System (SWITS) specific for 222S.

### 2.4 Is storage capacity at this location potentially an issue for this waste stream?

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: NA

### 2.5 Planned management areas for storage of this waste: Current location CWC

DST  Other area(s) list:

None

### 2.6 Estimated generation projection by calendar year:

Year	m3	and/or	kg
2002	2.770		
2003	2.770		
2004	2.770		
2005	2.770		
2006	<u>2.770</u>		

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Totals 13.850

**2.7 DOE Storage Compliance Assessment information:**

- Assessment has been completed. Reference to most recent assessment A&E-SEC-01-018  
 Assessment has been scheduled. Scheduled date:  
 Other. Explain:

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

M-20-22

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

- Yes  No

If yes, summarize releases and quantities and provide date:

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

- Yes  No

If yes, explain:

**2.11 Is further characterization necessary?**

- Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

Additional characterization for storage at the 222-S Dangerous and Mixed Waste Storage Area is not required. Characterization needs arise as waste acceptance issues for subsequent storage at the Central Waste Complex on a case-by-case basis during either waste profile development or waste verification activities. 222-S relies on the Central Waste Complex for the identification of characterization needs for subsequent treatment and disposal of this waste as part of the waste acceptance process. No commitment is necessary for the characterization needs on this mixed waste because it will be addressed as part of the active M-91 TPA negotiations.

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

This waste will be managed in accordance with facility operational procedures.

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

- Yes  No

If yes, provide date assessment conducted: 9/2000



## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

1.1 **Plant/unit name:** 324/324, Org. Non-debris      **Waste stream** Organic Discarded  
Chemical/Waste  
**Treatability/aggregated group identifier:** MLLW-03  
**Treatability/aggregated group name:** Organic non-debris

1.2 **Applicable profile number(s) for this waste stream:**

NA

1.3 **Waste stream source information**

1.3.1 **General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Discarded/Unused chemical products or waste

1.3.2 **History of how and where the waste was/is generated:**

Chemical products were used for maintenance or clean-up activities

1.3.3 **Source of the hazardous constituents:**

Hazardous constituents in chemical products

1.3.4 **Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Process knowledge

1.3.5 **Additional notes:**

None

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

2.1 **Current storage method**

Container (pad)     Container (covered)     Container (retrievably buried)

Tank                 DST                     SST

Other (explain):

2.1.1 **How was the waste managed prior to storage?**

NA

2.1.2 **Timeframe when waste was placed into storage:**

NA

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.2 Inventory locations:**

Building/room number	Number of containers/tanks
NA	

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 0  
 Date of inventory values: 12/31/01  
 Comments on waste inventory: NA

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: SAA waste

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list: NA

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	0.600		
2003	3.000		
2004	2.400		
2005	6.000		
2006	2.900		
Totals	14.900		

**2.7 DOE Storage Compliance Assessment information:**

Assessment has been completed. Reference to most recent assessment

Assessment has been scheduled. Scheduled date:

Other. Explain: NA

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

None

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: Not scheduled at this time

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

Waste minimization is achieved by substitution of less hazardous chemicals, waste segregation and disposal of hazardous waste.

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m<sup>3</sup>

**3.3.2 Projected future waste volume reductions:**

Year      m<sup>3</sup>      and/or      kg

### LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

2002	0.000
2003	0.000
2004	0.000
2005	0.000
2006	0.000
Totals	0.000

#### 3.3.3 Bases and assumptions used in above estimates:

None

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

**1.1 Plant/unit name:** 327/327, Org. Non-debris      **Waste stream** Organic Discarded  
Chemical/Waste  
**Treatability/aggregated group identifier:** MLLW-03  
**Treatability/aggregated group name:** Organic non-debris

**1.2 Applicable profile number(s) for this waste stream:**

NA

**1.3 Waste stream source information**

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Discarded/Unused chemical products or waste

**1.3.2 History of how and where the waste was/is generated:**

Chemical products were used for maintenance or clean-up activities.

**1.3.3 Source of the hazardous constituents:**

Chemical products containing hazardous constituents

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Process knowledge

**1.3.5 Additional notes:**

None

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

**2.1 Current storage method**

Container (pad)     Container (covered)     Container (retrievably buried)

Tank                     DST                     SST

Other (explain):

**2.1.1 How was the waste managed prior to storage?**

NA

**2.1.2 Timeframe when waste was placed into storage:**

NA

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.2 Inventory locations:**

Building/room number	Number of containers/tanks
NA	

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 0  
 Date of inventory values: 12/31/01  
 Comments on waste inventory: NA

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: Waste is being accumulated in SAA

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list: NA

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	0.800		
2003	1.200		
2004	1.400		
2005	1.200		
2006	1.800		
Totals	6.400		

**2.7 DOE Storage Compliance Assessment information:**

Assessment has been completed. Reference to most recent assessment

Assessment has been scheduled. Scheduled date:

Other. Explain: NA

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

None

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: Not scheduled at this time

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

Waste minimization is achieved by substitution of less hazardous materials, waste segregation and disposal of hazardous waste.

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):**

0 m3

**3.3.2 Projected future waste volume reductions:**

Year      m3      and/or      kg

### LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

2002	0.000	
2003	0.000	
2004	0.000	
2005	0.000	
2006	<u>0.000</u>	<u>                    </u>
Totals	0.000	

#### 3.3.3 Bases and assumptions used in above estimates:

None

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 Plant/unit name:** CWC/CWC, Org. Non-debris      **Waste stream** Organic Solids and Labpacks
- Treatability/aggregated group identifier: MLLW-03
- Treatability/aggregated group name: Organic non-debris

**1.2 Applicable profile number(s) for this waste stream:**

NA

**1.3 Waste stream source information**

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

The waste consists of many different inorganic and organic solids (e.g., particulates, absorbed liquids, sludges, resins, and soils) and labpacks that are contaminated with organic regulated dangerous waste constituents, including PCBs. This waste does not include hazardous debris other than incidental debris material commingled with the non-debris.

**1.3.2 History of how and where the waste was/is generated:**

The waste was generated at many onsite locations and also by offsite generators.

**1.3.3 Source of the hazardous constituents:**

See 1.3.1 and 1.3.2. Wastes are either contaminated with regulated organic constituents or are themselves regulated organic chemicals.

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Analytical data and process knowledge.

**1.3.5 Additional notes:**

None

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

**2.1 Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)
- Tank                 DST                         SST
- Other (explain):

**2.1.1 How was the waste managed prior to storage?**

Accumulated and packaged by waste generators prior to storage at CWC.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 2.1.2 Timeframe when waste was placed into storage:

Waste storage in CWC began in 1987 and it has continued since then.

### 2.2 Inventory locations:

Building/room number	Number of containers/tanks
CWC	Approx. 2761

### 2.3 Current inventory for this stream (stored waste only, not accumulation areas)

Total volume (cubic meters): 774.1

Date of inventory values: 12/31/01

Comments on waste inventory: Based on inventory residing at the CWC as reported in SWITS for WSRds 300, 301, 302, 303, 304, 305, 310, 311, 315, 320, 321, 330, 331, 400, 401, 402, 402, 403, 404, 405, 406, 407, 408, 409, 40A, 40B, 427, 429, 430, 431, 432, 43C, 45A, 47A, 500, 501, 502, 503, 504, 505 (except 183-H), 506, 507, 50A, 50B, 50C, 520, 522, 52A, 53A, 700, 701, 720, 721, 90A, 920, 921, 922, 923, ALO, IDW, IXO, LPA, LPO, PAO, TFS, and TSC.

### 2.4 Is storage capacity at this location potentially an issue for this waste stream?

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: No issues with CWC storage based on life cycle waste generation forecast.

### 2.5 Planned management areas for storage of this waste: Current location CWC

DST  Other area(s) list:

None

### 2.6 Estimated generation projection by calendar year:

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.7 DOE Storage Compliance Assessment information:**

- Assessment has been completed. Reference to most recent assessment A&E-SEC-02-001  
 Assessment has been scheduled. Scheduled date:  
 Other. Explain:

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

M-20-12

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

- Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

- Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

- Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

If necessary, waste will be re-characterized just prior to treatment for most efficient use of resources to meet current disposal requirements. Characterization will be performed as necessary to support the results of the active M-91 TPA negotiations.

If yes, provide Tri-Party Agreement milestone number(s): None

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

- Yes  No

If yes, provide date assessment conducted: NA

If yes, provide document number or other identification: NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: None planned - waste not generated at CWC

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

- 3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

These activities occur before the wastes are shipped to CWC. There are few opportunities to reduce waste volumes placed into storage.

### **3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m3

#### **3.3.2 Projected future waste volume reductions:**

<u>Year</u>	<u>m3</u>	<u>and/or</u>	<u>kg</u>
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

#### **3.3.3 Bases and assumptions used in above estimates:**

There is no generation projected by CWC.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

**1.1 Plant/unit name:** PFP/234-5Z, Org. Non-debris      **Waste stream** Lab Chemicals/Wastes,  
Organic Non-debris  
**Treatability/aggregated group identifier:** MLLW-03  
**Treatability/aggregated group name:** Organic non-debris

**1.2 Applicable profile number(s) for this waste stream:**  
BWHC-400-00002-01, BWHC-400-0003-01, PFPX-505-0001-00

#### 1.3 Waste stream source information

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Spent/expired chemicals or lab generated wastes

**1.3.2 History of how and where the waste was/is generated:**

Laboratory operations

**1.3.3 Source of the hazardous constituents:**

Intrinsically hazardous

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Analytical data, process knowledge

**1.3.5 Additional notes:**

None

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

#### 2.1 Current storage method

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                 DST                         SST  
 Other (explain):

**2.1.1 How was the waste managed prior to storage?**

NA - Waste is not stored; once generated, waste goes directly to satellite accumulation area.

**2.1.2 Timeframe when waste was placed into storage:**

NA- Waste is placed directly into satellite accumulation area upon generation.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.2 Inventory locations:**

Building/room number	Number of containers/tanks
234-5Z	

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 0  
 Date of inventory values: 12/31/01  
 Comments on waste inventory: None

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: None

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list:

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	2.340		
2003	2.020		
2004	2.330		
2005	2.330		
2006	2.020		
Totals	11.040		

**2.7 DOE Storage Compliance Assessment information:**

Assessment has been completed. Reference to most recent assessment

PFP Compliance  
Assessment, A&E-SEC-01-  
015

Assessment has been scheduled. Scheduled date:

Other. Explain:

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

None

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

- 2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

- 2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

- 2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

Will be characterized when disposed.

If yes, provide Tri-Party Agreement milestone number(s): NA

- 2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

- 3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

CY 2001

If yes, provide document number or other identification:

PFP 2001 Waste Minimization Evaluation  
for LDR Report Waste Streams, Letter#  
M2100-02-016

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA:

- 3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

PFP has a waste minimization program. A hierarchical approach to environmental management is applied to all types of pollution and waste generating activities. Pollution prevention and waste minimization, through source reduction, is the preferred option, followed by environmentally safe recycling. Treatment to reduce the quantity, toxicity, and/or mobility will be considered only when prevention or recycling is not possible or practical. Environmentally safe disposal is the last option. Segregation is applicable in all of these activities. PFP routinely evaluates the chemicals in the labs to ensure that there is an identified use for them. Chemicals with no justifiable use will be either

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

recycled, if possible, or discarded as waste and not reordered.

### 3.3 Waste minimization schedule

3.3.1 Reduction achieved during calendar year (volume or mass): 0 m3

### 3.3.2 Projected future waste volume reductions:

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

### 3.3.3 Bases and assumptions used in above estimates:

PFP is currently in a clean up and stabilization mode. Clean up and stabilization operations tend to increase production of waste. PFP has a waste minimization program and is currently undergoing a Site Strategic Pollution Prevention Opportunity Assessment, which will identify if there are further opportunities to reduce waste production or produce waste in a less hazardous form. PFP is currently evaluating all the chemicals in the labs to insure that there is an identified use for them. Chemicals with no justifiable use will be either recycled, if possible, or discarded as waste and not reordered.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 **Plant/unit name:** T Plant Complex/Org. Non-debris    **Waste stream** Storage-Organic Non-debris  
    **Treatability/aggregated group identifier:** MLLW-03  
    **Treatability/aggregated group name:** Organic non-debris

1.2 **Applicable profile number(s) for this waste stream:**

WSRd 400, 402, 404, 500, 503, 505, 507, 923, LPO

1.3 **Waste stream source information**

1.3.1 **General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

This waste consists of many different inorganic and organic solids (e.g., particulates, absorbed liquids, sludges, soils, labpacks, etc.) and could contain PCBs. This waste does not include hazardous debris other than incidental debris material commingled with the non-debris. Tank farm contact soil.

1.3.2 **History of how and where the waste was/is generated:**

The waste was generated by T Plant Complex and from various other onsite other locations, and also by offsite generators.

1.3.3 **Source of the hazardous constituents:**

See 1.3.1 and 1.3.2

1.3.4 **Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Analytical data and process knowledge

1.3.5 **Additional notes:**

None.

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

2.1 **Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                     DST                     SST  
 Other (explain): NA

2.1.1 **How was the waste managed prior to storage?**

Generated and accumulated and packaged at various onsite locations and by offsite generators before shipment to T Plant.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.1.2 Timeframe when waste was placed into storage:**

1995 to present.

**2.2 Inventory locations:**

Building/room number	Number of containers/tanks
T PLANT	88

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 20.43  
 Date of inventory values: 12/28/01  
 Comments on waste inventory: None.

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: NA

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list: NA

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	0.240		
2003	0.240		
2004	0.240		
2005	0.240		
2006	0.240		
Totals	1.200		

**2.7 DOE Storage Compliance Assessment information:**

Assessment has been completed. Reference to most recent assessment: Oct. 2000, A&E-00-ASS-072

Assessment has been scheduled. Scheduled date: Assessment currently scheduled for July 2003

Other. Explain: NA

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

None.

- 2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

- 2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

- 2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): NA

- 2.12 Other key assumptions related to storage, inventory, and generation information:**

None.

### 3.0 WASTE MINIMIZATION

- 3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: See Section 3.3 for discussion on waste min.

- 3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

To the extent practical, all mixed waste is segregated and packaged separately from LLW or TRU. The volume of mixed waste is reduced by compaction, when possible. To minimize the generation of mixed waste, T Plant Complex personnel actively seek nondangerous alternatives. In addition, waste minimization goals are set annually and tracked quarterly.

- 3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m<sup>3</sup>

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 3.3.2 Projected future waste volume reductions:

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

### 3.3.3 Bases and assumptions used in above estimates:

The T Plant Complex has submitted a P2/Wmin fiscal year 2002 goal to reduce, where possible, mixed waste generation. For FY 2002 to 2006, new goals will be evaluated and identified on a year-by-year basis. T Plant Complex does not track waste reduction by treatability groups. Routine and non-routine generated waste is reported quarterly to the Waste Minimization/Pollution Prevention Group. This information is available on the following URL: <http://apsql05.rl.gov/polprev/default.asp>

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 Plant/unit name:** Tank Farm Facilities/Org. Non-debris DST and SST Containerized Waste      **Waste stream** Organic Non-debris
- Treatability/aggregated group identifier: MLLW-03
- Treatability/aggregated group name: Organic non-debris

- 1.2 Applicable profile number(s) for this waste stream:**  
505-03

**1.3 Waste stream source information**

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Tank farms contaminated soil consisting of 80% or more soil, gravel, rock, and sand, containing small amounts of asbestos, animal feces, vegetation, and debris (including plastic, paper, cloth, and rubber). The contaminated soil is generated from the clean up of regulated fuel spills and other organic regulated chemical products.

**1.3.2 History of how and where the waste was/is generated:**

Tank farms contaminated soil is generated during the maintenance, operation and upgrades of the tank farms. Such activities can include contamination control and clean up; excavation for modifications and constructions; soil sampling; and spill clean up.

**1.3.3 Source of the hazardous constituents:**

Tank farms soils are considered mixed waste because they are presumed to contain (as described by RCRA "contained in" provisions) tank waste. Another source of hazardous constituents are regulated fuels and other regulated chemical products.

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

MSDS, process knowledge, and analytical data. The document "Tank Farm Solid Waste Characterization Guide with Sampling and Analysis Attachment", HNF-SD-WM-PLN-119, REV. 01, describes the basis for historical and process knowledge and sampling analysis plan.

**1.3.5 Additional notes:**

None

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

**2.1 Current storage method**

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                 DST                                 SST  
 Other (explain):

**2.1.1 How was the waste managed prior to storage?**

Waste is managed in SAA and 90 day accumulation areas.

**2.1.2 Timeframe when waste was placed into storage:**

NA

**2.2 Inventory locations:**

Building/room number	Number of containers/tanks
NA	

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 0

Date of inventory values: 12/31/00

Comments on waste inventory: NA

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

- Yes     No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: NA

**2.5 Planned management areas for storage of this waste:**  Current location     CWC

DST     Other area(s) list:

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	13.920		
2003	15.300		
2004	16.750		
2005	18.200		
2006	18.200		
Totals	82.370		

**2.7 DOE Storage Compliance Assessment information:**

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

- Assessment has been completed. Reference to most recent assessment: NA
- Assessment has been scheduled. Scheduled date: NA
- Other. Explain: NA

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

None

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

- Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

- Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

- Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

Waste is being accumulated in SAA and 90 Day containers.

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

- Yes  No

If yes, provide date assessment conducted: 04/02/00

If yes, provide document number or other identification: Soil and Vadose Characterization P2O No. 2

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA:

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

1. Segregation of LLW and Mixed Waste. 2) Sample and Analysis. 3) Use non-regulated products. 4) Spill avoidance

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 3.3 Waste minimization schedule

3.3.1 Reduction achieved during calendar year (volume or mass): 0 m3

### 3.3.2 Projected future waste volume reductions:

<u>Year</u>	<u>m3</u>	<u>and/or</u>	<u>kg</u>
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	<u>0.000</u>		<u>          </u>
Totals	0.000		

### 3.3.3 Bases and assumptions used in above estimates:

Tank farms is in construction and upgrade mode. Non reduction is expected at this time.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 Plant/unit name:** WRAP/2336-W, Org Non-debris      **Waste stream**      Organic Non-debris  
    **Treatability/aggregated group identifier:**      MLLW-03  
    **Treatability/aggregated group name:**      Organic non-debris

**1.2 Applicable profile number(s) for this waste stream:**

WSRd 503-2

**1.3 Waste stream source information**

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

The waste consists of many different inorganic and organic solids (e.g., particulates, absorbed liquids, sludges, resins, and soils) and labpacks that are contaminated with organic regulated dangerous waste constituents, including PCBs. This waste does not include hazardous debris other than incidental debris material commingled with the non-debris.

**1.3.2 History of how and where the waste was/is generated:**

The waste was generated at many onsite locations and also by offsite generators.

**1.3.3 Source of the hazardous constituents:**

Hazardous constituents most likely entered the waste as chemicals used during analytical activities at various laboratories. See 1.3.1 and 1.3.2

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Analytical data, process knowledge.

**1.3.5 Additional notes:**

Waste at WRAP comes from various generators and generating processes around the Hanford Site due to WRAP's verification and repackaging mission.

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

**2.1 Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                 DST                         SST  
 Other (explain): NA

**2.1.1 How was the waste managed prior to storage?**

Waste was generated and packaged at the WSCF laboratory.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 2.1.2 Timeframe when waste was placed into storage:

Most MLLW at WRAP is recently generated waste that is being verified as part of the waste acceptance process.

### 2.2 Inventory locations:

Building/room number	Number of containers/tanks
2336W	1

### 2.3 Current inventory for this stream (stored waste only, not accumulation areas)

Total volume (cubic meters): 0.2  
 Date of inventory values: 12/26/01  
 Comments on waste inventory: Inventory based on Drum Management System (DMS) printout dated 12/26/2001.

### 2.4 Is storage capacity at this location potentially an issue for this waste stream?

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: Due to proximity to and interchange with CWC, there is no storage capacity issue at WRAP.

### 2.5 Planned management areas for storage of this waste: Current location CWC

DST  Other area(s) list:

None

### 2.6 Estimated generation projection by calendar year:

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	<u>0.000</u>		
Totals	0.000		

### 2.7 DOE Storage Compliance Assessment information:

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Assessment has been completed. Reference to most recent assessment DOE # A&E-DWR-01-011  
July 2001

Assessment has been scheduled. Scheduled date:

Other. Explain:

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

None

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA:

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

Through source reduction, waste minimization practices are being employed to ensure that the

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

generation of this stream is being minimized. Additional waste is not expected to be generated in the future.

### 3.3 Waste minimization schedule

3.3.1 Reduction achieved during calendar year (volume or mass): 0 m3

### 3.3.2 Projected future waste volume reductions:

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

### 3.3.3 Bases and assumptions used in above estimates:

Since subject waste has already been generated and is being directly disposed of, no additional waste minimization activities are planned.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 Plant/unit name:** WSCF/WSCF, Org. Non-debris      **Waste stream** Organic Non-debris  
**Treatability/aggregated group identifier:** MLLW-03  
**Treatability/aggregated group name:** Organic non-debris

**1.2 Applicable profile number(s) for this waste stream:**

WMFH-404-003-02, WSCF-404-0002-00, WMFH-404-0007-02, WSCF-404-0002-00, WMFH-402-003-00, WSCF-400-0001-00, WMFH-404-0009-00, WMFH-402-0004-00, WSCF-402-0002-00, WSCF-402-0001-01, WMFH-402-0003-00, WSCF-404-0001-00

**1.3 Waste stream source information**

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

The waste stream is generated from analytical processes within the laboratory. The organic non-debris wastes are collected in the WSCF SAA's and packaged for shipment to the CWC.

**1.3.2 History of how and where the waste was/is generated:**

WSCF has been sending these waste streams to the CWC for approximately the last six years. This waste stream is generated as a result of analysis within the laboratory.

**1.3.3 Source of the hazardous constituents:**

The hazardous constituents are derived from sample contributions and/or the addition of reagents during the analytical process. These reagents may be considered regulated constituents and contribute to the hazardous nature of the waste stream.

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Information to characterize this waste stream is obtained from process knowledge and analytical data.

**1.3.5 Additional notes:**

This material is managed in a SAA and 90 day accumulation area. WSCF has no TSD unit.

