

## Hanford 5-Year Plan Survey Results

- 23 responses
  - All 23 surveys were submitted anonymously
- 

Question 1: **Hanford's top priorities in the next five years include the startup of tank waste treatment and risk reduction. Are you supportive of these goals? If not, please explain.**

23 out of 23 responded to this question.

19 out of 23 responded with "Yes"

One response stated, "not really"

The remaining response did not reply with "yes" or "no" but commented.

- Have alternatives been evaluated? Is glassification still the optimum treatment strategy given technological advances which have been experienced in the last 20+ years since WTP was decided on?
- This has gone on long enough. I seem to be reading the same story over and over again in the last 25 years that I've followed the Hanford cleanup. I think you need to sit down with the actual workers who are doing the clean up and listen to some of their solutions. They are the ones working in the nuclear fields.
- USDOE did not present a five year strategic plan for Hanford Cleanup. USDOE's so-called "plan" fails to disclose how USDOE set priorities. USDOE's plan ignores major safety risks and public values. I urge USDOE to develop a meaningful public and Tribal participation process for public input in developing Hanford cleanup strategic plans, including meetings around the region.

The Hanford Cleanup Five Year Plan needs to prioritize removing waste from leaking High-Level Nuclear Waste tanks. The Plan needs to commit to removing waste from leaking Tank B-109 now, as federal and state hazardous waste laws require. It's unacceptable that USDOE is spending billions of dollars on a plant to treat the waste from tanks while allowing leaking tanks to just keep leaking waste to contaminate the soil and groundwater which flows into the Columbia River. Develop the capacity via the "SAFE" and "Test Bed Initiatives" to remove waste from Single Shell Tanks with offsite treatment and disposal to lower overall risks to Hanford's groundwater and health.

Before an earthquake causes a catastrophe, remove all extremely radioactive Cesium and Strontium capsules from the WESF pools by 2025.

USDOE's Hanford Five Year Plan should commit to removing and treating all illegally stored wastes in Hanford's Central Waste Complex in the next 24 months. Thousands of drums and containers of waste are dangerously stored in violation of hazardous waste laws. Wastes are – even stored outdoors, and many containers are corroding. Laws forbid storing these wastes without treatment for more than a year, but USDOE has stored them for decades. It's time to remove and treat them at a licensed treatment facility.

Hanford's Five Year Plan should complete remediation of all River Corridor areas and ensure safe access to resources along the River by the end of 2025. Honor Treaty rights of Native American nations enabling them to safely utilize River Corridor resources within five years rather than waiting hundreds of years for the areas to be safe and stop spreading contamination into the Columbia.

Additional comments from question 1:

- This is work that should have been done 50 years ago.
- Addressing hazard of tank waste is long overdue. After moving from single-shell to double-shell and that life span now over, final solution needs to be implemented.
- This is a high level question, the issues are in the detail. It's not the startup of the tank waste treatment and risk reduction, it's the mismanagement of the costs. Why are tax payers paying to facilitate a blood drive, or why aren't Hanford jobs paying competitive wages within the community/positions, versus overpaying. Seems when issues can't get resolved, another department/cost is approved - example, human resources, ethics and compliance, contractor/DOE employee concerns, etc. Efficiency in the HR department should eliminate the others. These are few of many issues.
- Not really. Startup of the tank waste treatment system at WTP may result in increased risk instead of risk reduction. It certainly increases the volume of waste due to effluents and secondary waste. The integrated risks have not been presented to the public. GAO's recommendation of a QA audit of the 13 LAW systems beyond the LAW D&O report has not been resolved per GAO's web page. Allegations of gross mismanagement, waste, gross waste of funds, fraud, and abuse have not been resolved.
- Yes, looking to see more work scope performed on risk reduction vs general facility maintenance and groundwater treatment activities (wells, modeling, etc).
- this is an extremely biased question: a) USDOE fails to include any discussion of how it set priorities and how many priorities it has or could have; b) there is no definition of "risk reduction," and major risk reduction efforts that are required by federal and state hazardous waste laws are entirely ignored, e.g., removal of corroding and uncharacterized wastes in CWC.

