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STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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October 29, 2012

12-NWP-172

Mr. Oliver A. Farabee, Federal Project Director
United States Department of Energy
Richland Operations Office
P.O. Box 550, MSIN: H6-60
Richland, Washington 99352

Re: Ecology Review of Calendar Year 2011 Transuranic Mixed/Mixed Low-Level Waste Project
Management Plan Submitted for TPA Milestone M-091-03

Dear Mr. Farabee:

The Department of Ecology (Ecology) received the Calendar Year 2011 Transuranic Mixed/Mixed Low-Level Waste Project Management Plan, dated June 13, 2012 for review. Ecology finds that the document does not meet the criteria in TPA Action Plan Section 11.5 and is therefore incomplete. Please find our comments enclosed with this letter.

Ecology believes that it may be more pragmatic for all parties involved to shift our attention forward to the upcoming Calendar Year 2012 Project Management Plan. We look forward to working with the United States Department of Energy to resolve our concerns in that document. The next update of the Project Management Plan will also need to reflect the ongoing resolution of compliance issues at the Solid Waste Operations Complex.

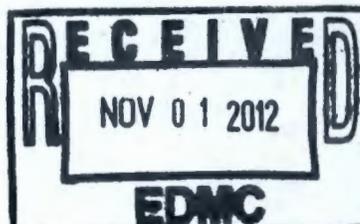
If you have any questions, please feel free to contact me at 509-372-7923.

Sincerely,

Deborah Singleton
Waste Management Project Manager
Nuclear Waste Program

ac/jvs

Enclosure
Distribution (see page 2)



M-091-03



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cc w/enc:

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Mike Collins, USDOE
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5. Document Number(s)/Title(s) Calendar Year 2011 M-91 Project Management Plan (PMP)	6. Program/Project/Building Number	7. Reviewer: Albert Chang, Steve Lowe, John Price	8. Organization/Group Ecology / Waste Management / Compliance	9. Location/Phone Richland 372-7950
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17. Comment Submittal Approval:	10. Agreement with indicated comment disposition(s)	11.
Date Organization Manager (Optional)	Date Reviewer/Point of Contact	Date Reviewer/Point of Contact
	Author/Originator	Author/Originator

Item	Location in Document	Comment	Hold Point	Disposition (Provide justification if NOT accepted.)	Status
1	Global (Lowe)	The scope of the PMP needs to be adjusted to agree with the M-91-03 milestone text. Many of the M-91 series milestones are specific to waste in above ground storage as of June 30, 2009 and in retrievable storage. However, milestone M-91-03 for the PMP encompasses all RCRA MLLW and TRUM waste, current and future generated. The TPA Section 11.5 also defines the content of the PMP and states it is to address "integration with other programs and projects" and provide capability information which includes "performance and specification requirements and projected capacity needs." The scope must include waste anticipated to be received from other generators (e.g., Tank Closure, 222 S). The PMP should be consistent with and reference the latest documented SWIFT forecast. The information is needed to adequately size and estimate future facilities and processing capabilities.			
2	Global (Lowe)	The TPA Section 11.5 says the PMP is to describe project interface control, specifically site-wide systems engineering. There are existing interface control documents with commitments to other projects and programs for waste management services that should be cited and described in the PMP.			

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3	Global (Lowe)	Delete the mention of in-trench treatment in Trenches 31 & 34 throughout the document. In-trench treatment is no longer allowed.			
4	Section 3.3.3 and Section 4.2.2 (Lowe)	Offsite commercial processing of MLLW and TRUM waste is described. Please insert a sentence referring the reader to Section B1.8 where onsite and offsite transportation of waste is discussed.			
5	Section 4.2.2 (Lowe)	The assumption that "other TRU waste generated during Hanford Cleanup activities (e.g., 618-10/11, PFP) will be compliantly packaged at the point of generation" is questionable. For example, cleanup of 618-10/11 is likely focused on retrieving the waste and getting it in a safe form to transport elsewhere where it can be further managed (temporary storage, NDE/NDA, treatment, repackaging, etc.) until disposed.			
6	Table 4-1 (Lowe)	There are two M-91-44 milestones shown with incorrect descriptions and due dates. The list should be modified to agree with the current TPA.			
7	Section 4.3.2 (Lowe)	Change the statement to " Three The TRUPACT-II containers are typically shipped three at a time to WIPP".			
8	Table 5-2 (Lowe)	The entry "Sodium Metal Contaminated Debris" is said to have been processed at an offsite commercial facility in May 2011. It is unclear if this waste still exists or should be removed from the list of No-Path Forward Waste.			
9	Section 6.3 (Lowe)	Change the list of storage buildings associated with WRAP to "... <u>2404-WA, 2404-WB, and 2404-WC</u> ...". Change the next sentence to "The storage capacity at WRAP also includes <u>temporary</u> outdoor storage that is intended to facilitate the WRAP waste management activities...".			
10	Section 6.4 (Lowe)	Change the sentence to "The MWTs (218-W-5 LLBG, Trenches 31 and 34) provide storage for various sized containers of mixed waste <u>which meet LDR requirements.</u> "			

