



April 25, 2022

Comment submitted electronically to LCSSC@rl.gov

Shannon Ortiz, Lifecycle Report Project Manager
US Department of Energy – Richland Operations Office
PO Box 550, Mailstop H5-20
Richland, WA 99352

Dear Ms. Ortiz,

Thank you for the opportunity to comment on the 2022 Lifecycle, Scope, Schedule, and Cost Report. We greatly appreciate the extension of the comment period, thank you so much.

Hanford Challenge is a non-profit, public interest, environmental, and worker advocacy organization located in Seattle, WA.¹ Hanford Challenge is an independent 501(c)(3) membership organization incorporated in the State of Washington with a mission to create a future for the Hanford Nuclear Site that secures human health and safety, advances accountability, and promotes a sustainable environmental legacy. Hanford Challenge has members who work at the Hanford Site. Other members of Hanford Challenge work and/or recreate near Hanford, where they may also be affected by hazardous materials emitted into the environment by Hanford. All members have a strong interest in ensuring the safe and effective cleanup of the nation's most toxic nuclear site for themselves and for current and future generations.

Use the Lifecycle Report to Spur Increased Cleanup Spending

The US Department of Energy's (USDOE) 2022 Lifecycle, Scope, Schedule and Cost Report estimates a need for dramatically increased yearly spending in the coming decades to keep pace with Hanford cleanup. These estimates are at odds with USDOE rhetoric about expectations of flat funding and fiscally constrained environments. Hanford Challenge believes that there is work to be done within USDOE to reckon with the contradiction between USDOE's own written projections and verbal budget expectations so that they align in a common vision that can be leveraged for increased funding for Hanford cleanup.

Future generations deserve a safer, cleaner future. The Lifecycle Report should be used as a tool to fight for intergenerational equity. A first step towards intergenerational equity is offsetting future cleanup spending by spending more now. By spending more now, we can decrease the total cost of Hanford cleanup which grows every year that insufficient funding fails to cover the

¹ Hanford Challenge mailing address: P.O. Box 28989 Seattle, WA 98118.

cost of all legally required cleanup work and taxpayers continue babysitting waste, instead of getting work completed and off the books. An increased investment in removal, treatment, and disposal of Hanford's toxic legacy will decrease the burden of nuclear waste cleanup, management, and risk that future generations must bear.

During the USDOE Hanford Cleanup Priorities public meeting on March 15, the WA State Department of Ecology's John Price provided a presentation and noted that according to his estimates, the USDOE Richland field office falls half a year behind schedule every year that the appropriation amount falls short of the compliance level funding request. Furthermore, Mr. Price added that if the Hanford Site funding increased up to the compliance level funding request, that would allow for twice as much work to be completed than what occurs under the appropriated level. Hanford's Sitewide Services are necessary, but taken alone, funding that only covers site wide services essentially stalls cleanup, as it is not enough to support the actual cleanup work needed to meet deadlines.

Increased funding is necessary to move the cleanup forward, however, USDOE seems intent on undermining any effort to advocate for more funding. By setting such low expectations that the budget will ever increase, USDOE is essentially discouraging external parties from advocating for increased funding. This is a mistake and is at odds with the Lifecycle Report.

It is imperative that the U.S. Department of Energy use its Lifecycle Report to make a strong case to the Office of Management and Budget and to Congress for compliant funding. By advocating for funding that reaches the compliance level funding request, Hanford cleanup can stay on track and protect human health and the environment without increasing the burden future generations must bear.

Add a Flat-Funding Scenario to the Lifecycle Report

The Lifecycle Report high and low-range estimates are interesting data points, yet could be improved. We believe the report should add a flat-funding scenario, that shows a spare-no-punches look into what would happen if annual cleanup funding did not increase and stayed at current funding levels. The current high and low estimates only include a ten-year delay, which seems unrealistic considering all of the uncertainty in both scenarios. Both high and low spending estimates show drastic increased spending starting in 2022, at distinct odds with budget data and U.S. Department of Energy rhetoric about cleanup spending expectations.

The report would be much more useful if it included a flat-funding scenario. We believe that this scenario would put in plain sight the impact of not dramatically increasing cleanup spending, with a far future completion date for cleanup, and a long-term increased total cost. It is our hope that this scenario will spur Congressional action to avoid this fate through increased compliant funding.

Color Code Min-Safe Vs. Actual Cleanup Dollars in Lifecycle Report Graphs

The report would be improved if a color-coding system was used to show the proportion of the annual budget that is actual cleanup work vs. minimum safe operations in the graphs used throughout the report. Hanford Challenge believes this tool would highlight how much more work would get done with increased spending, and how spending more now on actual cleanup would decrease the total cost of cleanup in a flat funding scenario.

Expand Assumptions and Include Regulatory, Tribal Government, and Stakeholder Input with Listening Sessions

Now that the Lifecycle Report is on a three-year cycle, the U.S. Department of Energy should gather more input from regulators, tribal governments, and stakeholders in listening sessions focused on each section of the report. Having a general Lifecycle Report comment period is less impactful than having focused conversations with tribal governments, regulatory agencies, and a broad cross-section of stakeholders to gather feedback and input on a list of assumptions for each section of the report.

For instance, a listening session on Section 5 – Tank Waste Cleanup, would discuss low-range, high-range, and flat-funding scenario assumptions, and gather input on what should be included. Over the course of a year, it would be possible to get to each section of the report, conduct meaningful engagement, and use the input gathered in the development of the 2025 Lifecycle Report. This strategy would also provide a mechanism for quality regional public engagement which is currently lacking and may help clarify the range of assumptions about Hanford cleanup end-states.

