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STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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August 14, 2009

Mr. Matthew S. McCormick
Assistant Manager for the Central Plateau
Richland Operations Office
United States Department of Energy
P. O. Box 550, MSIN: A7-50
Richland, Washington 99352

Re: Comments on Revised M-91-03 Interim Milestone *Transuranic (TRU) Mixed/Mixed Low-Level Waste Project Management Plan (PMP)* [HNF-19169, Rev. 6]

Dear Mr. McCormick:

The Department of Ecology (Ecology) reviewed the revised M-91 PMP (HNF-19169, Rev. 6) prepared by CH2MHILL Plateau Remediation Company. Ecology's comments to the United States Department of Energy (USDOE) are enclosed. Ecology expects that USDOE will revise and resubmit the PMP after our comments are resolved.

If you have any questions, contact Michelle Mandis at 509-372-7970, or me at 509-372-7923.

Sincerely,

Deborah Singleton
Waste Management Project Manager
Nuclear Waste Program

mm/pll

Enclosure

cc w/enc:

Dennis Faulk, EPA
M. Collins, USDOE
Larry Romine, USDOE
Curtis Stroup, CHPRC
Robert Piippo, FH
Stuart Harris, CTUIR
Gabriel Bohnee, NPT

Russell Jim, YN
L. Buck, Wanapum
Susan Leckband, HAB
Ken Niles, ODOE
Environmental Portal
Administrative Record: M-91-03/PMP

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REVIEW COMMENT RECORD	Date	Review No.
	Project No.	Page

		Case has a completion date of 2020 and text states this activity will start in 2019 for Base Case. Can this be achieved in one year? If not revise text to reflect accurate completion date.			
4.	p. iv, Table	Revise text for M-91-44C to reflect a date of 6/30/2012 as identified in Addendum D of the TPA.			
5.	p. iv	Paragraph 4, Provide text to indicate what the potential impacts to CWC storage are, or where CH TRU is expected to be stored until 2014?			
6.	p. 5, sec 2.2	Proved text in 7 th bullet to describe how the volume of waste generated from failed RSW containers is calculated to support the next generation retrieval.			
7.	p. 12	Include text to support the decision by Ecology to allow treatment of PCB – contaminated waste at Perma-Fix Northwest.			
8.	p. 14, ¶ 5	In the last sentence of the paragraph that starts “Plans would process...;” the text is not clear in stating that :Plans would process 600 m ³ per year...Plans do not process, suggest revising text to identify that the T-Plant SWPC would process...			
9.	p. 16	Since the 2008 Evaluation Study did not include recommendations, what are the basis for the bulleted assumptions?			
10.	p. 37 and 41 bullets	Bullets of the As-Soon-As-Feasible Compliance Case MLLW Assumptions and As-Soon-As-Feasible Compliance Case Transuranic Waste Assumptions do not appear to be supporting the text summarizing the description of the As-Soon-As-Feasible compliance Case funding; please identify this text more clearly or provide the needed text.			
11.	Page v, milestone accomplishments, M-91-43 MLLW, second bullet	Provide quantification.			
12.	Section 2.5.2, page 14, 2nd column, 2nd paragraph	Clarify/correct units regarding whether dose is 20,000 rem/hr or mrem/hr and plutonium quantity as 2,100 grams rather than gallons. See also: Section 3.1.1, page 21, 2nd column, last paragraph.			
13.	Section 3.1.2, page 24, 2nd column, last	Provide or reference results of HVAC system evaluation for the support of the future processing activities.			

REVIEW COMMENT RECORD	Date	Review No.
	Project No.	Page

	paragraph				
14.	Section 3.2.1, page 29, 1st column, last two paragraphs	Clarify clause "assumed in FY2003 and found...in 2004"			
15.	Page 32, 2nd column, top paragraph	Please confirm with PermaFix NW – I believe they have applied for permit modification to remove the GASVIT.			
16.	p. iii and iv	Dates in text and Table do not correlate; resolve.			
17.	p. 2	Delete "Finally" in second paragraph of first column.			
18.	p. 2	The definitions presented for LLW overlap quite a bit as spent fuel is HLW but can really have high and low levels of radioactivity as can TRU waste and byproduct material. Clarify the basis of the definitions, per DOE Order....			
19.	p. 23	Describe the size dimensions of WRAP's storage and processing areas and where the facility is located like was done for CWC and T-Plant.			
20.	p. 39	Clarify if WIPP can receive waste streams containing carbon tetrachloride or if pre-treatment is required.			
21.	p. A-2	Definitions for "CH" and "RH" wastes imply that the surface is a receptor for dose. Please modify here and through-out the document for exposure rates/measurements.			
22.	p. C-3	There is no waste site in the 200-IS-1 OU or Qmap listed as "216-E-15". Please correct. Also clarify in text on page H-6.			
23.	p. H-2 and H-6	The third line of the flow diagram's second diamond notes "33DeCi"; clarify if Deca Ci or deci Ci are intended.			
24.	p. H-5	Add "IH" or industrial Hygienist to the acronym listing.			
25.	p. H-11	Add and "T" to Quick Assay in the third box.			
26.	p. H-15	Resolve the "Database Information:" units...cannot have both 1mR and less than 1 DE-Ci; clarify the DE-Ci.			
27.	p. M-3	Either add HSG to acronym listing or define in text.			
28.	p. N-2	Either define RTR on acronym listing or define in text.			
29.	p. N-4	Either define FGE on acronym listing or define in text.			
30.	p. O-4	Resolve extra line return in last paragraph.			
31.	Page iii, table, M-91, milestone M-	Punctuate volume (in same manner of remainder of document).			

