

0073042



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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June 11, 2007

Mr. Michael J. Weis  
Richland Operations Office  
United States Department of Energy  
P.O. Box 550, MSIN: A7-50  
Richland, Washington 99352

Ms. Shirley Olinger  
Office of River Protection  
United States Department of Energy  
P.O. Box 450, MSIN: H6-60  
Richland, Washington 99352

Re: United States Department of Energy Calendar Year (CY) 2006 Land Disposal Restrictions (LDR) Summary Report, submitted in accordance with M-26-01Q

Dear Mr. Weis and Ms. Olinger:

The Department of Ecology received the letter and attached CY 2006 LDR Summary Report, submitted April 27, 2007, by the United States Department of Energy. *0072816*

In accordance with the Hanford Facility Agreement and Consent Order, Milestone M-26-01Q, this report was submitted as a primary document, which requires the lead agency to respond within 45 days. This letter and the enclosed comment pages contain Ecology's response.

If you would like to discuss Ecology's comments on the CY 2006 LDR Summary Report please contact Eric Van Mason at 509-372-7929.

Sincerely,

Ron Skinnarland  
Waste Management Section Manager  
Nuclear Waste Program

evm/dbm  
Enclosure

**RECEIVED**  
JUN 14 2007

**EDMC**

cc w/enc:

Greg Sinton, USDOE-RL  
Woody Russell, USDOE-ORP  
Tony Miskho, FHI  
Administrative Record *M-26-01Q*  
Environmental Portal

cc w/o enc:

Stuart Harris, CTUIR  
Gabriel Bohnee, NPT  
Russell Jim, YN  
Susan Leckband, HAB  
Ken Niles, ODOE



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<b>Document Number(s)/Title(s)</b> <i>Calendar Year 2006 Hanford Ste Mixed Land Disposal Restrictions Summary Report, DOE/RL-2007-16, Rev. 0</i>	<b>Program/Project/Building Number</b> Ecology NWP-WM	<b>Reviewer</b> E. Van Mason, M. Mandis J. Vanni	<b>Organization/Group</b>	<b>Location/Phone</b>
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Comment Submittal Approval:

Agreement with indicated comment disposition(s)

Status:

Ron Skinnarland  
Organization Manager (Optional)

\_\_\_\_\_ Date

Eric Van Mason  
Reviewer/Point of Contact

\_\_\_\_\_ Date

\_\_\_\_\_ Reviewer/Point of Contact

Eric Van Mason  
Author/Originator

\_\_\_\_\_ Author/Originator

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1.	General	<p><b>Comment:</b> Many waste volumes were reported for M-91 related projects that are inconsistent with the M-91 PMP charts.</p> <p><b>Modification needed:</b> Modify the LDR report and/or the M-91 PMP charts so that the same or similar volumes are quoted.</p>			

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2.	p. 1-5 thru p. 1-8	<p><b>Comment:</b> According to the PMP, Rev. 2 "Tree-Chart in Appendix D", the volumes are:</p> <p>MLLW-01<sub>Inv</sub> = 190 m<sup>3</sup> TG CH                      MLLW-01<sub>2007-2011</sub> = 3862 m<sup>3</sup> TG RH forecast                      MLLW-01<sub>2007-2011</sub> = 6172 m<sup>3</sup> TG CH forecast                      MLLW-02<sub>Inv</sub> = 275 m<sup>3</sup> TG CH                      MLLW-02<sub>2007-2011</sub> = 354 m<sup>3</sup> CH forecast                      MLLW-03<sub>Inv</sub> = 586 m<sup>3</sup> CH + 300 m<sup>3</sup> for M-91-12                      MLLW-03<sub>2007-2011</sub> = 541 m<sup>3</sup> CH forecast                      MLLW-04A<sub>Inv</sub> = 1177 m<sup>3</sup> CH                      MLLW-04A<sub>2007-2011</sub> = 502 m<sup>3</sup> CH forecast                      MLLW-04B<sub>Inv</sub> = 15 m<sup>3</sup> CH                      MLLW-04B<sub>2007-2011</sub> = 346 m<sup>3</sup> CH forecast                      MLLW-05<sub>Inv</sub> = 13 m<sup>3</sup> CH                      MLLW-05<sub>2007-2011</sub> = 18 m<sup>3</sup> CH forecast                      MLLW-06<sub>Inv</sub> = 15 m<sup>3</sup> CH                      MLLW-06<sub>2007-2011</sub> = 8 m<sup>3</sup> CH forecast                      MLLW-07<sub>Inv</sub> = 126 m<sup>3</sup> CH                      MLLW-07<sub>Inv</sub> = 149 m<sup>3</sup> RH                      MLLW-07<sub>2007-2011</sub> = 528 m<sup>3</sup> RH forecast                      MLLW-08<sub>Inv</sub> = 20 m<sup>3</sup> CH                      MLLW-08<sub>2007-2011</sub> = TBD m<sup>3</sup> CH forecast                      MLLW-09<sub>Inv</sub> = 0? m<sup>3</sup> CH                      MLLW-09<sub>2007-2011</sub> = 9 m<sup>3</sup> CH forecast                      MLLW-10<sub>Inv</sub> = 0? m<sup>3</sup> CH                      MLLW-10<sub>2007-2011</sub> = TBD m<sup>3</sup> CH forecast</p> <p><b>Modification needed:</b> Modify document as needed.</p>			

