



STATE OF WASHINGTON  
 DEPARTMENT OF ECOLOGY  
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March 27, 2007

Mr. Matthew S. McCormick  
 Richland Operations Office  
 United States Department of Energy  
 P. O. Box 550, MSIN: A5-11  
 Richland, Washington 99352

Re: Comments on Revised *Remedial Design/Remedial Action Work Plan for the 221-U Facility*  
 [DOE/RL-2006-21, Draft A]

0071902

Dear Mr. McCormick:

The Department of Ecology has reviewed the draft Remedial Design/Remedial Action Work Plan (RD/RAWP) prepared by Fluor Hanford, Inc. Ecology's written comments on the RD/RAWP are enclosed.

If you have any questions, contact Jennifer Ollero at 509-372-7988 or me at 509-372-7885.

Sincerely,

*Rick Bond*

Rick Bond  
 Transition Project Manager  
 Nuclear Waste Program

jo/pll  
 Enclosure

cc w/enc: Craig Cameron, EPA  
 Larry Romine, USDOE  
 Wade Woolery, USDOE  
 Julie Robertson, FH  
 Stuart Harris, CTUIR  
 Gabriel Bohnee, NPT

Russell Jim, YN  
 Susan Leckband, HAB  
 Ken Niles, ODOE  
 Environmental Portal  
 Administrative Record: 221-U Facility  
 OU: U PLANTAA

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REVIEW COMMENT RECORD (RCR)**

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5. Document Number(s)/Title(s) Remedial Design/Remedial Action Work Plan for the 221-U Facility (DOE/RL-2006-21, Draft A)	6. Program/Project/Building Number 221-U	7. Reviewer Rick Bond, Jennifer Ollero, Oliver Wang	8. Organization/Group Waste Management	9. Location/Phone
17. Comment Submittal Approval:	10. Agreement with indicated comment disposition(s)		11. CLOSED	
Date 3/7/07	Organization Manager (Optional) Ron Skinnarland	Date	Reviewer/Point of Contact Jennifer Ollero	Date
		Author/Originator		Author/Originator

Item	Location in Document	Comment	Hold Point	Disposition (Provide justification if NOT accepted.)	Status
1.		<p><b>General:</b> Suggest re-formatting RD/RAWP for clarity and consistency with the 221-U Record of Decision, and the RD/RAWP for the 200 North Area Waste Sites (DOE/RL-2006-69, Draft B).</p> <p><b>Justification:</b> The current RD/RAWP as written is difficult to follow. The project phases are not well defined.</p> <p><b>Modification Needed:</b> Suggest re-formatting the sections as follows:</p> <p>1.0 Introduction:</p> <ul style="list-style-type: none"> <li>1.1 Purpose</li> <li>1.2 Scope,</li> <li>1.3 Description of ROD,</li> <li>1.4 Updates to RD/RAWP</li> </ul> <p>2.0 Basis for Remedial Action:</p> <ul style="list-style-type: none"> <li>2.1 Record of Decision Summary and Decision Definition</li> <li>2.2 RAO</li> <li>2.3 RAG</li> <li>2.4 Application of RAGs</li> <li>2.5 ARARs</li> <li>2.6 Remedy Description</li> </ul> <p>3.0 Remedial Design Approach</p> <p><b>(See next page)</b></p>			

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<p>1.</p>	<p><b>(Continued from previous page)</b></p> <p>4.0 Remedial Action Approach and Management</p> <ul style="list-style-type: none"> <li>4.1 Project Team</li> <li>4.2 Remedial Action Work Activities</li> <li>4.3 Project Schedules and Cost Estimate</li> <li>4.4 Change Management/Configuration Control</li> <li>4.5 Remedial Action Planning Documentation</li> <li>4.6 Attainment of RAOs</li> <li>4.7 CERCLA Cleanup Documentation</li> </ul> <p>5.0 Environmental Management and Controls</p> <ul style="list-style-type: none"> <li>5.1 Waste Management</li> <li>5.2 Standards Controlling Releases to the Environment</li> <li>5.3 Reporting Requirements for Non-routine Releases</li> <li>5.4 Release of Property (if Applicable)</li> <li>5.5 Cultural and Ecological Resource Protection Standards</li> <li>5.6 Radiation Controls and Protection</li> <li>5.7 Quality Assurance</li> </ul> <p>6.0 References</p>			
<p>2.</p>	<p><b>General:</b> This RD/RAWP needs to identify what is and is not addressed, but was identified as a requirement in the ROD. Specifically, there are certain actions that were identified in the ROD (e.g. detailed schedules, points of compliance) that are either not in the document or do not meet the intent of the requirement. If DOE plans to develop this RD/RAWP in phases, and revise as conditions change, then the introduction of this Plan needs to reflect how the Plan is being developed.</p> <p><b>Modification Needed:</b> Update the Introduction to include a discussion on how the RD/RAWP is being developed and implemented.</p>			

