March 27, 2023

U.S. Department of Energy
Attn: Jennifer Colborn, HMIS
P.O. Box 450, H6-60
Richland, WA 99352
Comments submitted via email: CleanupPriorities@rl.gov

RE: Public Comment Period for Hanford Cleanup Priorities

U.S. Department of Energy:

Thank you for the opportunity to submit comments on the Hanford Site field-office FY25 Budget Request through your annual Cleanup Priorities comment period.

Hanford Challenge is a non-profit, public interest, environmental and worker advocacy organization located in Seattle, WA. 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.

Hanford Challenge believes in the principle of offsetting future cleanup spending by spending more now; spend more now, to spend less later. This adage is even more pressing when paired with the multigenerational timeline of Hanford cleanup and long-term monitoring. Why increase the burden of nuclear waste management that future generations must bear and risks from delaying cleanup work, when we could lighten that burden, foster intergenerational equity, and celebrate a more successful cleanup by increasing well-managed spending to accomplish more cleanup now?

The US Department of Energy’s (USDOE) 2022 Lifecycle, Scope, Schedule and Cost Report estimates a need for dramatic increased 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.

It is imperative that the U.S. Department of Energy 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.

1 Hanford Challenge mailing address: P.O. Box 28989 Seattle, WA 98118.
Please take the following comments into consideration as you plan for Fiscal Year 2025 and beyond.

- **Perform Meaningful Budget/Cleanup Priorities Public Involvement:** We were disappointed with the Cleanup Priorities public meeting on March 6th.
  - **Bring Back Workshop Format:** USDOE should return to the informal workshop format for their annual budget priorities meeting. In the past, USDOE held a multi-hour workshop instead of an hour-long public meeting to share its budget priorities and more specific information about budget requests/needs. Informational panels were stationed around a room with Tri-Party Agency employees informally presenting the specific cleanup activities on site. The public could wander around, listen, and ask questions about the various projects being presented, in addition to formal presentations, Q&A, and discussion.
  - **Schedule Longer Meetings:** The meeting should be scheduled for at least two hours to allow sufficient time for public questions. The meeting on March 6th was only scheduled for an hour and did not allow enough time for questions. Schedule ample time for the meeting in order to allow all members of the public to ask as many questions as they'd like.
  - **Limiting Questions Limits Dialogue:** Return to more of an open discussion format in which attendees can engage in back-and-forth dialogue with presenters. During the meeting on March 6th, the exchange with the public was more controlled. There seemed to be an intent to limit questions, which stifled the spirit of engagement. Allowing participants to ask multiple questions and follow-up questions facilitates understanding and builds rapport with the Tri-Party Agencies. Members of the public were limited to one question each and those who asked two questions did have their questions answered, but only because the USDOE managers were willing to stay a few extra minutes.
  - **Follow Through with your Promises:** USDOE said in the Response Comments document related to the Adaptive Milestone Approach that: "DOE will provide additional information on priority planning for the next nominal 3-year window at the annual budget and cleanup priorities meeting." This didn't happen and it should have. More on this comment below.

- **Increase Transparency:** Increase the level of detail provided in budgetary briefings and public involvement materials. Information provided should include the proposed Project Baseline Summary level funding, guidance from USDOE headquarters, the funding and work scope for the level below that (regardless of whether USDOE has changed the name of how it breaks out this level from the terminology in the Tri-Party Agreement), and Integrated Priority Lists. The comment period is not meaningful without this information. Ensure that future detailed budgetary information differentiates between the costs of “min-safe” and “mortgage costs” and the level of funding that accomplishes actual cleanup work. It was surprising that USDOE wouldn't even share ideal funding levels for FY2025.

- **Build Collaborative Space for Hanford Cleanup Funding:** Create space for collaboration with the public and regulators while developing future budget proposals for Hanford cleanup. Work with the regulators to prepare Tri-Party Agreement Agency budget briefings that involve collaborative advanced planning between all parties. Give the public the tools and detailed budgetary information necessary to make a compelling case for full funding of Hanford cleanup to achieve...
regulatory compliance, risk reduction, removal of contamination from the environment, mitigation of hazards, and consideration of Tribal treaty rights.

- **Incorporate Adaptive Milestones into Cleanup/Budget Priorities Meeting:** In the Comment Response Document and Responsiveness Summary for the Tri-Party Agreement Revisions for Near-term Milestones for Central Plateau Operable Units, Comment #7 stated, "Some commenters requested that the annual budget and cleanup priorities public meeting include additional information on priorities under the adaptive milestone approach." The response to Comment #7 was, "Under the adaptive milestone approach, the Parties will establish enforceable milestones over nominal 3-year periods. DOE will provide additional information on priority planning for the next nominal 3-year window at the annual budget and cleanup priorities meeting." USDOE did not provide additional information on priority planning for the next 3-year window during the Budget Priorities meeting on March 6th. Why wasn't additional information provided during the meeting as promised by USDOE?