---

**Question 2: What is your top priority for Hanford cleanup? Why (use comment field)? This question allowed for check marks to be left in multiple boxes.**

23 out of 23 responses answered this question. DFLAW was mentioned in 7 of the 23 responses followed by groundwater treatment and TBI in 5 of the responses.

- (7) Direct-Feed Low-Activity Waste Program
- (1) High-level tank waste treatment
- (2) 324 Building
- (3) Tank waste retrievals
- (4) Tank leak mitigations
- (3) 100-K area remediation

- (5) Groundwater treatment
- (2) WESF capsules to dry storage
- (5) Low-level waste offsite disposal (Test Bed Initiative)

Additional comments from question 2:

- The whole list and probably more
- Our top priority for Hanford cleanup is groundwater remediation. Aging infrastructure and past waste sites continue to leak cancer-causing contaminants into the ground, permeating the vadose water and groundwater, slowly inching their way to the Columbia River. In many cases, contaminants already upwell in the River. These contaminants threaten the safety of communities that recreate on the River and the ecological receptors that call the Hanford Reach their home.

Central Plateau contamination requires a whole site approach

According to the Hanford Site Environmental Report for 2019, long-lived, mobile radionuclides such as Iodine-129 (I-129) and Technetium (Tc-99) remain in the groundwater in the Central Plateau. A whole site approach to groundwater remediation is necessary to treat these contaminants due to their motile nature in groundwater. The cancer-causing contaminants in groundwater in the Central Plateau will find its way to the River. There is a startling lack of planning for the remediation of these Central Plateau groundwater contaminants, which will one day become River Corridor contaminants. A whole site remediation plan is necessary to address the long-lived, mobile radionuclides, slowly migrating from the Central Plateau to the River Corridor.

River Corridor contamination requires active remediation

The River Corridor groundwater is of extreme concern with notably high levels of Strontium-90 (Sr-90) and Hexavalent Chromium (Cr(VI)). In the 100 N-Area groundwater alone, the Sr-90 concentrations were 15,700 pCi/L. To compare, the drinking water standard in Washington State is 8 pCi/L. At the levels present in groundwater, Sr-90 and Cr(VI) anywhere in the River Corridor risk the health and safety of fish, animals, plants, and people who depend on them.

These levels of contamination are of great concern, and Energy's approach has failed to address key pollution issues. Energy's preferred plans often involve using Monitored Natural Attenuation (MNA) with Institutional Controls (ICs) for groundwater associated with River Corridor Aquifers. Allowing radioactive decay and other natural pollution decay while Energy monitors the pollution and uses ICs to restrict uses. The extensive use of MNA and ICs allows Cr(VI) to upwell into the River and other pollutants to persist in nearby groundwater until they either meet surface water standards or drinking water standards. This is unacceptable when the Reach provides critical habitat for spawning, foraging, and migration of salmon and steelhead. Additionally, it is the most productive spawning grounds for endangered Chinook salmon on the Columbia, producing 52 million juvenile Chinook salmon every year. If there is to be robust use of the River Corridor, a goal we support, active groundwater remediation needs to be addressed and prioritized in the Central Plateau and River Corridor. As stated previously, all groundwater, even that in the Central Plateau, will come in contact

with the River. Reducing cancer-causing pollution in the groundwater must be addressed using a whole-site approach. Unless pollution throughout the site continues to be addressed, including through Energy's commitment to reducing groundwater pollution, the health of the fish, wildlife, plants, and people that use or will use the site will suffer.

- The top priority is managing these projects, not the project themselves. How long has it taken the Waste Treatment Plant to get up and going. I understand nearly 20 years. The efficiency, effectiveness in the effort, and accountability don't seem to be included in the effort.
- Cleaning the soils and area of historic contaminants and not having any new contaminants able to enter into the river corridor. This is important to me as a community member that uses the river for pleasure, irrigation, and as a food source.

---

**Question 3: Are there other cleanup projects you believe should be higher priority than those included on the 5-Year Plan? Please explain.**

23 out of 23 responses answered this question.

Out of the 23 responses, 11 were answered with "no" and 1 with, "I don't know".