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3.	p. 1-8 thru p. 1-9	<p><b>Comment:</b> Verify how "TRUM-CH Special, TRUM-CH Standard, and TRUM-RH" relate back to M-91 Milestones. According to the PMP, Rev. 2 "Tree-Chart in Appendix D", the volumes are:</p> <p>TRUM-CH Special<sub>Inv</sub> = 3896 m<sup>3</sup> in ABS  TRUM-CH Special<sub>2007-2011</sub> = 17,193 m<sup>3</sup> RH forecast  TRUM-CH Standard<sub>Inv</sub> = ??? m<sup>3</sup> in ABS  TRUM-CH Standard<sub>2007-2011</sub> = ??? m<sup>3</sup> RH forecast  TRUM-RH<sub>Inv</sub> = 260 m<sup>3</sup>  TRUM-RH<sub>2007-2011</sub> = 1009 m<sup>3</sup> forecast</p> <p><b>Modification needed:</b> Modify document as needed.</p>			
4.	p. 1-8 thru p. 1-9	<p><b>Comment:</b> Explain how Retrievably Stored Waste is counted by this report. How can RSW be added into the specific MLLW groupings as the actual amount is currently unknown?</p> <p><b>Modification needed:</b> Verify and modify document as needed.</p>			
5.	p. 1-10 and 1-11	<p><b>Comment:</b> The "Current Inventory and Projected Generation" columns need updating per previous comments.</p> <p><b>Modification needed:</b> Modify document as needed.</p>			
6.	p. 1-11	<p><b>Comment:</b> Verify how 0.42 m<sup>3</sup> of MWLL-08 will be treated between 2007 and 2011 when no current treatment path exists.</p> <p><b>Modification needed:</b> Change 0.42 m<sup>3</sup> to TBD.</p>			

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7.	p. 1-12 thru p. 1-30	<p><b>Comment:</b> Column E does not provide enough information for the potential mixed waste materials with possible future use paths.</p> <p><b>Modification needed:</b> Modify row E on p. 1-12 to read "Description/documentation of the future use of items in column E included in an additional column" (new column F). Also, add a column F to Table 1-4 that includes a brief description of the path for re-use/recycle and the corresponding descriptions for each to Table 1-3.</p>			
8.	p. 1-14	<p><b>Comment:</b> Additional wastes present at 234-5Z should include tanks, piping, and control and processing equipment including the RMA/RMB/RMC lines, etc.</p> <p><b>Modification needed:</b> List additional equipment/components in column D.</p>			
9.	p. 1-16	<p><b>Comment:</b> Additional wastes present at 241-Z-361 include piping, etc. Also, the 200-PW-1 OU is not listed in Columns G and H.</p> <p><b>Modification needed:</b> List additional equipment/components in column D and include schedule and integrating factor information in columns G and H, respectively for 200-PW-1 OU.</p>			
10.	p. 1-18	<p><b>Comment:</b> It is doubtful that liquids within the lead casks can be re-used. Negotiations may be needed in the future.</p> <p><b>Modification needed:</b> List how the liquids within the lead casks can be re-used, additional equipment/components in column D, and delete the "Negotiations are not needed" phrase in column G.</p>			