REVIEW COMMENT RECORD	Date	Review No.
	Project No.	Page

	91-42F, requirement description				
32.	Page iii, table, M-91 milestone M-91-42J, requirement description	Delete "at".			
33.	Section 2.1.7, Page 4, column 2, third paragraph, line 15	Coordinate reference with this date. Refs say April 2009 not February 2009.			
34.	Page 11, Section 2.2.5, last paragraph, line 1	Modify "forecast" not "forecasted".			
35.	Section 2.5.2, page 16, 1st column, 3rd paragraph, 2nd line	Resolve typo in "Evalutaion".			
36.	Section 2.6.1, page 18, 1st paragraph, line 7	Correct reference (hyphen) to "218-W-4B".			
37.	Page 21, Section 3.1.1, 2nd paragraph, line 4	Delete excess space in "T17".			
38.	Section 3.1.2, page 25, 1st paragraph, line 9	Resolve spelling error "comliant" -- should be "compliant".			
39.	Page 25, Section 3.1.3, 1st paragraph, lines 1 and 8	Delete "of" following "disposed".			

REVIEW COMMENT RECORD	Date	Review No.
	Project No.	Page

40.	Appendix D, page D-3, next to last bullet	Modify "Retrieval and Storage"... volumes are internal volumes...			
41.	Globally	Add the missing dashes in many places of the document between "M" and "91" and "other milestone numbers".			
42.	Globally	Change all "Rev. 5" to "Rev. 6".			
43.	p. i	The Preface, nor the rest of the document describes: <ul style="list-style-type: none"> -Status of TRU/M certification increase production rates from 120 m³ to 1000 m³ -Why retrieval, MLLW treatment, and TRU/M certification rates are so low, even with ARRA monies -Why this is Revision 6, and last year was Revision 4 -Why only 270 m³ of TRU/M will be prepared for certification rather than 300 m³ -Status of completion of sending all of the 5066 m³ of MLLW in ABS as of 2002 LDR report. 			
44.	p. iii	The "added text" to resolve the PMP Rev. 4, Comment #6 is only partially complete. Add as appropriate in the PMP Rev. 6 citations of reports and studies evaluated and/or conducted to treat RH and Large containers of both MLLW and TRU/M.			
45.	p. iv	If T-Plant is only maintained until 2028, how will M-91-44 TRU waste be processed from 2028 until 2040?			
46.	p. iv	Clarify in the 4 th paragraph that the CCP will only provide support for PFP associated waste at the Hanford site immediately. Also, will there be enough storage for the backlog of waste that will be generated by the approximately 5-yrs of storage of TRU/M in the interim? Provide calculations demonstrating a comparison of waste volume anticipated and storage capacities of T-Plant, CWC, and WRAP as a new Appendix (per previous comment #30 in Rev. 4).			
47.	p. 6 and Appendix J	Provide explanations, rather than notes that describe why: <ul style="list-style-type: none"> - A decrease of approximately 3000 m³ of TRU/M in ABS from last year and only 600 m³ was certified in 2008 - A decrease in approximately 3000 m³ of TRU/M in the forecast - A decrease in approximately 1200 m³ of MLLW in the forecast 			

REVIEW COMMENT RECORD	Date	Review No.
	Project No.	Page

48.	p. 6	Explain the basis as to why all of the remaining RSW drums are degraded and require over pack?			
49.	p. 7	Explain the basis as to why (documented operations): - 95% of the RSW debris waste containers contain conforming waste and the other percentage is non-conforming - splits between MLLW and TRU/M			
50.	p. 8	Specify if DOE Orders and Washington Administrative Codes will be upheld for MLLW and WIPP certification requirements used for TRUM that may also be classified material (Previous comment #9 from Rev. 4)?			
51.	p. 9	Appendix B does not contain enough information to accurately describe the large decrease in total MLLW-07 project volume as noted in previous Comment #10 for Rev. 4. Add more information to resolve this comment.			
52.	p. 9	Also, provided information regarding the large decrease of MLLW-03 volumes.			
53.	p. 9 and through-out	Bullets describing the types of waste that will be reclassified from "CH" to "RH" were provided in various parts of the Rev. 6 document. However, how this reclassification of waste volumes will impact volumes previously counted to meet M-91 Milestones is not discussed. Provide this information as requested in comment #11 of Rev. 4.			
54.	p. 14	Discuss if any new size or different packaging arrangements for RH TRU/M waste cash-shipment alternatives have been explored or when this critical task will be conducted.			
55.	p. 15	Provide information to define the timeline associated with the "CD" process.			
56.	p. 15	Add the document number for the April 2008 draft "M-91 Project Alternative Evaluation Study" to the text and provide this document to Ecology.			
57.	p. 16, 17, 30, and through-out	Add the various document numbers to the references listed on this page and through-out Rev. 6.			
58.	p. 16	Define how and when a plan will be developed to ship approximately 50 m ³ of RH TRU/M to WIPP.			
59.	p. 16	Provide assurance that WIPP will continue to operate through the Year 2050 and will be accepting waste from Hanford, including details of DOE's National TRU/M Strategy.			
60.	p. 22	Add information regarding the 2420-W Covered Storage Pad at CWC for cask			