The remaining 11 left the following comments:

- Organic destruction in tank waste so that we can grout.
- Not listed, but should be included is the remediation of all of the languishing WIDS sites; that's the actual cleanup.
- There should be a priority to determine/communicate expectations, education, and accountability to efficiently work as a team to complete tasks and resolve issues, not continue to add costs by adding layers. Why would question 4. below be to "push into the future", instead of "reducing costs to get as many tasks completed as possible". It will cost more to push projects into the future.
- What about all the waste site in the 600 area and the backlog of disposition of those waste sites?
- The roadway upgrades. So the employees have a safer travel to and from work.
- The current Hanford 5-year plan fails to bring soil and water into compliance at an adequate pace. Vadose water and groundwater pollution reductions offer the Department of Energy great potential positive impact on future generations' use. Therefore the site needs a more integrated approach to assessing groundwater pollution, and the River Corridor cleanup needs to move up in priority. In addition to issues raised earlier, the situation at the 324 Building poses huge concerns. We do not support the idea that highly lethal contamination removed from beneath the 324 B Cell meets standards for disposal at ERDF. The possibility for intense and long-lived radiation to persist seems too high, given discrepancies about the potential presence of transuranic elements in the waste, which already exceeds (by a large margin) lethal levels of other radioactive contamination.

Central Plateau remediation plan

According to the Hanford Site Environmental Report for 2019, long-lived, mobile radionuclides' are extensively in the groundwater in the Central Plateau. There needs to be an additional plan in place to remediate these contaminants, particularly the Iodine-129

plume. Ecology and Energy must ensure that the people who will use the Hanford Site or the Columbia River, far into the future, will be protected from Hanford's pollution. Otherwise, the Central Plateau plumes are a poison pill slowly inching their way toward being released into the river.

#### River Corridor urgency

Additionally, the 100-K ROD and 100-N ROD are slated to be released in 2024 and 2025, respectively, with work plans beginning in 2026. The current levels of Cr(VI) are already extremely high in these areas and require immediate action. The timelines for the RODs and implementation of their plans need to move up to prevent cancer-causing pollution leaking into the River. The RODs must also take into account the necessity for active pump and treat in order to protect the health and safety of people using the river, fish, and wildlife. Finally, the 324 Building needs to be prioritized as well. Some measurements of radiation beneath the 324 Building are staggeringly high, within the River Corridor, and potentially hazardous or deadly to anyone who approaches the most contaminated areas unshielded.

- CWC removal and treatment of illegally stored wastes within 24 months
- WESF acceleration to be complete within five years
- Prepare and deploy equipment and monitoring for removal of wastes from leaking and high risk SSTs
- Remove soil contamination and treat groundwater to meet surface water quality standards and reduce risks to allow unrestricted Tribal use along the River Corridor in five years.
- I am concerned about the nuclear waste being brought from Bremerton Naval Air Base and other plans to build a new nuclear reactor for energy. Times up when you can't clean up what is already there. This survey is rigged. I don't want to remove anything from 4 and the words are just double talk.

---

**Question 4: Should DOE receive less funding than planned in fiscal year 2023, based on your cleanup priorities, which projects on the 5-Year Plan would you push into the future? Please indicate potential projects to push out, based on the critical activities listed in the 5-Year Plan list for FY23.**

23 out of 23 responses answered this question.

Complete 300 area lighting along route 4S had the highest response with nine, followed by complete LAW facility operational readiness review to authorize hot commissioning, resume 242-A evaporator operations and complete 224B facility demolition preparation, all received three votes.

- (3) Complete LAW Facility Operational Readiness Review to Authorize Hot Commissioning
- (1) Initiate IDF Operations
- (0) Commence Hot Commissioning of WTP LAW Facility and EMF
- (3) Resume 242-A Evaporator Operations
- (0) Complete LERF Basin 41 Construction
- (0) Complete IDF Upgrades & Readiness Reviews Required for Operations
- (3) Complete 224B Facility Demolition Preparation
- (0) Complete PUREX North Facility RCRA Tank Closures
- (2) Complete 400 Area Fire Station
- (2) Complete Raw Water Cross Connection Isolations
- (0) Complete 105KE Reactor ISS

- (1) Complete Installation of 324 Building Micropiles to Support Waste 300-296 Remote Excavation
- (0) Complete 100 Area Mission Critical Distribution Feeders
- (9) Complete 300 Area Lighting Along Route 4S