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11.	p. 1-19	<p><b>Comment:</b> Additional wastes present at IMUSTs not associated with buildings include piping, etc. Also, the 200-TW-1/2 OUs, etc. is not listed in Columns G and H.</p> <p><b>Modification needed:</b> List additional equipment/components in column D and include schedule and integrating factor information in columns G and H, respectively for 200-TW-1/ OUs, etc.</p>			
12.	p. 1-19	<p><b>Comment:</b> Basis for the statement under 224-T, column D, "mixed waste is not expected to be found in these items" needs to be explained. Negotiations may be needed in the future.</p> <p><b>Modification needed:</b> Delete the phrase above in column D or provide basis for statement and delete the "Negotiations are not needed" phrase in column G.</p>			
13.	p. 1-19	<p><b>Comment:</b> If the assumption that the media are stable and poses no threat to human health or the environment at 231-Z is not based on factual data, the statement should be removed.</p> <p><b>Modification needed:</b> Delete the phrase in column H that states "It is assumed that the media, if present, are stable and pose no threat to human health or the environment".</p>			
14.	p. 1-24	<p><b>Comment:</b> Schedule information for T Plant Canyon needs revision.</p> <p><b>Modification needed:</b> Add "Ecology reviewed and commented on the T-Plant LDR April 2007. However, as the T-Plant Permit is not final, negotiations will continue." to column G. Also, include schedule and integrating factor information in columns G and H, respectively for M-91-01.</p>			

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15.	p. 1-24	<p><b>Comment:</b> Status is incorrect and not all integrating factors are listed.</p> <p><b>Modification needed:</b> And add "Ecology reviewed and commented on the T-Plant LDR April 2007. However, as the T-Plant Permit is not final, negotiations will continue." to column G. Also, include schedule and integrating factor information in columns G and H, respectively for M-91-01.</p>			
16.	p. 1-25	<p><b>Comment:</b> Additional wastes present with the T-Plant IMUSTs include piping, etc. Also, negotiations may be needed in the future.</p> <p><b>Modification needed:</b> List additional equipment/components. Delete the "Negotiations are not needed" phrase in column G.</p>			
17.	p. 1-26	<p><b>Comment:</b> Not all integrating factors are listed for Double-Shell Tank Farms.</p> <p><b>Modification needed:</b> Add "SST Retrieval, WTP Construction, Permit Conditions, etc." integrating factor information in columns G and H, respectively.</p>			
18.	p. 1-27	<p><b>Comment:</b> Not all integrating factors are listed for Single-Shell Tank farms.</p> <p><b>Modification needed:</b> Add "SST Retrieval, WTP Construction, Permit Conditions, etc." integrating factor information in columns G and H, respectively.</p>			
19.	p. 1-28	<p><b>Comment:</b> Not all IMUSTs and integrating factors are listed.</p> <p><b>Modification needed:</b> Add to column C: 244-BX, 244-S, 244-TX, 244-U, 241-A-302A, 241-A-350, 241-A-417, 242-A-AX-152, 242-AZ-151, 242-AZ-154, 241-EW-151, 241-S-304, 241-TX-302C, 241-U-301B, and 244-A. And add "SST Retrieval, SST Permit Conditions, IS-1 OU, and CERCLA facility closure, and SST/DST DCRTs (M-32 and M-48), etc." integrating factor information in columns G and H, respectively.</p>			

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20.	p. 1-28	<p><b>Comment:</b> Not all integrating factors are listed for Miscellaneous Buildings.</p> <p><b>Modification needed:</b> Add "SST Retrieval, WTP Construction, Permit Conditions, etc." integrating factor information in columns G and H, respectively.</p>			
21.	p. 1-31	<p><b>Comment:</b> Not enough documentation is listed.</p> <p><b>Modification needed:</b> Add appropriate milestone and clean-up documents to the "Reason for Deletion Column" that verify where the matrices were disposed of in 2005 for both the 3711 and 2711-E buildings. Add the recent oil spill information and cleanup for the 2711-E building.</p>			
22.	p. 1-31	<p><b>Comment:</b> Not enough documentation is listed.</p> <p><b>Modification needed:</b> Add additional information to specify which CERCLA Removal Action was completed for both the UO<sub>3</sub> and U-Plant facilities.</p>			
23.	p. 1-31	<p><b>Comment:</b> Not enough information and documentation is listed.</p> <p><b>Modification needed:</b> Add additional information to specify which CERCLA Removal Action was completed, current status of, final disposition, etc. for the 4734D and PFP facilities, and 242-A ion exchange columns.</p>			
24.	p. 1-31	<p><b>Comment:</b> Not enough information and documentation is listed.</p> <p><b>Modification needed:</b> Add additional information to specify the basis that (sampling, inspection, demolition of, etc.) the facility does not contain PMW for the 340 Complex, (and list these-"many" is not sufficient), 1714-N, 314, 3708 buildings, and 100 Area facilities. 100 Area facilities need to be listed individually - "many" is not sufficient.</p>			

