



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10  
HANFORD PROJECT OFFICE  
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May 15, 2012

Briant S. Charboneau  
Federal Project Director  
Richland Operations Office  
U.S. Department of Energy  
P.O. Box 550, M/S A6-33  
Richland, Washington 99352

Dear Mr. Charboneau:

The U.S. Environmental Protection Agency has reviewed the draft *Remedial Investigation/Feasibility Study Work Plan 200-WA-1 and 200-BC-1 Operable Units* (DOE/RL-2010-49, draft A). The readability and organization of this document are very good and represent a marked improvement in document quality.

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We have enclosed our comments on the draft work plan. One of the primary comments is that the schedule provided in the document does not support the milestone for submittal of a draft FS report and proposed plan. The EPA expects the DOE to provide a schedule that is compliant with this recently negotiated milestone.

Another significant comment is that the scope of the RI/FS needs to include the evaluation of additional sites in the U Plant area, sub-slab portions of buildings that have undergone decontamination and demolition in the West Area and the below-grade structures from the Plutonium Finishing Plant complex.

There are several other important comments that are included in the enclosure. Please contact me at 509 376-8665 or Rod Lobos at 509 376-3749 if you have questions. We agree with DOE that it would be beneficial to meet to discuss our comments. That would provide the opportunity to also pass along minor comments on specific sections of the document. Please contact us to schedule a project meeting on the draft RI/FS work plan.

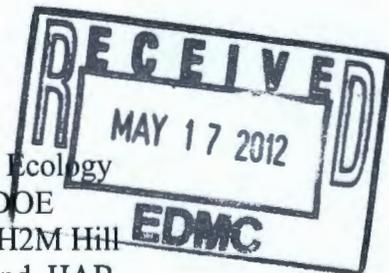
Sincerely,

Craig Cameron  
Project Manager

Enclosure

cc: Kevin Leary, DOE  
Stuart Harris, CTUIR  
Gabe Bohnee, Nez Perce Tribe  
Russell Jim, Yakama Nation  
Jane Hedges, Ecology

Nina Menard, Ecology  
Ken Niles, ODOE  
Phil Burke, CH2M Hill  
Susan Leckband, HAB  
Administrative Record: 200-WA-1, 200-BC-1



U.S. Environmental Protection Agency Comments on the Remedial Investigation/  
Feasibility Study Work Plan 200-WA-1 and 200-BC-1 Operable Units  
(DOE/RL-2010-49, draft A)

GENERAL COMMENTS – Providing higher level, global comments and will pass along any minor specific comments on various sections when we meet in person.

*Organization and Readability*

The work plan is very well written. Even though the subject matter is complex and involved, the ideas are brought together in a cogent way that makes it readable. The quality of the document is well received by EPA.

*Interim vs. Final Description*

The reference to the future ROD should not describe it as final. The term final should generally be used when there has been an interim ROD and we wish to distinguish between the two. EPA acknowledges that the planned ROD for 200-WA-1 and 200-BC-1 is not an interim ROD so there is no need to refer to it as “final.”

*Work Plan Components*

The work plan needs to contain a waste management section, and eventually the project will need to have a waste control plan for field investigation activities. Also, an air monitoring plan needs to be included in the work plan to cover field characterization activities.

*SAPs and QAPjP*

EPA shares the interest of minimizing rework on the SAPs that have already been approved but have not been fully utilized for characterization of many of the waste sites currently in 200-WA-1. We suggest that the 200-WA-1 and 200-BC-1 work plan refer to those SAPs and QAPjPs from the Supplemental Characterization work plan and other work plans as being adopted by the 200-WA-1 and 200-BC-1 work plan. EPA would like to work with DOE to understand previous sampling plans for sites that were part of Ecology lead OUs since we may not have been as involved in their development. EPA was involved in the development of the 216-U-8 and 216-U-12 SAP and believes it can be implemented as written.

A SAP and QAPjP will need to be developed for the waste sites that are not covered by existing SAPs. Also, the SAP, including a QAPjP (or another SAP and QAPjP), will need to cover investigation work related to sub-slab and subgrade sampling for buildings that have undergone decontamination and demolition down to grade level.