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

**2.1 Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                 DST                         SST

- Other (explain): WSCF waste is managed in a SAA or 90 day accumulation area. WSCF has no TSD.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.1.1 How was the waste managed prior to storage?**

NA

**2.1.2 Timeframe when waste was placed into storage:**

NA

**2.2 Inventory locations:**

Building/room number	Number of containers/tanks
NA	NA

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 0

Date of inventory values: 12/31/01

Comments on waste inventory: None

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: WSCF does not "store" waste as it does not have a TSD.

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list: NA

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	1.620		
2003	1.620		
2004	1.620		
2005	1.620		
2006	1.620		
Totals	8.100		

**2.7 DOE Storage Compliance Assessment information:**

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

- Assessment has been completed. Reference to most recent assessment
- Assessment has been scheduled. Scheduled date:
- Other. Explain: NA

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

NA

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

- Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

- Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

- Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

- Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: No Date Established

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

None, waste is currently generated from sample analysis using SW-846/equal protocol procedures

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 3.3 Waste minimization schedule

3.3.1 Reduction achieved during calendar year (volume or mass): 0 kg

### 3.3.2 Projected future waste volume reductions:

<u>Year</u>	<u>m3</u>	<u>and/or</u>	<u>kg</u>
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

### 3.3.3 Bases and assumptions used in above estimates:

None

## LDR REPORT TREATABILITY GROUP DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION

- 1.1 Treatability group/aggregated stream identifier** MLLW-04A  
**Treatability group/aggregated stream name:** O/C hazardous debris
- 1.2 Description of waste (list WSRd numbers for this waste stream, as applicable):**

This treatability group is for waste that meets the definition of hazardous debris as defined in 40CFR268.2, and the waste contains physical and/or chemical constituents that meet the definition of organic/carbonaceous waste as defined in WAC 173-303-040. The physical characteristics include paper, plastic, wood, rubber, rags, and lesser quantities of metallic and inorganic waste components. Applicable WSRds may include: ASB, BLD, DBR, DBL, H3D, SOC, SOE, 600, 601, 603, 605, 606, 607, 60A, 60B, 620, 621, 622, 640, 641, 315, 334, 625, 626, and 627.

### 2.0 WASTE STREAM INVENTORY AND GENERATION

- 2.1 Current total inventory for this stream (stored waste only, not accumulation areas)**  
 Total volume (cubic meters): 1,740.985
- 2.2 Estimated generation projection by calendar year**

Year	m3	and/or	kg
2002	135.816		
2003	140.628		
2004	146.316		
2005	152.708		
2006	152.316		
Totals	727.784		

### 3.0 WASTE STREAM CHARACTERIZATION

- 3.1 Radiological characteristics**
- 3.1.1 Mixed waste type**       High-level     Transuranic     Low-level
- 3.1.2 Handling (as currently packaged/stored)**     Contact-handled     Remote-handled
- 3.1.3 Comments on radiological characteristics (e.g., more specific content, treatment concerns caused by radiation, confidence level):**
- Since this waste is a general category based on dangerous waste characteristics, the radiological characteristics are expected to vary greatly. However, there is high confidence that the waste is MLLW. The waste as packaged is considered Contact-handled (i.e., less than or equal to 200mR/hr on outside package surface); however, the dose rate of some waste inside the package may exceed 200mR/hr.
- 3.2 Matrix characteristics (physical content)**
- 3.2.1 Matrix constituent table (each constituent listed should constitute at least 1% of the total volume or mass)**

## LDR REPORT TREATABILITY GROUP DATA SHEET

### 3.2.2 Confidence level for matrix characteristic data in Section 3.2.1:

Low  Medium  High

### 3.2.3 Comments on matrix characteristics and/or confidence level:

The matrix characteristics has or will be verified prior to the waste being shipped to the receiving TSD unit. Waste verifications take place either at the generating site or at one of the centralized TSD units at Hanford.

### 3.3 Regulated contaminated characteristics

#### 3.3.1 Wastewater/non-wastewater under RCRA

Wastewater  Non-wastewater  Unknown

#### 3.3.2 Regulated contaminant table including treatment requirements and UHCs, if applicable

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
D001	Ignitable	Ignitable Charac.	n/a	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D002	Corrosive	Corrosive Charac.	n/a	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D003	Reactive	Reactive Cyanides	n/a	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D004	TC-Arsenic	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D005	TC-Barium	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D006	TC- Cadmium	Cadmium Charac.	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D007	TC-Chromium	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D008	TC-Lead	Lead Charac.	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D008	Radioactive Lead Solids	Radioactive Lead Solids	<50 vol% per package basis	***	Macroencapsulati on

**LDR REPORT TREATABILITY GROUP DATA SHEET**

<b>EPA/ State number</b>	<b>Waste description</b>	<b>LDR sub- category*</b>	<b>Concentration (typical or range)**</b>	<b>Basis</b>	<b>LDR Treatment Concentration Standard or Technology Code</b>
D009	TC-Mercury	Low Mercury	<260 mg/kg Hg	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D010	TC-Selenium	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D011	TC-Silver	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D012	Endrin	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D013	Lindane	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D014	Methoxychlor	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D015	Toxaphene	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D016	2,4-D	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D017	2,4,5-TP (Silvex)	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D018	Benzene	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D019	Carbon Tetrachloride	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D020	Chlordane	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D021	Chlorobenzene	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)

## LDR REPORT TREATABILITY GROUP DATA SHEET

<b>EPA/ State number</b>	<b>Waste description</b>	<b>LDR sub- category*</b>	<b>Concentration (typical or range)**</b>	<b>Basis</b>	<b>LDR Treatment Concentration Standard or Technology Code</b>
D022	Chloroform	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D023	o-Cresol	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D024	m-Cresol	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D025	p-Cresol	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D026	Cresol	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D027	p-Dichlorobenzene	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D028	1,2-Dichlorobenzene	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D029	1,1-Dichloroethylene	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D030	2,4-Dinitrotoluene	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D031	Heptachlor	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D032	Hexachlorobenzene	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D033	Hexachlorobutadiene	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D034	Hexachloroethane	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)

**LDR REPORT TREATABILITY GROUP DATA SHEET**

<b>EPA/ State number</b>	<b>Waste description</b>	<b>LDR sub- category*</b>	<b>Concentration (typical or range)**</b>	<b>Basis</b>	<b>LDR Treatment Concentration Standard or Technology Code</b>
D035	Methyl Ethyl Ketone	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D036	Nitrobenzene	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D037	Pentachlorophenol	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D038	Pyridine	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D039	Tetrachloroethylene	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D040	Trichloroethylene	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D041	2,4,5-Trichlorophenol	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D042	2,4,6-Trichlorophenol	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
D043	Vinyl Chloride	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
F001	1,1,1-Trichlorethane	Spent Solvent	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
F002	Methylene Chloride	Spent Solvent	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
F003	Acetone & Hexone	Spent Solvent	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
F004	o-Cresol & p-Cresol	Spent Solvent	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)

## LDR REPORT TREATABILITY GROUP DATA SHEET

<b>EPA/ State number</b>	<b>Waste description</b>	<b>LDR sub- category*</b>	<b>Concentration (typical or range)**</b>	<b>Basis</b>	<b>LDR Treatment Concentration Standard or Technology Code</b>
F005	Methyl Ethyl Ketone	Spent Solvent	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
P029	Copper Cyanide	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
P030	Cyanides	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
P098	Potassium Cyanide	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
P102	Propargyl Alcohol	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
P106	Sodium Cyanide	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
P120	Vanadium Pentoxide	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
U002	Acetone	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
U006	Acetyl Chloride	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
U031	n-Butyl Alcohol	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
U043	Vinyl Chloride	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
U057	Cyclohexanone	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
U080	Methylene Chloride	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)

## LDR REPORT TREATABILITY GROUP DATA SHEET

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
U123	Formic Acid	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
U151	Mercury	Low Mercury	<260 mg/kg Hg	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
U159	Methyl Ethyl Ketone	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
U161	Methyl Isobutyl Ketone	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
U196	Pyridine	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
U220	Toluene	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
U226	1,1,1-Trichloroethane	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
U239	Xylenes	NA	***	***	Alternative Stds. for Haz. Debris (40 CFR 268.45)
WP01	Persistent, EHW	NA	***	***	None (1)
WP02	Persistent, DW	NA	***	***	None
WSC2	Solid Corrosive	NA	***	***	Remove Solid Acid Charac.
WT01	Toxic, EHW	NA	***	***	None (1)
WT02	Toxic, DW	NA	***	***	None

## LDR REPORT TREATABILITY GROUP DATA SHEET

\*LDR subcategory marked NA if no existing subcategory adequately describes this waste, or if there are no defined subcategories for the waste number (40 CFR 268.40).

\*\*If the waste is not consistent in concentration or the concentration is unknown, this may not apply. Describe in Section 3.3.6.

\*\*\* The concentration varies and is based on process knowledge and/or analytical data.

(1) Mixed extremely hazardous wastes may be land-disposed in Washington State in DOE facilities in accordance with RCW 70.105.050 (2)

UHCs Identification not required when using the alternative treatment standards for hazardous debris.

\*\*\* variable

### 3.3.3 List any waste numbers from Section 3.3.2 for which the stream already meets established LDR treatment standards

List:

No LDR treatment required (e.g., TRUM waste destined for WIPP, exclusion, etc.)

None (i.e., all constituents/waste numbers of this waste stream still require treatment)

### 3.3.4 Does this waste stream contain PCBs?

Yes  No  Unknown If no or unknown, skip to Section 3.3.5

#### 3.3.4.1 Is waste stream subject to TSCA regulations for PCBs?

Yes  No  Unknown

#### 3.3.4.2 Indicate the PCB concentration range (ppm)

<50  ≥ 50  Unknown

### 3.3.5 What is the confidence level for the regulated contaminant characteristic data?

Low  Medium  High

### 3.3.6 Comments on regulated contaminant characteristics and/or confidence level:

The waste characterization information is reviewed on a per-package basis prior to the waste being shipped to an onsite or offsite TSD. Waste that has been residing in storage for a long time may require more extensive verification work to make it acceptable for treatment and/or disposal. If, during the verification activities, it is determined that some of the waste does not meet the MLLW-04A waste stream description, then it will be reassigned into the appropriate waste stream (e.g., MLLW-02, -03 or -04B through -10) and the correct WSRd will be assigned to it.

## 4.0 WASTE STREAM TREATMENT

## LDR REPORT TREATABILITY GROUP DATA SHEET

- 4.1 **Is this stream currently being treated?**  Yes  No

If yes, provide details: Hanford has been sending a portion of this waste treatability group to the Allied Technology Group (ATG) facility located in Richland, WA for treatment. The treatment being utilized by ATG is macroencapsulation. The treated waste is being returned back to Hanford and disposed of in the Mixed Waste Disposal trench located in 200-W Area.

- 4.2 **Planned treatment**

Check the appropriate box indicating future plans for treating this waste stream to meet applicable regulations, including LDR treatment standards.

- No treatment required (skip to Section 5.0)  Treating or plan to treat off site  
 Treating or plan to treat on site  Treatment options still being assessed

- 4.3 **Planned treatment method, facility, extent of treatment capacity available:**

The treatment method being used to treat this waste group is macroencapsulation per 40CFR268.45. The waste is mainly being sent offsite to a commercial treatment facility for treatment. There is additional commercial treatment capacity available in the nation which can be accessed via contracts. Some treatment may also be performed onsite.

- 4.4 **Treatment schedule information:**

Treatment of this waste has been ongoing for several years. Additional treatment will be performed as necessary to support the results of the active M-91 TPA negotiations.

- 4.5 **Applicable Tri-Party Agreement milestone numbers (including permitting):**

None

- 4.6 **Proposed new Tri-Party Agreement treatment milestones:**

An M-91 TPA change request was submitted to Ecology on 2/13/02.

- 4.7 **If treating or planning to treat on site, was or will waste minimization be addressed in developing and/or selecting the treatment method?**

- Yes  No  Unknown

If yes, describe: To the extent practical, all mixed waste is segregated and packaged separately from LLW or TRU wastes. The volume of mixed waste is reduced by in-drum compaction when possible, and where it does not interfere with future treatment activities. To minimize the generation of mixed waste, generators actively seek nondangerous alternatives for the dangerous constituents in their processes. Minimization goals are set annually and tracked quarterly, and waste treatment is used to destroy the hazardous constituents, as allowable.

- 4.8 **List or describe treatability equivalency petitions, rulemaking petitions, and case-by-case exemptions needed for treatment:**

Organic/Carbonaceous LDR 1,000 mile inapplicability certification has been in effect for several years that allows for the treatment of the O/C debris by other than incineration.

## LDR REPORT TREATABILITY GROUP DATA SHEET

- 4.9 Key assumptions:** Commercial thermal treatment capacity is not sufficient to change the status of the LDR 1,000 mile inapplicability certification. In order to dispose of non-F001-F005 listed waste, the 200 Area ETF delisting petition must be modified in order to manage the leachate generated from the mixed waste trenches.

### 5.0 WASTE STREAM DISPOSAL

**After treatment, how will the waste stream be disposed of (include description, locations, milestone numbers, variances required, etc., as applicable)?**

Subject waste will be disposed of in mixed waste trenches located on the Hanford Site.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 Plant/unit name:** 200 LEF/200 ETF, Acid O/C Debris **Waste stream** Acid  
Treatability/aggregated group identifier: MLLW-04A  
Treatability/aggregated group name: O/C hazardous debris

**1.2 Applicable profile number(s) for this waste stream:**

**1.3 Waste stream source information**

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Acid waste is generated from spill clean-up and debris generated from maintenance activities.

**1.3.2 History of how and where the waste was/is generated:**

The 200 Area Effluent Treatment Facility (ETF) uses acid throughout the treatment process for pH adjustment.

**1.3.3 Source of the hazardous constituents:**

Acid used for pH adjustment in the ETF treatment process

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Analytical data, source information, MSDS's, process knowledge

**1.3.5 Additional notes:**

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

**2.1 Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                     DST                             SST  
 Other (explain):

**2.1.1 How was the waste managed prior to storage?**

The waste was in the process being generated

**2.1.2 Timeframe when waste was placed into storage:**

05/99 - 12/01 for current inventory. This type waste has been generated at this location since 1995.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 2.2 Inventory locations:

Building/room number	Number of containers/tanks
ETF	9 drums

### 2.3 Current inventory for this stream (stored waste only, not accumulation areas)

Total volume (cubic meters): 1.9  
Date of inventory values: 12/31/01  
Comments on waste inventory:

### 2.4 Is storage capacity at this location potentially an issue for this waste stream?

Yes  No

If yes, what is the total estimated storage capacity? \_\_\_\_\_

When is this capacity expected to be reached \_\_\_\_\_

Bases and assumptions used:

### 2.5 Planned management areas for storage of this waste: Current location CWC

DST  Other area(s) list:

None

### 2.6 Estimated generation projection by calendar year:

Year	m3	and/or	kg
2002	1.300		
2003	1.300		
2004	1.300		
2005	1.300		
2006	1.300		
Totals	6.500		

### 2.7 DOE Storage Compliance Assessment information:

Assessment has been completed. Reference to most recent assessment: 09/2000, A&E-00-ASS-070

Assessment has been scheduled. Scheduled date:

Other. Explain:

### 2.8 Applicable Tri-Party Agreement milestones related to storage at this location:

None

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain:

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

If yes, provide Tri-Party Agreement milestone number(s):

**2.12 Other key assumptions related to storage, inventory, and generation information:**

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

If yes, provide document number or other identification:

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: No assessment planned at this time.

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

Facility operating procedures provide instructions on packaging and segregation of waste.

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m<sup>3</sup>

**3.3.2 Projected future waste volume reductions:**

<u>Year</u>	<u>m<sup>3</sup></u>	<u>and/or</u>	<u>kg</u>
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## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

2002	0.000
2003	0.000
2004	0.000
2005	0.000
2006	0.000
Totals	0.000

### 3.3.3 Bases and assumptions used in above estimates:

NA

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 **Plant/unit name:** 200 LEF/200 ETF, Caustic O/C      **Waste stream** Caustic  
Debris
- Treatability/aggregated group identifier: MLLW-04A
- Treatability/aggregated group name: O/C hazardous debris

1.2 **Applicable profile number(s) for this waste stream:**

#### 1.3 Waste stream source information

1.3.1 **General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Caustic waste is generated from spill clean-up and debris generated from maintenance activities.

1.3.2 **History of how and where the waste was/is generated:**

The Effluent Treatment Facility (ETF) uses caustic throughout the treatment process for pH adjustment.

1.3.3 **Source of the hazardous constituents:**

Caustic used for pH adjustment in the ETF treatment process

1.3.4 **Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Analytical data, source information, MSDS's, process knowledge

1.3.5 **Additional notes:**

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

#### 2.1 Current storage method

- Container (pad)     Container (covered)     Container (retrievably buried)
- Tank                     DST                     SST
- Other (explain):

2.1.1 **How was the waste managed prior to storage?**

The waste was in the process of generation

2.1.2 **Timeframe when waste was placed into storage:**

02/00 - 12/01 for current inventory. This type waste has been generated at this location since 1995.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.2 Inventory locations:**

Building/room number	Number of containers/tanks
ETF	4 drum

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 0.8  
 Date of inventory values: 12/31/01  
 Comments on waste inventory:

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? \_\_\_\_\_

When is this capacity expected to be reached \_\_\_\_\_

Bases and assumptions used:

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list:

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	0.210		
2003	0.210		
2004	0.210		
2005	0.210		
2006	0.210		
Totals	1.050		

**2.7 DOE Storage Compliance Assessment information:**

Assessment has been completed. Reference to most recent assessment 09/2000, A&E-00-ASS-070

Assessment has been scheduled. Scheduled date:

Other. Explain:

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

N/A

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain:

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

If yes, provide Tri-Party Agreement milestone number(s):

**2.12 Other key assumptions related to storage, inventory, and generation information:**

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

If yes, provide document number or other identification:

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: No assessment planned at this time.

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

Facility operating procedures provide instructions on packaging and segregation of waste.

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m<sup>3</sup>

**3.3.2 Projected future waste volume reductions:**

Year      m<sup>3</sup>      and/or      kg

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

2002	0.000
2003	0.000
2004	0.000
2005	0.000
2006	
Totals	

### 3.3.3 Bases and assumptions used in above estimates:

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

1.1 **Plant/unit name:** 200 LEF/200 ETF, O/C Debris      **Waste stream** RCRA O/C Debris  
    **Treatability/aggregated group identifier:** MLLW-04A  
    **Treatability/aggregated group name:** O/C hazardous debris

1.2 **Applicable profile number(s) for this waste stream:**  
2LEF-627-

#### 1.3 Waste stream source information

1.3.1 **General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Process contacted debris generated from maintenance and clean-up activities.

1.3.2 **History of how and where the waste was/is generated:**

Generated during operation and maintenance activities at the 200 Area Effluent Treatment Facility (ETF) and associated facilities

1.3.3 **Source of the hazardous constituents:**

Hanford Site generated RCRA wastewaters that are treated through the ETF and used oils/greases from LERF/ETF equipment.

1.3.4 **Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Analytical data, process knowledge, MSDS's

1.3.5 **Additional notes:**

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

#### 2.1 Current storage method

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                 DST                         SST  
 Other (explain):

2.1.1 **How was the waste managed prior to storage?**

Waste was in the process of generation

2.1.2 **Timeframe when waste was placed into storage:**

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

1997 - present

### 2.2 Inventory locations:

Building/room number	Number of containers/tanks
2025E	46 Drums

### 2.3 Current inventory for this stream (stored waste only, not accumulation areas)

Total volume (cubic meters): 9.6

Date of inventory values: 12/31/01

Comments on waste inventory:

### 2.4 Is storage capacity at this location potentially an issue for this waste stream?

Yes  No

If yes, what is the total estimated storage capacity? \_\_\_\_\_

When is this capacity expected to be reached \_\_\_\_\_

Bases and assumptions used:

### 2.5 Planned management areas for storage of this waste: Current location CWC

DST  Other area(s) list:

None

### 2.6 Estimated generation projection by calendar year:

Year	m3	and/or	kg
2002	11.000		
2003	11.000		
2004	11.000		
2005	11.000		
2006	11.000		
Totals	55.000		

### 2.7 DOE Storage Compliance Assessment information:

Assessment has been completed. Reference to most recent assessment: 09/2000, A&E-00-ASS-070

Assessment has been scheduled. Scheduled date:

Other. Explain:

### 2.8 Applicable Tri-Party Agreement milestones related to storage at this location:

N/A

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain:

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

If yes, provide Tri-Party Agreement milestone number(s):

**2.12 Other key assumptions related to storage, inventory, and generation information:**

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

If yes, provide document number or other identification:

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: No assessment planned at this time.

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

Facility operating procedures provide instructions on packaging and segregation of waste.

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m<sup>3</sup>

**3.3.2 Projected future waste volume reductions:**

Year      m<sup>3</sup>      and/or      kg

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

2002	0.000	
2003	0.000	
2004	0.000	
2005	0.000	
2006	<u>0.000</u>	<u>                    </u>
Totals	0.000	

### 3.3.3 Bases and assumptions used in above estimates:

NA

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 **Plant/unit name:** 200 LEF/242-A, O/C Debris      **Waste stream** 242-A  
    **Treatability/aggregated group identifier:**      MLLW-04A  
    **Treatability/aggregated group name:**      O/C hazardous debris

1.2 **Applicable profile number(s) for this waste stream:**

1.3 **Waste stream source information**

1.3.1 **General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Process contacted debris generated from maintenance and clean-up activities.

1.3.2 **History of how and where the waste was/is generated:**

Generated during the operation and maintenance activities at the 242-A Evaporator.

1.3.3 **Source of the hazardous constituents:**

From processing Tank Waste from Tank Farms

1.3.4 **Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Analytical, source information, MSDS's, process knowledge

1.3.5 **Additional notes:**

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

2.1 **Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                 DST                         SST  
 Other (explain):

2.1.1 **How was the waste managed prior to storage?**

Waste was in the process of being generated.

2.1.2 **Timeframe when waste was placed into storage:**

No waste stored at this time.

