



November 22, 2021

U.S. Department of Energy  
Attn: Jennifer Colborn, HMIS  
P.O. Box 450, H6-60  
Richland, WA 99352  
Comments submitted via email: 5YearPlan@rl.gov

**RE: Public Comment Period for Hanford 5-Year Plan**

U.S. Department of Energy:

Thank you for the opportunity to submit comments on the Hanford Site 5-Year Plan priorities.

Hanford Challenge is a non-profit, public interest, environmental, and worker advocacy organization located in Seattle, WA.<sup>1</sup> 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, and who are therefore affected by conditions that endanger human health and the environment.

We appreciate the effort to increase the window for public involvement in the five-year plan, compared with the very small window of time that was provided for input in the EM 10 Year Strategic Vision. However, we believe the public involvement process on this document could be further improved in the future, including earlier and more meaningful involvement of the broader public, tribes, and regulators.

In general, we are aligned with the high-priority focus on DFLAW and vitrification of tank waste; however, we disagree with spending money on alternatives to the established path for glassifying waste through the Waste Treatment Plant, particularly the multi-pronged effort to push grout as an alternative waste form. We have many concerns with grout as a waste form.

Please take the following comments into consideration in your planning of cleanup work from FY22-26 and for the next iteration of your five-year plan.

- **More Inclusive Early Public and Regulator Involvement:** DOE should involve the public and regulators in workshops prior to publishing its five-year plan documents, to gather input about cleanup priorities and concerns. Once the documents are created, it is unlikely that they are going to change.

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<sup>1</sup> Hanford Challenge mailing address: P.O. Box 28989 Seattle, WA 98118.


- **Improved Method of Generating Public Comments:** Hanford Challenge recognizes that DOE has made an effort to solicit public comments in the form of a survey. While DOE’s interest in generating public comments is commendable, the method is inadequate. The survey is formatted with biased and leading questions that guide the public into answering in the best interests of DOE, not the public itself. DOE should create a survey with open ended questions where the public can voice their personal concerns and opinions.
- **Milestone Cheat Sheet:** It would be helpful in future iterations of the five-year planning process, to include a cheat sheet of milestones for the five-year period that is up for discussion. This cheat sheet would need to use plain language to help facilitate public understanding of the coded language of the milestone series.
- **Request a Compliant Budget:** DOE should 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. It is clear from Question 4 of DOE’s Public Engagement Survey that DOE is anticipating a lack of sufficient funding in FY 2023, which is necessary to carry out the planned cleanup priorities. DOE should make the case to Congress that more money is needed to avoid delaying critical cleanup projects.
- **Increase Transparency:** Increase the level of detail provided in public involvement materials. In addition to providing the Draft Hanford 5-Year Plan Placemat that highlights certain activities planned for each fiscal year, provide a comprehensive document that outlines all of the planned activities. This would allow the public to make informed decisions in regard to DOE’s priorities for the next five years. Similarly, the public documents should be clear and understandable. For example, “Implement West Area Risk Management” is listed as one of the critical tank waste activities for FY 2024. The title is vague and confusing for a member of the public. A more appropriate and descriptive title would be, “Implement Test Bed Initiative and Grouting in West Area.” During the Hanford Advisory Board meeting on the 5-Year Plan, Ben Harp from DOE described “Implement West Area Risk Management” as grouting waste in the West Area and sending it off site in order to further the Test Bed Initiative. However, DOE’s document containing descriptions of the 5-Year Plan critical activities fails to mention the Test Bed Initiative in the description of “Implement West Area Risk Management.” DOE must be completely transparent and forthright with the public about the critical activities outlined in the 5-Year Plan. Information inconsistencies may cause the public to lose trust in the agency.
- **Improve Plain Language/Accessibility of Public Materials:** We appreciate that DOE organized the 5-Year Plan documents on one webpage. However, many of the documents, including the fact sheets, have so many technical terms, the basic information is lost. Please look to the Public Involvement Committee for input in the future on increasing the accessibility of information presented. For example, the TSCR fact sheet doesn’t clearly state that it will be treating tank waste. Also, there should have been acknowledgment in the Plutonium Finishing Plant fact sheet of the serious and preventable worker exposures and contamination release due to the open-air demolition of the PFP. Facing and acknowledging mistakes publicly is a critical step to ensuring the same mistakes are not repeated in the future.
- **Delay the Following Work:**
  - **Tank Closure:** Delay tank closure at Hanford, especially at 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.

