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Richland Operations Office
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Mr. Michael A. Wilson, Program Manager
Nuclear Waste Program
State of Washington
Department of Ecology
3100 Port of Benton Boulevard
Richland, Washington 99352

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EDMC

Dear Mr. Wilson:

ANNUAL PROGRESS REPORT ON REMOTE-HANDLED (RH) AND LARGE CONTAINER CONTACT-HANDLED (CH) WASTE

The subject report is being submitted in accordance with the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Interim Milestone M-91-45. The report describes work completed in Fiscal Year (FY) 2004 and outlines planned work scope for these waste streams in FY 2005.

If you have any questions, please contact me, or your staff may contact Matt McCormick, Assistant Manager for the Central Plateau, on (509) 373-9971, or Joel Hebdon, Director, Office of Environmental Services, on (509) 376-6657.

Sincerely,

for Keith A. Klein
Manager

AMCP:GLS

Enclosure

cc w/encl:
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Administrative Record (M-91)

ANNUAL PROGRESS REPORT ON RH AND LARGE CONTAINER RH AND CH WASTE

As required by Tri-Party Agreement Milestone M-91-45, this report has been prepared to describe work completed during Fiscal Year (FY) 2004 on remote-handled (RH) and large container RH and contact-handled (CH) waste and to identify work scheduled for these waste streams in FY 2005.

FY 2004 Accomplishments

- A total of 145.0 m^3 of remote-handled (RH) and large-container Treatability Group MLLW-07 waste was disposed in FY 2004. Of the total, 51.7 m^3 was direct disposed and 93.3 m^3 was treated and disposed. Detailed production data are presented in Table 1.

- Offsite commercial treatment capabilities were expanded in FY 2004, to support Tri-Party Agreement Milestone M-91-43. The existing contract with Pacific EcoSolutions (PEcoS) was modified to process large-container waste and waste with higher radiological inventories. Additional waste characterization data are now provided to PEcoS for evaluation prior to waste acceptance and treatment. Transportation permits were also modified to allow shipment of over-sized and over-width loads. As a result, 93.3 m^3 of remote-handled and large-container waste were treated (macroencapsulated) at PEcoS and disposed in mixed-waste trench 34 at Hanford in FY 2004.

- A total of 51.7 m^3 of waste was direct disposed in trench 34 in FY 2004. This includes the disposal of a 30 m^3 box, the second largest container previously stored at the Central Waste Complex (CWC), and two Radioisotope Thermoelectric Generators (RTGs), RH waste that also was previously stored at CWC.

- The TRUM/Mixed Low Level Waste Project Management Plan (TRUM/MLLW PMP) was approved on May 13, 2004. The PMP identified annual measurable actions to be taken by DOE to acquire capabilities to manage large container and RH waste.

- A Chemical Waste Landfill Authorization application was submitted to the U.S. Environmental Protection Agency (EPA) for disposal of Toxic Substances Control Act (TSCA) waste in FY 2004. Upon approval, transformers, which are Treatment Group MLLW-07 and TSCA waste, can be disposed.

- An analysis was completed in July 2004 (PNNL-14778) which establishes the planning basis for M-91 waste, including large-container and RH waste. Recommendations from the study include:

    - Minimize generation of new large-container waste by supporting treatment-by-generator efforts and waste packaging in standard configurations

    - Expand commercial contracts to accept larger and higher-dose packages

    - Pursue in-trench treatment for some oversized and RH waste

- In FY 2005 define size-reduction and repackaging capabilities for CH waste, including the use of existing on-site facilities and use of temporary structures. Acquire this capability in FY 2006, initiate processing in FY 2007, and be current by FY 2011

- Begin solicitation and assess interest of commercial processing of RH waste in FY 2006

- Conduct an Engineering Study in FY 2007 in conjunction with the WIPP RH-TRU WAC to define RH waste processing and treatment capabilities to complete the M-91 processing mission. Select the preferred approach, acquire the required capability in FY 2008-FY 2010, and commence processing thereafter.

Planned FY 2005 Activities

- Continue waste treatment at PEcoS and in-trench when permitted.
- Complete an Engineering Study/Functional Design Criteria for CH large/oversize MLLW containers by September 30, 2005.
- Revise the planning baseline to incorporate the results of PNNL-14778.
- Prepare an end-of year status report for FY 2005 accomplishments and plans for FY 2006 by September 30, 2005.