2.2 **Inventory locations:**

**LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET**

Building/room number	Number of containers/tanks
242-A RMA SHED	0

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): \_\_\_\_\_ 0

Date of inventory values: \_\_\_\_\_ 12/31/01

Comments on waste inventory:

**2.4 Is storage capacity at this location potentially an issue for this waste stream?** Yes  No

If yes, what is the total estimated storage capacity? \_\_\_\_\_

When is this capacity expected to be reached \_\_\_\_\_

Bases and assumptions used:

**2.5 Planned management areas for storage of this waste:**  Current location  CWC DST  Other area(s) list: None**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	1.040		
2003	1.040		
2004	1.040		
2005	1.040		
2006	1.040		
Totals	5.200		

**2.7 DOE Storage Compliance Assessment information:** Assessment has been completed. Reference to most recent assessment 10/2000, A&E-00-ASS-073 Assessment has been scheduled. Scheduled date: Other. Explain:**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

N/A

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?** Yes  No

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

If yes, summarize releases and quantities and provide date:

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain:

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

If yes, provide Tri-Party Agreement milestone number(s):

**2.12 Other key assumptions related to storage, inventory, and generation information:**

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

If yes, provide document number or other identification:

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: No assessment planned at this time.

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

Facility operating procedures provide instructions on packaging and segregation of waste.

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m<sup>3</sup>

**3.3.2 Projected future waste volume reductions:**

Year	m <sup>3</sup>	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 3.3.3 Bases and assumptions used in above estimates:

NA



## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 2.1.1 How was the waste managed prior to storage?

Waste was managed per the Hanford Facility Dangerous Waste Permit Application, 222-S Laboratory Complex (DOE/RL-91-27 Revision 1)

### 2.1.2 Timeframe when waste was placed into storage:

12/1998-12/31/2001

### 2.2 Inventory locations:

Building/room number	Number of containers/tanks
HS-0082A	4
HS-0082B	1
HS-0083A	7
HS-0083B	5

### 2.3 Current inventory for this stream (stored waste only, not accumulation areas)

Total volume (cubic meters): 3.536

Date of inventory values: 1/14/02

Comments on waste inventory: This data was generated from Solid Waste Information and Tracking System (SWITS) specific to 222S Laboratory.

### 2.4 Is storage capacity at this location potentially an issue for this waste stream?

Yes  No

If yes, what is the total estimated storage capacity? n/a

When is this capacity expected to be reached n/a

Bases and assumptions used: n/a

### 2.5 Planned management areas for storage of this waste: Current location CWC

DST  Other area(s) list:

None

### 2.6 Estimated generation projection by calendar year:

Year	m3	and/or	kg
2002	58.230		
2003	58.230		
2004	58.230		
2005	58.230		
2006	58.230		
Totals	291.150		

### 2.7 DOE Storage Compliance Assessment information:

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.7 DOE Storage Compliance Assessment information:**

- Assessment has been completed. Reference to most recent assessment: A&E-SEC-01-018
- Assessment has been scheduled. Scheduled date:
- Other. Explain:

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

M-20-22

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

- Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

- Yes  No

If yes, explain: n/a

**2.11 Is further characterization necessary?**

- Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

n/a

If yes, provide Tri-Party Agreement milestone number(s): n/a

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

- Yes  No

If yes, provide date assessment conducted: 9/2000

If yes, provide document number or other identification: Operating and analytical procedures at 222-S Laboratory.

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: n/a

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

- 3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**  
222-S personnel optimize use of lab ware during waste generation to minimize waste generation through proper planning during Automated Job Hazard Analysis (AJHA) and pre-jobs. 222-S personnel seek innovative technology which allows them to minimize more waste.

### 3.3 Waste minimization schedule

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m3

#### 3.3.2 Projected future waste volume reductions:

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

#### 3.3.3 Bases and assumptions used in above estimates:

222-S has no waste minimization goals for this waste stream. However, the analytical process generating this stream is continuously evaluated for waste minimization opportunities.



## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Building/room number	Number of containers/tanks
NA	

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 0  
 Date of inventory values: 12/31/01  
 Comments on waste inventory: NA

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: Waste is accumulated in SAA

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list:

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	0.400		
2003	0.800		
2004	0.600		
2005	2.000		
2006	<u>1.400</u>		
Totals	5.200		

**2.7 DOE Storage Compliance Assessment information:**

Assessment has been completed. Reference to most recent assessment

Assessment has been scheduled. Scheduled date:

Other. Explain: NA

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

None

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: Not scheduled at this time

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

Waste minimization is achieved by chemical reduction, waste segregation, and less hazardous chemical substitution.

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):**

0 m3

**3.3.2 Projected future waste volume reductions:**

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Totals 0.000

### 3.3.3 Bases and assumptions used in above estimates:

None

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 **Plant/unit name:** 3711/3711, O/C Debris      **Waste stream** Rad. Plastic/Inerts, Lead Residues
- Treatability/aggregated group identifier: MLLW-04A  
Treatability/aggregated group name: O/C hazardous debris

1.2 **Applicable profile number(s) for this waste stream:**

Profile number yet to be determined. Profile will be generated once decision is made to dispose of waste (waste still in accumulation status.)

1.3 **Waste stream source information**

1.3.1 **General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Plastics and inerts with lead residue.

1.3.2 **History of how and where the waste was/is generated:**

Waste is being accumulated in an SAA at 3711 Building in 300 Area. Waste is the result of packaging/repackaging of contaminated lead bricks originating from various facilities onsite.

1.3.3 **Source of the hazardous constituents:**

Contact with lead bricks.

1.3.4 **Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Process knowledge and analytical data.

1.3.5 **Additional notes:**

None

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

2.1 **Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                 DST                         SST  
 Other (explain):

2.1.1 **How was the waste managed prior to storage?**

NA

2.1.2 **Timeframe when waste was placed into storage:**

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

NA

**2.2 Inventory locations:**

Building/room number	Number of containers/tanks
NA	

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 0  
 Date of inventory values: 12/31/01  
 Comments on waste inventory: NA

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: NA

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list:

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	0.208		
2003	0.000		
2004	0.208		
2005	0.000		
2006	0.208		
Totals	0.624		

**2.7 DOE Storage Compliance Assessment information:**

Assessment has been completed. Reference to most recent assessment

Assessment has been scheduled. Scheduled date:

Other. Explain: NA

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

NA

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s):

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: None planned. Waste not generated at 3711.

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

None planned. Waste not generated at 3711.

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):**

0 m3

**3.3.2 Projected future waste volume reductions:**

Year      m3      and/or      kg

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

2002	0.000
2003	0.000
2004	0.000
2005	0.000
2006	0.000
Totals	0.000

### 3.3.3 Bases and assumptions used in above estimates:

NA. Waste not generated at 3711.



## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Accumulated and packaged by waste generators prior to storage at CWC.

### 2.1.2 Timeframe when waste was placed into storage:

Waste storage in CWC began in 1987 and has continued since then.

### 2.2 Inventory locations:

Building/room number	Number of containers/tanks
CWC	Approx. 3772

### 2.3 Current inventory for this stream (stored waste only, not accumulation areas)

Total volume (cubic meters): 1694.1

Date of inventory values: 12/31/01

Comments on waste inventory: Based on inventory residing at the CWC as reported in SWITS for WSRds: 334, 600, 601, 603, 605, 606, 607, 60A, 60B, 620, 621, 622, 625, 626, 627, 930 (183-H), BLD, DBR, H3D, SOC, SOE, and SOW.

### 2.4 Is storage capacity at this location potentially an issue for this waste stream?

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: No issues with CWC storage based on 20 year waste generation forecast.

### 2.5 Planned management areas for storage of this waste: Current location CWC

DST  Other area(s) list:

None

### 2.6 Estimated generation projection by calendar year:

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

### 2.7 DOE Storage Compliance Assessment information:

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

- Assessment has been completed. Reference to most recent assessment: A&E-SEC-02-001  
 Assessment has been scheduled. Scheduled date:  
 Other. Explain:

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

M-20-12

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

- Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

- Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

- Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

If necessary, waste will be re-characterized just prior to treatment for most efficient use of resources to meet current disposal requirements. Characterization will be performed as necessary to support the results of the active M-91 TPA negotiations.

If yes, provide Tri-Party Agreement milestone number(s): None

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

- Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: None planned - waste not generated at CWC

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

- 3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**  
These activities occur before the wastes are shipped to CWC. There are few opportunities to reduce waste volumes placed into storage.

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m3

**3.3.2 Projected future waste volume reductions:**

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

**3.3.3 Bases and assumptions used in above estimates:**

There is no projected generation by CWC.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 **Plant/unit name:** Groundwater Well Maintenance      **Waste stream** Well Debris  
Debris/Well Maintenance Debris
- Treatability/aggregated group identifier: MLLW-04A
- Treatability/aggregated group name: O/C hazardous debris

1.2 **Applicable profile number(s) for this waste stream:**

BHIX-505-0002-00, BHIX-923-0002-00, BHIX-647-0002-00, BHIX-627-0002-00, BHIX-100-0003-00/BHIX-120-0003-00, and BHIX-930-0002-00/BHIX-931-0002-00

1.3 **Waste stream source information**

1.3.1 **General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Miscellaneous Solid Waste (MSW) from groundwater well maintenance, sampling, analyses, drilling, and decommissioning activities includes glass, plastic, rubber, concrete, paper, and metal including pipe and pumps. This waste stream accounts for MSW generated from groundwater well activities across the site.

1.3.2 **History of how and where the waste was/is generated:**

Waste is generated during routine maintenance, sampling, drilling, and decommissioning of the groundwater wells across the Hanford Site

1.3.3 **Source of the hazardous constituents:**

Hazardous constituents were discharged to the soil during past Hanford Operations

1.3.4 **Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Analytical data and process knowledge.

1.3.5 **Additional notes:**

This waste stream accounts for groundwater well waste generated across the Hanford Site.

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

2.1 **Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)
- Tank                 DST                         SST
- Other (explain):

2.1.1 **How was the waste managed prior to storage?**

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Waste is managed in accumulation areas and 90-day storage pads prior to storage at the CWC

### 2.1.2 Timeframe when waste was placed into storage:

### 2.2 Inventory locations:

### 2.3 Current inventory for this stream (stored waste only, not accumulation areas)

Total volume (cubic meters): 0

Date of inventory values: 12/31/01

Comments on waste inventory: Waste is managed on a 90-day pad at 100-N prior to being shipped to CWC.

### 2.4 Is storage capacity at this location potentially an issue for this waste stream?

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: NA

### 2.5 Planned management areas for storage of this waste: Current location CWC

DST  Other area(s) list:

None

### 2.6 Estimated generation projection by calendar year:

Year	m3	and/or	kg
2002	5.000		
2003	5.000		
2004	5.000		
2005	5.000		
2006	5.000		
Totals	25.000		

### 2.7 DOE Storage Compliance Assessment information:

Assessment has been completed. Reference to most recent assessment

Assessment has been scheduled. Scheduled date:

Other. Explain: NA

### 2.8 Applicable Tri-Party Agreement milestones related to storage at this location:

NA

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

Characterization is performed prior to placing the waste in storage

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None.

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: See Location Specific Data Sheet for the PSTF

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

If purgewater generated during sampling is eliminated (see Location Specific Data Sheet for the Purgewater Storage and Treatment Facility), then the volume of MSW generated would be reduced. "Contained-in" determinations are being pursued with Ecology to eliminate listed waste codes where appropriate, which could result in reducing the volume of mixed waste.

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m<sup>3</sup>

**3.3.2 Projected future waste volume reductions:**

Year            m<sup>3</sup>            and/or            kg

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

2002	0.000	
2003	0.000	
2004	0.000	
2005	0.000	
2006	0.000	
Totals	0.000	

**3.3.3 Bases and assumptions used in above estimates:**

None.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

1.1 **Plant/unit name:** Hexone Storage and Treatment Facility Filter Waste/HSTF Filter Waste      **Waste stream** Hexone Filter Waste

Treatability/aggregated group identifier: MLLW-04A  
Treatability/aggregated group name: O/C hazardous debris

1.2 **Applicable profile number(s) for this waste stream:**  
505-03

#### 1.3 Waste stream source information

1.3.1 **General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Filters used to operate the nitrogen purge system supporting the Hexone Tanks

1.3.2 **History of how and where the waste was/is generated:**

The nitrogen purge system is operated to limit the amount of oxygen in the tank. This reduces the potential to create a flammable mixture in the tanks.

1.3.3 **Source of the hazardous constituents:**

The hexone tanks were used to receive and store reagent-grade hexone used in the REDOX process. When the REDOX Plant was deactivated in 1967, the final cycle-recovered hexone from the plant and waste was placed in the hexone storage tanks for storage. Tank 276-S-142 also contained kerosene and tri-butyl phosphate from a one-time campaign to separate americium, curium, and promethium from Shippingport reactor blanket fuel in 1966.

1.3.4 **Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Process knowledge and analytical data.

1.3.5 **Additional notes:**

Further information about the history of the TSD unit can be found in the Hanford Facility RCRA Permit, Part A, Form 3 Permit Application.

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

#### 2.1 Current storage method

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                 DST                                 SST  
 Other (explain):

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 2.1.1 How was the waste managed prior to storage?

NA - The waste is managed on a SAA and 90 day pad prior to being transferred to CWC for storage and disposal.

### 2.1.2 Timeframe when waste was placed into storage:

Not applicable

### 2.2 Inventory locations:

### 2.3 Current inventory for this stream (stored waste only, not accumulation areas)

Total volume (cubic meters): 0

Date of inventory values: 12/31/01

Comments on waste inventory: Waste is managed on an SAA and 90 day pad prior to being transferred to CWC for storage

### 2.4 Is storage capacity at this location potentially an issue for this waste stream?

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: None

### 2.5 Planned management areas for storage of this waste: Current location CWC

DST  Other area(s) list:

None

### 2.6 Estimated generation projection by calendar year:

Year	m3	and/or	kg
2002	1.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	1.000		

### 2.7 DOE Storage Compliance Assessment information:

Assessment has been completed. Reference to most recent assessment:

Assessment has been scheduled. Scheduled date:

Other. Explain: NA

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

NA

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

Filters are characterized prior to being placed in storage.

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

DOE is under an order to stabilize the tanks. The tank void will be filled as an interim stabilization of the unit until final closure of the TSD. The filtration system will not be used once the tank has been stabilized.

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: Waste will not be generated after April 2002.

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

Stabilization of the tank will result in eliminating this waste stream since there will be no operational need for the nitrogen purge system.

**3.3 Waste minimization schedule**

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m3

**3.3.2 Projected future waste volume reductions:**

<u>Year</u>	<u>m3</u>	<u>and/or</u>	<u>kg</u>
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	<u>0.000</u>		<u>          </u>
Totals	0.000		

**3.3.3 Bases and assumptions used in above estimates:**

None



## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

NA - Waste is not stored, it is accumulated in satellite area.

### 2.2 Inventory locations:

Building/room number	Number of containers/tanks
-------------------------	-------------------------------

### 2.3 Current inventory for this stream (stored waste only, not accumulation areas)

Total volume (cubic meters): 0  
 Date of inventory values: 12/31/01  
 Comments on waste inventory: None

### 2.4 Is storage capacity at this location potentially an issue for this waste stream?

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: None

### 2.5 Planned management areas for storage of this waste: Current location CWC

DST  Other area(s) list:

None

### 2.6 Estimated generation projection by calendar year:

Year	m3	and/or	kg
2002	0.520		
2003	0.820		
2004	0.520		
2005	0.520		
2006	0.520		
Totals	2.900		

### 2.7 DOE Storage Compliance Assessment information:

Assessment has been completed. Reference to most recent assessment

PFP Compliance  
Assessment, A&E-SEC-01-  
015

Assessment has been scheduled. Scheduled date:

Other. Explain:

### 2.8 Applicable Tri-Party Agreement milestones related to storage at this location:

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

None

- 2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

- 2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

- 2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

Will be characterized when disposed.

If yes, provide Tri-Party Agreement milestone number(s): NA

- 2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

- 3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

CY 2001

If yes, provide document number or other identification:

PFP 2001 Waste Minimization Evaluation  
for LDR Report Waste Streams, Letter#  
M2100-02-016

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA:

- 3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

PFP has a waste minimization program. A hierarchical approach to environmental management is applied to all types of pollution and waste generating activities. Pollution prevention and waste minimization, through source reduction, is the preferred option, followed by environmentally safe recycling. Treatment to reduce the quantity, toxicity, and/or mobility will be considered only when prevention or recycling is not possible or practical. Environmentally safe disposal is the last option. Segregation is applicable in all of these activities.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 3.3 Waste minimization schedule

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m<sup>3</sup>

### 3.3.2 Projected future waste volume reductions:

Year	m <sup>3</sup>	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

### 3.3.3 Bases and assumptions used in above estimates:

PFP is currently in a clean up and stabilization mode. Clean up and stabilization operations tend to increase production of waste. PFP has a waste minimization program and is currently undergoing a Site Strategic Pollution Prevention Opportunity Assessment, which will identify if there are further opportunities to reduce waste production or produce waste in a less hazardous form.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 Plant/unit name:** REDOX/202-S, Organic Debris      **Waste stream** 202-S  
**Treatability/aggregated group identifier:** MLLW-04A  
**Treatability/aggregated group name:** O/C hazardous debris

**1.2 Applicable profile number(s) for this waste stream:**

Not available at this time

**1.3 Waste stream source information**

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Discarded grease and oils used in maintenance activities on the canyon crane way.

**1.3.2 History of how and where the waste was/is generated:**

Waste was generated as a result of crane maintenance activities performed at the REDOX facility.

**1.3.3 Source of the hazardous constituents:**

Hazardous constituents resulting from equipment maintenance in the REDOX facility.

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Process knowledge.

**1.3.5 Additional notes:**

None

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

**2.1 Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                 DST                         SST  
 Other (explain): Legacy waste stored loosely on the craneway.

**2.1.1 How was the waste managed prior to storage?**

Unknown - Legacy waste

**2.1.2 Timeframe when waste was placed into storage:**

Unknown - Legacy Waste

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.2 Inventory locations:**

Building/room number	Number of containers/tanks
202-S CRANEWAY	

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 10  
 Date of inventory values: 12/31/01  
 Comments on waste inventory: None

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: None

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list:

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

**2.7 DOE Storage Compliance Assessment information:**

Assessment has been completed. Reference to most recent assessment

Assessment has been scheduled. Scheduled date:

May 2003

Other. Explain:

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

REDOX is under Long Term Surveillance and Maintenance under Chapter 8 of the TPA

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

It may be necessary to sample the waste prior to placing the waste in storage at CWC.

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: NA

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

NA

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):**

0 m<sup>3</sup>

**3.3.2 Projected future waste volume reductions:**

Year      m<sup>3</sup>      and/or      kg

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

2002	0.000	
2003	0.000	
2004	0.000	
2005	0.000	
2006	<u>0.000</u>	<u>                    </u>
Totals	0.000	

### 3.3.3 Bases and assumptions used in above estimates:

None

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 Plant/unit name:** T Plant Complex/O/C debris      **Waste stream** Storage-Organic/Carbonaceous debris
- Treatability/aggregated group identifier: MLLW-04A
- Treatability/aggregated group name: O/C hazardous debris

**1.2 Applicable profile number(s) for this waste stream:**

601, 606, 60A, and 627

**1.3 Waste stream source information**

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Organic debris generated as a result of 221-T Canyon cleanout (e.g., plastic, rubber, wood, paper, cloth, etc.), maintenance, and operational activities. In addition, this waste is generated from various onsite and offsite generators in which their waste is sent to the T Plant Complex for waste verification/storage/treatment.

**1.3.2 History of how and where the waste was/is generated:**

Waste generated as part of cleanup activities, maintenance, operations, and from various onsite locations and offsite generators. See discussion in Section 1.3.1.

**1.3.3 Source of the hazardous constituents:**

See 1.3.1 and 1.3.2

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Analytical data and process knowledge

**1.3.5 Additional notes:**

None.

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

**2.1 Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)
- Tank                 DST                         SST
- Other (explain):

**2.1.1 How was the waste managed prior to storage?**

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Generated from various onsite locations and offsite generators. Generated as part of routine maintenance, operation and cell cleanout/canyon deck cleanoff.

### 2.1.2 Timeframe when waste was placed into storage:

1991 to present

### 2.2 Inventory locations:

Building/room number	Number of containers/tanks
T PLANT COMPLEX	27

### 2.3 Current inventory for this stream (stored waste only, not accumulation areas)

Total volume (cubic meters): 19.849

Date of inventory values: 12/28/01

Comments on waste inventory: Inventory will fluctuate as T Plant Complex generates or performs treatment/verification on onsite/offsite generators.

### 2.4 Is storage capacity at this location potentially an issue for this waste stream?

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: NA

### 2.5 Planned management areas for storage of this waste: Current location CWC

DST  Other area(s) list: NA

None

### 2.6 Estimated generation projection by calendar year:

Year	m3	and/or	kg
2002	3.200		
2003	3.200		
2004	3.200		
2005	3.200		
2006	3.200		
Totals	16.000		

### 2.7 DOE Storage Compliance Assessment information:

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

- Assessment has been completed. Reference to most recent assessment: Oct. 2000, A&E-00-ASS-072
- Assessment has been scheduled. Scheduled date: Assessment currently scheduled for July 2003
- Other. Explain: NA

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

None

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

- Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

- Yes  No

If yes, explain: NA.

**2.11 Is further characterization necessary?**

- Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None.

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

- Yes  No

If yes, provide date assessment conducted:

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: See Section 3.3 for discussion on waste min.

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

Waste minimization is and will continue to be incorporated to the extent practical during canyon deck

**LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET**

cleanoff and cell cleanout. Attempts will be made to segregate low-level from mixed and from TRU.

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m3

**3.3.2 Projected future waste volume reductions:**

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

**3.3.3 Bases and assumptions used in above estimates:**

The T Plant Complex has submitted a P2/Wmin fiscal year 2002 goal to reduce, where possible, mixed waste generation. For FY 2002 to 2006, new goals will be evaluated and identified on a year-by-year basis. The T Plant Complex does not track waste reduction by treatability groups. Routine and non-routine generated waste is reported quarterly to the Waste Minimization/Pollution Prevention Group. This information is available on the following URL: <http://apsql05.rl.gov/polprev/default.asp>



**LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET**

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                     DST                                     SST  
 Other (explain):

**2.1.1 How was the waste managed prior to storage?**

Managed in SAA or 90 day accumulation areas

**2.1.2 Timeframe when waste was placed into storage:**

NA

**2.2 Inventory locations:**

Building/room number	Number of containers/tanks
NA	

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 0  
 Date of inventory values: 12/31/01  
 Comments on waste inventory: NA

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

- Yes  No

If yes, what is the total estimated storage capacity? NA  
 When is this capacity expected to be reached NA  
 Bases and assumptions used: NA

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

- DST     Other area(s) list: NA  
 None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	53.500		
2003	58.820		
2004	64.800		
2005	70.000		
2006	<u>70.000</u>		
Totals	317.120		

**2.7 DOE Storage Compliance Assessment information:**

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

- Assessment has been completed. Reference to most recent assessment: NA
- Assessment has been scheduled. Scheduled date: NA
- Other. Explain: NA

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

None

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

- Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

- Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

- Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

- Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: Unknown at this time.