- **Prioritize Funding Cleanup Projects:** It is important to Hanford Challenge that cleanup—defined as projects that achieve regulatory compliance, risk reduction, removal of contamination from the environment, mitigation of hazards, and consideration of Tribal treaty rights—is prioritized. Request funding of cleanup projects that:
  - Reduce risk to workers, the environment, and/or the public and future generations
  - Maintain/meet/move towards attainment of TPA milestones, consent decree, and/or RCRA permit and other requirements
  - Use engineering controls versus administrative controls where feasible
  - Prevent the short-term spread of contamination
  - Reduce long-lived radioactive contamination and risk
  - Protect the Columbia River
  - Protect/remediate the deep vadose zone
  - Use existing and proven technologies
  - Prevent future releases
  - Mitigate past releases
  - Reasonably address public concerns in a timely manner
  - Safely treat, store, and dispose of waste
  - Listen to, encourage, and protect workers who raise concerns and work to resolve those concerns
  - Mitigate mobile high-risk contaminants before less mobile high-risk contaminants (ex: 324 Building, drainable tank liquids)
  - Maintain infrastructure budget/support systems necessary to complete the work and maintain a safe working environment for the Hanford workforce

- **Request a Compliant Budget:** Hanford Challenge would like USDOE to request full funding to meet ALL compliance obligations and to address emergent threats, such as leaks from single-shell and double-shell high-level nuclear waste tanks. Ask for the money you need and make a strong case for why it is imperative that cleanup be fully funded. Request funding levels based on projections in the 2022 Lifecycle Scope, Schedule and Cost Report and use the report as leverage to advocate for the funding needed to stay on track.
• **Increase Funding for Meaningful Public Involvement:** Public awareness, input, and involvement in decisions about Hanford cleanup is essential to achieve a successful cleanup. Therefore, additional funding should be provided for meaningful regional, hybrid public meetings; the vital public involvement work of the Hanford Advisory Board, the WA State Department of Ecology’s oversight, and WA State Department of Health. Emergency preparedness is also an essential activity at the Hanford Site and should not be cut short.

Ensure your public involvement efforts are guided by [Hanford Advisory Board advice #239](https://www.hanford.gov/files.cfm/HABAdv_239.pdf), which states:

The art and craft of public involvement is successful when: clear goals are defined; stakeholders contribute early to the design and development of public involvement; involvement is interactive, inclusive, engaging and respectful; the public has early input influencing the decision-making process (for example, the identification of alternatives for evaluation); the decision-makers demonstrate openness to having input influence their decisions and the decision-making process; and the public sees meaningful results from participation.²

• **Address Systemic Problems:** There are many systemic problems at Hanford that money alone cannot fix. Instead, more checks and balances are needed to safeguard cleanup activities. USDOP should look at funding and legislative efforts to increase contractor oversight. USDOP should also take efforts to renew commitment to improving the safety culture at Hanford.

• **Spend More Now to Spend Less Later:** Often at Hanford, delaying cleanup projects for any reason results in increased lifecycle costs for the entire Hanford Cleanup mission. Hanford Challenge requests that USDOP make a plan for and request dramatic increased funding levels of at least $4B annually. Increasing spending on Hanford cleanup now will **decrease the total lifecycle costs** in the long-term and provide a strong disincentive for cleanup shortcuts. Make a strong case for dramatic increased spending in USDOP budget proposals and budget related documents and request compliance level funding. Spend more now to spend less later.

• **Delay Tank Closure:** Delay tank closure at Hanford, starting with the C Farm tanks, until the safe and effective treatment capacity to immobilize Hanford’s tank waste in glass has been achieved. Delaying tank closure also offers time for the development of technologies that may allow for the retrieval of more tank waste and leaked waste.

• **Focus on Safe and Effective Tank Waste Vitrification:** Make glass safely. Prioritize work on Direct Feed Low Activity Waste. Continue solving problems to be ready for high-level waste vitrification.

• **Accelerate Work to Remove Cesium and Strontium Capsules to Dry Storage:** Request funding that speeds up the work to safely remove the Waste Encapsulation and Storage Facility’s cesium and strontium capsules to dry-cask storage. Accelerate movement of the WESF capsules to safer storage to meet the 2025 milestone deadline, while ensuring a safe work environment. Fund and perform concrete testing of the WESF storage pools after transferring the capsules to dry storage.

