



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10 HANFORD PROJECT OFFICE

712 Swift Boulevard, Suite 5 Richland, Washington 99352

February 25, 2002

Bob McLeod U.S. Department of Energy P.O. Box 550, H0-12 Richland, WA 99352

December 2001



Re:

Comments on "Remedial Design Report/Remedial Action Workplan for the 300-FF-2 Operable Unit," DOE/RL-2001-47, Draft A, December 2001; and "300-FF-2 Operable Unit Remedial Action Sampling and Analysis Plan," DOE/RL-2001-48, Draft A,

Dear Mr. McLeod:

The U.S. Environmental Protection Agency (EPA) has reviewed the subject documents, and our comments are enclosed. Wayne Soper, Ecology, and Dick Jaquish, Department of Health, have assisted me in preparing the enclosed comments. Given the nature of the comments, I would like to see another draft of the documents, or relevant portions, before a copy is prepared for my approval. If you have any questions, please contact me at (509)376-4919.

Sincerely,

Mike Goldstein

300 Area Unit Manager

Enclosure

cc: Wayne Soper, Ecology

Dick Jaquish, DOH

Administrative Record - 300 Area

Enclosure:

Comments on "Remedial Design Report/Remedial Action Workplan for the 300-FF-2 Operable Unit," DOE/RL-2001-47, Draft A, December 2001; and "300-FF-2 Operable Unit Remedial Action Sampling and Analysis Plan," DOE/RL-2001-48, Draft A, December 2001.

RDR/RAWP General Comments

- 1) As we have discussed before, I do not feel that it is appropriate to include a 300-FF-1 Operable Unit Waste Site (618-4 Burial Ground) within the scope of this 300-FF-2 document. I haven't checked with my legal yet, but I'm fairly certain he will say the same thing. While I agree that this is the most efficient way to do this from an administrative standpoint, I think that it will be hard for people to understand why we did it in the future, and I am afraid it will only cause confusion and perhaps some legal questions. Given the nature of Comment #2 below, I request that you remove 618-4 from the scope of these documents and amend the appropriate 300-FF-1 documents instead. An efficient way to do this would be to only add an appendix to those documents, leaving the core document untouched. This appendix would only address the new procedures and protocols for the 618-4 burial ground and most, if not all, of the language could be taken from the current draft of these 300-FF-2 documents once the following comments are addressed. The revised documents should also include a "summary of changes" discussion in the front part of the document to explain what was changed and why (similar to what we recently did for Rev.2 of the SAP for the 300 Area Kd/Leach study).
- 2) The RDR/RAWP is supposed to be a roadmap for implementing the ROD requirements, not just the RTD portion of the ROD. These requirements are outlined in the "Selected Remedy" portion of the ROD. As such, appropriate portions of Section 1 and Section 2 should contain references to the entire remedy and scope of the ROD, putting this initial group of 13 waste sites into the context of the overall ROD and explaining how and when the other ROD requirements will be met. I would recommend a table that lays out the Selected Remedy portion of the ROD verbatim, with a second column that explains how and when the other requirements will be met (e.g., future RDR/RAWP for remaining sites, Site-wide institutional controls plan, future SAP to address post-cleanup ecological monitoring, etc...). Likewise, Table 1-1 should be retitled "Summary of Waste Sites addressed in Rev. 1 of the 300-FF-2 RDR/RAWP" and a second table should be added "Summary of Waste sites to be addressed in subsequent revisions to this RDR/RAWP." The majority of the document is fine after that, because it lays out the protocol for achieving the RAOs in the ROD, thus meeting the cleanup requirements of the RTD alternative.
- 3) Specific Institutional Control requirements for signs should be included in this RDR/RAWP. See Chris Smith re: 100 Area RDR/RAWP discussions.
- 4) The document needs to include a cleanup schedule for the 13 sites, and this schedule should also address when the remainder of the sites will be addressed as well. For the time being, the schedule should be based on the draft 300 Area change packages. For completeness, it should also show how the M-16 milestone is intended to be integrated with the M-94 milestone commitments. For the time being, specific start and end dates for individual waste sites do not need to be included in this schedule. However, it is expected that a subsequent revision of the document will include the more specific cleanup schedules that will be negotiated in June 2003.