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

1. Segregation of LLW from mixed waste. 2) Minimize the use of regulated products. 3) Encourage

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

the use non-regulated products. 4) Minimize the volume of regulated chemicals used in Rad. Zone.  
5)Release items by sampling and analysis.

### 3.3 Waste minimization schedule

3.3.1 Reduction achieved during calendar year (volume or mass): 0.28 m3

### 3.3.2 Projected future waste volume reductions:

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

### 3.3.3 Bases and assumptions used in above estimates:

The site goal for 2001 is 10% of forecasted volumes. At this time tank farm is construction and upgrade for feed delivery to waste treatment plant. No waste reduction is expected.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

1.1 **Plant/unit name:** WRAP/2336-W, O/C Debris      **Waste stream** Organic/Carbonaceous debris  
**Treatability/aggregated group identifier:** MLLW-04A  
**Treatability/aggregated group name:** O/C hazardous debris

1.2 **Applicable profile number(s) for this waste stream:**

WSRds 601, 626, and 627

1.3 **Waste stream source information**

1.3.1 **General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

The waste consists of hazardous debris containing primarily organic debris material (e.g., paper plastic, rubber, wood, cloth, tumbleweeds, etc.). Some inorganic debris material (e.g., building rubble, metals, asbestos, etc.) would be present in the waste; however, the debris would be considered as organic/carbonaceous waste (as defined per WAC 173-303-040) on a per-container basis. Debris that is contaminated with PCBs at concentrations greater than 50 ppm is not included in this waste.

1.3.2 **History of how and where the waste was/is generated:**

The waste was generated and put into WRAP storage by many onsite generating locations and offsite generators.

1.3.3 **Source of the hazardous constituents:**

Hazardous constituents most likely entered the waste as chemicals used during analytical processes and operating activities. See 1.3.1 and 1.3.2

1.3.4 **Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Analytical data, process knowledge.

1.3.5 **Additional notes:**

Waste at WRAP comes from various generators and generating processes around the Hanford Site due to WRAP's verification and repackaging mission.

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

2.1 **Current storage method**

Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                 DST                                 SST

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Other (explain):

### 2.1.1 How was the waste managed prior to storage?

Waste was generated and packaged at various locations around the Hanford Site or by offsite generators.

### 2.1.2 Timeframe when waste was placed into storage:

Most MLLW at WRAP is recently generated waste that is being verified as part of the waste acceptance process.

### 2.2 Inventory locations:

Building/room number	Number of containers/tanks
2336W	6

### 2.3 Current inventory for this stream (stored waste only, not accumulation areas)

Total volume (cubic meters): 1.2

Date of inventory values: 12/26/01

Comments on waste inventory: Inventory fluctuates on a daily basis to support WRAP's mission of waste verification. Inventory based on Solid Waste Information Tracking System (SWITS) and the WRAP Data Management System (DMS) printouts dated 12/26/2001.

### 2.4 Is storage capacity at this location potentially an issue for this waste stream?

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: Due to proximity to and interchange with CWC, there is no storage capacity issue at WRAP.

### 2.5 Planned management areas for storage of this waste: Current location CWC

DST  Other area(s) list:

None

### 2.6 Estimated generation projection by calendar year:

Year m3 and/or kg

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

2002	0.000
2003	0.000
2004	0.000
2005	0.000
2006	0.000
Totals	0.000

**2.7 DOE Storage Compliance Assessment information:**

- Assessment has been completed. Reference to most recent assessment DOE # A&E-DWR-01-011  
July 2001
- Assessment has been scheduled. Scheduled date:
- Other. Explain:

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

None

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

- Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

- Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

- Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

- Yes  No

If yes, provide date assessment conducted:

NA

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

If yes, provide document number or other identification: NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA:

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

This is waste generated by other facilities. However, to the extent practical, all mixed waste is segregated and packaged separately from LLW or TRU wastes. The volume of mixed waste is reduced by in-drum compaction when possible, and where it does not interfere with future treatment activities. To minimize the generation of mixed waste, generators actively seek nondangerous alternatives for the dangerous constituents in their processes. Minimization goals are set annually and tracked quarterly, and waste treatment is used to destroy the hazardous constituents, as allowable.

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m3

**3.3.2 Projected future waste volume reductions:**

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

**3.3.3 Bases and assumptions used in above estimates:**

Since subject waste has already been generated and is being directly disposed of, no additional waste minimization activities are planned.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

1.1 **Plant/unit name:** WSCF/WSCF, O/C debris      **Waste stream** Organic/Carbonaceous  
Hazardous Debris  
**Treatability/aggregated group identifier:** MLLW-04A  
**Treatability/aggregated group name:** O/C hazardous debris

1.2 **Applicable profile number(s) for this waste stream:**

WSCF-921-0001-00

1.3 **Waste stream source information**

1.3.1 **General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

TEVA resins and F001-F005 listed solid debris is generated from discarded lab materials and analytical processes in the lab. Note, TEVA resins are a product name from Eichrom Technologies.

1.3.2 **History of how and where the waste was/is generated:**

The F001-F005 listed solid debris is generated as a result of handling samples that are F-listed. This waste stream consists of debris (e.g., PPE, paper towels, and plastic pipettes) that have been contacted with F-listed constituents.

1.3.3 **Source of the hazardous constituents:**

The hazardous constituents are derived from sample contribution and or the addition of reagents and standards during the analytical process. The reagents and standards may be considered regulated constituents and contribute to the hazardous nature of the waste stream.

1.3.4 **Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Information to characterize these waste streams is obtained from process knowledge and analytical data.

1.3.5 **Additional notes:**

This waste is managed in a SAA and 90 day accumulation area. WSCF has no TSD unit.

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

2.1 **Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                 DST                         SST  
 Other (explain):

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.1.1 How was the waste managed prior to storage?**

WSCF has no TSD unit, all waste is managed in an SAA or on a 90 day pad.

**2.1.2 Timeframe when waste was placed into storage:**

NA

**2.2 Inventory locations:**

Building/room number	Number of containers/tanks
NA	NA

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 0

Date of inventory values: 12/31/01

Comments on waste inventory: NA

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: WSCF does not "store" waste, it has no TSD.

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list: n/a

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	0.208		
2003	0.208		
2004	0.208		
2005	0.208		
2006	<u>0.208</u>		
Totals	1.040		

**2.7 DOE Storage Compliance Assessment information:**

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Assessment has been completed. Reference to most recent assessment:

Assessment has been scheduled. Scheduled date:

Other. Explain: NA

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

NA

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

NA

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted: September 23, 1999

If yes, provide document number or other identification: WSCF-1999-1

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA:

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

Waste is segregated by the worker at the bench. Training has raised awareness of how to properly segregate the wastes generated from analysis procedures.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 3.3 Waste minimization schedule

3.3.1 Reduction achieved during calendar year (volume or mass): 0 kg

### 3.3.2 Projected future waste volume reductions:

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

### 3.3.3 Bases and assumptions used in above estimates:

None

## LDR REPORT TREATABILITY GROUP DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION

- 1.1 **Treatability group/aggregated stream identifier** MLLW-04B  
**Treatability group/aggregated stream name:** Non-O/C hazardous debris
- 1.2 **Description of waste (list WSRd numbers for this waste stream, as applicable):**

This treatability group is for waste that meets the definition of hazardous debris as defined in 40CFR268.2, and the waste does not contain physical and/or chemical organic/carbonaceous waste constituents in excess of 10% as defined in WAC 173-303-040. The physical characteristics include metals, inorganic debris items and lesser quantities of O/C waste components (paper, plastic, wood, etc.). Applicable WSRds may include: ASB, 640, 641, 645, 646, and 647. Debris that is regulated for PCBs by TSCA regulation is not included in this waste stream; such debris is considered organic solid waste and is reported in MLLW-03.

### 2.0 WASTE STREAM INVENTORY AND GENERATION

- 2.1 **Current total inventory for this stream (stored waste only, not accumulation areas)**  
 Total volume (cubic meters): 161.769
- 2.2 **Estimated generation projection by calendar year**

Year	m3	and/or	kg
2002	133.270		
2003	150.210		
2004	164.180		
2005	177.900		
2006	<u>177.900</u>		<u>                    </u>
Totals	803.460		

### 3.0 WASTE STREAM CHARACTERIZATION

- 3.1 **Radiological characteristics**
- 3.1.1 **Mixed waste type**       High-level     Transuranic     Low-level
- 3.1.2 **Handling (as currently packaged/stored)**     Contact-handled     Remote-handled
- 3.1.3 **Comments on radiological characteristics (e.g., more specific content, treatment concerns caused by radiation, confidence level):**
- Since this waste is a general category based on dangerous waste characteristics, the radiological characteristics are expected to vary greatly. However, there is high confidence that the waste is MLLW. The waste as packaged is considered Contact-Handled (i.e., less than or equal to 200mR/hr on outside package surface); however, the dose rate of some waste inside the package may exceed 200mR/hr.
- 3.2 **Matrix characteristics (physical content)**

## LDR REPORT TREATABILITY GROUP DATA SHEET

**3.2.1 Matrix constituent table (each constituent listed should constitute at least 1% of the total volume or mass)**

**3.2.2 Confidence level for matrix characteristic data in Section 3.2.1:**

Low  Medium  High

**3.2.3 Comments on matrix characteristics and/or confidence level:**

The matrix characteristics have been, or will be, verified prior to the waste being shipped to the receiving TSD unit. Waste verifications take place either at the generating site or at one of the centralized TSD units at Hanford.

### 3.3 Regulated contaminated characteristics

**3.3.1 Wastewater/non-wastewater under RCRA**

Wastewater  Non-wastewater  Unknown

**3.3.2 Regulated contaminant table including treatment requirements and UHCs, if applicable**

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
D001	Ignitable	Ignitable Charac.	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D002	Corrosive	Corrosive Charac.	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D003	Reactive	Reactive Cyanides	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D004	TC-Arsenic	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D005	TC-Barium	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D006	TC-Cadmium	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)

## LDR REPORT TREATABILITY GROUP DATA SHEET

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
D007	TC-Chromium	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D008	TC-Lead	Lead Charac.	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D009	TC-Mercury	Low Mercury	<260 mg/kg	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D010	TC-Selenium	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D011	TC-Silver	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D012	Endrin	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D013	Lindane	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D014	Methoxychlor	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D015	Toxaphene	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D016	2,4-D	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)

## LDR REPORT TREATABILITY GROUP DATA SHEET

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
D017	2,4,5-TP (Silvex)	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D018	Benzene	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D019	Carbon Tetrachloride	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D020	Chlordane	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D021	Chlorobenzene	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D022	Chloroform	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D023	o-Cresol	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D024	m-Cresol	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D025	p-Cresol	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D026	Cresol	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)

## LDR REPORT TREATABILITY GROUP DATA SHEET

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
D027	p-Dichlorobenzene	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D028	1,2-Dichloroethane	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D029	1,1-Dichloroethylene	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D030	2,4-Dinitrotoluene	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D031	Heptachlor	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D032	Hexachlorobenzene	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D033	Hexachlorobutadiene	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D034	Hexachloroethane	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D035	Methyl Ethyl Ketone	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D036	Nitrobenzene	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)

## LDR REPORT TREATABILITY GROUP DATA SHEET

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
D037	Pentachlorophenol	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D038	Pyridine	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D039	Tetrachloroethylene	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D040	Trichloroethylene	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D041	2,4,5-Trichlorophenol	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D042	2,4,6-Trichlorophenol	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D043	Vinyl Chloride	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
F001	1,1,1-Trichloroethane	Spent Solvent	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
F002	Methylene Chloride	Spent Solvent	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
F003	Acetone & Hexone	Spent Solvent	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)

## LDR REPORT TREATABILITY GROUP DATA SHEET

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
F004	o-Cresol & p-Cresol	Spent Solvent	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
F005	Methyl Ethyl ketone	Spent Solvent	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
P029	Copper Cyanide	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
P030	Cyanides	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
P098	Potassium Cyanide	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
P102	Propargyl Alcohol	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
P106	Sodium Cyanide	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
P120	Vanadium Pentoxide	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
U002	Acetone	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
U006	Acetyl Chloride	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)

## LDR REPORT TREATABILITY GROUP DATA SHEET

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
U031	n-Butyl Alcohol	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
U043	Vinyl Chloride	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
U057	Cyclohexanone	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
U080	Methylene Chloride	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
U123	Formic Acid	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
U151	Mercury	Low Mercury	<260 mg/kg Hg	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
U159	Methyl Ethyl Ketone	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
U161	Methyl Isobutyl Ketone	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
U196	Pyridine	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
U220	Toluene	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)

## LDR REPORT TREATABILITY GROUP DATA SHEET

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
U226	1,1,1-Trichlorethane	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
U239	Xylenes	NA	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
WP01	Persistent, EHW	NA	***	***	None (1)
WP02	Persistent, DW	NA	***	***	None
WSC2	Solid Corrosive	NA	***	***	Remove solid-acid charac.
WT01	Toxic, EHW	NA	***	***	None (1)
WT02	Toxic, DW	NA	***	***	None

\*LDR subcategory marked NA if no existing subcategory adequately describes this waste, or if there are no defined subcategories for the waste number (40 CFR 268.40).

\*\*If the waste is not consistent in concentration or the concentration is unknown, this may not apply. Describe in Section 3.3.6.

\*\*\*The concentration varies and is based on process knowledge and/or analytical data.

(1) Mixed extremely hazardous wastes may be land-disposed in Washington State in DOE facilities in accordance with RCW 70.105.050 (2)

(2) The combination of waste codes varies on a per-package basis in accordance with WAC 173-303-070(3) and (5).

UHCs identification not required when using the alternative treatment standards for hazardous debris.

### 3.3.3 List any waste numbers from Section 3.3.2 for which the stream already meets established LDR treatment standards

List:

No LDR treatment required (e.g., TRUM waste destined for WIPP, exclusion, etc.)

None (i.e., all constituents/waste numbers of this waste stream still require treatment)

### 3.3.4 Does this waste stream contain PCBs?

Yes  No  Unknown If no or unknown, skip to Section 3.3.5

## LDR REPORT TREATABILITY GROUP DATA SHEET

3.3.4.1 Is waste stream subject to TSCA regulations for PCBs?

Yes  No  Unknown

3.3.4.2 Indicate the PCB concentration range (ppm)

<50  ≥ 50  Unknown

3.3.5 What is the confidence level for the regulated contaminant characteristic data?

Low  Medium  High

3.3.6 Comments on regulated contaminant characteristics and/or confidence level:

The waste characterization information is reviewed on a per-package basis prior to the waste being shipped to an onsite or offsite TSD. Waste that has been residing in storage for a long time may require more extensive verification work to make it acceptable for treatment and/or disposal. If during the verification activities, it is determined that some of the waste does not meet the MLLW-04B waste stream description, then it will be reassigned into the appropriate waste stream (e.g., MLLW-02, -03, etc.), and the correct WSRd will be assigned to it.

### 4.0 WASTE STREAM TREATMENT

4.1 Is this stream currently being treated?  Yes  No

If yes, provide details: Hanford has been actively sending a portion of this waste treatability group to the Allied Technology Group (ATG) facility located in Richland, WA for treatment. The treatment utilized by ATG is macroencapsulation. The treated waste is being returned back to Hanford and disposed of into the mixed waste trenches located in 200-W Area.

4.2 Planned treatment

Check the appropriate box indicating future plans for treating this waste stream to meet applicable regulations, including LDR treatment standards.

No treatment required (skip to Section 5.0)  Treating or plan to treat off site  
 Treating or plan to treat on site  Treatment options still being assessed

4.3 Planned treatment method, facility, extent of treatment capacity available:

The treatment method being used to treat this waste group is macroencapsulation per 40 CFR 268.45. The waste is mainly being sent offsite to a commercial facility for treatment. There is additional commercial treatment capacity available in the nation which can be accessed via contracts. On site treatment may also be performed.

4.4 Treatment schedule information:

Treatment of this waste has been ongoing for several years. Additional treatment will be performed as necessary to support the results of the active M-91 TPA negotiations.

4.5 Applicable Tri-Party Agreement milestone numbers (including permitting):

None.

**LDR REPORT TREATABILITY GROUP DATA SHEET****4.6 Proposed new Tri-Party Agreement treatment milestones:**

An M-91 TPA change request was submitted to Ecology on 2/13/02.

**4.7 If treating or planning to treat on site, was or will waste minimization be addressed in developing and/or selecting the treatment method?**

Yes  No  Unknown

If yes, describe: To the extent practical, all mixed waste is segregated and packaged separately from LLW or TRU wastes. The volume of mixed waste is reduced by in-drum compaction when possible, and where it does not interfere with future treatment activities. To minimize the generation of mixed waste, generators actively seek nondangerous alternatives for the dangerous constituents in their processes. Minimization goals are set annually and tracked quarterly, and waste treatment is used to destroy the hazardous constituents, as allowable.

**4.8 List or describe treatability equivalency petitions, rulemaking petitions, and case-by-case exemptions needed for treatment:**

None

**4.9 Key assumptions: None****5.0 WASTE STREAM DISPOSAL****After treatment, how will the waste stream be disposed of (include description, locations, milestone numbers, variances required, etc., as applicable)?**

Subject waste is being disposed of in mixed waste trenches located on the Hanford Site.

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## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

1.1 **Plant/unit name:** CWC/CWC, Non-O/C Debris      **Waste stream** Inorganic Debris  
    **Treatability/aggregated group identifier:** MLLW-04B  
    **Treatability/aggregated group name:** Non-O/C hazardous debris

1.2 **Applicable profile number(s) for this waste stream:**

NA

1.3 **Waste stream source information**

1.3.1 **General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

The waste consists of hazardous debris containing primarily inorganic debris material (e.g., building rubble, metals, asbestos, etc.) that is contaminated with hazardous constituents.

1.3.2 **History of how and where the waste was/is generated:**

The waste was generated at many onsite locations and also by offsite generators.

1.3.3 **Source of the hazardous constituents:**

See 1.3.1 and 1.3.2 Waste is debris contaminated with hazardous materials such as F, P, and U listed constituents, RCRA metals, corrosives, etc.

1.3.4 **Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Analytical data and process knowledge

1.3.5 **Additional notes:**

None

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

2.1 **Current storage method**

Container (pad)     Container (covered)     Container (retrievably buried)

Tank                     DST                     SST

Other (explain):

2.1.1 **How was the waste managed prior to storage?**

Accumulated and packaged by waste generators prior to storage at CWC.

2.1.2 **Timeframe when waste was placed into storage:**

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Waste storage in CWC began in 1987 and it has continued since then.

### 2.2 Inventory locations:

Building/room number	Number of containers/tanks
CWC	Approx. 126

### 2.3 Current inventory for this stream (stored waste only, not accumulation areas)

Total volume (cubic meters): 161.09

Date of inventory values: 12/31/01

Comments on waste inventory: Based on inventory residing at the CWC as reported in SWITS for WSRds: 640, 641, 645, 646, 647, 647, and ASB.

### 2.4 Is storage capacity at this location potentially an issue for this waste stream?

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: No issues with CWC storage based on 20 year waste generation forecast.

### 2.5 Planned management areas for storage of this waste: Current location CWC

DST  Other area(s) list:

None

### 2.6 Estimated generation projection by calendar year:

Year	m3	and/or	kg
2002	1.270		
2003	1.030		
2004	1.280		
2005	1.300		
2006	1.300		
Totals	6.180		

### 2.7 DOE Storage Compliance Assessment information:

Assessment has been completed. Reference to most recent assessment

A&E-SEC-02-001

Assessment has been scheduled. Scheduled date:

Other. Explain:

### 2.8 Applicable Tri-Party Agreement milestones related to storage at this location:

M-20-12

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

- 2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**  
 Yes  No  
If yes, summarize releases and quantities and provide date:  
NA
- 2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**  
 Yes  No  
If yes, explain: NA
- 2.11 Is further characterization necessary?**  
 Yes  No  Unknown at this time  
If yes, provide details and schedule (also see treatment/characterization plan volume for further information):  
If necessary, waste will be re-characterized just prior to treatment for most efficient use of resources to meet current disposal requirements. Characterization will be performed as necessary to support the results of the active M-91 TPA negotiations.  
If yes, provide Tri-Party Agreement milestone number(s): None
- 2.12 Other key assumptions related to storage, inventory, and generation information:**  
The waste generation projections are for waste expected to be received from offsite generators.

### 3.0 WASTE MINIMIZATION

- 3.1 Has a waste minimization assessment been completed for this stream?**  
 Yes  No  
If yes, provide date assessment conducted: NA  
If yes, provide document number or other identification: NA  
If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: None planned - waste not generated at CWC
- 3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**  
These activities occur before the wastes are shipped to CWC. There are few opportunities to reduce waste volumes placed into storage.
- 3.3 Waste minimization schedule**
- 3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m<sup>3</sup>
- 3.3.2 Projected future waste volume reductions:**
- | Year | m <sup>3</sup> | and/or | kg |
|------|----------------|--------|----|
|------|----------------|--------|----|

### LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

2002	0.000	
2003	0.000	
2004	0.000	
2005	0.000	
2006	0.000	
Totals	0.000	

#### 3.3.3 Bases and assumptions used in above estimates:

There is no projected generation by CWC.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

**1.1 Plant/unit name:** PFP/PFP, Non-O/C Debris      **Waste stream** Operations and D&D Waste  
**Treatability/aggregated group identifier:** MLLW-04B  
**Treatability/aggregated group name:** Non-O/C hazardous debris

**1.2 Applicable profile number(s) for this waste stream:**

Not yet developed

**1.3 Waste stream source information**

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Operations and D&D waste

**1.3.2 History of how and where the waste was/is generated:**

Waste generated from routine facility operations and D&D activities.