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<p>3.</p>	<p><b>Section 4.0</b></p>	<p><b>General:</b> This document does not read as a Remedial Design/Remedial Action Work Plan. The Remedial Design Approach, per the TPA Action plan (Section 7.3.9) requires:</p> <p><i>“A number of items will be completed during the RD phase, including, but not limited to the following:</i></p> <ul style="list-style-type: none"> <li>• <i>Completion of design drawings</i></li> <li>• <i>Specification of materials of construction</i></li> <li>• <i>Specification of construction procedures</i></li> <li>• <i>Specification of all constraints and requirements (e.g. legal)</i></li> <li>• <i>Development of construction budget estimates</i></li> <li>• <i>Preparation of all necessary and supporting documentation”</i></li> </ul> <p>The RD section of this Plan does not adequately address these elements.</p> <p><b>Modification Needed:</b> Suggest that the RD section be revised to reflect elements of design that are being subcontracted out to meet the intent of the first 3 bullets. Suggest “beefing” up the RD section to include discussions of any constraints, requirements, etc. As currently written, the RD section does not have enough detail to qualify as “design”.</p>			
<p>4.</p>		<p><b>General:</b> An RD/RAWP implements the selected remedy of the ROD. This document is written as though selection of a remedy hasn’t occurred. There appears to be a significant amount of “cut and paste” from the ROD, which is acceptable, but must still be updated to reflect the current phase of the project and should be expanded upon.</p> <p><b>Modification Needed:</b> Revise the document to implement the remedy. Specifically, page 2-4, Section 2.3.2 <i>Description of Construction Component of the Selected Remedy</i>, 1<sup>st</sup> bullet: “Residual materials that would have transuranic isotope concentrations greater than 100 nCi/g after stabilization (such as the contents of a tank in process cell 30) will be removed and dispositioned prior to stabilization in accordance with the approved RD/RAWP.” <b>This is the same language that appears in the ROD on page 49. This RD/RAWP often reads as a pre-decisional documentation or the ROD. Consequently, this RD/RAWP is supposed to be the “approved RD/RAWP.</b></p>			

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5.		<p><b>General:</b> This RD/RAWP doesn't follow the ROD Requirements: page 49 of the ROD states that the RD/RAWP will "document the point of compliance for groundwater protection" however, this document doesn't mention the point of compliance. Please include with justification.</p> <p><b>Modification Needed:</b> Please include a discussion on how or when the point of compliance for groundwater protection will be addressed in the justification.</p>			
6.		<p><b>General:</b> The ROD requires that "The schedule and procedures that will be used to implement the multi-year work effort required by the ROD will be described and documented in the RDR/RA." However, this document does not provide enough detail to adequately address a "multi-year" work effort.</p> <p><b>Modification Needed:</b> Please include a discussion into the <i>Project Schedules and Cost Estimate</i> Section.</p>			
7.		<p><b>General:</b> This Plan doesn't identify how or when the document will be updated.</p> <p><b>Modification Needed:</b> Please include a discussion on updates to the RD/RAWP. May want to include a provision to allow updates to the Work Plan via the Unit Manager Meetings and the frequency for updates.</p>			
8.	<p><b>Page 1-1, Section 1.0, line 26, last sentence</b></p>	<p><b>Specific:</b> Add the following sentence to the paragraph, "The U Plant is referred synonymously as the 221-U Facility Complex, or simply 221-U Facility in many Hanford documents."</p>			
9.	<p><b>Page 1-6, last paragraph</b> <b>And Page 3-2, Section 3.2</b></p>	<p><b>Specific:</b> The ROD requires a detailed schedule. This RD/RAWP does not contain a detailed schedule or an explanation of a "phased" approach.</p> <p><b>Modification Needed:</b> Revise/update the RD/RAWP to include a discussion detailing how schedules will be handled in this document.</p> <p><b>Justification:</b> The RD/RAWP must address actions specified in the ROD, or outline an agreed to approach for how the requirement will be addressed.</p>			