REVIEW COMMENT RECORD	Date	Review No.
	Project No.	Page

		storage. Also add that most of the RH-TRU is actually in concrete bunkers with soil sued for shielding,			
61.	p. 25	Add the types of waste streams, not just debris, and specify the types of treatment techniques that will be used for immobilization for in-trench treatment.			
62.	p. 26	Add the construction of "Super Cells" 9 & 10 to the ERDF description.			
63.	p. 27	Clarify the statement "In the Base Case, 750 m ³ of RSW is retrieved during FY 2009." Is this volume counting a portion of the volume retrieved during CY 2008 previously counted to meet that milestone, or does the project expect to retrieve approximately 500 m ³ of RSW in the next month?			
64.	p. 30	Explain why the LDR Treatability Group/Waste Volume Table is so different this year from the values reported from last year.			
65.	p. 30, 33, 34, 35, and through-out	Update the information presented regarding the new Permit for Perma-Fix West to accept and treat PCB contaminated wastes.			
66.	p. 35	Describe the basis for "redesignating" the dioxin containing waste. Ecology strongly suggests that DOE and their contractor consult Ecology prior to this effort.			
67.	p. 36	Provide more information and a timeline associated with the P015-listed waste.			
68.	p. 36	Explain the basis for adding the new 480 packages listed in LDR Treatability Group MLLW-08. How was this waste counted before?			
69.	p. 37	Re-add the permitting bullet and permit modifications needed for the Base Case MLLW Assumptions.			
70.	p. 38	While future off-site TRU/M processing rates were added, the types of waste streams sent, potential commercial treatment technologies and facilities, etc. were not provided. Provide a basis for these rates per comment #25 of Rev. 4.			
71.	p. 39	Explain why the waste streams presented in Rev. 6 do not match those in Rev. 4 for WIPP approved TRU/M streams. Also, resolve comments #26 and 27 from Rev. 4.			
72.	p. 42	Rev/ 4 of the PMP specifies 21 years are needed to complete waste MLLW-07 LDR treatability group; while Rev. 6 states that this can be completed in 1 year using off-site commercial facilities. Clarify or resolve this statement as it is highly unlikely that this can occur.			
73.	p. 43	Rev. 4 noted there was 8900 m ³ of RH-TRU/M; while Rev. 6 states there is			

REVIEW COMMENT RECORD	Date	Review No.
	Project No.	Page

		9800 m ³ of RH-TRU/M. Resolve or explain this difference.			
74.	p. 43	It is highly unlikely DOE and their contractor will reach WIPP compliant packaging rates specified. Provide more information for the basis of how these rates will be reached.			
75.	p. 43	Where at WRAP are the WIPP compliant packaged wastes and waste awaiting processing is being stored.			
76.	p. 43	Include updates on alternatives/plans to establish large container and RH capabilities per project constraints and required budget needed per comment #32 of Rev. 4.			
77.	p. 43	Add "the draft M-91 Change Package M-91-08-05." At the end of the last sentence of section 4.1.			
78.	p. 44	Provide information as to why acceleration of retrieval of RSW, acceleration of MLLW treatment, and TRU/M certification was not listed or considered as part of the "building blocks" for use of ARRA monies when those have been Ecology's documented priorities.			
79.	p. 45	Specify the type of RH RSW technologies for retrieval and assay that need to be developed...for boxes, drums, caissons wastes and included the constraints of the Next Generation and RH Caisson retrieval and processing efforts.			
80.	p. C-7	Add the information for the burial grounds specified in previous Rev. 4 comment #35.			
81.	p. D-2	Specify why: <ul style="list-style-type: none"> - The increase in retrieval, TRU/M small container volumes - If the volumes include WIPP ready accumulation in storage values - Why the volumes of TRU/M are approximately 1/2 of last years - Why approximately 1000 m³ of MLLW-03 is less than last year's values 			
82.	p. F-2	Explain why the volume of TRU/M large containers has double again this year as it doubled last year too for a net increase of almost 5000 m ³ .			