**1.3.3 Source of the hazardous constituents:**

Materials/debris contaminated with hazardous constituents from operations/construction/D&D activities.

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Analytical data, process knowledge

**1.3.5 Additional notes:**

None

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

**2.1 Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                 DST                         SST  
 Other (explain):

**2.1.1 How was the waste managed prior to storage?**

NA -- waste is placed directly into satellite accumulation area upon generation.

**2.1.2 Timeframe when waste was placed into storage:**

NA -- waste is not stored, it is accumulated in satellite area,

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.2 Inventory locations:**

Building/room number	Number of containers/tanks
PFP	

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 0  
 Date of inventory values: 12/31/01  
 Comments on waste inventory: None

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: None

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list:

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	0.000		
2003	4.160		
2004	4.160		
2005	4.160		
2006	4.160		
Totals	16.640		

**2.7 DOE Storage Compliance Assessment information:**

Assessment has been completed. Reference to most recent assessment

PFP Compliance  
Assessment, A&E-SEC-01-  
015

Assessment has been scheduled. Scheduled date:

Other. Explain:

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

None

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

Will be characterized when disposed of.

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA:

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

PPF has a waste minimization program. A hierarchical approach to environmental management is applied to all types of pollution and waste generating activities. Pollution prevention and waste minimization, through source reduction, is the preferred option, followed by environmentally safe recycling. Treatment to reduce the quantity, toxicity, and/or mobility will be considered only when prevention or recycling is not possible or practical. Environmentally safe disposal is the last option. Segregation is applicable in all of these activities.

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):**

0 m3

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 3.3.2 Projected future waste volume reductions:

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

### 3.3.3 Bases and assumptions used in above estimates:

PFP is currently in a clean up and stabilization mode. Clean up and stabilization operations tend to increase production of waste. PFP has a waste minimization program and is currently undergoing a Site Strategic Pollution Prevention Opportunity Assessment, which will identify if there are further opportunities to reduce waste production or produce waste in a less hazardous form.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

**1.1 Plant/unit name:** Tank Farm Facilities/Inorg. Debris, **Waste stream** Inorganic Debris  
DST and SST Containerized Waste

Treatability/aggregated group identifier: MLLW-04B

Treatability/aggregated group name: Non-O/C hazardous debris

**1.2 Applicable profile number(s) for this waste stream:**

647-01

**1.3 Waste stream source information**

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Inorganic debris containing regulated material products (paint and paint related products) and/or equipment and tools. The waste may also include a small amount of organic hazardous debris such as paper, plastic, and rubber.

**1.3.2 History of how and where the waste was/is generated:**

Waste is generated at the tank farms and associated facilities. It can be generated by sampling, maintenance, surveillance, clean up and upgrades/constructions, tank stabilization, tank waste transfer and equipment removal.

**1.3.3 Source of the hazardous constituents:**

Debris contaminated with tank waste is considered mixed waste when it contains (as described by RCRA "contained-in policy" provisions) tank waste. Debris may also be contaminated with regulated chemical products.

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

MSDS, process knowledge and analytical data. The document "Tank Farm Solid Waste Characterization Guide with Sampling and Analysis Plan Attachment", HNF-SD-WM-PLN-119, REV. 01, describes the basis for historical, process knowledge and sampling and analysis plan.

**1.3.5 Additional notes:**

None.

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

**2.1 Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                 DST                                 SST

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Other (explain): NA

**2.1.1 How was the waste managed prior to storage?**

Managed in SAA and 90 day accumulation areas.

**2.1.2 Timeframe when waste was placed into storage:**

NA

**2.2 Inventory locations:**

Building/room number	Number of containers/tanks
NA	

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 0

Date of inventory values: 12/31/01

Comments on waste inventory: NA

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: Waste is accumulated and stored in SAA and/or 90 Day storage areas.

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list: NA

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	132.000		
2003	145.020		
2004	158.740		
2005	172.440		
2006	172.440		
Totals	780.640		

**2.7 DOE Storage Compliance Assessment information:**

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

- Assessment has been completed. Reference to most recent assessment: NA
- Assessment has been scheduled. Scheduled date: NA
- Other. Explain: NA

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

None

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

- Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

- Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

- Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): None

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

- Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: Unknown at this time.

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

1) Segregation of LLW from MW. 2) Minimize the use of regulated products. 3) Encourage the use of non-regulated products. 4) Minimize the use of regulated products in radiological zone.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 3.3 Waste minimization schedule

3.3.1 Reduction achieved during calendar year (volume or mass): 0 m3

### 3.3.2 Projected future waste volume reductions:

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

### 3.3.3 Bases and assumptions used in above estimates:

Tank farms is in construction and upgrade mode to be ready for feed delivery to the waste treatment plant. No waste reduction is expected at this time.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 **Plant/unit name:** WRAP/2336-W, Inorg. Debris      **Waste stream** Inorganic Debris  
    **Treatability/aggregated group identifier:** MLLW-04B  
    **Treatability/aggregated group name:** Non-O/C hazardous debris

1.2 **Applicable profile number(s) for this waste stream:**

1.3 **Waste stream source information**

1.3.1 **General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

This waste stream consists of many different inorganic solids including particulates, absorbed liquids, sledges, labpacks, paint waste, salt waste, etc. This waste does not include hazardous debris other than incidental debris material commingled with the non-debris.

1.3.2 **History of how and where the waste was/is generated:**

This waste originated from laboratory processes.

1.3.3 **Source of the hazardous constituents:**

Hazardous constituents most likely entered the waste as chemicals used during analytical processes. See 1.3.1 and 1.3.2

1.3.4 **Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Analytical data, process knowledge.

1.3.5 **Additional notes:**

Waste from WRAP comes from various generators and generating processes around the Hanford Site due to WRAP's verification and repacking mission.

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

2.1 **Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                 DST                         SST  
 Other (explain):

2.1.1 **How was the waste managed prior to storage?**

This waste was generated at LMHC.

2.1.2 **Timeframe when waste was placed into storage:**

**LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET**

Most MLLW at WRAP is recently generated waste that is being verified as part of the LLW waste acceptance process.

**2.2 Inventory locations:**

Building/room number	Number of containers/tanks
2336W	1

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 0.679

Date of inventory values: 12/26/01

Comments on waste inventory: Inventory fluctuates on a daily basis to support WRAP's mission of waste verification. Inventory based on Drum Management System (DMS) printout dated 12/26/2001.

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: Due to proximity to and interchange with CWC, there is no storage capacity issue at WRAP.

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list:

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

**2.7 DOE Storage Compliance Assessment information:**

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Assessment has been completed. Reference to most recent assessment DOE # A&E-DWR-01-011  
July 2001

Assessment has been scheduled. Scheduled date:

Other. Explain:

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

None

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA:

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

To the extent practical, all mixed waste is segregated and packaged separately from LLW or TRU

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

wastes. The volume of mixed waste is reduced by in-drum compaction when possible, and where it does not interfere with future treatment activities. To minimize the generation of mixed waste, generators actively seek nondangerous alternatives for the dangerous constituents in their processes. Minimization goals are set annually and tracked quarterly, and waste treatment is used to destroy the hazardous constituents, as allowable.

### 3.3 Waste minimization schedule

3.3.1 Reduction achieved during calendar year (volume or mass): 0 m3

#### 3.3.2 Projected future waste volume reductions:

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

#### 3.3.3 Bases and assumptions used in above estimates:

Since subject waste has already been generated and is being directly disposed of, no additional waste minimization activities are planned.

## LDR REPORT TREATABILITY GROUP DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION

1.1 **Treatability group/aggregated stream identifier** MLLW-05  
**Treatability group/aggregated stream name:** Elemental lead

1.2 **Description of waste (list WSRd numbers for this waste stream, as applicable):**  
 This treatability group is for waste that is determined to meet the "Radioactive Lead Solids Subcategory" as described in 40 CFR 268.40. Applicable WSRds for this treatability group are: EPB, 800, 801, 803. This treatability group consists of many different forms of radioactive lead solids including bricks, sheets, shot-filled blankets, lead-lined debris items where the lead comprises more than 50% of the waste matrix. The waste was and is generated by many onsite generating organizations and offsite generators.

### 2.0 WASTE STREAM INVENTORY AND GENERATION

2.1 **Current total inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 445.286

2.2 **Estimated generation projection by calendar year**

Year	m <sup>3</sup>	and/or	kg
2002	2.010		
2003	22.960		
2004	21.830		
2005	17.030		
2006	<u>16.330</u>		
Totals	80.160		

### 3.0 WASTE STREAM CHARACTERIZATION

3.1 **Radiological characteristics**

3.1.1 **Mixed waste type**       High-level     Transuranic     Low-level

3.1.2 **Handling (as currently packaged/stored)**     Contact-handled     Remote-handled

3.1.3 **Comments on radiological characteristics (e.g., more specific content, treatment concerns caused by radiation, confidence level):**

Since this waste is a general category based on dangerous waste physical characteristics, the radiological characteristics are expected to vary greatly. However, there is high confidence that the waste is MLLW. The waste as packaged is considered Contact-Handled (i.e., less than or equal to 200mR/hr on outside package surface); however, the dose rate of some waste inside the package may exceed 200mR/hr.

3.2 **Matrix characteristics (physical content)**

## LDR REPORT TREATABILITY GROUP DATA SHEET

**3.2.1 Matrix constituent table (each constituent listed should constitute at least 1% of the total volume or mass)**

**3.2.2 Confidence level for matrix characteristic data in Section 3.2.1:**

Low  Medium  High

**3.2.3 Comments on matrix characteristics and/or confidence level:**

Waste received under the Waste Specification System (WSS) has a high confidence level that the physical matrix characteristics meet the waste stream description. Waste received prior to the WSS being implemented has a low to medium confidence level. For this older waste, the matrix characterization will be verified prior to sending it to treatment and disposal. If during the verification process, it is determined that some of the waste does not meet the MLLW-05 waste stream description, it will be reassigned into the appropriate waste stream (e.g., MLLW-04A or -04B).

### 3.3 Regulated contaminated characteristics

**3.3.1 Wastewater/non-wastewater under RCRA**

Wastewater  Non-wastewater  Unknown

**3.3.2 Regulated contaminant table including treatment requirements and UHCs, if applicable**

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
D001	Ignitable	Ignitable Charac.	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)
D002	Corrosive	Corrosive Charac.	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)
D004	TC-Arsenic	NA	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)
D005	TC-Barium	NA	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)
D006	TC-Cadmium	Cadmium Charac.	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)

## LDR REPORT TREATABILITY GROUP DATA SHEET

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
D007	TC-Chromium	NA	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)
D008	TC-Lead	Rad. Lead Solids	***	***	MACRO (40 CFR 268.40)
D009	TC-Mercury	Low Mercury	<260 mg/kg	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)
D010	TC-Selenium	NA	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)
D011	TC-Silver	NA	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)
D018	Benzene	NA	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)
D019	Carbon Tetrachloride	NA	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)
D022	Chloroform	NA	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)
D023	o-Cresol	NA	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)
D028	1,2-Dichloroethane	NA	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)
D029	1,1-Dichlorethylene	NA	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)

**LDR REPORT TREATABILITY GROUP DATA SHEET**

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
D030	2,4-Dinitrotoluene	NA	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)
D033	Hexachlorobutadiene	NA	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)
D035	Methyl Ethyl Ketone	NA	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)
D038	Pyridine	NA	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)
D039	Tetrachloroethylene	NA	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)
D040	Trichloroethylene	NA	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)
D043	Vinyl Chloride	NA	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)
F001	1,1,1-Trichloroethane	Spent Solvent	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)
F002	Methylene Chloride	Spent Solvent	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)
F003	Acetone & Hexone	Spent Solvent	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)

## LDR REPORT TREATABILITY GROUP DATA SHEET

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
F004	o-Cresol & p-Cresol	Spent Solvent	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)
F005	Methyl Ethyl Ketone	Spent Solvent	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)
P012	Arsenic Trioxide	NA	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)
U044	Chloroform	NA	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)
U203	Safrole	NA	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)
U228	Trichloroethylene	NA	***	***	Alternative Treatment Stds. for Haz. Debris (40 CFR 268.45)
WP01	Persistent, DW	NA	***	***	None (1)
WP02	Persistent, DW	NA	***	***	None
WSC2	Solid Corrosive Acid	NA	***	***	Remove Solid Acid Charac.
WT01	Toxic, EHW	NA	***	***	None (1)
WT02	Toxic, DW	NA	***	***	None

## LDR REPORT TREATABILITY GROUP DATA SHEET

\*LDR subcategory marked NA if no existing subcategory adequately describes this waste, or if there are no defined subcategories for the waste number (40 CFR 268.40).

\*\*If the waste is not consistent in concentration or the concentration is unknown, this may not apply. Describe in Section 3.3.6.

\*\*\* The concentration varies and is based on process knowledge and/or analytical data.

(1) Mixed extremely hazardous wastes may be land-disposed in Washington State in DOE facilities in accordance with RCW 70.105.050 (2)

UHCs Identification not required for D008 radioactive lead solids and hazardous debris when using alternative treatment standards for hazardous debris.

### 3.3.3 List any waste numbers from Section 3.3.2 for which the stream already meets established LDR treatment standards

List:

No LDR treatment required (e.g., TRUM waste destined for WIPP, exclusion, etc.)

None (i.e., all constituents/waste numbers of this waste stream still require treatment)

### 3.3.4 Does this waste stream contain PCBs?

Yes  No  Unknown If no or unknown, skip to Section 3.3.5

#### 3.3.4.1 Is waste stream subject to TSCA regulations for PCBs?

Yes  No  Unknown

#### 3.3.4.2 Indicate the PCB concentration range (ppm)

<50  ≥ 50  Unknown

### 3.3.5 What is the confidence level for the regulated contaminant characteristic data?

Low  Medium  High

### 3.3.6 Comments on regulated contaminant characteristics and/or confidence level:

Waste received under the WSS has a high confidence level that the regulated contaminant characteristics meet the prescribed treatability group. Waste received prior to the WSS implementation has a low to medium confidence level and will require some characterization verifications prior to sending it to treatment and disposal. If, during the verification process, it is determined that some of the waste does not meet the MLLW-05 Treatability Group, then it will be reassigned into the appropriate waste stream (e.g., MLLW-04A or -04B).

## 4.0 WASTE STREAM TREATMENT

## LDR REPORT TREATABILITY GROUP DATA SHEET

- 4.1 **Is this stream currently being treated?**  Yes  No  
If yes, provide details: NA
- 4.2 **Planned treatment**  
Check the appropriate box indicating future plans for treating this waste stream to meet applicable regulations, including LDR treatment standards.
- No treatment required (skip to Section 5.0)  Treating or plan to treat off site  
 Treating or plan to treat on site  Treatment options still being assessed
- 4.3 **Planned treatment method, facility, extent of treatment capacity available:**  
RCRA specifies that this waste type (D008) be treated via macroencapsulation without using a sealed container. Treatment will be performed by means of onsite and offsite commercial treatment contracts, and/or by onsite treatment units.
- 4.4 **Treatment schedule information:**  
Treatment will be performed as necessary to support the results of the active M-91 TPA negotiations.
- 4.5 **Applicable Tri-Party Agreement milestone numbers (including permitting):**  
None.
- 4.6 **Proposed new Tri-Party Agreement treatment milestones:**  
An M-91 TPA change request was submitted to Ecology on 2/13/02.
- 4.7 **If treating or planning to treat on site, was or will waste minimization be addressed in developing and/or selecting the treatment method?**  
 Yes  No  Unknown  
If yes, describe: When feasible and/or practical, decontamination and segregation will be performed on this waste to reduce the ultimate disposal volumes.
- 4.8 **List or describe treatability equivalency petitions, rulemaking petitions, and case-by-case exemptions needed for treatment:**  
None
- 4.9 **Key assumptions:** In order to dispose of non-F001-F005 listed waste, the 200 Area ETF delisting petition must be modified in order to manage the leachate generated from the mixed waste trenches.

### 5.0 WASTE STREAM DISPOSAL

**After treatment, how will the waste stream be disposed of (include description, locations, milestone numbers, variances required, etc., as applicable)?**

Subject waste ultimately will be disposed of in mixed waste trenches located on the Hanford Site.

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## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 Plant/unit name:** 222-S/222-S Elemental Lead,      **Waste stream** 222-S Elemental Lead  
Dangerous Mixed Waste Storage  
Area (DMWSA)
- Treatability/aggregated group identifier:      MLLW-05
- Treatability/aggregated group name:      Elemental lead

**1.2 Applicable profile number(s) for this waste stream:**

None

**1.3 Waste stream source information**

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Radioactive Lead Solids subcategory waste is generated during general laboratory operations (e.g. hot cell, analytical procedures, and 219-S operations). Lead solids are bricks, shot, and manipulators that are elemental lead and not debris.

**1.3.2 History of how and where the waste was/is generated:**

Waste is generated during laboratory operations (e.g. dangerous mixed waste storage area (DMWSA), hot cell, analytical hoods, and 219-S operations). Normally the lead is used as shielding from radiation during Laboratory activities in high radiological contaminated areas.

**1.3.3 Source of the hazardous constituents:**

The source of Hazardous Constituents is Hanford generating facilities (e.g. Tank Farms, K-Basins, PFP, ETF, ERDF, etc.).

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Process knowledge.

**1.3.5 Additional notes:**

None

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

**2.1 Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)
- Tank                 DST                         SST
- Other (explain):

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 2.1.1 How was the waste managed prior to storage?

Waste was managed per the Hanford Facility Dangerous Waste Permit Application, 222-S Laboratory Complex (DOE/RL-91-27 Revision 1)

### 2.1.2 Timeframe when waste was placed into storage:

06/1999 - 12/31/2001

### 2.2 Inventory locations:

Building/room number	Number of containers/tanks
HS-0083A	2

### 2.3 Current inventory for this stream (stored waste only, not accumulation areas)

Total volume (cubic meters): 0.416

Date of inventory values: 1/14/02

Comments on waste inventory: This was based on the Solid Waste Information and Tracking System (SWITS) specific to 222S Laboratory.

### 2.4 Is storage capacity at this location potentially an issue for this waste stream?

Yes  No

If yes, what is the total estimated storage capacity? n/a

When is this capacity expected to be reached n/a

Bases and assumptions used: n/a

### 2.5 Planned management areas for storage of this waste: Current location CWC

DST  Other area(s) list:

None

### 2.6 Estimated generation projection by calendar year:

Year	m3	and/or	kg
2002	0.310		
2003	0.310		
2004	0.310		
2005	0.310		
2006	0.310		
Totals	1.550		

### 2.7 DOE Storage Compliance Assessment information:

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

- Assessment has been completed. Reference to most recent assessment: A&E-SEC-01-018  
 Assessment has been scheduled. Scheduled date:  
 Other. Explain:

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**  
M-20-22

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**  
 Yes  No

If yes, summarize releases and quantities and provide date:  
n/a

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**  
 Yes  No

If yes, explain: n/a

**2.11 Is further characterization necessary?**  
 Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):  
n/a

If yes, provide Tri-Party Agreement milestone number(s): n/a

**2.12 Other key assumptions related to storage, inventory, and generation information:**  
None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**  
 Yes  No

If yes, provide date assessment conducted: 9/2000

If yes, provide document number or other identification: Operating and analytical procedures at 222S Laboratory.

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA:

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**  
222-S personnel minimize waste through proper planning during Automated Job Hazard Analysis

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

(AJHA) and pre-jobs and optimizing use of lab ware. 222-S personnel seek innovative technology that will allow them to minimize waste.

### 3.3 Waste minimization schedule

3.3.1 Reduction achieved during calendar year (volume or mass): 7.3 m<sup>3</sup>

### 3.3.2 Projected future waste volume reductions:

Year	m <sup>3</sup>	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

### 3.3.3 Bases and assumptions used in above estimates:

DOE/RL-2000-79- "Pollution Prevention Accomplishments" document reported waste reduction for CY 2000. The waste reduction volume reported above in Section 3.3.1 is a total waste minimization volume for similar waste streams across the 222-S Laboratory; this waste stream may be a portion of what was reported. 222-S has no waste minimization goals for this waste stream; therefore, no projected future waste volume reductions are reported above in Section 3.3.2. However, the analytical process generating this waste stream is continuously evaluated for waste minimization opportunities.



## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Building/room number	Number of containers/tanks
NA	

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 0  
 Date of inventory values: 12/31/01  
 Comments on waste inventory: NA

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: Waste is being accumulated in SAA

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list: NA

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	0.000		
2003	19.200		
2004	19.200		
2005	12.800		
2006	12.800		
Totals	64.000		

**2.7 DOE Storage Compliance Assessment information:**

Assessment has been completed. Reference to most recent assessment

Assessment has been scheduled. Scheduled date:

Other. Explain: NA

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

None

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: Assessment not scheduled at this time

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

Lead items will be reused, excessed or recycled. Purchasing of new lead materials will be limited.

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):**

0 m3

**3.3.2 Projected future waste volume reductions:**

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 3.3.3 Bases and assumptions used in above estimates:

None



## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Building/room number	Number of containers/tanks
NA	

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 0  
 Date of inventory values: 12/31/01  
 Comments on waste inventory: NA

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: Waste is being accumulated in SAA

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list: NA

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	0.000		
2003	1.500		
2004	0.000		
2005	1.500		
2006	0.000		
Totals	3.000		

**2.7 DOE Storage Compliance Assessment information:**

Assessment has been completed. Reference to most recent assessment

Assessment has been scheduled. Scheduled date:

Other. Explain: NA

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

None

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: Not scheduled at this time

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

Excess of unused and uncontaminated lead. Purchasing of new lead items will be limited.

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):**

0 m3

**3.3.2 Projected future waste volume reductions:**

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 3.3.3 Bases and assumptions used in above estimates:

None

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

1.1 **Plant/unit name:** CWC/CWC, Pb, elemental      **Waste stream** Elemental Lead  
    **Treatability/aggregated group identifier:** MLLW-05  
    **Treatability/aggregated group name:** Elemental lead

1.2 **Applicable profile number(s) for this waste stream:**

NA

1.3 **Waste stream source information**

1.3.1 **General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

The waste consists of elemental lead solids (bricks, shot, gloves, shielding, etc.). The lead may be commingled with heterogeneous debris or the lead may be a component of a debris article.

