



November 9, 2011

Shannon Ortiz, Lifecycle Report Project Manager
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Dear Ms. Ortiz,

Thank you for creating an opportunity to provide comments on the 2011 Hanford Lifecycle, Scope, Schedule and Cost Report (the Report). We appreciate the many briefings you have provided the Hanford Advisory Board, both in committee and via webinar and your patience in answering questions related to the Report. We believe that the Report is and will continue to be, in its future iterations, a useful document, especially as it provides a window into the remaining cleanup work at Hanford. It is important both as a project planning and budgeting tool and for framing discussions with involved stakeholders and the general public about the challenges ahead and the assumptions underpinning the remaining cleanup.

Hanford Challenge has a few concerns with the report and how it may be interpreted and used.

Though not a decision document, we believe the Report will have an impact on decisions through a lens of cost comparison. Our concern is that the planning emphasis will be on how the remaining cleanup costs may be reduced, instead of an emphasis on how DOE may achieve the most protective cleanup current and future generations deserve, by considering and comparing the cost ranges that could produce a more protective outcome. As it is an accessible document, it can be assumed that this will be a go-to document for decision makers when assessing the future of cleanup amidst budget concerns. Though we have heard DOE say the Report is not intended to argue cost against protectiveness, decision makers are under pressure to save money. No one wants less protective remedies chosen because a planner or decision maker has seen numbers that argue for a less expensive cleanup. For example, having decision makers see a range of costs coupled with alternatives instead of the highest and lowest costs for the remediation of the 200-SW-2 OU will provide a more tempered reaction to the cost and remediation possibilities for that OU (Operable Unit), instead of only seeing the shocking upper bound cost for removal, treatment and disposal. Providing additional remediation options for OU's like this, instead of only showing the use of barriers versus complete RTD (Retrieval, Treatment and Disposal), will increase planning flexibility and transparency. DOE often says "the decision has not been made" for waste sites that do not have a final ROD (Record of Decision) in place. Yet seeing cost estimates like this, which push a conclusion that the protective decision is too expensive, does not build public confidence that that is the case.

Hanford Challenge believes that providing a clear picture of how budget shortfalls or project delays will affect future schedules and scope of work should be reflected in a range of total estimated cleanup costs. Instead of giving remaining cleanup a final \$115 billion price tag, it would be more useful to

provide a range of costs using a range of cleanup scenarios. This range should take into consideration the guaranteed need for long-term stewardship beyond 2090.

Decision makers and the public need to be aware of the accumulated long-term costs associated with decisions which leave waste in place, and are contingent on monitoring of institutional controls such as barriers, fences and pump and treat systems, and if necessary cleaning up more waste if the institutional controls fail or cleanup levels change. Choosing an end date of 2090 does not take into consideration the long-term monitoring of contaminants such as Plutonium-239, which has a half-life of 24,000 years and will remain in the environment for 240,000 years. Additionally, the Department of Energy has said at recent public meetings on PW-1, 3, 6 and CW-5 that it will have a monitoring presence at Hanford "for as long as the hazards exist" because of the long-lived isotopes that will remain in the ground. The report should include an estimate of the cost of monitoring such contaminated sites with institutional controls essentially forever. We believe the Report would provide a more compelling argument to accelerate a thorough and protective cleanup in the near future while avoiding increased long-term costs later, if the end date and total cost in the Report reflected this mind-boggling timeframe.

We would also like future Hanford Lifecycle, Scope, Schedule and Cost Reports to include a clear picture of the cost and schedule impacts of delays and decreased funding as well as the impacts of accelerating or delaying individual cleanup projects.

We urge DOE to revise cost estimates and projections in the Report to include:

- A transparently arrived-at cost basis and complete range of costs.
- Characterization costs for waste sites such as the 43 miles of unlined trenches used for disposal, and/or partial retrieval of high-threat wastes.
- Temporary and longer-term storage costs and additional cost for capacity for storage of processed Hanford high-level waste to show a cost range in the event a deep-geologic repository is not sited and ready to accept waste by April 2023 (which we find highly unrealistic).
- Anticipated costs that appear to be missing such as:
 - Impacts on underground storage tanks and tank waste if treatment is delayed, such as leaking tanks or a collapsed dome.
 - Impacts to the vitrification process and waste removal from the tanks if there are significant problems due to delay and potential technical malfunctions at the Waste Treatment Plant.
 - Continued "safe and compliant costs" until all facilities or structures are gone.
 - Additional worker training costs, if workers are laid off or moved to other projects and then brought back.
 - CERCLA five-year reviews reveal that remedies were not protective and additional cleanup work is necessary.
 - Final ROD's do not confirm that cleanup levels established under interim ROD's are protective of human health and the environment and additional cleanup work is necessary.
 - Long-term stewardship costs.
 - New discoveries of unanticipated contamination, such as the recent contamination below the 324 Building's B-Cell, requiring remediation.
 - Complete removal of Hanford's underground storage tanks and vadose zone contamination resulting from tank leaks.

We appreciate the opportunity to share our input and look forward to future versions of the Report.
Please let us know if you have any questions about our comments.

Respectfully,

A handwritten signature in blue ink, reading "Liz Mattson". The signature is fluid and cursive, with the first name "Liz" written in a larger, more prominent script than the last name "Mattson".

Liz Mattson
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