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Subject: Comments on 200-WA-1/200-BC-1 RI/FS Work Plan Rev. 1 Draft A

Dear Mr. French:

The U.S. Environmental Protection Agency is providing our comments on the draft Revision 1 change to the Remedial Investigation/Feasibility Study Work Plan for 200-WA-1 and 200-BC-1 with this letter. We are keeping our comments at a global or high level and look forward to going over with DOE and your contractor the disposition of comments within the draft document. This is all being done with an eye towards finalizing once resource modeling efforts help us determine a sound schedule for the RI/FS activities described in the work plan. Milestone M-015-91D provides a deadline (September 30, 2024) for submittal of a draft change control form to establish dates for the schedule in the work plan.

Here are our comments:

1. The work plan is well put together and addresses the goals of this revision which include:
 - a. Implementation of RASCAL approach
 - b. Inclusion of new sites from the former PFP demolition area
 - c. 200-DV-1 lessons learned
 - d. Conformity to recent milestone negotiations to add dates to schedule items once PREP Mod is fully run
 - e. Inclusion of a 200-BC-1 modeling task and schedule item (also an outcome of project discussions and recent negotiations)
 - f. Removal from the work plan of straightforward shallow waste sites and inclusion of those sites into the new 200-IA-1 OU created by the Tri-Parties to expedite a near-term source of contaminated soil to help balance with the building rubble waste stream at ERDF.
2. Having 80 unique sites that might need pre-ROD characterization diminishes the impact of the RASCAL approach and could lead to delays in remedial action.

After consideration of various options, we prefer to sample all of these pre-ROD but lessen the timing impact on getting to remedial action by splitting up the OU into three OUs with different RODs. We have talked about that in the past of having 200-WA-1 be the U Plant Area, 200-WA-2 be for the Z/former PFP area, and the balance of the scope in 200-WA-3. The numbering convention about which is which doesn't matter that much.

3. PREP Mod runs might indicate that the timing of characterization of 200-WA-1 will take several years and might influence whether or not pieces of the OU would be split off into new OUs to get to RODs and remediation more quickly than waiting for the entire OU to be characterized. This is in line with the previous comment but emphasizes the potential usefulness of PREP Mod to scope out the situation prior to creating new OUs through the Tri-Party Agreement.
4. For the discussion of Post-ROD activities it should be noted that the TPA Action Plan has a requirement for the Draft A RD/RA work plan to be submitted to the regulatory agency within 180 days of the ROD signature unless otherwise agreed to by the DOE and the regulator(s). It is likely there will be at least two RD/RA work plans as 200-BC-1 will be on its own path after the RI/FS and that path will include its own ROD which triggers the start of the 180 day timeframe for its RD/RA work plan.
5. Characterization efforts should provide for information that supports the development and potential selection of combination remedial alternatives, such as shallow zone RTD or capping and deep zone IC and/or implementation of technologies that reduce flux from deep vadose zone so as to protect groundwater.
6. Please note that the Hanford completion framework document was produced by DOE and is not a Tri-Party agreed to document.
7. Please explain the deep vadose zone/protectiveness problem and inflexibility by the parities that killed the 200-UW-1 ROD. Just listing things does not explain the issues and undervalues the characterization work that occurred under the earlier RI/FS attempts. The deep vadose zone problem was identified, in part, by EPA's use of USGS technical modeling review in support of WA Dept. of Ecology. EPA and Ecology wrote a letter to DOE on December 7, 2004 (<http://pdw.hanford.gov/document/D7005781>) that began the focus on deep vadose zone contamination and what might be developed to address it. Note that the DOE complex designated Hanford as one of two centers of study for deep vadose zone characterization and technology testing. DOE RL management recently seemed unaware of this.