1.3.2 **History of how and where the waste was/is generated:**

The waste was generated at many onsite locations and also by offsite generators.

1.3.3 **Source of the hazardous constituents:**

See 1.3.1 and 1.3.2

1.3.4 **Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Analytical data and process knowledge

1.3.5 **Additional notes:**

None

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

2.1 **Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                 DST                         SST  
 Other (explain):

2.1.1 **How was the waste managed prior to storage?**

Accumulated and packaged by waste generators prior to storage at CWC.

2.1.2 **Timeframe when waste was placed into storage:**

Waste storage began at CWC in 1987 and it has continued since then.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.2 Inventory locations:**

Building/room number	Number of containers/tanks
CWC	Approx. 1130

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 444.47  
 Date of inventory values: 12/31/01  
 Comments on waste inventory: Based on inventory residing at the CWC as reported in SWITS for WSRds EPB, 800, 801, and 803.

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: No issues with CWC storage based on 20 year waste generation forecast.

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list:

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

**2.7 DOE Storage Compliance Assessment information:**

Assessment has been completed. Reference to most recent assessment

A&E-SEC-02-001

Assessment has been scheduled. Scheduled date:

Other. Explain:

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

M-20-12

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

Pre- waste steam specification waste will be re-characterized just prior to treatment for most efficient use of resources to meet current disposal requirements. Characterization will be performed as necessary to support the results of the active M-91 TPA negotiations.

If yes, provide Tri-Party Agreement milestone number(s): None

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: None planned - waste not generated at CWC

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

These activities occur before the wastes are shipped to CWC. There are few opportunities to reduce waste volumes placed into storage.

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m3

**3.3.2 Projected future waste volume reductions:**

Year            m3            and/or            kg

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

2002	0.000	
2003	0.000	
2004	0.000	
2005	0.000	
2006	0.000	
Totals	0.000	

### 3.3.3 Bases and assumptions used in above estimates:

There is no projected generation by CWC.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

**1.1 Plant/unit name:** PFP/234-5Z, Pb, elemental      **Waste stream** Elemental Lead  
**Treatability/aggregated group identifier:** MLLW-05  
**Treatability/aggregated group name:** Elemental lead

**1.2 Applicable profile number(s) for this waste stream:**

BWHC-800-0001-00

**1.3 Waste stream source information**

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Elemental lead previously used for shielding

**1.3.2 History of how and where the waste was/is generated:**

Elemental lead previously used for shielding

**1.3.3 Source of the hazardous constituents:**

Intrinsically hazardous

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Analytical data, process knowledge

**1.3.5 Additional notes:**

None

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

**2.1 Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                 DST                         SST  
 Other (explain):

**2.1.1 How was the waste managed prior to storage?**

NA - Lead is used as shielding prior to being declared waste, then it will go to a satellite accumulation area/90 day accumulation area.

**2.1.2 Timeframe when waste was placed into storage:**

NA - Lead will not be stored, it will go to a satellite accumulation area/90 day accumulation area.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.2 Inventory locations:**

Building/room number	Number of containers/tanks
234-5Z	

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 0  
 Date of inventory values: 12/31/01  
 Comments on waste inventory: None

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: None

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list:

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	0.260		
2003	0.410		
2004	0.260		
2005	0.260		
2006	0.260		
Totals	1.450		

**2.7 DOE Storage Compliance Assessment information:**

Assessment has been completed. Reference to most recent assessment

PFP Compliance  
Assessment, A&E-SEC-01-  
015

Assessment has been scheduled. Scheduled date:

Other. Explain:

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

None

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

Will be characterized when disposed.

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

CY 2001

If yes, provide document number or other identification:

PFP 2001 Waste Minimization Evaluation  
for LDR Report Waste Streams, Letter#  
M2100-02-016

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA:

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

PFP has a waste minimization program. A hierarchical approach to environmental management is applied to all types of pollution and waste generating activities. Pollution prevention and waste minimization, through source reduction, is the preferred option, followed by environmentally safe recycling. Treatment to reduce the quantity, toxicity, and/or mobility will be considered only when prevention or recycling is not possible or practical. Environmentally safe disposal is the last option. Segregation is applicable in all of these activities.

**3.3 Waste minimization schedule**

**LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET****3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m3**3.3.2 Projected future waste volume reductions:**

<u>Year</u>	<u>m3</u>	<u>and/or</u>	<u>kg</u>
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	<u>0.000</u>		<u>          </u>
Totals	0.000		

**3.3.3 Bases and assumptions used in above estimates:**

PFP is currently in a clean up and stabilization mode. Clean up and stabilization operations tend to increase production of waste. PFP has a waste minimization program and is currently undergoing a Site Strategic Pollution Prevention Opportunity Assessment, which will identify if there are further opportunities to reduce waste production or produce waste in a less hazardous form.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 **Plant/unit name:** Tank Farm Facilities/Pb elemental, **Waste stream** Elemental Lead  
DST and SST Containerized Waste
- Treatability/aggregated group identifier: MLLW-05  
Treatability/aggregated group name: Elemental lead

1.2 **Applicable profile number(s) for this waste stream:**

800

1.3 **Waste stream source information**

1.3.1 **General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Lead waste includes raw lead, lead shots, lead bricks, lead sheets and lead wool which are used in a variety of applications to shield and reduce radiation exposure dose rates.

1.3.2 **History of how and where the waste was/is generated:**

Lead in variety of shapes or forms is used for shielding during operation, upgrades and clean up at the DST and SST facilities. When it is determined that this lead is unusable, it is disposed of.

1.3.3 **Source of the hazardous constituents:**

The lead itself is hazardous, it can also be contaminated with tank waste.

1.3.4 **Source of information (e.g., analytical data, process knowledge, document number, etc.)**

MSDS and process knowledge. "Tank Farm Solid Waste Characterization Guide with Sampling and Analysis Attachment", HNF-SD-WM-PLN-119, REV. 01, describes the basis for historical and process knowledge; and sampling plan for tank farm solid waste.

1.3.5 **Additional notes:**

None.

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

2.1 **Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                 DST                                 SST  
 Other (explain):

2.1.1 **How was the waste managed prior to storage?**

Managed in SAA and 90 day accumulation areas

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.1.2 Timeframe when waste was placed into storage:**

NA

**2.2 Inventory locations:**

Building/room number	Number of containers/tanks
NA	

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 0

Date of inventory values: 12/31/01

Comments on waste inventory: NA

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: NA

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list:

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	1.040		
2003	1.140		
2004	1.260		
2005	1.360		
2006	1.360		
Totals	6.160		

**2.7 DOE Storage Compliance Assessment information:**

Assessment has been completed. Reference to most recent assessment: NA

Assessment has been scheduled. Scheduled date: NA

Other. Explain: NA

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

None

- 2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

- 2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

- 2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): NA

- 2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

- 3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: Unknown at this time.

- 3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

1. Survey and release lead items. 2. Recycle lead. 2. Reduce the amount of lead taken into rad zone.

- 3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m3

**3.3.2 Projected future waste volume reductions:**

Year m3 and/or kg

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

2002	0.000	
2003	0.000	
2004	0.000	
2005	0.000	
2006	<u>0.000</u>	<u>                    </u>
Totals	0.000	

### 3.3.3 Bases and assumptions used in above estimates:

No projected volume reduction at this time, because the volume generated is very small.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

**1.1 Plant/unit name:** WRAP/2336-W, Pb, elemental      **Waste stream** Elemental Lead  
Treatability/aggregated group identifier: MLLW-05  
Treatability/aggregated group name: Elemental lead

**1.2 Applicable profile number(s) for this waste stream:**

WSRd 800

**1.3 Waste stream source information**

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

The waste consists of elemental lead solids (bricks, shot, gloves, shielding, etc.). The lead is may be commingled with heterogeneous debris or the lead may be a component of a debris article.

**1.3.2 History of how and where the waste was/is generated:**

The waste was generated at many onsite locations and also by offsite generators.

**1.3.3 Source of the hazardous constituents:**

See 1.3.1 and 1.3.2

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Process knowledge.

**1.3.5 Additional notes:**

Waste at WRAP comes from various generators and generating processes around the Hanford Site due to WRAP's verification and repackaging mission. One drum is a transfer drum. It is used within WRAP for the collection of MW out of the TRU segregation process at WRAP.

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

**2.1 Current storage method**

Container (pad)     Container (covered)     Container (retrievably buried)

Tank                     DST                     SST

Other (explain):

**2.1.1 How was the waste managed prior to storage?**

Waste was generated and packaged at various locations around the Hanford Site and off site.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 2.1.2 Timeframe when waste was placed into storage:

Most MLLW at WRAP is recently generated waste that is being verified as part of the waste acceptance process.

### 2.2 Inventory locations:

Building/room number	Number of containers/tanks
2336W	2

### 2.3 Current inventory for this stream (stored waste only, not accumulation areas)

Total volume (cubic meters): 0.4

Date of inventory values: 12/31/01

Comments on waste inventory: Inventory fluctuates on a daily basis to support WRAP's mission of waste verification. Inventory based on Drum Management System (DMS) printout dated 1/3/01.

### 2.4 Is storage capacity at this location potentially an issue for this waste stream?

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: Due to proximity to and interchange with CWC, there is no storage capacity issue at WRAP.

### 2.5 Planned management areas for storage of this waste: Current location CWC

DST  Other area(s) list:

None

### 2.6 Estimated generation projection by calendar year:

Year	m3	and/or	kg
2002	0.400		
2003	0.400		
2004	0.800		
2005	0.800		
2006	1.600		
Totals	4.000		

### 2.7 DOE Storage Compliance Assessment information:

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Assessment has been completed. Reference to most recent assessment DOE # A&E-DWR-01-011  
JULY 2001

Assessment has been scheduled. Scheduled date:

Other. Explain:

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

None

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: None currently scheduled -- see Section 3.2

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

This is waste generated by other facilities. However, to the extent practical, all mixed waste is

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

segregated and packaged separately from LLW or TRU wastes. The volume of mixed waste is reduced by in-drum compaction when possible, and where it does not interfere with future treatment activities. To minimize the generation of mixed waste, generators actively seek nondangerous alternatives for the dangerous constituents in their processes. Minimization goals are set annually and tracked quarterly, and waste treatment is used to destroy the hazardous constituents, as allowable.

### 3.3 Waste minimization schedule

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m3

#### 3.3.2 Projected future waste volume reductions:

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

#### 3.3.3 Bases and assumptions used in above estimates:

Since subject waste has already been generated and is being directly disposed of, no additional waste minimization activities are planned.

## LDR REPORT TREATABILITY GROUP DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION

**1.1 Treatability group/aggregated stream identifier** MLLW-06  
**Treatability group/aggregated stream name:** Elemental mercury

**1.2 Description of waste (list WSRd numbers for this waste stream, as applicable):**

This treatability group is for waste that is determined to meet the "Elemental Mercury Contaminated with Radioactive Materials" subcategory as described in 40 CFR 268.40. Applicable WSRds for this treatability group are: EHG, HHG, 810, 811, and 812. This treatability group consists of liquid mercury, partially amalgamated mercury, mercury spill cleanups, and some debris waste items that are packaged in with the mercury waste.

### 2.0 WASTE STREAM INVENTORY AND GENERATION

**2.1 Current total inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 12.930

**2.2 Estimated generation projection by calendar year**

Year	m3	and/or	kg
2002	0.200		
2003	0.000		
2004	0.890		
2005	0.200		
2006	<u>0.000</u>		
Totals	1.290		

### 3.0 WASTE STREAM CHARACTERIZATION

**3.1 Radiological characteristics**

**3.1.1 Mixed waste type**       High-level     Transuranic     Low-level

**3.1.2 Handling (as currently packaged/stored)**     Contact-handled     Remote-handled

**3.1.3 Comments on radiological characteristics (e.g., more specific content, treatment concerns caused by radiation, confidence level):**

Since this waste is a general category based on dangerous waste physical characteristics, the radiological characteristics are expected to vary greatly. However, there is a high confidence that the waste is MLLW. The waste as packaged is considered Contact-Handled (i.e., less than or equal to 200mR/hr on outside package surface); however, the dose rate of some waste inside the package may exceed 200mR/hr.

**3.2 Matrix characteristics (physical content)**

**3.2.1 Matrix constituent table (each constituent listed should constitute at least 1% of the total volume or mass)**

## LDR REPORT TREATABILITY GROUP DATA SHEET

**3.2.2 Confidence level for matrix characteristic data in Section 3.2.1:**

Low  Medium  High

**3.2.3 Comments on matrix characteristics and/or confidence level:**

Waste received under the Waste Specification System (WSS) has a high confidence level. Waste received prior to the implementation of the WSS has a low to medium confidence level. For this older waste, the matrix characterization will be verified prior to being sent to treatment and disposal. If during the verification process, it is determined that some of the waste does not meet the MLLW-06 waste stream description, it will be reassigned into the appropriate waste stream (e.g., MLLW-02, MLLW-03, etc.).

**3.3 Regulated contaminated characteristics**

**3.3.1 Wastewater/non-wastewater under RCRA**

Wastewater  Non-wastewater  Unknown

**3.3.2 Regulated contaminant table including treatment requirements and UHCs, if applicable**

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
D001	Ignitable	Ignitable Charac.	***	***	Alternative Treatment stds for Haz. Debris (40 CFR 268.45)
D002	Corrosive	Corrosive Charac.	***	***	Alternative treatment stds for Haz. Debris (40 CFR 268.45)
D004	TC-Arsenic	NA	***	***	Alternative Treatment stds for Haz. Debris (40 CFR 268.45)
D005	TC-Barium	NA	***	***	Alternative Treatment stds for Haz. Debris (40 CFR 268.45)
D006	TC-Cadmium	Cadmium Charac.	***	***	Alternative Treatment stds for Haz. Debris (40 CFR 268.45)
D007	TC-Chromium	NA	***	***	Alternative Treatment stds for Haz. Debris (40 CFR 268.45)

## LDR REPORT TREATABILITY GROUP DATA SHEET

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
D008	TC-Lead	Lead Charac.	***	***	Alternative Treatment stds for Haz. Debris (40 CFR 268.45)
D009	TC-Mercury	Elemental	***	***	Amalgamation
D009	TC-Mercury	High Mercury	>260 mg/kg	***	RMERC
D011	TC-Silver	NA	***	***	Alternative Treatment stds for Haz. Debris (40 CFR 268.45)
D019	Carbon Tetrachloride	NA	***	***	Alternative Treatment stds for Haz. Debris (40 CFR 268.45)
D022	Chloroform	NA	***	***	Alternative Treatment stds for Haz. Debris (40 CFR 268.45)
D028	1,2-Dichloroethane	NA	***	***	Alternative Treatment stds for Haz. Debris (40 CFR 268.45)
D035	Methyl Ethyl Ketone	NA	***	***	Alternative Treatment stds for Haz. Debris (40 CFR 268.45)
D040	Trichloroethylene	NA	***	***	Alternative Treatment stds for Haz. Debris (40 CFR 268.45)
F002	Methylene Chloride	Spent Solvent	***	***	Alternative Treatment stds for Haz. Debris (40 CFR 268.45)
F003	Acetone & Hexone	Spent Solvent	***	***	Alternative Treatment stds for Haz. Debris (40 CFR 268.45)

## LDR REPORT TREATABILITY GROUP DATA SHEET

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
F005	Methyl Ethyl Ketone	Spent Solvent	***	***	Alternative Treatment stds for Haz. Debris (40 CFR 268.45)
U151	Mercury	Elemental	***	***	Amalgamation
WP01	Persistent, EHW	NA	***	***	None (1)
WSC2	Solid Corrosive	NA	***	***	Remove solid- acid charac.
WT01	Toxic, EHW	NA	***	***	NONE(1)
WT02	Toxic, DW	NA	***	***	None

\*LDR subcategory marked NA if no existing subcategory adequately describes this waste, or if there are no defined subcategories for the waste number (40 CFR 268.40).

\*\*If the waste is not consistent in concentration or the concentration is unknown, this may not apply. Describe in Section 3.3.6.

\*\*\*The concentration varies and is based on process knowledge and/or analytical data.

(1) Mixed extremely hazardous wastes may be land-disposed in Washington State in DOE facilities in accordance with RCW 70.105.050 (2)

UHCs Identification not required for D009 elemental mercury and hazardous debris when using the alternative treatment standards for hazardous debris.

**3.3.3 List any waste numbers from Section 3.3.2 for which the stream already meets established LDR treatment standards**

List:

No LDR treatment required (e.g., TRUM waste destined for WIPP, exclusion, etc.)

None (i.e., all constituents/waste numbers of this waste stream still require treatment)

**3.3.4 Does this waste stream contain PCBs?**

Yes  No  Unknown If no or unknown, skip to Section 3.3.5

**3.3.4.1 Is waste stream subject to TSCA regulations for PCBs?**

Yes  No  Unknown

**3.3.4.2 Indicate the PCB concentration range (ppm)**

<50  ≥ 50  Unknown

## LDR REPORT TREATABILITY GROUP DATA SHEET

**3.3.5 What is the confidence level for the regulated contaminant characteristic data?**

Low  Medium  High

**3.3.6 Comments on regulated contaminant characteristics and/or confidence level:**

Waste received under the WSS has a high confidence level. Waste received prior to the implementation of the WSS has a low to medium confidence level. Much of the elemental mercury has been amalgamated by the generator due to spill cleanups and safe handling concerns. However, the amalgamation has not been certified as meeting the LDR treatment standard AMLGM. A good portion of the currently stored inventory of this waste will require characterization verifications prior to it being sent to treatment and disposal.

### 4.0 WASTE STREAM TREATMENT

**4.1 Is this stream currently being treated?**  Yes  No

If yes, provide details: NA

**4.2 Planned treatment**

Check the appropriate box indicating future plans for treating this waste stream to meet applicable regulations, including LDR treatment standards.

No treatment required (skip to Section 5.0)  Treating or plan to treat off site  
 Treating or plan to treat on site  Treatment options still being assessed

**4.3 Planned treatment method, facility, extent of treatment capacity available:**

Mercury amalgamation per the Treatment Standards for Hazardous Wastes (40 CFR 268.40) is the specified treatment technology for elemental mercury. Treatment will be performed by means of commercial contracts, and/or by onsite treatment units. Currently, there is very limited treatment capacity in the U.S. for this waste treatability group.

**4.4 Treatment schedule information:**

Treatment will be performed as necessary to support the results of the active M-91 TPA negotiations.

**4.5 Applicable Tri-Party Agreement milestone numbers (including permitting):**

None.

**4.6 Proposed new Tri-Party Agreement treatment milestones:**

An M-91 TPA change request was submitted to Ecology on 2/13/02.

**4.7 If treating or planning to treat on site, was or will waste minimization be addressed in developing and/or selecting the treatment method?**

Yes  No  Unknown

If yes, describe: To the extent practical, all mixed waste is segregated and packaged separately from LLW and TRU wastes. The volume of mixed waste is reduced by in-drum compaction when possible, and where it does not interfere with future treatment activities. To minimize the generation of mixed waste, generators actively seek

## LDR REPORT TREATABILITY GROUP DATA SHEET

nondangerous alternatives for the dangerous constituents in their processes. Minimization goals are set annually and tracked quarterly, and waste treatment is used to destroy the hazardous constituents in their processes, as allowable.

**4.8 List or describe treatability equivalency petitions, rulemaking petitions, and case-by-case exemptions needed for treatment:**

A treatability equivalency may be pursued for this treatability group due to the physical form (partially amalgamated) of much of the waste in this group. A separate request is being considered on the DOE complex level to provide a variance that allows macroencapsulation of mercury-containing batteries instead of RMERC.

**4.9 Key assumptions:** None

### 5.0 WASTE STREAM DISPOSAL

**After treatment, how will the waste stream be disposed of (include description, locations, milestone numbers, variances required, etc., as applicable)?**

Subject waste ultimately will be disposed of in mixed waste trenches located on the Hanford Site.



## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Building/room number	Number of containers/tanks
NA	

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 0  
 Date of inventory values: 12/31/01  
 Comments on waste inventory: NA

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: Waste is being accumulated in SAA

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list: NA

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	0.200		
2003	0.000		
2004	0.000		
2005	0.200		
2006	0.000		
Totals	0.400		

**2.7 DOE Storage Compliance Assessment information:**

Assessment has been completed. Reference to most recent assessment

Assessment has been scheduled. Scheduled date:

Other. Explain: NA

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

None

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: Not scheduled at this time

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

Recycling of radiological released thermostats and pressure switches, when possible

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):**

0 m<sup>3</sup>

**3.3.2 Projected future waste volume reductions:**

Year	m <sup>3</sup>	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 3.3.3 Bases and assumptions used in above estimates:

None

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

**1.1 Plant/unit name:** CWC/CWC, Hg, elemental      **Waste stream** Elemental Mercury  
**Treatability/aggregated group identifier:** MLLW-06  
**Treatability/aggregated group name:** Elemental mercury

**1.2 Applicable profile number(s) for this waste stream:**

NA

**1.3 Waste stream source information**

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

This waste stream consists of elemental mercury, amalgamated mercury, and debris articles containing small amounts of elemental mercury in their components (mercury switches, thermometers, etc).

**1.3.2 History of how and where the waste was/is generated:**

The waste was generated at many onsite locations and by offsite generators.

**1.3.3 Source of the hazardous constituents:**

See 1.3.1 and 1.3.2

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Analytical data and process knowledge

**1.3.5 Additional notes:**

None

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

**2.1 Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                 DST                         SST  
 Other (explain):

**2.1.1 How was the waste managed prior to storage?**

Accumulated and packaged by waste generators prior to storage at CWC.

**2.1.2 Timeframe when waste was placed into storage:**

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Waste storage at CWC began in 1987 and it has continued since then.

### 2.2 Inventory locations:

Building/room number	Number of containers/tanks
CWC	Approx. 66

### 2.3 Current inventory for this stream (stored waste only, not accumulation areas)

Total volume (cubic meters): 12.93  
 Date of inventory values: 12/31/01  
 Comments on waste inventory: Volumes based on SWITS information for WSRds EHG, HHG, 810, 811, and 812.

### 2.4 Is storage capacity at this location potentially an issue for this waste stream?

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: No issues with CWC storage based on 20 year waste generation forecast.