Provide More Realistic Schedule Estimates and Tank Waste Treatment Assumptions

While the cost of cleanup includes low-range and high-range estimates, the same range of estimates are not provided for the schedule. Undoubtedly, the schedule will stretch out far into the future if certain cleanup activities don't go according to plan or if cleanup funding levels do not increase. For example, if the Waste Treatment Plant experiences more startup or operation issues, this would add years (maybe decades) to the current schedule. Yet, the Lifecycle Report doesn't reflect these schedule uncertainties, which is a serious shortcoming. The report should take these time range uncertainties into consideration by including a margin of error.

Another shortcoming of the Lifecycle Report is the assumption that in FY 2023, \$1.2 billion will be spent on the construction of the Pretreatment Facility, which is paused indefinitely. USDOE paused construction of the Pretreatment Facility and allocated just \$20 million in FY 2022 towards its ongoing preservation. Basically, it's oxidizing and deteriorating in the middle of the Central Plateau.

USDOE has no short-term plans to begin construction on the Pretreatment Facility. Therefore, the Lifecycle Report misrepresents what activities USDOE plans for the Pretreatment Facility in the coming years. This limitation of the report inflates the estimated yearly cost of cleanup for near-term fiscal years, while underestimating the cost for long-term fiscal years. It also causes the public to assume that the Pretreatment Facility construction will occur sooner than what is realistically possible, and doesn't address the elephant in the room, which is that the Pretreatment Facility will more likely than not, never open at all.

The next iteration of the report should present more realistic schedule impacts for the high, low, and flat-funding scenarios.

Include More Detailed Cost Basis

Hanford Challenge believes the report should make more effort to show a detailed cost basis for its projections and cost estimate ranges presented in the Lifecycle Report. It is important to know what formed the basis of the calculations presented in the report to increase transparency and clarity for the reader.

Label What is in the High-Range Estimates and Include All Estimate Graphs in Each Section of the Report – Include Flat-Funding Estimates as well

Each section of the report should show a low, high-range, and flat funding estimate graph, not just the low range estimates. These graphs need to be labeled to allow the reader to compare the estimates at a glance. Doing this would make the report much more useful.

Address Leaking Tank Response, Building New Tanks, Cleaning Up Leaked Tank Waste

As cleanup gets pushed further and further out, tanks that are already aging and leaking will deteriorate and leak more frequently—leaving the soil and groundwater irreparably contaminated. The Lifecycle Report should include an assumption of funding for robust leak response, building new tanks, and cleaning up high-level waste source contamination that has leaked into the soil, beyond pumping and treating contaminated groundwater. This is also an example of feedback the USDOE may receive during listening sessions on each section of the report, that would allow input from the tribes, regulators, and broader public to influence the scenarios selected.

Do Not Use Report to Advocate for Cleanup on the Cheap – Stop the Shortcuts

This report should not be used to advocate for an alternative and less protective cleanup strategy, or more plainly put, “cleanup on the cheap.” The cost estimates are staggering and are unquestionably going to increase. The timeframe is long and will get longer. In order to counter

this, USDOE will likely look for shortcuts to save time and money—shortcuts that will gravely endanger human health and the environment.

One example of a shortcut USDOE is trying to implement is grouting tank waste. It is well known that vitrifying (immobilizing in glass) tank waste is more protective and is a proven method for storing radioactive waste safely for a long time. Grout on the other hand, is being pushed by USDOE as a "faster, better, and cheaper" option. However, life-cycle cost estimates show glass is competitive or cheaper than grout. Furthermore, each batch of waste must be tested to develop the correct grout recipe. This ends up being a lengthy, time-consuming process. Finally, grouting radioactive tank waste does not provide long-term protection of human health and the environment, because radionuclides in grout can leach out into the environment more easily over time. Vitrification is still the best option. Yet, USDOE is pushing the idea that grout will speed up the cleanup process and cost less money. We do not want the Lifecycle Report used to advocate for disastrous shortcuts.

Instead of feeling paralyzed by the figures in the Lifecycle Report, USDOE should feel galvanized to stand behind the numbers and ask for what is needed from the Office of Management and Budget and Congress. Hanford cleanup isn't something that can be swept under the rug and ignored because it's too costly and takes too long. Nor is it a good idea to take shortcuts and conduct an incompetent cleanup of the most radioactive site in the Western hemisphere. It is best to tackle the big projects and spend the necessary money in order to decrease the total cost of cleanup and ensure a safe and effective cleanup that protects future generations.

Increase RL-100 Community and Regulatory Support

Hanford Challenge believes that robust public engagement is key to a successful cleanup. Meaningful public engagement needs to involve meeting communities where they are, discussing the cleanup in plain language, gathering input, and using that input to shape and change cleanup decisions. The Hanford Advisory Board is one piece of the public involvement puzzle. The HAB should not be used as a proxy for all public involvement, and deserves funding to support regular in person meetings, travel for the primary and alternate, and regional meetings. By increasing funding for community and regulatory support, it may be possible to start rebuilding broken trust and incorporating the public voice into cleanup decisions.

Effective public engagement is money well spent. We believe the RL-100 budget should be increased in the Lifecycle Report to show a plan for investing in meaningful, effective public engagement.

Show Comment Response

We were disappointed to learn that there was not an effort made to respond to comments on the 2019 Lifecycle Report in writing. Please show how comments were considered in writing.

Add Page Numbering to Section 6

Section 6 appears to be missing page numbering.

Thank you again for considering our comments and for extending the comment period.

A handwritten signature in black ink that reads "Nikolas F. Peterson". The signature is written in a cursive, slightly slanted style.

Nikolas Peterson, Executive Director