- 5) Include the high level summary of the 300 Area industrial exposure scenario in Section 2 (probably section 2.1.2) and Appendix B (section B.3). The summary includes the major assumptions that were used in developing the cleanup levels and are the same that are to be used when demonstrating that the RAOs have been met. See page 63-64 of ROD. This industrial exposure scenario should also be illustrated in a figure similar to Figure 3-4 from the RDR/RAWP for the 100 Area. We've made similar figures before, but we have never updated them for inclusion in the RDR/RAWP so that they can be rolled into the CVPs. Finally, text should be added regarding which RESRAD parameters are "locked" by these ROD requirements (e.g., # hours) and which are the most likely to be modified with site-specific information (e.g., thickness of contaminated zone). See Comment #16 below.
- 6) Add a figure that illustrates the generic site profile to Section 2.1.2. See Figure C-1 in Appendix C of the RDR/RAWP for the 100 Area. This should also be added to Appendix B (Section B.6.2) as well because it is the profile that should be used (or modified with site-specific data) to demonstrate attainment of groundwater remedial action goals. Perhaps a simplified figure with a template for filling in site-specific data and a technical rationale can be included in Appendix B for use in CVPs (i.e., use the figure as is or fill in blanks with additional info when doing waste site closeout).
- 7) Ensure that this generic site profile is footnoted with the major differences for Uranium. You may want to include the alternate generic site profile for Uranium (from the Kd/Leach Study white paper) so that everyone understands up front that it is different than the generic site profile that is used for the remainder of the contaminants. Likewise, clarify that section B.6.2 does not apply to Uranium. A new section (or discussion) should be added to reflect how the attainment of groundwater remedial action goals would be achieved for Uranium.
- 8) General question: Shouldn't more information on each individual waste site be presented in Section 3 of this RDR/RAWP? At least a generic plan map and cross section for each waste site (as was included in the 300-FF-1 RDR/RAWP)? In addition, if we know we have multiple COCs prior to entering the site, shouldn't this document include a revised set of lookup values for each waste site (See Comment #13 below)? Won't you be doing this in your more detailed design reports anyway? At EPA, we have been talking about bringing some more detail into our RDR/RAWPs so that we are approving more substantive cleanup protocols. We have to find the right balance. I'm not sure the current document is specific enough. I'd like to discuss this with you a bit further.

Specific Comments on RDR/RAWP

- 9) Section 2.1.2. Remove reference to "ROD-promulgated values" at end of last paragraph.
- 10) Add a clear discussion of "balancing factors" to section 2.2.1. Also, in last sentence, rewrite as "...direct contact cleanup levels are not applicable."
- 11) Remove the backup to the soil lookup tables (Tables 2-3 through 2-10) and rewrite section 2.2.2 so that it describes how site-specific data will be used to support closeout. Some oif t

- 12) Add a table that defines lookup values for contaminants of concern when excavating below 15 feet (i.e., direct contact/direct exposure levels do not apply). If the values are the same as in tables 2-1 and 2-1, indicate that is the case. While I recognize that "balancing factors" and scenarios with multiple contaminants may cause actual cleanup levels to be lower, I think that the RDR/RAWP should provide non direct contact/direct exposure lookup values that could be used below 15 feet.
- 13) Section 2.2.3: Briefly describe the procedure that is identified in Appendix B and provide a specific example of how the multiple contaminant scenario would be used in the field and during waste site closeout (i.e., determine COCs prior to waste site excavation, modify lookup values, modify COC list and lookup values as appropriate during excavation if new COCs are encountered, verify during waste site closeout). If this is not how it is going to work, we need to talk.
- 14) Section B.4.3: I want to make sure that it is clear that the CVP should not only summarize the field screening that was performed, but also include the major conclusions ALONG WITH the supporting data. I know we can't use the data to support our closeout process, but we can use the biased sampling approach to build the case that we have achieved the BOUNDARIES of the waste site, thus supporting the random sampling closeout approach. Therefore, I think it is important that the CVP supply conclusions and supporting data when field screening data is used to define the "edges" of the waste site including: sidewalls, plumes, and bottom of excavation pit.
- 15) Section B.5.2.2, 3rd paragraph, second sentence: Rewrite as "In the event that a simple model is too conservative, *or not supported by site-specific data*, ..."
- 16) Table B-2 should be specified in headers and text as "Summary of RESRAD input parameters for the generic site profile" and a brief discussion should be included regarding WHICH parameters should be modified with site-specific information (e.g., thickness of CZ in R011 and thickness of uncontaminated/unsaturated zone in R015). I'd recommend that you highlight those parameters that are most likely to be modified by site-specific info and those that are "locked" by the ROD (e.g., # of hours per industrial exposure scenario). This should be done on table itself by highlighting or bolding rows and including footnote notations. Corresponding text should be edited as well.

Comments on SAP

- 17) Make changes per RDR/RAWP comments above.
- 18) Section 1.2.2: Inconsistent with RDR/RAWP discussion (i.e., vadose zone contamination discussion, at least for uranium, is not consistent).
- 19) Section 2.4: Add to SAP a discussion of how to report lab data that is "below detection levels" for radionuclides. Similar discussion should be added regarding how to report data qualifiers. See RDR/RAWP for 100 Area.
- 20) Compositing of samples collected for cleanup verification should not be performed for chemical analyses or they will not meet MTCA requirements.