The rest of the story is that DOE wanted the ROD to be final (which doesn't allow flexibility of an interim ROD), Ecology didn't want to break off the upper part of the soil profile for an interim action, and EPA would not sign a final ROD that is not protective of groundwater. It is our hope that characterization under this RI/FS work plan and progress in deep vadose zone lab and treatability studies will help us avoid the same issues this time around.

8. The 200-BC-1 scope was split from 200-TW-1/2 many years ago because EPA believed that it was too large and complex as a whole for meaningful engagement of the public. We appreciate agreement on the intended path for the OU where it will have its own focused FS and ROD.
9. The CIE results are consistent with knowledge of the past and potential future impacts of waste sites that received large volumes of wastewater.
10. There is not strong and consistent language about going deeper than the 15' sample interval if shallow sites are found out in the field to be deeper. Either the sampling should have the next interval be included automatically or the language needs to be beefed up. We don't want the situation where demobilization occurs before a decision is made. It is understood that some sampling intervals will show contamination stops well above 15' so there should be a description of how that decision is made, also. This should be reiterated in each of the specific field sampling addenda of the SAP.
11. We need to be refreshed on the PCB analysis IAMIT agreement and where these OUs stand. It is not clear why PCBs aren't just run for every shallow interval sample. Or is it that you are running an analysis just not both analyses for PCBs? Seems like it would be hard to assume based on process knowledge that one can avoid sampling at least the first two intervals in the shallow zone or whatever is appropriate depending on the profile and where the waste stream came into the waste site.
12. The sampling for the U Plant sand filter (and T Plant for that matter) does not reflect the DQO and needs assessment from the earlier revision of the work plan. Having soil sampling near and at depth is great. However, EPA is not convinced that there is enough information about the sand filter contents to know if the waste is greater than Class C. GTCC waste cannot be left in the near-surface, even under a cap. The plan was not to sample the contents but to run some rad instruments down the appurtenances or piping that run through the waste. Then a more thorough and accurate assessment (including conservative calculations) could be done to determine if the sand filter material is GTCC.
13. Sampling under slabs and below grade areas (especially in the former PFP area) needs to be performed to determine the long-term risk posed by TRU species and the possible TRU waste levels that may be present. Again, characterization needs to support the evaluation of a wide range of remedial alternatives per EPA guidance. Characterization and cleanup actions done under the removal actions for buildings in the U Area and PFP was insufficient to help make a remedial decision.
14. Did not notice if the early decision in scoping for the AR Vault at U Plant was still in this version. The plan was to use knowledge of the vault and tanks and not to sample the interior until the remedy was being conducted because of the hazards and readiness review that would need to occur. Soil sampling near and at depth is also an important part of the sampling at it should be conducted

pre-ROD.

15. The health and safety section should not just discuss DOE's program but commit to having a Health and Safety Plan(s) specific to the field work and SAP execution.
16. The CIE modeling for 200-BC-1 was helpful but Section 5.4 doesn't have enough detail to understand the modeling effort planned for 200-BC-1.
17. Section 5.8 (and global comment) preliminary remediation goals (PRGs) should be the term used at this stage instead of Cleanup levels.
18. Table ES-1 is confusing as-is – would be improved if dates of CCFs were provided, and revise heading “final count included in 200-WA-1” to “final count added to 200-WA-1”. The notes are also confusing without more context, e.g. CCF C-20-02 says only 1 site was added but the notes mention three sites.
19. As noted in comments on the previous revision draft, we agree that the CLUP can be a To Be Considered item in the ARAR table. However, we do not agree that there is such a thing as an industrial exclusive land use as a reasonably anticipated land use. It can be industrial, but the exclusive part doesn't come into play until institutional controls written into the ROD limit the use to industrial.

Please let us know if you have questions about the comments or the changes we are looking for in the finalized document. We look forward to continued progress through the RI/FS process for these OUs, understanding that after this work plan the two OUs go their separate ways through the rest of the CERCLA remedial action process.

Sincerely,

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Administrative Record files for 200-WA-1 and 200-BC-1