*Scope of 200-WA-1*

Since DOE wanted to have more consolidated decisions, the 200-WA-1 OU needs to be as fully inclusive as possible. The OU needs to include important waste sites in the U Plant area

including the WR (Thorium) Vault and the U Plant sand filter. Regardless of current OU or facility affiliation, these sites need to be included in the 200-WA-1 OU for evaluation and likely remediation. Keep in mind that there are no waste sites within the 200-CU-1 (U Plant) OU as there are for the other decommissioned canyon buildings and that coordination with the U Plant (221-U Facility) remedial action requires these two sites (and potentially some others) to be investigated and addressed prior to completion of the U Plant remedy.

The other missing scope for this OU is represented by the exclusion of the PFP Below-Grade Structures. The 200-WA-1 OU is the logical place to include these sites for evaluation.

### *Schedule*

The schedule outlined in Table 6-1 is 62 months long and extends past the milestone date. EPA expects DOE to provide a schedule that meets the milestone. We accommodated funding issues and priorities, and now it is time to meet the requirements we negotiated in good faith.

### *Land Use Discussion*

We appreciate the balanced discussion of how both the Future Site Uses Working Group and the CLUP EIS help us both as agencies to determine the reasonably anticipated land use for the inner area of the 200 Area. However, we disagree that the CLUP should to be treated as a To-Be-Considered criterion in the ROD. Please avoid overshadowing the proper discussion in the main part of the document by removing the CLUP from the ARAR/TBC table in the ARARs appendix.

### *Rationale for Having Enough Information for 200-BC-1*

There is insufficient treatment of the case for having sufficient information to make a decision for the 200-BC-1 waste sites. The reason why EPA and DOE agree is that there has been sufficient characterization through RI/FS sampling and geophysical logging and from the two treatability tests. Both of those tests should be discussed. The excavation treatability test showed that the trenches can be safely excavated and disposed of at ERDF while the desiccation treatability test demonstrated that Tc-99 can be removed from the vadose zone through the entrainment of pore water with high vacuum extraction.

### *Technology Options and Potential Remedial Alternatives*

EPA does not agree that excavation below 20 feet is difficult or particularly problematic. Excavation far below that depth has occurred routinely in the 100 Areas. We also wish to remind DOE that there are times when excavation to the bottom of an engineered structure or to get the mass of contamination makes sense for groundwater protection, protection of inadvertent intruders for highly contaminated sites, and also for reducing demands of implementing institutional controls on the Hanford site.

### *Point of Compliance for Ecological Risk*

The discussion of the ecological point of compliance depth in the work plan (including appendices) needs to hold to the agreement reached in the Senior Executive Council of the Tri-Party agencies. DOE can evaluate the 10 foot depth, but must also evaluate the 15 foot point of compliance depth in the RI/FS since EPA and Ecology have not accepted the alternative point of compliance DOE has proposed.

### *Baseline Risk Assessment and Groundwater Interface*

The handling of potential impacts to groundwater and the risk from those impacts appear to be passed on to the groundwater OUs. However, one groundwater OU already has a decision and the other in the West Area is soon to have a remedial decision. There won't be any upcoming baseline risk assessment supporting those groundwater OUs. The impacts and risks from contaminant flux from the 200-WA-1 waste sites needs to be evaluated as part of this OU's RI/FS and therefore should be included in the 200 West Area Baseline Risk Assessment. The 200-BC-1 OU is over a groundwater OU that does not currently have a ROD. However, thus, there may be more flexibility in coordinating risk assessment and cumulative risk between those two units.

The Conceptual Exposure Models provided in the document do not show complete pathways for groundwater ingestion. A baseline risk assessment must not assume site controls are in place. Thus, it is possible that waste sites from the two OUs contributing to groundwater contamination (not the contamination currently in the groundwater OUs) may have a complete pathway through ingestion and use of groundwater. The groundwater ingestion and use pathways need to be activated for the residential user and possibly for the Tribal users.

The Conceptual Exposure Model plates have a section covering groundwater OUs. We disagree that a 10X or greater than target level is the trigger for action on groundwater OUs. Let's discuss a more appropriate revision to this chart when we meet in person.

### *Expectation for CSMs and RI/FS Report*

We appreciated reviewing the sample Conceptual Site Models and Conceptual Exposure Model plates included in the document. EPA agrees with DOE that each waste site needs to have these developed and that they must go in the RI/FS report as they are very useful summaries.

### *Documentation, Change Control and Dispute Resolution*

The last sections of the document include text that is not from the Tri-Party Agreement and Action Plan. Revise the text to strictly rely on the Tri-Party Agreement provisions and reservations. Also, approval could come in the form of approval letters or signature of the project manager on document signature pages. We do not want to restrict approval to only TPA change control forms.