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11	Section 7.3.2 (Lowe)	The text discusses debris waste that cannot be packaged into WIPP-certifiable containers at the point of generation and how the future M-91 large container CH-TRUM and RH-TRUM facility could be used but “this would result in the facility to operate past the anticipated shutdown date of FY2030 as currently planned.” The alternative of repackaging the waste at WRAP and T Plant is also mentioned but “this would require WRAP and T Plant to be operated longer than anticipated.” This logic is in error; a path forward must be provided. (The facility is not yet designed or constructed, but we’re planning for its shutdown?)			
12	Section 8.1 (Lowe)	Descriptions are provided for most of the WBS planning elements except for support to ERDF (WBS 013.10) and IDF (WBS 013.12). Please provide these descriptions so the reader can understand the scope of these activities.			
13	iii/3 (Compliance)	Revise 2 nd sentence as follows: “These changes refocused the major milestone from delayed the acquisition of facilities to the treatment of Hanford Site <i>Resource Conservation and Recovery Act of 1976</i> ³ MLLW and the certification and shipment of TRUM waste, to satisfy land disposal treatment standards <u>but added shipment milestones for TRUM waste.</u> ”			
14	Table ES-1 Table 1-2 (Compliance)	Add an additional column to the table, showing milestone status as either “Completed” “On Schedule” “At Risk” or “To Be Missed”			
15	1-1 et seq. (Compliance)	Delete discussion of <i>Hanford Site Cleanup Completion Framework</i> beginning in 3 rd paragraph, continuing through the 2 nd paragraph on page 1-2.			
16	1-1 (Compliance)	Delete Table 1-1			

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17	1-2/3 (Compliance)	Revise 1 st sentence as follows: "Ecology, EPA and DOE approved changes to the M-091 Milestones in September 2010 that align with the Completion Framework.			
18	1-2/3 (Compliance)	Revise 1 st sentence as follows: "The major M-091 Milestone previously focused on <u>included a near-term date for</u> the acquisition and modification of facilities/capabilities to support retrieval, storage, and treatment of wastes."			
19	1-2/4 (Compliance)	Delete paragraph "During negotiations . . . priority cleanup activities."			
20	1-2/5 (Compliance)	Delete end of paragraph ". . . based on the <i>Framework Cleanup</i> and available resources."			
21	1-6/2 (Compliance)	Revise last sentence of Section 1.2 as follows: "Provided in Chapter 7 is a summary of the CERCLA cleanup actions that have the potential to generate waste with TRU constituents greater than 100 nCi/g, along with projected volumes, and <u>Schedules</u> from the CERCLA cleanup actions authorized in records of decision (RODs) and action memoranda, and <u>milestone schedules for CERCLA cleanup actions still in the investigatory phase.</u> "			
22	Sec 1.4 (Compliance)	In second bullet, delete 2 occurrences of text "in-trench treatment," – this has been discontinued.			
23	Fig 1-4 (Compliance)	Delete "or In-Trench Treatment (MWT 31 & 34)			
24	Fig 1-5 (Compliance)	Delete Figure 1-5. FY15 and FY16 in particular are not compliant with milestone requirements.			

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25	1-10/3 (Compliance)	<p>Delete paragraph.</p> <ul style="list-style-type: none"> • Basing waste work-off rate on "Plateau Remediation Contract baseline" is inappropriate, because text doesn't state whether that baseline is TPA-compliant. • The paragraph includes the false statement "... and current funding through Congressional appropriation." The latter statement would only apply to FY12. • ARRA funding is past, and a future funding profile isn't based on past funding (although certainly the ETC is based on work performed to date, including ARRA-funded work). 			
26	1-10/3 (Compliance)	<p>Although the paragraph is deleted, please identify where in text DOE explains the assumptions cited in the sentence "Funding for FY2019 through FY2031 was estimated based on assumptions regarding operations that support completion of the M-091 Milestones series and is subject to change as planning is refined." One of the basic purposes of this PMP is to document planning assumptions, so those assumptions should be explained in detail in this report.</p>			
27	1-10/4 (Compliance)	<p>Revise first sentence as follows: "Given the anticipated funding levels and competing site priorities, it has become necessary <u>DOE has chosen</u> to suspend M-091 Milestone work scope for the next few years until resources become available."</p>			
28	1-11 (Compliance)	<p>Delete the first two and last sentences of the bulleted paragraph.</p>			
29	1-12 (Compliance)	<p>Delete the first bullet.</p>			