Publicly Available Reports

1. Calendar Year 2002 Hanford Site Mixed Waste Land Disposal Restrictions Report, DOE/RL-2003-20, Revision 0.

2. M-91 TRU Mixed/Mixed Low Level Waste Project Management Plan, HNF-19169, Revision 1.

3. Establishment of a Cost-Effective and Robust Planning Basis for the Processing of M-91 Waste at the Hanford Site, PNNL-14778, July 2004.

TABLE 1: MLLW-07 Treatment and Disposal Summary for FY 2004

Waste Package ID No. (PIN)	Waste Package Vol (m^3)	LDR Treatability Group	WSRd Number	Shipment Number	Shipment Date	Treatment Location	Treatment Type	Disposal Unit	Disposal Date	M-91-43 Waste Description
9703458	0.32	MLLW-07	800	CC021	7/17/03	PEcoS	Macroencapsulation per 40CFR268.40	Hanford Site LLBG 218W5 T34	Nov-03	RH MLLW shielded down to CH levels
326-88-0012S	30.41	MLLW-07	120	Facility Transfer	6/26/03	n/a	Direct Disposal	Hanford Site LLBG 218W3AE T08	Mar-04	>10m^3 MLLW waste package*
ERO-93-000733	6.66	MLLW-07	120	Facility Transfer	7/1/03	n/a	Direct Disposal	Hanford Site LLBG 218W3AE T08	Mar-04	RH MLLW shielded down to CH levels*
ERO-93-000734	6.66	MLLW-07	120	Facility Transfer	7/1/03	n/a	Direct Disposal	Hanford Site LLBG 218W3AE T08	Mar-04	RH MLLW shielded down to CH levels*
ERO-93-000735	6.66	MLLW-07	120	Facility Transfer	7/1/03	n/a	Direct Disposal	Hanford Site LLBG 218W3AE T08	Mar-04	RH MLLW shielded down to CH levels*
9802782	0.68	MLLW-07	627	CC024	11/6/03	PEcoS	Macroencapsulation per 40CFR268.45	Hanford Site LLBG 218W5 T34	Jul-04	RH MLLW shielded down to CH levels.
FFS-01-268-03	6.37	MLLW-07	627	CC047	2/9/04	PEcoS	Macroencapsulation per 40CFR268.45	Hanford Site LLBG 218W5 T34	Jul-04	RH MLLW shielded down to CH levels
9903186	5.43	MLLW-07	647	CC048	4/22/04	PEcoS	Macroencapsulation per 40CFR268.45	Hanford Site LLBG 218W5 T34	Jul-04	>10m^3 MLLW waste package
9600457	0.32	MLLW-07	HRW	CC053	6/3/04	PEcoS	Macroencapsulation per 40CFR268.45	Hanford Site LLBG 218W5 T34	Sep-04	RH MLLW shielded down to CH levels
9804066	0.32	MLLW-07	HRW	CC053	6/3/04	PEcoS	Macroencapsulation per 40CFR268.45	Hanford Site LLBG 218W5 T34	Sep-04	RH MLLW shielded down to CH levels
9804077	0.32	MLLW-07	HRW	CC053	6/3/04	PEcoS	Macroencapsulation per 40CFR268.45	Hanford Site LLBG 218W5 T34	Sep-04	RH MLLW shielded down to CH levels
WTFF-91-148-02	0.32	MLLW-07	HRW	CC053	6/3/04	PEcoS	Macroencapsulation per 40CFR268.45	Hanford Site LLBG 218W5 T34	Sep-04	RH MLLW shielded down to CH levels.
340-89-0011	0.21	MLLW-07	HRW	CC053	6/3/04	PEcoS	Macroencapsulation per 40CFR268.45	Hanford Site LLBG 218W5 T34	Sep-04	RH MLLW shielded down to CH levels
9607973	0.21	MLLW-07	650	CC053	6/3/04	PEcoS	Macroencapsulation per 40CFR268.45	Hanford Site LLBG 218W5 T34	Sep-04	RH MLLW shielded down to CH levels
9901855	12.69	MLLW-07	647	DC007	6/24/04	PEcoS	Macroencapsulation per 40CFR268.45	Hanford Site LLBG 218W5 T34	Sep-04	>10m^3 MLLW waste package
