



Oregon

Kate Brown, Governor



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Mr. Rich Buel
U.S. Department of Energy Richland Operations Office
P.O. Box 550, MSIN A7-75
Richland, WA 99352

Dear Mr. Buel:

The State of Oregon appreciates the opportunity to review and provide comments on the *Engineering Evaluation/Cost Analysis (EE/CA) for the REDOX Complex (DOE/RL-2016-16, Rev 0)*.

Like many others, we have a growing concern with the degradation of facilities and infrastructure at Hanford, and the potential hazards it poses. This EE/CA highlights a number of concerns with facilities within the REDOX complex, such as severe structural degradation and radiological and chemical hazards, including the spread of contamination throughout the buildings. These hazards will only increase with time as the facilities continues to age and degrade.

Oregon agrees that action is necessary within the REDOX complex to mitigate potential threats to human health and the environment.

While the EE/CA proposes a mostly reasonable approach for dealing with the degrading facilities at REDOX – and we do support the preferred alternative – we do see where adding some additional work could further reduce risk. Yet we are concerned that planned funding is not sufficient now to conduct the work identified in the preferred alternative, let alone add additional work scope.

The additional work that we suggest be considered is related to the approximately 24.5 kg of plutonium in the 202S Canyon, including process cells, equipment and piping, and the Canyon Deck. This plutonium waste is not presently planned to be removed as part of this action. This plutonium presents a potential criticality hazard and a worker and human health and environmental hazard that should not be deferred. We encourage additional analyses to examine the costs and work needed to safely remove part or all of this waste from the 202S Canyon and prepare it for eventual disposal at the Waste Isolation Pilot Plant.

At the same time, we question whether an expenditure of \$2-3 million per year – for what is estimated to be a \$180 million project – will be sufficient to make a meaningful impact in

reducing the risks from REDOX. Experience at Hanford has demonstrated that working in heavily contaminated facilities is costly. While we agree that it is important to begin the process, we are concerned that not much will be done for this \$2-3 million a year. If the EE/CA is necessary to allow some work to begin, then by all means we support its completion. However, realistic cleanup expectations should be appropriately conveyed to the public.

We are concerned that public information materials related to this action – including the fact sheet posted on the web – are misleading. The fact sheet points out that “If not timely addressed, the condition could present a threat to human health and the environment.” It also explains that the proposed removal actions are “immediate, short-term responses intended to protect people from immediate threats posed by hazards waste sites.” In essence, the fact sheet implies that there are immediate threats that will be addressed in a timely manner, when that is not likely the case.

While the work at REDOX is important and necessary, we would not elevate it in priority above other critical work that is underway – such as demolition of the Plutonium Finishing Plant, moving sludge from the K-West Basin, moving the cesium and strontium capsules to dry storage, and expanding groundwater treatment. Important waste site investigation and characterization must also go forward without further delay.

This is not the first time that buildings slated for eventual demolition required interim measures to keep them safe. Nor is it likely to be the last time.

We believe that the U.S. Department of Energy needs to craft a more compelling argument as to why these types of problems justify an increase in funding.

As we have previously commented, we believe the annual Lifecycle Scope, Schedule and Cost Report is deficient in that it fails to identify additional costs that occur because of delays caused by insufficient funding. These additional costs need to be more clearly defined and articulated.

When funds are insufficient to move forward with demolition of unneeded facilities, there is a continuing need for “safe and compliant” or “min-safe” costs until that facility/structure is gone. For some of Hanford’s facilities, those costs are tens of millions of dollars annually. These costs are not readily available in the Lifecycle Report.

In addition, funds spent to repair or upgrade unneeded facilities to keep them safe until they can be demolished – such as what is being proposed at REDOX – is essentially wasted money. If funding was available for demolition, many of these upgrades – new roofs, ventilation systems and other improvements – would not be needed. These costs are also not apparent in the Lifecycle Report.

Without this specific information, DOE is hindered in its ability to make a compelling case for additional funding.

We have two additional, unrelated comments:

- We encourage the Tri-Parties to not bias the final disposal decisions for the technetium and iodine wastes in the 293S subgrade through grouting. We do not object to grouting if that is appropriate for stabilization and will not preclude removal and clean closure. However, we would remind the agencies of the problems encountered with the low-activity waste grout vaults and technetium mobility through the grout, and the relative inability to ensure the adequate mixing of grout with sludge and residues in tanks.
- Section 2.2.1.1.2 provides limited details of the two cranes in the REDOX canyon, yet no explanation of their condition. Given the repeated breakdowns of the crane in the Plutonium Reclamation Facility, DOE should not assume the REDOX cranes will reliably operate when needed. DOE should further investigate the condition of the cranes and plan to replace them if necessary.

Should you have questions or if you want to discuss our comments, please contact me at 503-378-4906.

Sincerely,



Ken Niles
Assistant Director for Nuclear Safety

cc: Tom Fletcher, U.S. Department of Energy, Richland Office
Dennis Faulk, U.S. Environmental Protection Agency
Alex Smith, Washington Department of Ecology
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