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30	2-1/2 (Compliance)	Delete the sentence "Containers determined to present unacceptable hazards to the workers will be documented and may be reburied to provide adequate protection during storage." Re-burying a waste box does not meet the criteria for compliant storage, and would not be allowed.			
31	2-1/last (Compliance)	DOE has lost WIPP certification capability at Hanford. Replace the generic "Operation ramp-up" with details about how and when DOE will re-develop certification capability at Hanford.			
32	Sec 2.1 2 nd (Compliance)	Delete sentence "The schedule of retrieval activities is based on the funding profile given in Figure 8-1." Replace the logic for retrieval with some other basis, e.g., minimizing the life-cycle retrieval cost, optimizing retrieval vs. capacity for re-packaging, optimal WIPP shipment schedule, off-site treatment capacity, etc.			
33	2-1/last (Compliance)	Revise the first sentence to read ". . . retrieval of RSW will not occur in FY 2012 through FY 2015." DOE has target milestones for FY12 through FY15, but cannot unilaterally decide not to retrieve in FY15.			
34	2-1/last (Compliance)	Delete 3 rd and 4 th sentences of the last paragraph.			
35	2-6/1 (Compliance)	For sentence beginning on page 2-3, DOE needs to develop a plan now for RH drums in poor condition. Revise sentence to read " If <u>When</u> RH containers are found that are believed to have poor integrity, they will be covered with lead blankets, soil , or other shielding to reduce dose rates and a plan <u>an advanced retrieval capability will be developed for executed to retrieve</u> retrieving these containers."			
36	2-6/4 (Compliance)	Add additional text describing how the waste processing manages waste with free liquids, because the text states: "During the winter months, a drum warming unit will be used to melt any liquids inside a drum prior to going into the real-time radiography equipment."			

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37	3-1/1 (Compliance)	Revise sentences as follows “ The combination of commercial <u>Commercial</u> capabilities and in-trench treatment will continue to be used for treating the remaining MLLW. The MLLW that cannot currently be treated either commercially or by in-trench treatment is considered no-path-forward waste.”			
38	3-1/3 (Compliance)	Delete paragraph beginning with sentence “In-trench treatment will continue to be performed to meet the LDR requirements.”			
39	3-1/last (Compliance)	Revise sentence as follows: “ Under the anticipated annual funding profile, DOE has suspended treatment of MLLW will not occur during FY2013 <u>and FY2014 through FY2015.</u> ”			
40	3-1 (Compliance)	Delete the sentence beginning “The treatment of MLLW will restart during FY2016 once retrieval operations has restarted and feed is available.” The logic underlying this statement has two errors: one, Ecology has not agreed that DOE would not retrieve during FY2015, and there is MLLW feed already available in the current CWC stored waste.			
41	3-2/last (Compliance)	Additional treatability groups need to be added to the bullets, and additional text. This PMP confirms on page 2-4 that free liquids occur in drums, and a 2012 Ecology inspection at CWC confirms the presence of free liquids. One of the treatability groups should explicitly acknowledge waste with free liquids, and describe the appropriate treatment.			
42	3-3/1 (Compliance)	Revise first bullet as follows: “RH and Large Container,” Treatment Path: In-trench treatment , commercial’			
43	Sec. 3.3 (Compliance)	Replace following sentence with description of other capabilities, as in-trench treatment is no longer allowed: “In-trench treatment in the MWTs may be used to minimize significant worker risks and physical infrastructure capabilities associated with opening and processing some of the wastes contained in this treatability group.”			

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44	Sec 3.3.5 (Compliance)	Revise Subsection heading as follows: “Commercial and In-Trench Treatment (MLLW-07)”			
45	3-5/2 & 3 (Compliance)	Delete the 2 nd and 3 rd paragraphs, as in-trench treatment is no longer allowed.			
46	Sec 4 – intro (Compliance)	This section is mis-leading because it implies that WRAP is a current capability, whereas WRAP is on standby status. It is also mis-leading because it implies that WIPP certification is occurring at WRAP, while WRAP is on stand-by. Revise the intro to be more factual, and introduce text that will have to be added later in the chapter. Section 4 will need detail to describe the activities and schedule to bring WRAP back on-line, and to re-instate WIPP certification capability at Hanford.			
47	Sec 4.2.1 (Compliance)	Revise sentence as follows: “DOE repackages <u>has the capability to repackage</u> small containers of TRUM waste into WIPP certifiable containers at T Plant and WRAP as described in the following subsections,” The present tense of the sentence “repackages” is mis-leading, because it implies that DOE is currently repackaging small containers, whereas WRAP is currently in standby mode.			
48	Sec 4.2.1.1 (Compliance)	Revise sentence as follows: “DOE utilizes <u>can utilize</u> the T Plant for treating . . .” The present tense of the sentence “utilizes” is mis-leading, because it implies that DOE is currently treating waste at T Plant, but there is currently no treatment occurring at T Plant.			
49	Fig 4-3 (Compliance)	Modify the figure to include a step(s) accounting for free liquids. This PMP confirms on page 2-4 that free liquids occur in drums, and a 2012 Ecology inspection at CWC confirms the presence of free liquids.			
50	Sec 4.2.3 (Compliance)	This section should describe the caisson waste that would come into the SWOC from 618-10 and 618-11, and describe whether or not the CERCLA waste is following the same process as the RSW.			