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² Hanford Advisory Board Advice #239, https://www.hanford.gov/files.cfm/HABAdv_239.pdf
• **Safely Complete Removal of Contaminated Soil Beneath the 324 Building**: Request funding that allows for the 324 Building B-cell contamination to be removed safely and on schedule, and maximizes worker protections. Ensure that funding levels allow for characterization of waste as it is removed to ensure that no long-lived contaminants end up in the Environmental Restoration Disposal Facility.

• **Fund Vapor Engineered Exposure Controls**: Continue to fund the testing, selection, and implementation of the most effective measures to safely address worker exposures to toxic chemical vapors in Hanford’s tank farms as outlined in the 2023 updated settlement agreement. Please ensure that workers are provided effective respiratory protection using supplied air respiratory protection while working in the tank farms to protect them from immediate and chronic health effects and illnesses. Please ensure that all facilities that handle tank waste and secondary waste from tank waste treatment include robust protections for workers from chemical vapors.

• **Plan for Expanded High-Level Tank Waste Storage**: Request funding to plan for and implement safe additional storage of Hanford’s high-level tank waste so that this space is available before more Hanford underground storage tanks fail.

• **Build New Tanks Now**: Start the process for building new tanks and increase readiness and quick-to-implement infrastructure for emergency pumping of leaking tanks. **We are noticing what we will call a selective use of urgency around leaking tanks to sell the idea that grouting tank waste is necessary. We disagree.** Build new tanks. We go into a detailed explanation of our opposition to grout in our blog post. Leaked and leaking tank waste is a problem, and it has been for a long time. For more than a decade, we have advocated for building new tanks as the answer to leaking tanks. We know how to build new tanks. We do not believe building new tanks is a death sentence for tank waste treatment, but rather a preventative measure that protects the environment and buys us more time—which is something we need no matter what.

• **Glass Not Grout**: Hanford resources need to be focused on glass not grout. For more information on our grout position see our blog post.

• **Implement the SST Leak Detection, Characterization, Mitigation, Cleanup, and Communication Plan**: Implement and utilize the plan to address Single-Shell Tank leak detection, characterization, mitigation, cleanup, and communication.

• **Restore Onsite Treatment Capacity for Waste Treated at Perma-Fix Northwest**: Request funding to restore onsite treatment capacity to return treatment of Hanford’s waste to the Hanford site. See our 2020 report outlining concerns with Perma-Fix NW.

• **Request Funding for Deep Vadose Zone Contamination**: Restore funding to plan remediation of the deep vadose zone, especially below Hanford’s tank farms where an estimated one million gallons or more of high-level nuclear waste has leaked. The vadose zone contaminants will continue to migrate through the soil, re-contaminating areas that were previously cleaned up. Remediating the deep vadose zone won’t happen without a plan, funding, and an ongoing commitment to accomplish the work. This work must be funded in order to protect future generations.
• **Request Additional Funding for Groundwater Remediation:** Protect the Columbia River, future generations, and the environment by requesting additional funding for groundwater remediation. Fully fund thorough cleanup plans that address strontium-90, hexavalent chromium, uranium, and other radioactive and chemical contaminants near the K Reactor, N Reactor, and the 300 Area.

• **Plan Now for Offsite Waste Shipments:** Identify and collect all data and resource needs to meet milestones for waste shipments to the Waste Isolation Pilot Plant (WIPP) or other appropriate offsite facilities. Use the 2050 WIPP closure date as a benchmark to plan for and accelerate work related to characterizing and remediating transuranic and mixed transuranic waste sites in the Central Plateau, including beginning 200-CW-5/PW 1,3,6 remedial activities and stabilizing canyons.

• **Request Contingency Funding for Emergencies:** Recent history has shown us the need for RL and ORP to request and set aside funding to quickly respond to emergencies and unplanned cleanup crises. As we have seen in the past several years with the identification of leaked contamination beneath the 324-Building, the PUREX Tunnel 1 collapse, the RL Matrix identifying 27 potential sites needing stabilization to avoid contamination release, and the B-109 tank leak; contingency funding would provide a welcome buffer to respond quickly to these issues. Request funding to plan for a future that will contain emergencies and unplanned crises to ensure a nimble response that does not redirect money away from other important cleanup work.

• **Request Funding for an Independent External Review of the Waste Treatment Plant:** Successful and safe treatment by immobilizing Hanford’s tank waste in glass is non-negotiable. It is critical to determine what can and cannot be salvaged at the Waste Treatment Plant. Request funding for an independent external review.

Thank you for considering our comments,

[Nikolas F. Peterson, Executive Director]