



Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

0066935

05-AMCP-0421

SEP 29 2005

Mr. Michael A. Wilson, Program Manager
Nuclear Waste Program
State of Washington
Department of Ecology
3100 Port of Benton Boulevard
Richland, Washington 99354

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OCT 05 2005
EDMC

Dear Mr. Wilson:

COMPLETION OF HANFORD FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (TRI-PARTY AGREEMENT) INTERIM MILESTONE M-91-45, SUBMIT TO ECOLOGY A REPORT DESCRIBING COMPLETED AND SCHEDULED WORK RELATING TO REMOTE HANDLED (RH) WASTE AND BOXES AND LARGE CONTAINERS OF RH AND CONTACT HANDLED (CH) WASTE

The subject report is being submitted in accordance with the Tri-Party Agreement Interim Milestone M-91-45. As required, the report describes completed and scheduled work relating to RH waste and boxes and large containers of RH and CH waste performed in accordance with the requirements of the M-91 milestone series.

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.

Sincerely,

Keith A. Klein
Manager

AMCP:GLS

Attachment

cc: See page 2

Mr. Michael A. Wilson
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cc w/attach:

G. Bohnee, NPT

N. Ceto, EPA

L. J. Cusack, Ecology

D. A. Faulk, EPA

S. Harris, CTUIR

R. Jim, YN

T. M. Martin, HAB

K. Niles, ODOE

D. G. Singleton, Ecology

Administrative Record (M-91)

Environmental Portal

cc w/o attach:

L. D. Crass, FHI

R. E. Piippo, FHI

R. D. Morrison, FHI

Attachment

**ANNUAL PROGRESS REPORT ON REMOTE-HANDLED (RH)
MIXED WASTE AND CONTACT-HANDLED (CH) MIXED WASTE IN
BOXES/LARGE CONTAINERS**

September 2005

**Consisting of 4 pages
Including cover page**

ANNUAL PROGRESS REPORT ON REMOTE-HANDLED (RH) MIXED WASTE AND CONTACT-HANDLED (CH) MIXED WASTE IN BOXES/LARGE CONTAINERS SEPTEMBER 2005

As required by TPA Milestone M-91-45, this report has been prepared to describe work completed during Fiscal Year (FY) 2005 on remote-handled (RH) mixed waste and contact-handled (CH) mixed waste in boxes/large containers and to identify work scheduled for these waste streams in FY 2006.

FY 2005 Accomplishments

- A total of 76.4m³ of remote-handled (RH) and large-container Treatability Group MLLW-07 waste was treated and disposed in FY 2005. Of the total, 25.7m³ was RH Mixed Low-Level Waste (MLLW), and 50.7m³ was large-container CH MLLW. Detailed production data is presented in Table 1. A cumulative total of 194 m³ has been disposed through FY 2005.
- Enhanced off-site commercial treatment capabilities continued to be utilized in FY 2005 which follows Hanford's overall strategy for disposition of MLLW-07 waste. The existing contract with Pacific EcoSolutions (PEcoS) was modified to process large-container waste and waste with higher radiological inventories. Additional radiological characterization data is provided to PEcoS for evaluation prior to waste acceptance and treatment. Special transportation permits were also obtained to allow shipment of over-sized loads. As a result, 76.4m³ of RH and large-container mixed waste was treated (macroencapsulated) at PEcoS and disposed in Mixed Waste Disposal Unit (Trench 34) at Hanford in FY 2005.
- No MLLW-07 waste was directly disposed during FY 2005.
- Significant progress continued to be made in FY 2005 to expand mixed waste disposal capacity at Hanford.
 - The Environmental Restoration Disposal Facility (ERDF) continues to be used in FY 2005 to dispose of other MLLW Treatment Groups (i.e., MLLW-01, MLLW-02, MLLW-04A/B). Work is ongoing to expand the use of ERDF for disposal of other Treatment Groups, including MLLW-07.
 - The 200 Liquid Effluent Facility (LEF) Unit delisting modification was approved in August 2005, which will allow Hanford to begin disposing of most "F," "P," and "U" Resource Conservation and Recovery Act (RCRA) listed waste codes into the Mixed Waste Disposal Units located in the 200 West Area.
 - Progress on a new permitted mixed waste disposal facility, the Integrated Disposal Facility (IDF), was made by CH2M HILL as part of the DOE Office of River Protection.