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10.	Page 2-1, Section 2.2.1	<p><b>Specific:</b> The RAOs need more detail. This section is too light in the requirements and are not specific enough to meet the requirement of the ROD.</p> <p><b>Modification Needed:</b> Suggest revising to include a definition of what an RAO is (example: RAOs are site-specific goals that define the extent of cleanup necessary to achieve the specific level of remediation at the site.”</p> <p>Also suggest identifying the RAO and then describing how that RAO will be achieved. (see text in DOE/RL-2006-69, Draft B, page 2-1)</p>			
11.	Page 2-3, Section 2.2.2 and 2.2.3	<p><b>Specific:</b> The statement regarding PRGs (preliminary remediation goals) in Section 2.2.2 is misleading. Section 2.2.2 states that “Each of the remedial alternatives discussed in the final feasibility study was evaluated against the PRGs as a part of the CERCLA decision-making process.” In the same paragraph, it also states that “A list of PRGs was developed to define the specific cleanup goals that will result in achievement of the RAOs (remedial action objectives).” However, Section 2.2.3 states that “when a remedy is established that leaves contamination in place, the remedy is not based on cleaning up to RAGs, but rather on containing the contamination in such a fashion that it presents an acceptable level of risk to human health and the environment.” These conflicting statements need to be clarified.</p>			
12.	Page 2-5, 3 <sup>rd</sup> bullet	<p><b>Specific:</b> Please define how surface contamination on the canyon walls, deck and ceiling will be addressed in more detail.</p>			
13.	Page 2-5	<p><b>Specific:</b> Missing a discussion of the engineered barrier (from page 52 of the ROD).</p>			
14.	Page 2-9, Section 2.4	<p><b>Specific:</b> Two ARARs that were identified in the ROD have been omitted from the RD/RAWP. Specifically, WAC 173-340 and 173-201A. Please provide justification for removal.</p>			
15.	Section 3.0	<p><b>Specific:</b> The organization of this section is confusing. Suggest reorganizing (see Comment 1) for clarity and consistency with other RD/RAWPs.</p>			

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16.	Page 3-2 (Figure 3-1) and Page 3-3 (Table 3-1)	<b>Specific:</b> Figure 3-1 (Page 3-2) and Table 3-1 (Page 3-3) describes the 10-year project schedule and associated cost estimates of \$125,900,000 with assigned narrow range of accuracy. Not enough information is provided to explain these important data and analyses. A couple of pages description including estimate methodology and contingencies would help Ecology understand the project schedule/cost processes.			
17.	Page 3-6 Section 3.3.4	<b>Specific:</b> No discussion of a Mitigation Action Plan. <b>Modification Needed:</b> Please revise for inclusion of a Mitigation Action Plan.			
18.	Page 3-20, Section 3.3.12	<b>Specific:</b> This section does not contain enough detail on attainment of the RAOs. <b>Modification Needed:</b> Suggest revising section to include more detail on how the RAOs will be attained through the selected remedy.			
19.	Page 4-2, Line 21	<b>Specific:</b> "A graded approach will be implemented as part of the design process . . ." What is a "graded approach" for design?			
20.	Page 4-2, Section 4.3.1	<b>Specific:</b> What will be included in the first design package? What is required for design?			
21.	Page 5-1, Section 5.0	<b>Specific:</b> Under what section of the "Remedial Action Approach" is a discussion on the removal of asbestos and PCB contaminated equipment prior to demolition?			