### 2.5 Planned management areas for storage of this waste: Current location CWC

DST  Other area(s) list:

None

### 2.6 Estimated generation projection by calendar year:

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.890		
2005	0.000		
2006	0.000		
Totals	0.890		

### 2.7 DOE Storage Compliance Assessment information:

Assessment has been completed. Reference to most recent assessment

A&E-SEC-02-001

Assessment has been scheduled. Scheduled date:

Other. Explain:

### 2.8 Applicable Tri-Party Agreement milestones related to storage at this location:

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

M-20-12

- 2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

- 2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

- 2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

Pre-waste stream specification waste will be re-characterized just prior to treatment for most efficient use of resources to meet current disposal requirements. Characterization will be performed as necessary to support the results of the active M-91 TPA negotiations.

If yes, provide Tri-Party Agreement milestone number(s): None

- 2.12 Other key assumptions related to storage, inventory, and generation information:**

The waste generation projections are for waste expected to be received from offsite generators.

### 3.0 WASTE MINIMIZATION

- 3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: None planned - waste not generated at CWC

- 3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

These activities occur before the wastes are shipped to CWC. There are few opportunities to reduce waste volumes placed into storage.

- 3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):**

0 m<sup>3</sup>

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 3.3.2 Projected future waste volume reductions:

<u>Year</u>	<u>m3</u>	<u>and/or</u>	<u>kg</u>
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	<u>0.000</u>		
Totals	0.000		

### 3.3.3 Bases and assumptions used in above estimates:

There is no projected generation by CWC.

## LDR REPORT TREATABILITY GROUP DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION

**1.1 Treatability group/aggregated stream identifier** MLLW-07  
**Treatability group/aggregated stream name:** RH and Large Container

**1.2 Description of waste (list WSRd numbers for this waste stream, as applicable):**  
 WSRds: DBL, HRW, 450, 550, 650. This waste stream is comprised of remote-handled mixed low-level waste (RH-MLLW) with various chemical (organics, inorganics, metals) and physical (particulates, debris, sludges, etc.) characteristics. Many different regulated constituents could be represented in this waste stream; however, the primary waste type is heterogeneous debris from the SST/DST systems operations. This waste stream also contains waste in oversized containers, not typically suited for commercial treatment, that will be treated using the M-91 MLLW capability.

### 2.0 WASTE STREAM INVENTORY AND GENERATION

**2.1 Current total inventory for this stream (stored waste only, not accumulation areas)**  
 Total volume (cubic meters): 65.935

**2.2 Estimated generation projection by calendar year**

Year	m3	and/or	kg
2002	151.150		
2003	338.150		
2004	305.150		
2005	279.150		
2006	279.150		
Totals	1,352.750		

### 3.0 WASTE STREAM CHARACTERIZATION

**3.1 Radiological characteristics**

**3.1.1 Mixed waste type**       High-level     Transuranic     Low-level

**3.1.2 Handling (as currently packaged/stored)**     Contact-handled     Remote-handled

**3.1.3 Comments on radiological characteristics (e.g., more specific content, treatment concerns caused by radiation, confidence level):**

Remote-handled (RH) waste must be shielded down to contact-handled (CH) levels before it can be accepted into the CWC; therefore, RH waste packages in CWC are actually input into SWITS as CH. To determine if a CWC waste package contains RH waste, the radionuclide, dose rate, physical form and generator information in SWITS is reviewed for clues that might lead a reviewer to believe a waste may be RH.

**3.2 Matrix characteristics (physical content)**

**3.2.1 Matrix constituent table (each constituent listed should constitute at least 1% of the total volume or mass)**

## LDR REPORT TREATABILITY GROUP DATA SHEET

### 3.2.2 Confidence level for matrix characteristic data in Section 3.2.1:

Low    Medium    High

### 3.2.3 Comments on matrix characteristics and/or confidence level:

Waste received under the Waste Specification System (WSS) has a high confidence level. Waste received prior to the implementation of the WSS has a low to medium confidence level. For this older waste, the matrix characterization will be verified prior to being sent to treatment and disposal. If during the verification process, it is determined that some of the waste does not meet the MLLW-07 waste stream description, it will be reassigned into the appropriate waste stream (e.g., MLLW-02, MLLW-03, etc.).

### 3.3 Regulated contaminated characteristics

#### 3.3.1 Wastewater/non-wastewater under RCRA

Wastewater    Non-wastewater    Unknown

#### 3.3.2 Regulated contaminant table including treatment requirements and UHCs, if applicable

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
D001	Ignitable	Ignitable charac.	***	***	DEACT & meet 40 CFR 268.48
D002	Corrosive	Corrosiv charac.	***	***	DEACT & meet 40 CFR 268.48
D006	TC-Cadmium	Cadmium charac	***	***	0.11 mg/l TCLP & meet 40 CFR 268.48
D007	TC-Chromium	NA	***	***	0.60 mg/l TCLP & meet 40 CFR 268.48
D008	TC-Lead	Lead charac.	***	***	0.75 mg/l TCLP & meet 40 CFR 268.48
D011	TC-Silver	NA	***	***	0.14 mg/l TCLP & meet 40 CFR 268.48
F001	1,1,1-Trichlorethane	Spent Solvent	***	***	6.0 mg/kg
F002	Methylene Chloride	Spent Solvent	***	***	30 mg/kg
F003	Acetone & Hexone	Spent Solvent	***	***	160 mg/kg
F004	o-Cresol & p-Cresol	Spent Solvent	***	***	5.6 mg/kg
F005	Methyl Ethyl Ketone	Spent Solvent	***	***	36 mg/kg

## LDR REPORT TREATABILITY GROUP DATA SHEET

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
WP01	Persistent, EHW	NA	***	***	NONE(1)
WP02	Persistent, DW	NA	***	***	NONE
WT01	Toxic, EHW	NA	***	***	NONE (1)
WT02	Toxic, DW	NA	***	***	NONE

\*LDR subcategory marked NA if no existing subcategory adequately describes this waste, or if there are no defined subcategories for the waste number (40 CFR 268.40).

\*\*If the waste is not consistent in concentration or the concentration is unknown, this may not apply. Describe in Section 3.3.6.

\*\*\* The concentration varies and is based on process knowledge and/or analytical data.

(1) Mixed extremely hazardous wastes may be land-disposed in Washington State in DOE facilities in accordance with RCW 70.105.050 (2)

UHCs TBD on a per package basis during waste "up-grading" and/or when the waste is sent for treatment.

### 3.3.3 List any waste numbers from Section 3.3.2 for which the stream already meets established LDR treatment standards

List:

No LDR treatment required (e.g., TRUM waste destined for WIPP, exclusion, etc.)

None (i.e., all constituents/waste numbers of this waste stream still require treatment)

### 3.3.4 Does this waste stream contain PCBs?

Yes  No  Unknown If no or unknown, skip to Section 3.3.5

#### 3.3.4.1 Is waste stream subject to TSCA regulations for PCBs?

Yes  No  Unknown

#### 3.3.4.2 Indicate the PCB concentration range (ppm)

<50  ≥ 50  Unknown

### 3.3.5 What is the confidence level for the regulated contaminant characteristic data?

Low  Medium  High

### 3.3.6 Comments on regulated contaminant characteristics and/or confidence level:

Subject waste will undergo characterization verifications as part of the past-practice waste stream upgrading program. Once the waste meets all the upgrading requirements, it will be assigned to the appropriate WSS WSRd associated with the proper waste stream.

## LDR REPORT TREATABILITY GROUP DATA SHEET

Portions of the waste have met the rigors of the Waste Specification System for waste storage and treatment. However, the WSS came into effect in 1995 and was based on the dangerous waste regulations imposed at that time. There have been several changes to the dangerous waste regulations since then that impose additional characterization requirements onto the generator, namely identification of UHCs for all waste designated with a characteristic waste code (i.e., D001 through D043).

### 4.0 WASTE STREAM TREATMENT

- 4.1 **Is this stream currently being treated?**  Yes  No

If yes, provide details: NA

4.2 **Planned treatment**

Check the appropriate box indicating future plans for treating this waste stream to meet applicable regulations, including LDR treatment standards.

- No treatment required (skip to Section 5.0)  Treating or plan to treat off site  
 Treating or plan to treat on site  Treatment options still being assessed

4.3 **Planned treatment method, facility, extent of treatment capacity available:**

Treatment options are being addressed as part of the Project Management Plan specified in TPA Milestone M-91-10.

4.4 **Treatment schedule information:**

Treatment will be performed as necessary to support the results of the active M-91 TPA negotiations.

4.5 **Applicable Tri-Party Agreement milestone numbers (including permitting):**

M-91-10 and M-91-15.

4.6 **Proposed new Tri-Party Agreement treatment milestones:**

An M-91 TPA change request was submitted to Ecology on 2/13/02.

4.7 **If treating or planning to treat on site, was or will waste minimization be addressed in developing and/or selecting the treatment method?**

- Yes  No  Unknown

If yes, describe: To the extent practical, all mixed waste is segregated and packaged separately from LLW or TRU wastes. To minimize the generation of mixed waste, generators actively seek nondangerous alternatives for the dangerous constituents in their processes. Minimization goals are set annually and tracked quarterly, and waste treatment is used to destroy the hazardous constituents, as allowable.

4.8 **List or describe treatability equivalency petitions, rulemaking petitions, and case-by-case exemptions needed for treatment:**

None

4.9 **Key assumptions:** None

## **LDR REPORT TREATABILITY GROUP DATA SHEET**

### **5.0 WASTE STREAM DISPOSAL**

**After treatment, how will the waste stream be disposed of (include description, locations, milestone numbers, variances required, etc., as applicable)?**

Subject waste ultimately will be disposed of in mixed waste trenches located on the Hanford Site.

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## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

1.1 **Plant/unit name:** 222-S/222-S, Shielded Debris      **Waste stream** 222-S, MLLW-07  
**Treatability/aggregated group identifier:** MLLW-07  
**Treatability/aggregated group name:** RH and Large Container

1.2 **Applicable profile number(s) for this waste stream:**

WMFH-627-0003-CR; 222S-647-0001-00; 222S-650-0001-00; CR - Current Revision

1.3 **Waste stream source information**

1.3.1 **General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Debris waste generated from laboratory operations (e.g., analytical procedures, hot cell, maintenance, etc.)

1.3.2 **History of how and where the waste was/is generated:**

This waste is generated at the 222-S Laboratory from operations including analytical procedures, hot cell, 219-S Waste Handling Facility, etc.

1.3.3 **Source of the hazardous constituents:**

Laboratory standards and reagents and unused samples may result in contaminated debris. The 222-S Laboratory receives mostly tank Farms samples resulting in all waste designating as F001-F005. Samples may come from any Hanford generating facility (e.g., ETF, ERDF, K-Basins, etc.).

1.3.4 **Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Waste Contents Inventory Sheets, MSDSs, Waste Stream Fact Sheets

1.3.5 **Additional notes:**

None

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

2.1 **Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                 DST                         SST  
 Other (explain):

2.1.1 **How was the waste managed prior to storage?**

Waste was managed per the Hanford Facility Dangerous Waste Permit Application, 222-S

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Laboratory Complex (DOE/RL-91-27 Revision 1)

### 2.1.2 Timeframe when waste was placed into storage:

12/1998-12/2001

### 2.2 Inventory locations:

Building/room number	Number of containers/tanks
HS-0082A	1
HS-0082B	2
HS-0083A	2

### 2.3 Current inventory for this stream (stored waste only, not accumulation areas)

Total volume (cubic meters): 1.04

Date of inventory values: 1/14/02

Comments on waste inventory: This data was generated from Solid Waste Information and Tracking System (SWITS) specific to 222-S Laboratory.

### 2.4 Is storage capacity at this location potentially an issue for this waste stream?

Yes  No

If yes, what is the total estimated storage capacity? n/a

When is this capacity expected to be reached n/a

Bases and assumptions used: n/a

### 2.5 Planned management areas for storage of this waste: Current location CWC

DST  Other area(s) list:

None

### 2.6 Estimated generation projection by calendar year:

Year	m3	and/or	kg
2002	0.150		
2003	0.150		
2004	0.150		
2005	0.150		
2006	0.150		
Totals	0.750		

### 2.7 DOE Storage Compliance Assessment information:

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

- Assessment has been completed. Reference to most recent assessment: A&E-SEC-01-018
- Assessment has been scheduled. Scheduled date:
- Other. Explain:

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**  
M-20-22

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**  
 Yes  No

If yes, summarize releases and quantities and provide date:  
n/a

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**  
 Yes  No

If yes, explain: n/a

**2.11 Is further characterization necessary?**  
 Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):  
n/a

If yes, provide Tri-Party Agreement milestone number(s): n/a

**2.12 Other key assumptions related to storage, inventory, and generation information:**  
None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**  
 Yes  No

If yes, provide date assessment conducted: 9/2000

If yes, provide document number or other identification: Operating and analytical procedures at the 222-S Laboratory Complex.

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA:

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**  
222-S personnel optimize use of lab ware during waste generation to minimize waste generation

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

through proper planning during Automated Job Hazard Analysis (AJHA) and pre-jobs. 222-S personnel seek innovative technology which allows them to minimize more waste.

### 3.3 Waste minimization schedule

3.3.1 Reduction achieved during calendar year (volume or mass): 0 m3

### 3.3.2 Projected future waste volume reductions:

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

### 3.3.3 Bases and assumptions used in above estimates:

222-S has no waste minimization goals for this waste stream. However, the analytical process generating this stream is continuously evaluated for waste minimization opportunities.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 Plant/unit name:** CWC/CWC, M-91 MLLW      **Waste stream** M-91 MLLW  
**Treatability/aggregated group identifier:** MLLW-07  
**Treatability/aggregated group name:** RH and Large Container

**1.2 Applicable profile number(s) for this waste stream:**

NA

**1.3 Waste stream source information**

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Subject waste is from various sources, however, the primary waste type is heterogeneous debris from the SST/DST Systems operations.

**1.3.2 History of how and where the waste was/is generated:**

The waste was generated at many onsite locations.

**1.3.3 Source of the hazardous constituents:**

See 1.3.1 and 1.3.2

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Analytical data; process knowledge

**1.3.5 Additional notes:**

Waste is shielded to meet contact handled dose limits for CWC.

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

**2.1 Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                 DST                         SST  
 Other (explain):

**2.1.1 How was the waste managed prior to storage?**

Accumulated and packaged by waste generators prior to storage at CWC.

**2.1.2 Timeframe when waste was placed into storage:**

Waste storage in CWC began in 1987 and it has continued since then.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.2 Inventory locations:**

Building/room number	Number of containers/tanks
CWC	Approx. 20

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 64.41  
 Date of inventory values: 12/31/01  
 Comments on waste inventory: Based on inventory residing at the CWC as reported in the Solid Waste Information Tracking System (SWITS) for WSRds 450, 550, 650, DBL, and HRW.

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: No issues with CWC storage based on 20 year waste generation forecast.

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list:

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

**2.7 DOE Storage Compliance Assessment information:**

Assessment has been completed. Reference to most recent assessment

A&E-SEC-02-001

Assessment has been scheduled. Scheduled date:

Other. Explain:

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

M-20-12

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

If necessary, waste will be re-characterized just prior to treatment for most efficient use of resources to meet current disposal requirements. Characterization will be performed as necessary to support the results of the active M-91 TPA negotiations.

If yes, provide Tri-Party Agreement milestone number(s): None

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: None planned - waste not generated at CWC

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

These activities occur before the wastes are shipped to CWC. There are few opportunities to reduce waste volumes placed into storage.

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m<sup>3</sup>

**3.3.2 Projected future waste volume reductions:**

Year            m<sup>3</sup>            and/or            kg

### LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

2002	0.000	
2003	0.000	
2004	0.000	
2005	0.000	
2006	0.000	
Totals	0.000	

#### 3.3.3 Bases and assumptions used in above estimates:

There is no projected generation by CWC.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 **Plant/unit name:** HWTU/HWTU, MLLW-RH      **Waste stream** MLLW-07  
    **Treatability/aggregated group identifier:** MLLW-07  
    **Treatability/aggregated group name:** RH and Large Container

1.2 **Applicable profile number(s) for this waste stream:**

PNNL ships shielded debris under the following profiles: PNNL-627-0004-00, PNNL-627-0007-00, PNNL-647-0001-00, PNNL-647-0004-00, PNNL-647-0005-00.

1.3 **Waste stream source information**

1.3.1 **General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Subject waste is generated from PNNL laboratory and hot cell operations.

1.3.2 **History of how and where the waste was/is generated:**

Waste is generated from routine operations at PNNL. - Laboratory analysis (physical and chemical) and other testing conducted on SST/DST waste and other high dose-rate substances and wastes.

1.3.3 **Source of the hazardous constituents:**

This waste stream consists of debris contaminated with inorganic and organic regulated dangerous waste constituents.

1.3.4 **Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Wastes are characterized as specified in PNNL Waste Stream Profiles.

1.3.5 **Additional notes:**

Wastes are shielded to meet contact-handled dose limits for CWC before shipping.

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

2.1 **Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                 DST                         SST  
 Other (explain):

2.1.1 **How was the waste managed prior to storage?**

The waste was managed in 90 day or Satellite Accumulation areas within the hot cells prior to being transferred to this storage area.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 2.1.2 Timeframe when waste was placed into storage:

The waste currently stored here was placed in storage between 5/7/1993 and 12/30/2001.

### 2.2 Inventory locations:

Building/room number	Number of containers/tanks
325/SAL	24

### 2.3 Current inventory for this stream (stored waste only, not accumulation areas)

Total volume (cubic meters): 0.485  
 Date of inventory values: 1/14/02  
 Comments on waste inventory: None.

### 2.4 Is storage capacity at this location potentially an issue for this waste stream?

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: NA

### 2.5 Planned management areas for storage of this waste: Current location CWC

DST  Other area(s) list:

None

### 2.6 Estimated generation projection by calendar year:

Year	m3	and/or	kg
2002	3.000		
2003	3.000		
2004	3.000		
2005	3.000		
2006	<u>3.000</u>		
Totals	15.000		

### 2.7 DOE Storage Compliance Assessment information:

Assessment has been completed. Reference to most recent assessment

1/4/2002

Assessment has been scheduled. Scheduled date:

Other. Explain:

### 2.8 Applicable Tri-Party Agreement milestones related to storage at this location:

**LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET**

M-20-20

- 2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

- 2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

- 2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

PNNL Waste Management requests full chemical and radiological characterization from the laboratory generators prior to receiving the waste into the HWTU.

If yes, provide Tri-Party Agreement milestone number(s): NA

- 2.12 Other key assumptions related to storage, inventory, and generation information:**

The inventory information is for what is currently in storage in the specified HWTU location(s). This includes current generation and/or M-91 wastes. The projections in section 2.6 of this data sheet include current generation and M-91 volumes.

**3.0 WASTE MINIMIZATION**

- 3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

If yes, provide document number or other identification:

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: Assessment date to be determined.

- 3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

Laboratory staff routinely evaluate their processes to determine if less reagent volume or a less hazardous reagent can be used in the process. The Radioactive Waste Operations Group routinely assess the possibility of consolidating items for shipment to CWC.

- 3.3 Waste minimization schedule**

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m3

**3.3.2 Projected future waste volume reductions:**

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

**3.3.3 Bases and assumptions used in above estimates:**

Projects generating wastes usually have strict requirements for process outcomes. Hence, it is not possible to project specific volume reductions. As noted in Section 3.2, each project generating this waste type is reviewed to assure that waste volumes generated are minimized.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 **Plant/unit name:** Tank Farm Facilities/RH Mixed Waste      **Waste stream** M-91 MLLW  
**Treatability/aggregated group identifier:** MLLW-07  
**Treatability/aggregated group name:** RH and Large Container

- 1.2 **Applicable profile number(s) for this waste stream:**  
606, 800, 801

1.3 **Waste stream source information**

1.3.1 **General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

This waste stream includes equipment removed from the Double Shell Tank (DST) and Single Shell Tank (SST) systems, which can include jumpers, pumps, instrument trees, sluicers, and water or air lances.

1.3.2 **History of how and where the waste was/is generated:**

Equipment has been removed from tanks in the SST and/or DST systems.

1.3.3 **Source of the hazardous constituents:**

Equipment removed from the tank system have contacted tank waste. The source of hazardous constituents is tank waste.

1.3.4 **Source of information (e.g., analytical data, process knowledge, document number, etc.)**

The process knowledge, and analytical data, and sampling plan are described in "Tank Farm Solid Waste Characterization Guide with Sampling and Analysis Attachment", HNF-SD-WM-PLN-119, Rev. 01.

1.3.5 **Additional notes:**

None

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

2.1 **Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                 DST                         SST  
 Other (explain): NA

2.1.1 **How was the waste managed prior to storage?**

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Waste was accumulated in 90 day accumulation area.

### 2.1.2 Timeframe when waste was placed into storage:

NA

### 2.2 Inventory locations:

Building/room number	Number of containers/tanks
NA	0

### 2.3 Current inventory for this stream (stored waste only, not accumulation areas)

Total volume (cubic meters): 0

Date of inventory values: 12/31/01

Comments on waste inventory: No waste is currently in storage.

### 2.4 Is storage capacity at this location potentially an issue for this waste stream?

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: NA

### 2.5 Planned management areas for storage of this waste: Current location CWC

DST  Other area(s) list:

None

### 2.6 Estimated generation projection by calendar year:

Year	m3	and/or	kg
2002	148.000		
2003	335.000		
2004	302.000		
2005	276.000		
2006	<u>276.000</u>		
Totals	1,337.000		

### 2.7 DOE Storage Compliance Assessment information:

Assessment has been completed. Reference to most recent assessment

NA

Assessment has been scheduled. Scheduled date:

NA

Other. Explain: NA

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

None

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: This waste is not a routinely generated.

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**  
Segregation between LLW and Mixed waste.

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):**

**3.3.2 Projected future waste volume reductions:**

Year      m3      and/or      kg

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

2002	0.000	
2003	0.000	
2004	0.000	
2005	0.000	
2006	<u>0.000</u>	<u>                    </u>
Totals	0.000	

### 3.3.3 Bases and assumptions used in above estimates:

No volume reduction is expected

## LDR REPORT TREATABILITY GROUP DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION

- 1.1 Treatability group/aggregated stream identifier** MLLW-08  
**Treatability group/aggregated stream name:** Unique Waste
- 1.2 Description of waste (list WSRd numbers for this waste stream, as applicable):**  
 BER, 821, 823, 84A. This waste stream consists of unique wastes that requires special processing not typically employed for the other MLLW waste streams. Example includes beryllium powder, requiring RMETL or RTHRM.