- The Chemical Waste Landfill Authorization application that was submitted to the Environmental Protection Agency (EPA) during FY 2004 remains under review with EPA. EPA is evaluating the best overall approach to manage Toxic Substances Control Act (TSCA) poly-chlorinated bi-phenol (PCB) waste at the Hanford Site which could impact the Application. Note if the application was approved, PCB-contaminated transformers, which are Treatment Group MLLW-07 and TSCA waste, would be disposed.
- An initial engineering study, including functions, was completed in September 2005 which supports the acquisition of on-site capabilities to process MLLW and transuranic/transuranic mixed waste in boxes/large containers or RH waste in various sized packages.

Planned FY 2006 Activities

- Continue limited waste treatment at PEcoS and initiate the in-trench treatment permitting process.
- Continue disposal of MLLW in the mixed waste trenches and/or at ERDF and continue efforts to bring the IDF on-line for future MLLW disposal.
- Complete a final engineering study and functional design criteria to support acquisition of on-site capabilities to process MLLW and transuranic/transuranic mixed waste in boxes/large containers or RH waste in various sized packages.

Publicly Available Reports

1. Initial Engineering Study and Functions for MLLW and transuranic/transuranic mixed waste that is either CH waste in boxes/large containers or RH waste, September 2005.

FY2005 M-91-43 DISPOSITIONED MIXED LOW-LEVEL WASTE

WASTE PACKAGE ID	LDR WASTE STREAM	OUTBOUND SHIPMENT NO.	OUTBOUND SHIPMENT DATE	WASTE PACKAGE VOL (m ³)	RETURNED PIN (if applicable)	RECEIPT SHIPMENT NO. (if applicable)	DISPOSITIONED DATE	DISPOSAL LOCATION	TREATMENT OR DISPOSITION METHOD	M-91-43 WASTE DESCRIPTION
9519113	MLLW-07	CC063	8/12/04	6.37	MW04700216 & MW04700193	MR434 & MR435	11/3/2004	LLBG 218W5 T34	MACRO (PEcoS)	RH-MLLW shield down to CH-MLLW levels to allow for storage at the CWC
9902234	MLLW-07	CC063	8/12/04	6.37	MW04700215 & MW04700221	MR434 & MR435	11/3/2004	LLBG 218W5 T34	MACRO (PEcoS)	RH-MLLW shield down to CH-MLLW levels to allow for storage at the CWC
9521695	MLLW-07	CC061	7/21/04	0.21	MW04700193	MR435	10/1/04	LLBG 218W5 T34	MACRO (PEcoS)	RH-MLLW shield down to CH-MLLW levels to allow for storage at the CWC
9522513	MLLW-07	CC063	8/12/04	6.37	MW04700221 & MW04700222	MR435	10/1/04	LLBG 218W5 T34	MACRO (PEcoS)	RH-MLLW shield down to CH-MLLW levels to allow for storage at the CWC
9901854	MLLW-07	DC006	7/8/04	12.69	MW04700087	MR496	10/27/04	LLBG 218W5 T34	MACRO (PEcoS)	Large Size Ch-MLLW (i.e., >10m3)
9901855	MLLW-07	DC007	6/24/04	12.69	MW04700086	MR495	10/27/04	LLBG 218W5 T34	MACRO (PEcoS)	Large Size Ch-MLLW (i.e., >10m3)
9901856	MLLW-07	DC008	8/5/04	12.69	MW04700089	MR498	10/27/04	LLBG 218W5 T34	MACRO (PEcoS)	Large Size Ch-MLLW (i.e., >10m3)
9901857	MLLW-07	DC009	7/22/04	12.69	MW04700088	MR497	10/27/04	LLBG 218W5 T34	MACRO (PEcoS)	Large Size Ch-MLLW (i.e., >10m3)
FFS-01-310-02	MLLW-07	CC063	8/12/04	6.37	MW04700221 & MW04700217	MR435	10/1/04	LLBG 218W5 T34	MACRO (PEcoS)	RH-MLLW shield down to CH-MLLW levels to allow for storage at the CWC
Total FY2005 Waste Volume (m³) =				76.4	Note: All of these nine waste packages were completed in FY2005; however, this volume was inadvertently reported as completed during September 2004 and was included in the FY2004 Annual Progress Report.					

TABLE 1: MLLW-07 Treatment and Disposal Summary for FY 2005