1231110

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15-AMRP-0321

SEP 17 2015

Mr. D. A. Faulk, Program Manager
Office of Environmental Cleanup
Hanford Project Office
U.S. Environmental Protection Agency
309 Bradley Boulevard, Suite 115
Richland, Washington 99352

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SEP 21 2015
EDMC

Dear Mr. Faulk:

REMEDIAL INVESTIGATION/FEASIBILITY STUDY WORK PLAN 200-WA-1 AND 200-BC-1 OPERABLE UNITS, DOE/RL-2010-49, DRAFT B

This letter transmits the Remedial Investigation/Feasibility Study Work Plan 200-WA-1 and 200-BC-1 Operable Units, DOE/RL-2010-49, Draft B for your review.

This work plan incorporates the U.S. Environmental Protection Agency (EPA) comments to the Draft A version, submitted to EPA by letter 12-AMCP-0039 dated December 28, 2011. A Review Comment Record dispositioning the EPA comments to the Draft A is attached.

The Draft B version of this work plan has been revised to incorporate the Inner Area Principles currently being discussed and to identify further characterization. In addition, the process knowledge and current information on each waste site was updated and documented to aid in the development of the proposed Sampling and Analysis Plan within the work plan.

If you have any questions, please contact me, or your staff may contact, Mike Cline, of my staff, on (509) 376-6070.

Sincerely,

Ray J. Corey, Assistant Manager
for the River and Plateau

AMRP:JPS

Attachments - 1231111

cc: See page 2

200-WA-1 200-BC-1

SEP 17 2015

cc w/attachs:
G. Bohnee, NPT
R. Buck, Wanapum
C. E. Cameron, EPA
J. A. Hedges, Ecology
S. Hudson, HAB
R. Jim, YN
R. A. Lobos, EPA
N. M. Menard, Ecology
K. Niles, ODOE
D. Rowland, YN
R. Skeen, CTUIR
Administrative Record
Environmental Portal

cc w/o attachs:
J. V. Borghese, CHPRC
M. E. Byrnes, CHPRC
M. E. Day, CHPRC
M. H. Doornbos, CHPRC
C. P. Noonan, MSA
R. E. Piippo, MSA
M. J. Turner, MSA

Comment Heading	Comment	Disposition	Response to Comment
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.	No Change Needed	Comment noted.
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."	Accept	Work Plan language has been changed to eliminate references to "Final ROD".
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.	Accept	A SAP has been added that addresses these items.
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.	Accept	The 200-WA-1/200-BC-1 OU SAP and QAPjP covers characterization of all wastes sites included in the Work Plan, including those in the previous SAPs/QAPjPs noted above. Where appropriate (e.g. 216-U-8 and 216-U-12), coordination of data collection activities, conducted for reasons beyond what is needed for the 200-WA-1/200-BC-1 OU RI/FS, is noted in the work plan. Discussion of investigation work for foundations of buildings that have undergone decontamination and demolition has been added to the 200-WA-1/200-BC-1 OU Work Plan and SAP.

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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.	Accept	The 200-W-44 Sand Filter and the 241-WR-Vault and associated pipelines (200-W-244-PL and 200-W-248-PL) have been added to 200-WA-1 and are covered in the 200-WA-1/200-BC-1 OU Work Plan and SAP. Discussion of the waste sites associated with PFP below grade structures has been added to the 200-WA-1/200-BC-1 OU Work Plan. Data collected from these site during D4 activities will be evaluated to determine whether additional investigation is required.
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.	Justification Added	Activities that supported the completion of the milestone have been delayed due to Congressional funding levels for RL being below the President's Budget requests for prior years, as well as the impacts of the Fiscal Year (FY) 2013 Budget Control Act (sequestration) and FY 2014 Continuing Resolution. A new proposed schedule for the Central Plateau Operable Units will be developed. Currently, based on the need to complete and gain approval of the work plan, implement the sampling and analysis plans, and evaluate obtained data in order to prepare the report required by the milestone, it is anticipated it would take approximately five years after the start of the work to complete the milestone. In addition, waste sites covered by this Operable Units represent relatively low risk reduction potential relative to other site activities. In view of these factors, it may be advisable to significantly extend the current due date. After discussions with EPA and Ecology, a revised date will be established for Central Plateau projects and processed through the TPA procedures.

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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.	No Change Needed	The EPA review was performed and comments submitted to the Draft A Work Plan in 2011. Since that time, the CLUP has been referenced in many documents and RODs. The reference will remain in the work plan.
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.	Accept	Discussion of these treatability tests have been added to Task 7-Treatability Studies in Chapter 5. Results of these studies are included in the Appendix D Waste Site Summaries for the affected BC waste sites.
Technology Options ond 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.	Accept	The text stating that 20 ft is considered the maximum depth at which mechanical excavation is feasible has been deleted from the Work Plan.

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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.	Accept with Modification	Feasibility Studies will present an alternative that will evaluate compliance with human health (direct contact) & ecological PRGs at the standard POC of 15 ft. DOE may also choose to perform an analysis in first Inner Area Feasibility Study to evaluate a conditional point of compliance at 10 ft below ground surface for direct contact and ecological protection. The resulting decision will serve as the basis for the justification for the remainder of the OUs in the Inner Area. The basis for the decision will be developed in the first feasibility study, but all OUs will need to justify the decision. The subsequent OU discussions will reference the first evaluation and include an overview of similarities and differences between the first and subsequent OUs to ensure the approach is justified.

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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.	Accept with Modification	Cumulative impacts from waste sites, tank farms, and other sources within the Central Plateau will be assessed and documented in a single primary TPA document. This document will be prepared following the approval of the first Work Plan and prior to completion of the first RI/FS. Following the issuance of this document, each Remedial Investigation Report for source OUs will reference this application document, evaluate any necessary updates based on new information or updated elements of the conceptual site models (CSMs) and evaluate how the conclusions can change. Similarly the Composite Analysis (required under DOE O 435.1) will reference the same application document, evaluate any necessary changes and demonstrate the performance metrics required under the DOE Order. 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.
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.	No Change Needed	No changes required for the RI/FS Work Plan. CSMs and CEMs will be developed as part of the RI/FS report.
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.	Accept	The text was revised to refer to the appropriate sections of the Tri-Party Agreement only.