### 2.0 WASTE STREAM INVENTORY AND GENERATION

- 2.1 Current total inventory for this stream (stored waste only, not accumulation areas)**  
 Total volume (cubic meters): 20.500
- 2.2 Estimated generation projection by calendar year**

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

### 3.0 WASTE STREAM CHARACTERIZATION

- 3.1 Radiological characteristics**
- 3.1.1 Mixed waste type**     High-level     Transuranic     Low-level
- 3.1.2 Handling (as currently packaged/stored)**     Contact-handled     Remote-handled
- 3.1.3 Comments on radiological characteristics (e.g., more specific content, treatment concerns caused by radiation, confidence level):**  
 Since the waste is a general category based on dangerous waste physical characteristics, the radiological characteristics are expected to vary greatly. There is a high confidence that the waste is CH-MLLW.
- 3.2 Matrix characteristics (physical content)**
- 3.2.1 Matrix constituent table (each constituent listed should constitute at least 1% of the total volume or mass)**
- 3.2.2 Confidence level for matrix characteristic data in Section 3.2.1:**  
 Low     Medium     High
- 3.2.3 Comments on matrix characteristics and/or confidence level:**

## LDR REPORT TREATABILITY GROUP DATA SHEET

None

### 3.3 Regulated contaminated characteristics

#### 3.3.1 Wastewater/non-wastewater under RCRA

Wastewater    Non-wastewater    Unknown

#### 3.3.2 Regulated contaminant table including treatment requirements and UHCs, if applicable

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
D001	Ignitable	Initable Charac.	***	***	DEACT and meet 40 CFR 268.48
P015	Beryllium Dust	NA	***	***	RMETL or RTHRM

\*LDR subcategory marked NA if no existing subcategory adequately describes this waste, or if there are no defined subcategories for the waste number (40 CFR 268.40).

\*\*If the waste is not consistent in concentration or the concentration is unknown, this may not apply. Describe in Section 3.3.6.

\*\*\* The concentration varies and is based on process knowledge and/or analytical data.

#### 3.3.3 List any waste numbers from Section 3.3.2 for which the stream already meets established LDR treatment standards

List:

No LDR treatment required (e.g., TRUM waste destined for WIPP, exclusion, etc.)

None (i.e., all constituents/waste numbers of this waste stream still require treatment)

#### 3.3.4 Does this waste stream contain PCBs?

Yes    No    Unknown   If no or unknown, skip to Section 3.3.5

##### 3.3.4.1 Is waste stream subject to TSCA regulations for PCBs?

Yes    No    Unknown

##### 3.3.4.2 Indicate the PCB concentration range (ppm)

<50    ≥ 50    Unknown

#### 3.3.5 What is the confidence level for the regulated contaminant characteristic data?

Low    Medium    High

## LDR REPORT TREATABILITY GROUP DATA SHEET

### 3.3.6 Comments on regulated contaminant characteristics and/or confidence level:

None

### 4.0 WASTE STREAM TREATMENT

4.1 Is this stream currently being treated?  Yes  No

If yes, provide details:

#### 4.2 Planned treatment

Check the appropriate box indicating future plans for treating this waste stream to meet applicable regulations, including LDR treatment standards.

- No treatment required (skip to Section 5.0)  Treating or plan to treat off site  
 Treating or plan to treat on site  Treatment options still being assessed

#### 4.3 Planned treatment method, facility, extent of treatment capacity available:

No treatment path is currently in place for this waste stream.

#### 4.4 Treatment schedule information:

There are no treatment campaigns planned for this waste stream until after 2006, to allow the volume to accumulate for performance of more cost-effective treatment. Treatment will be performed as necessary to support the results of the active M-91 TPA negotiations.

#### 4.5 Applicable Tri-Party Agreement milestone numbers (including permitting):

None.

#### 4.6 Proposed new Tri-Party Agreement treatment milestones:

An M-91 TPA change request was submitted to Ecology on 2/13/02.

#### 4.7 If treating or planning to treat on site, was or will waste minimization be addressed in developing and/or selecting the treatment method?

- Yes  No  Unknown

If yes, describe: NA

#### 4.8 List or describe treatability equivalency petitions, rulemaking petitions, and case-by-case exemptions needed for treatment:

None.

#### 4.9 Key assumptions: None.

### 5.0 WASTE STREAM DISPOSAL

After treatment, how will the waste stream be disposed of (include description, locations, milestone numbers, variances required, etc., as applicable)?

Treated waste will be disposed of in mixed waste trenches located on the Hanford Site.

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## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

1.1 **Plant/unit name:** CWC/CWC, Unique Waste      **Waste stream** Unique Waste  
    **Treatability/aggregated group identifier:** MLLW-08  
    **Treatability/aggregated group name:** Unique Waste

1.2 **Applicable profile number(s) for this waste stream:**

NA

1.3 **Waste stream source information**

1.3.1 **General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

This waste stream consists of beryllium (P015), F022 contaminated waste, and F027 contaminated waste.

1.3.2 **History of how and where the waste was/is generated:**

The waste was generated at onsite locations and placed into storage at CWC.

1.3.3 **Source of the hazardous constituents:**

See 1.3.1 and 1.3.2

1.3.4 **Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Process knowledge

1.3.5 **Additional notes:**

None

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

2.1 **Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                 DST                         SST  
 Other (explain):

2.1.1 **How was the waste managed prior to storage?**

Accumulated and packaged as waste by waste generators prior to storage at CWC.

2.1.2 **Timeframe when waste was placed into storage:**

1994-2000

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.2 Inventory locations:**

Building/room number	Number of containers/tanks
CWC	4

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 0.83  
 Date of inventory values: 12/31/01

Comments on waste inventory: Based on inventory residing at the CWC as reported in SWITS for WSRds 821, 823, 84A, and BER. One container of WSRd "LPO", containing F027 waste and one container of WSRd "400" containing F022 waste are included in this waste stream. WSRds for these will be changed at a later time consistent with the "unique" waste stream classification.

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: No issues with CWC storage based on 20 year waste generation forecast.

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list:

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

**2.7 DOE Storage Compliance Assessment information:**

Assessment has been completed. Reference to most recent assessment

A&E-SEC-02-001

Assessment has been scheduled. Scheduled date:

Other. Explain:

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

M-20-12

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

Pre-waste stream specification waste will be re-characterized just prior to treatment for most efficient use of resources to meet current disposal requirements. Characterization will be performed as necessary to support the results of the active M-91 TPA negotiations.

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: None planned. This waste is not generated at CWC.

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

These activities occur before waste is shipped to CWC. There are few opportunities to reduce waste volumes placed into storage.

**3.3 Waste minimization schedule**

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m3

**3.3.2 Projected future waste volume reductions:**

<u>Year</u>	<u>m3</u>	<u>and/or</u>	<u>kg</u>
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

**3.3.3 Bases and assumptions used in above estimates:**

There is no generation projected by CWC

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 Plant/unit name:** T Plant Complex/T Plant Complex units      **Waste stream** MW Requiring Special Processing
- Treatability/aggregated group identifier: MLLW-08
- Treatability/aggregated group name: Unique Waste

**1.2 Applicable profile number(s) for this waste stream:**

84A-00

**1.3 Waste stream source information**

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Waste is generated from various sources with various hazardous/dangerous constituents; it is primarily heterogeneous. This waste consists of large containers, sometimes 10 cubic meters in size or greater, and/or remote handled waste to be dispositioned through the M-91-10 milestone. This waste can consist of various types (e.g., debris, liquids, etc.).

**1.3.2 History of how and where the waste was/is generated:**

Waste is generated at the T Plant Complex and is also received and stored at the T Plant Complex from various onsite locations and also by offsite generators

**1.3.3 Source of the hazardous constituents:**

See 1.3.1 and 1.3.2

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Process knowledge and analytical

**1.3.5 Additional notes:**

None.

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

**2.1 Current storage method**

- Container (pad)       Container (covered)       Container (retrievably buried)
- Tank       DST       SST
- Other (explain):

**2.1.1 How was the waste managed prior to storage?**

Waste generated at the T Plant Complex and from onsite locations and also by offsite

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

generators.

**2.1.2 Timeframe when waste was placed into storage:**

1995 through 2000

**2.2 Inventory locations:**

Building/room number	Number of containers/tanks
T PLANT	8

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 19.67

Date of inventory values: 12/28/01

Comments on waste inventory: Inventory will fluctuate as T Plant Complex generates waste, or performs waste storage and treatment/verification of onsite/offsite generators.

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: NA

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list: NA

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	<u>0.000</u>		
Totals	0.000		

**2.7 DOE Storage Compliance Assessment information:**

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Assessment has been completed. Reference to most recent assessment: Oct. 2000, A&E-00-ASS-072

Assessment has been scheduled. Scheduled date: Assessment currently scheduled for July 2003

Other. Explain: NA

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

None

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

Characterization needs are determined after the containers are opened and the contents are examined because the containers have failed verification. Once the containers are opened, the container is either reassigned to another treatability group/WSRd data sheet or it is declared non-mixed waste. Any containers declared non-mixed waste will be removed from the LDR report.

If yes, provide Tri-Party Agreement milestone number(s):

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted: NA

If yes, provide document number or other identification: NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: NA

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

- 3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**  
Waste minimization techniques are used, where possible, during generation and treatment processing.

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m3

**3.3.2 Projected future waste volume reductions:**

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

**3.3.3 Bases and assumptions used in above estimates:**

The T Plant Complex has submitted a P2/Wmin fiscal year 2002 goal to reduce, where possible, mixed waste generation. For FY 2002 to 2006, new goals will be evaluated and identified on a year by year basis. The T Plant Complex does not track waste reduction by treatability groups. Routine and non-routine generated waste is reported quarterly to the Waste Minimization/Pollution Prevention Group. This information is available on the following URL: <http://apsql05.rl.gov/polprev/default.asp>



## LDR REPORT TREATABILITY GROUP DATA SHEET

### 3.3 Regulated contaminated characteristics

#### 3.3.1 Wastewater/non-wastewater under RCRA

Wastewater    Non-wastewater    Unknown

#### 3.3.2 Regulated contaminant table including treatment requirements and UHCs, if applicable

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
D002	Corrosive	Corrosive Charac.	***	***	DEACT and meed 40 CFR 268.48
D004	TC-Arsenic	NA	***	***	5.0 mg/l TCLP and meed 40 CFR 268.48
D006	Cadmium	Cadmium Containing Batteries	NA	Process Knowledge	RTHRM
D008	Lead	Rad Lead Solids	NA	Process Knowledge	MACRO (2)
D009	TC-Mercury	Low Mercury	<260 mg/kg	***	0.20 mg/l TCLP and meed 40 CFR 268.48
WSC2	Solid Corrosive	NA	<=2.5 pH	***	Remove Solid Acid Charac.
WT01	Toxic, EHW	NA	***	***	None (1)
WT02	Toxic, DW	NA	***	***	None

\*LDR subcategory marked NA if no existing subcategory adequately describes this waste, or if there are no defined subcategories for the waste number (40 CFR 268.40).

\*\*If the waste is not consistent in concentration or the concentration is unknown, this may not apply. Describe in Section 3.3.6.

\*\*\* The concentration varies and is based on process knowledge and/or analytical data.

(1) Mixed extremely hazardous wastes may be land-disposed in Washington State in DOE facilities in accordance with RCW 70.105.050 (2).

(2) EPA has determined that the proper subcategory and the proper treatment standard for radioactively contaminated lead acid batteries are Radioactive Lead Solids and MACRO respectively. See letter dated August 9, 2001 from Elizabeth A Cotsworth, Director, Office of Solid Waste, EPA, to Andy Lawrence, Director, Office of Environmental Policy and Guidance, DOE.

UHCs TBD on a per-package basis during waste receipt, from characterization activities, or when the waste is sent for treatment.

## LDR REPORT TREATABILITY GROUP DATA SHEET

**3.3.3 List any waste numbers from Section 3.3.2 for which the stream already meets established LDR treatment standards**

- List:  
 No LDR treatment required (e.g., TRUM waste destined for WIPP, exclusion, etc.)  
 None (i.e., all constituents/waste numbers of this waste stream still require treatment)

**3.3.4 Does this waste stream contain PCBs?**

- Yes  No  Unknown If no or unknown, skip to Section 3.3.5

**3.3.4.1 Is waste stream subject to TSCA regulations for PCBs?**

- Yes  No  Unknown

**3.3.4.2 Indicate the PCB concentration range (ppm)**

- <50  ≥ 50  Unknown

**3.3.5 What is the confidence level for the regulated contaminant characteristic data?**

- Low  Medium  High

**3.3.6 Comments on regulated contaminant characteristics and/or confidence level:**

Confidence is high that the waste packages contain lead acid or cadmium batteries.

### 4.0 WASTE STREAM TREATMENT

**4.1 Is this stream currently being treated?**  Yes  No

If yes, provide details: NA

**4.2 Planned treatment**

Check the appropriate box indicating future plans for treating this waste stream to meet applicable regulations, including LDR treatment standards.

- No treatment required (skip to Section 5.0)  Treating or plan to treat off site  
 Treating or plan to treat on site  Treatment options still being assessed

**4.3 Planned treatment method, facility, extent of treatment capacity available:**

No treatment path is currently in place for this waste stream.

**4.4 Treatment schedule information:**

Treatment will be performed as necessary to support the results of the active M-91 TPA negotiations.

**4.5 Applicable Tri-Party Agreement milestone numbers (including permitting):**

None.

**4.6 Proposed new Tri-Party Agreement treatment milestones:**

## LDR REPORT TREATABILITY GROUP DATA SHEET

An M-91 TPA change request was submitted to Ecology on 2/13/02.

- 4.7 If treating or planning to treat on site, was or will waste minimization be addressed in developing and/or selecting the treatment method?**

Yes  No  Unknown

If yes, describe: NA

- 4.8 List or describe treatability equivalency petitions, rulemaking petitions, and case-by-case exemptions needed for treatment:**

A request is being considered on the DOE complex level to provide a variance that allows macroencapsulation of cadmium-containing batteries instead of R THERM.

- 4.9 Key assumptions:** None.

### 5.0 WASTE STREAM DISPOSAL

**After treatment, how will the waste stream be disposed of (include description, locations, milestone numbers, variances required, etc., as applicable)?**

Treated waste will be disposed of in mixed waste trenches located on the Hanford Site.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

**1.1 Plant/unit name:** 324/324, Batteries, Pb & Cd      **Waste stream** Batteries  
**Treatability/aggregated group identifier:** MLLW-09  
**Treatability/aggregated group name:** Lead acid and cadmium batteries

**1.2 Applicable profile number(s) for this waste stream:**

NA

**1.3 Waste stream source information**

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Lead acid and cadmium batteries

**1.3.2 History of how and where the waste was/is generated:**

Used lead acid and cadmium batteries.

**1.3.3 Source of the hazardous constituents:**

Batteries containing hazardous constituents

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Process knowledge

**1.3.5 Additional notes:**

None

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

**2.1 Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                 DST                         SST  
 Other (explain):

**2.1.1 How was the waste managed prior to storage?**

NA

**2.1.2 Timeframe when waste was placed into storage:**

NA

**2.2 Inventory locations:**

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Building/room number	Number of containers/tanks
NA	

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 0  
 Date of inventory values: 12/31/01  
 Comments on waste inventory: None

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: SAA waste

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list: NA

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	0.000		
2003	0.200		
2004	0.000		
2005	0.200		
2006	0.000		
Totals	0.400		

**2.7 DOE Storage Compliance Assessment information:**

Assessment has been completed. Reference to most recent assessment

Assessment has been scheduled. Scheduled date:

Other. Explain: NA

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

None

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: Not scheduled at this time

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

Non-radiological contaminated batteries will be recycled, when possible.

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):**

0 m3

**3.3.2 Projected future waste volume reductions:**

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 3.3.3 Bases and assumptions used in above estimates:

None

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 Plant/unit name:** 327/327, Batteries, Pb & Cd      **Waste stream** Batteries  
**Treatability/aggregated group identifier:** MLLW-09  
**Treatability/aggregated group name:** Lead acid and cadmium batteries

**1.2 Applicable profile number(s) for this waste stream:**

NA

**1.3 Waste stream source information**

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

Lead acid and cadmium batteries.

**1.3.2 History of how and where the waste was/is generated:**

Batteries that were used in emergency lights and other equipment.

**1.3.3 Source of the hazardous constituents:**

Batteries containing lead acid and cadmium

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Process knowledge

**1.3.5 Additional notes:**

None

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

**2.1 Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)  
 Tank                 DST                         SST  
 Other (explain):

**2.1.1 How was the waste managed prior to storage?**

NA

**2.1.2 Timeframe when waste was placed into storage:**

NA

**2.2 Inventory locations:**

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Building/room number	Number of containers/tanks
NA	

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 0  
 Date of inventory values: 12/31/01  
 Comments on waste inventory: NA

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: Waste is being accumulated in SAA

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list: NA

None

**2.6 Estimated generation projection by calendar year:**

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	3.600		
2005	0.000		
2006	0.000		
Totals	3.600		

**2.7 DOE Storage Compliance Assessment information:**

Assessment has been completed. Reference to most recent assessment

Assessment has been scheduled. Scheduled date:

Other. Explain: NA

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

None

**2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

If yes, summarize releases and quantities and provide date:

NA

**2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

**2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

NA

If yes, provide Tri-Party Agreement milestone number(s): NA

**2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

**3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: Not scheduled at this time

**3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

Batteries that can be radiological released are recycled. Batteries that are radiological contaminated will be disposed of as mixed waste.

**3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):**

0 m3

**3.3.2 Projected future waste volume reductions:**

Year	m3	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

Totals 0.000

### 3.3.3 Bases and assumptions used in above estimates:

None

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

### 1.0 WASTE STREAM IDENTIFICATION AND SOURCE

- 1.1 Plant/unit name:** CWC/CWC, Batteries, Pb & Cd      **Waste stream** Lead acid and cadmium batteries
- Treatability/aggregated group identifier: MLLW-09
- Treatability/aggregated group name: Lead acid and cadmium batteries

**1.2 Applicable profile number(s) for this waste stream:**

NA

**1.3 Waste stream source information**

**1.3.1 General description of the waste (e.g., spill clean-up waste, discarded lab materials, maintenance waste):**

The waste stream consists of regulated batteries.

**1.3.2 History of how and where the waste was/is generated:**

The waste was generated at many onsite locations and also by offsite generators.

**1.3.3 Source of the hazardous constituents:**

See 1.3.1 and 1.3.2

**1.3.4 Source of information (e.g., analytical data, process knowledge, document number, etc.)**

Process knowledge

**1.3.5 Additional notes:**

None

### 2.0 WASTE STREAM STORAGE, INVENTORY, AND GENERATION INFORMATION

**2.1 Current storage method**

- Container (pad)     Container (covered)     Container (retrievably buried)
- Tank                 DST                     SST
- Other (explain):

**2.1.1 How was the waste managed prior to storage?**

Accumulated and packaged by waste generators prior to storage at CWC.

**2.1.2 Timeframe when waste was placed into storage:**

Waste storage at CWC began in 1987 and it has continued since then.

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

**2.2 Inventory locations:**

Building/room number	Number of containers/tanks
CWC	Approx. 34

**2.3 Current inventory for this stream (stored waste only, not accumulation areas)**

Total volume (cubic meters): 8.2  
Date of inventory values: 12/31/01

Comments on waste inventory: Inventory based on data for containers residing at the CWC as reported in the Solid Waste Information Tracking System (SWITS) for WSRd numbers BAT, 830, and 802.

**2.4 Is storage capacity at this location potentially an issue for this waste stream?**

Yes  No

If yes, what is the total estimated storage capacity? NA

When is this capacity expected to be reached NA

Bases and assumptions used: No issues with CWC storage based on 20 year waste generation forecast.

**2.5 Planned management areas for storage of this waste:**  Current location  CWC

DST  Other area(s) list:

None

**2.6 Estimated generation projection by calendar year:**

Year	m <sup>3</sup>	and/or	kg
2002	0.000		
2003	0.000		
2004	0.000		
2005	0.000		
2006	0.000		
Totals	0.000		

**2.7 DOE Storage Compliance Assessment information:**

Assessment has been completed. Reference to most recent assessment

A&E-SEC-02-001

Assessment has been scheduled. Scheduled date:

Other. Explain:

**2.8 Applicable Tri-Party Agreement milestones related to storage at this location:**

M-20-12

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

- 2.9 Has there ever been any non-permitted, unauthorized release of this stream to the environment?**

Yes  No

If yes, summarize releases and quantities and provide date:

NA

- 2.10 Are there any plans to submit requests for variances or other exemptions related to storage?**

Yes  No

If yes, explain: NA

- 2.11 Is further characterization necessary?**

Yes  No  Unknown at this time

If yes, provide details and schedule (also see treatment/characterization plan volume for further information):

Pre-waste specification system waste will be re-characterized just prior to treatment for most efficient use of resources to meet current disposal requirements. Characterization will be performed as necessary to support the results of the active M-91 TPA negotiations.

If yes, provide Tri-Party Agreement milestone number(s): None

- 2.12 Other key assumptions related to storage, inventory, and generation information:**

None

### 3.0 WASTE MINIMIZATION

- 3.1 Has a waste minimization assessment been completed for this stream?**

Yes  No

If yes, provide date assessment conducted:

NA

If yes, provide document number or other identification:

NA

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: None planned - waste not generated at CWC

- 3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):**

These activities occur before the wastes are shipped to CWC. There are few opportunities to reduce waste volumes placed into storage.

- 3.3 Waste minimization schedule**

**3.3.1 Reduction achieved during calendar year (volume or mass):** 0 m<sup>3</sup>

**3.3.2 Projected future waste volume reductions:**

Year            m<sup>3</sup>            and/or            kg

## LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

2002	0.000	
2003	0.000	
2004	0.000	
2005	0.000	
2006	0.000	
Totals	0.000	

### 3.3.3 Bases and assumptions used in above estimates:

There is no projected generation by CWC.