9901854	12.69	MLLW-07	647	DC006	7/8/04	PEcoS	Macroencapsulation per 40CFR268.45	Hanford Site LLBG 218W5 T34	Sep-04	>10m^3 MLLW waste package
0004998	0.21	MLLW-07	650	CC061	7/21/04	PEcoS	Macroencapsulation per 40CFR268.45	Hanford Site LLBG 218W5 T34	Sep-04	RH MLLW shielded down to CH levels
0005002	0.21	MLLW-07	650	CC061	7/21/04	PEcoS	Macroencapsulation per 40CFR268.45	Hanford Site LLBG 218W5 T34	Sep-04	RH MLLW shielded down to CH levels
0005115	0.21	MLLW-07	650	CC061	7/21/04	PEcoS	Macroencapsulation per 40CFR268.45	Hanford Site LLBG 218W5 T34	Sep-04	RH MLLW shielded down to CH levels
9401308	0.21	MLLW-07	621	CC061	7/21/04	PEcoS	Macroencapsulation per 40CFR268.45	Hanford Site LLBG 218W5 T34	Sep-04	RH MLLW shielded down to CH levels
9401309	0.21	MLLW-07	621	CC061	7/21/04	PEcoS	Macroencapsulation per 40CFR268.45	Hanford Site LLBG 218W5 T34	Sep-04	RH MLLW shielded down to CH levels
9521684	0.21	MLLW-07	601	CC061	7/21/04	PEcoS	Macroencapsulation per 40CFR268.45	Hanford Site LLBG 218W5 T34	Sep-04	RH MLLW shielded down to CH levels
9521695	0.21	MLLW-07	621	CC061	7/21/04	PEcoS	Macroencapsulation per 40CFR268.45	Hanford Site LLBG 218W5 T34	Sep-04	RH MLLW shielded down to CH levels
9522119	0.21	MLLW-07	621	CC061	7/21/04	PEcoS	Macroencapsulation per 40CFR268.45	Hanford Site LLBG 218W5 T34	Sep-04	RH MLLW shielded down to CH levels
9701602	0.21	MLLW-07	650	CC061	7/21/04	PEcoS	Macroencapsulation per 40CFR268.45	Hanford Site LLBG 218W5 T34	Sep-04	RH MLLW shielded down to CH levels
9901269	0.21	MLLW-07	650	CC061	7/21/04	PEcoS	Macroencapsulation per 40CFR268.45	Hanford Site LLBG 218W5 T34	Sep-04	RH MLLW shielded down to CH levels
ETF-241-900463	0.21	MLLW-07	HRW	CC061	7/21/04	PEcoS	Macroencapsulation per 40CFR268.45	Hanford Site LLBG 218W5 T34	Sep-04	RH MLLW shielded down to CH levels.
9901857	12.69	MLLW-07	647	DC009	7/22/04	PEcoS	Macroencapsulation per 40CFR268.45	Hanford Site LLBG 218W5 T34	Sep-04	>10m^3 MLLW waste package
9901856	12.69	MLLW-07	647	DC008	8/5/04	PEcoS	Macroencapsulation per 40CFR268.45	Hanford Site LLBG 218W5 T34	Sep-04	>10m^3 MLLW waste package
9519113	6.37	MLLW-07	650	CC063	8/12/04	PEcoS	Macroencapsulation per 40CFR268.45	Hanford Site LLBG 218W5 T34	Sep-04	RH MLLW shielded down to CH levels
9522513	6.37	MLLW-07	601	CC063	8/12/04	PEcoS	Macroencapsulation per 40CFR268.45	Hanford Site LLBG 218W5 T34	Sep-04	RH MLLW shielded down to CH levels
9902234	6.37	MLLW-07	647	CC063	8/12/04	PEcoS	Macroencapsulation per 40CFR268.45	Hanford Site LLBG 218W5 T34	Sep-04	RH MLLW shielded down to CH levels
FFS-01-310-02	6.37	MLLW-07	650	CC063	8/12/04	PEcoS	Macroencapsulation per 40CFR268.45	Hanford Site LLBG 218W5 T34	Sep-04	RH MLLW shielded down to CH levels
4415	0.91	MLLW-07	HRW	50145	9/14/04	n/a	Direct Disposal	Hanford Site LLBG 218W5 T34	Sep-04	RH MLLW shielded down to CH levels*
3285	0.41	MLLW-07	HRW	50145	9/14/04	n/a	Direct Disposal	Hanford Site LLBG 218W5 T34	Sep-04	RH MLLW shielded down to CH levels*
FY2004 Total	145	*Recategorized as Low-Level Waste								