



Oregon

Kate Brown, Governor



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Dear Mr. Cline,

Oregon appreciates the opportunity to review the fifth 5-year Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hanford site review (21-SGD-003196, DOE/RL-2021-01 Draft A). The document is well organized and an improvement over early iterations of the 5-year review. However, we notice some potential gaps in the analysis, and we suggest other recommended changes which could make the document a more accessible and valuable reference for the reader.

During the last 5-year period, there has been increasing concern about emerging contaminants (specifically, Per- and Polyfluoroalkyl Substances, or PFAS). DOE has committed to evaluating the PFAS use on sites nationwide, and Oregon recommends that should be included as an action item for each of the Operating Units (OUs).

The report contains no mention of vapor intrusion assessment for any of the OUs with volatile organic solvents as contaminants of concern. Particularly for trichloroethylene (TCE) plumes in the river corridor, where the Records of Decision specify that cleanup is intended to allow residential use, these evaluations should be included. If there is minimal vapor intrusion risk where the top of the plume is greater than 45 feet below ground surface, that should be noted in the report.

When OUs are listed as “will be protective,” the most up to date estimate of when that protectiveness will be realized should be discussed. Providing an estimate allows easy follow-up in cleanup priority planning and in subsequent 5-year reviews. It seems incomplete to list OUs without a final Record of Decision as “will be protective.”

There is extensive use of hyperlinks leading to varying documents, webpages, and searches. These links are helpful, but we recommend that the links should be included to support the text, rather than replace it. An example of a beneficial use is including the links to documents when they are cited in tables. Certain tables appear to be missing the links to the cited documents (examples include 2-8, 2-13, 2-20, 2-26, 2-31, 3-2, 3-7). Where a link is the only source of information, DOE should include reference information for the documents pertinent to this review that the link leads to in an appendix. Examples include the groundwater monitoring report landing page and the recurring link to an Administrative Record (AR) search (pages 2-26, 2-53, 2-88, 3-7...). The documents at both of these links should be cited in appendices.

The review of institutional control (IC) effectiveness is a critical component of this document. The link to the IC monitoring plan is a good reference, but more information should be presented in this document in case the reader does not have the ability to access the AR. Similarly, directing the reader to review

unit manger's monthly meeting materials for the 5 year period is difficult and burdensome for a reader to follow. Rather, we suggest that pertinent information from those meeting materials should be excerpted and included as an appendix. A simple table included as an appendix to the report or in each OU section would provide an enduring reference for readers. The table could include:

- Operable unit(s) associated with the IC
- Waste site IDs associated with the IC
- What the IC is (15 feet of clean cover, shallow contamination, no irrigation, no water use, etc.)
- When the IC was recorded
- When and how it was last inspected (windshield survey, walkover, LIDAR evaluation, elevation control survey, etc.)
- For radionuclides and/or monitored natural attenuation, when will the IC no longer be needed to be protective?

A color-coded figure using the Waste Information Data System shapefiles for waste sites under ICs in each area would also be helpful for the reader. Additional or modified figures could be used to better illustrate the progress made to date and the clean-up remaining. While the waste site centroid figures (2-2, 2-4, 2-9, 2-10, 2-16, 2-21, 2-26, ...) are adequate, it would be more effective to use the same color coding on the waste site shapefiles that are presented in the preceding figures. On its own, the centroid does not present a compelling story of what work has been completed and what is left to accomplish. Figures depicting either the maximum or average groundwater plume extent for each OU over the 5-year review period, and how they compare to the corresponding metric (either max or average extent) in the previous review period would be effective at demonstrating the successes and challenges of groundwater cleanup.

The document as written fulfills much of the requirements of a CERCLA 5-year review, and Oregon recommends minor additions as outlined in this letter. We encourage DOE to expand discussion and include additional details in the document. Doing this will serve to provide context to the protectiveness determinations being described, presenting a more complete picture of the work completed at each OU for the reader. We look forward to seeing the record of cleanup progress at Hanford continue to develop in the next Five-Year Review and appreciate the opportunity to comment. Please contact Tom Sicilia (tom.sicilia@energy.oregon.gov) of my staff with any questions.

Regards,



Maxwell Woods

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