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51	Table 4-1 (Compliance)	Modify the table to show the 618-10 and 618-11. caisson wastes. The table should include dates that are compliant with the M-16 Milestone series dates applicable to the CERCLA waste.			
52	Table 4-1 (Compliance)	Modify the table to show the CERCLA wastes to be generated from the 200-PW-1/3/6 remedial action. The table should reflect completion of the remedial action (including TRUM waste disposal at WIPP) by 9/30/2024 date for M-16-00 Milestone.			
53	Sec 4.31. (Compliance)	This section omits the fact that Hanford has lost its WIPP certification capability. This section should be expanded to discuss the activities and schedule for re-acquiring the certification capability at Hanford.			
54	Sec 4.3.2 (Compliance)	Revise sentence as follows: "At WRAP DOE <u>has the capability to load</u> loads drums and SWBs of CH-TRUM waste . . ." The present tense of the sentence "repackages" is mis-leading, because it implies that DOE is currently loading waste, whereas WRAP is currently in standby mode.			
55	5-1/2 (Compliance)	Delete text "in-trench treatment,"			
56	5-1/3 (Compliance)	Delete third paragraph. Note this would paragraph would justify DOE suspending waste retrieval in FY12-14, and then not meeting the M-91 milestone series.			
57	Table 7-2 (Compliance)	Add a date for 200-CW=5 and PW-1/3/6 OUs. Although an execution schedule has not been developed for those OUs, this PMP should project a date (e.g., no later than FY22 in order to meet M-16-00 Milestone date).			

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58	Sec. 8.1/1 (Compliance)	<p>Delete paragraph.</p> <ul style="list-style-type: none"> • Basing waste work-off rate on “Plateau Remediation Contract baseline” is inappropriate, because text doesn’t state whether that baseline is TPA-compliant. • The paragraph includes the false statement “. . . and current funding through Congressional appropriation.” The latter statement would only apply to FY12. • ARRA funding is past, and a future funding profile isn’t based on past funding (although certainly the ETC is based on work performed to date, including ARRA-funded work). 			
59	Sec 8.1/1 (Compliance)	<p>Although the paragraph is deleted, please identify where in text DOE explains the assumptions cited in the sentence “Funding for FY2019 through FY2031 was estimated based on assumptions regarding operations that support completion of the M-091 Milestones series and is subject to change as planning is refined.” One of the basic purposes of this PMP is to document planning assumptions, so those assumptions should be explained in detail in this report.</p>			
60	Sec 8.3.1/1 (Compliance)	<p>Delete third sentence, “Given preliminary budget levels and site priorities, work will be curtailed sharply that supports the M-091 Milestone series.”</p>			
61	8-4/last (Compliance)	<p>Delete the 2nd sentence in the last paragraph on page 8-4, that continues onto page 8-5: “Focus on the completion of cleanup along the River Corridor coupled with future funding uncertainty formed the basis for the recently renegotiated milestones.”</p>			
62	8-5/1 (Compliance)	<p>Revise sentence as follows: “Target (unenforceable) milestones were established for the M-091 Milestone work in FY 2012 through FY 2014 and enforceable milestones were agreed to for FY 2015 and FY 2016-as the River Corridor cleanup is completed and funding is made available to refocus on MLLW and TRUM retrieval.”</p>			

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63	Sec 8.3.2 (Compliance)	Delete this section. The logic underlying this section has two errors: one, Ecology has not agreed that DOE would not retrieve during FY2015, and there is MLLW feed already available in the current CWC stored waste.			
64	Sec 8.3.3.1 (Compliance)	Revise text of first sentence to read "The alpha caisson wastes <u>in the 218-W-4B burial ground</u> contain waste containers . . ."			
65	Sec 8.3.3.1 (Compliance)	Move last paragraph of subsection up to be first subsection, and add a statement that the 618-10 and 618-11 wastes will be retrieved prior to retrieval of caisson wastes from the 218-W-4B burial ground.			
66	Sec 8.3.7 (Compliance)	This section omits the fact that DOE has lost WIPP certification capability at Hanford. Add text with details about how and when DOE will re-develop certification capability at Hanford.			