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25.	p. 1-32	<p><b>Comment:</b> Not enough information and documentation is listed.</p> <p><b>Modification needed:</b> Add additional information to specify which CERCLA Removal Action was completed, current status of, final disposition, etc. for the 234-5Z, 241-Z, 300 RRLWS, 2025E at 200 ETF, 105-KW, 3720, and 105-C and 118-C-4 facilities.</p>			
26.	p. 1-33	<p><b>Comment:</b> Not enough information and documentation is listed.</p> <p><b>Modification needed:</b> Add additional information to specify which CERCLA Removal Action was completed, current status of, final disposition, etc. for the 105-D, 105-DR, 117-DR, 190-DR, 105-F, 105-H, 1720-HA, 1713-H, and 100-N Reactor facilities.</p>			
27.	p. 1-33	<p><b>Comment:</b> Not enough information and documentation is listed.</p> <p><b>Modification needed:</b> Add additional information to specify which CERCLA Removal Action was completed, current status of, final disposition, etc. for the REDOX and Semi Works facilities. And add integration with the 200-IS-1 OU.</p>			
28.	p. 2-1	<p><b>Comment:</b> Not enough information and documentation is listed.</p> <p><b>Modification needed:</b> Add a "Path Forward" column to Table 2-1.</p>			
29.	p. 2-2	<p><b>Comment:</b> Not enough information and documentation is listed.</p> <p><b>Modification needed:</b> Add reference documents under the "Findings and Observations" column to Table 2-3.</p>			
30.	p. 3-1	<p><b>Comment:</b> Not enough information and documentation is listed.</p> <p><b>Modification needed:</b> Provide a record of decision or documented agreement basis for each "Completed" or "None" entry in Table 3-1 or modify these entries to state that a path forward has not been established.</p>			

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31.	p. 3-1 to 3-3	<p><b>Comment:</b> Not enough information and documentation is listed.</p> <p><b>Modification needed:</b> Provide a record of decision or documented agreement basis for each path forward entry in Table 3-1 listed (221-T Tank System, 222-S Lab, DST and SST Waste, etc., or modify these entries to state that the path forward listed is tentative and not agreed to by the Tri-Parties.</p>			
32.	p. 3-3	<p><b>Comment:</b> Editorial.</p> <p><b>Modification needed:</b> Modify footnote 1 of Table 3-1 to read...."will be reviewed and a graded approach to characterization will be made as necessary...."</p>			
33.	p. 4-2 to 4-4	<p><b>Comment:</b> Not enough information and documentation is listed.</p> <p><b>Modification needed:</b> Modify the "Volume currently stored" and "Projected volume to be treated" columns in Table 4-1 based on previous comments listed above.</p>			
34.	p. 5-3	<p><b>Comment:</b> Not enough information and documentation is listed.</p> <p><b>Modification needed:</b> Modify footnote 2 of Table 5-1 to be consistent with data in SWITS and the M-91 PMP. Also modify any data in Table 5-1 (such as MLLW-08 information), as needed to maintain consistency.</p>			
35.	p. 6-1	<p><b>Comment:</b> Not enough information and documentation is listed.</p> <p><b>Modification needed:</b> Add additional references including CERCLA cleanup documents (OU specific, CDI, facilities, etc.) SST and DST documents, etc.</p>			
36.	General	<p><b>Comment:</b> Units 100-NR-1, 1301-N, 1325-N, 1324-N/NA, 183-H, and 300 APT are not specified in the Report.</p> <p><b>Modification needed:</b> Add these units to table 5-1.</p>			