- **PUREX Demolition:** Delay PUREX demolition unless substantial additional funding is received.
- **Focus on Safe and Effective Tank Waste Vitrification, not Grout:** Make glass safely. Prioritize work on Direct Feed Low Activity Waste. Continue solving problems to be ready for high-level waste vitrification. There is a concerted effort to bring grout to Hanford as an alternative to vitrifying Hanford's tank waste. Hanford tank waste is high-level waste, and should not be relabeled or reconfigured in violation of applicable law, such as the Nuclear Waste Policy Act. See Hanford Challenge's paper, [Relabeling and Grouting Tank Waste at Hanford: Frequently Asked Questions](#), April 2021. The idea of grouting tank waste is being sold as faster, cheaper tank waste treatment—however, Hanford's history with grout tells a story which at the very least begs extreme caution in entertaining this faster, cheaper narrative. The history of the failed grout program is outlined in this paper "[Why Grout Failed at Hanford: Chronology of the Failed Grout Program](#)," released by Hanford Challenge. In short, we disagree with the plan to grout Hanford tank waste to save time and money on Hanford cleanup. The appropriate and legally-required disposal pathway for HLW is vitrification and disposal in a HLW repository. Shortcuts are not acceptable.
- **Accelerate Work to Remove Cesium and Strontium Capsules to Dry Storage:** Prioritize activities that speed up the work to safely remove the Waste Encapsulation and Storage Facility's cesium and strontium capsules to dry-cask storage. This is one of the top safety issues in the DOE complex and requires immediate, urgent attention. This work needs to be completed as soon as possible, and prior to FY 2026.
- **Safely Complete Removal of Contaminated Soil Beneath the 324 Building:** Prioritize activities that allow for the 324 Building B-cell contamination to be removed safely and on schedule, and maximize 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. We would like to see this work completed prior to FY 2025.
- **Prioritize Vapor Engineered Exposure Controls:** Complete the testing, selection, and implementation of the most effective measures to safely address worker exposure to toxic chemical vapors in Hanford's tank farms as outlined in the September 2018 settlement agreement regarding tank vapors. The centerpiece of this is an engineered control system that treats tank vapors in a thermal process and filtered before release to the air. While this process is undergoing evaluation and installation, ensure that workers are provided effective respiratory protection using supplied air respiratory protection while working in the tank farms to protect workers from both immediate and chronic health effects and illnesses. Effectively protecting workers from vapor exposures is an essential priority while operations surrounding removal of tank waste increase.
- **Plan for Expanded High-Level Tank Waste Storage:** Prioritize activities that 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. This should include building new double-shell tanks as soon as practicable.
- **Restore Onsite Treatment Capacity for Waste Treated at Perma-Fix Northwest:** Prioritize the restoration of onsite treatment capacity to return treatment of Hanford's waste to the Hanford site. See [our 2020 report](#) outlining concerns with Perma-Fix NW.

- **Prioritize Remediation of Deep Vadose Zone Contamination:** Prioritize 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 prioritized in order to protect future generations.
- **Prioritize Groundwater Remediation:** Protect the Columbia River, future generations, and the environment by prioritizing groundwater remediation.
- **Request Contingency Funding for Emergencies:** Request contingency funding to increase readiness to quickly move in infrastructure necessary to pump a leaking tank. Plan now for future, inevitable leaks. 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.

Thank you for considering our comments.



Tom Carpenter, Executive Director