



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Richland Field Office

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May 3, 2024

24-NWP-093

Susan Coleman, Chair
Hanford Advisory Board
245 Torbett Street
Richland, Washington 99354

Re: Department of Ecology Response to Hanford Advisory Board Consensus Advice #315, Fiscal Year 2026 Hanford Cleanup Priorities

Dear Susan Coleman:

Thank you for Hanford Advisory Board (Board) Advice #315. The Department of Ecology (Ecology) appreciates the hard work the Board puts into its annual policy-level advice on Hanford Site cleanup priorities. We rely on the Board and this annual advice to better understand and consider the cleanup priorities most important to local and regional communities impacted by Hanford in our decision-making.

This year, the Board requested a joint point-by-point response from the Tri-Party Agreement (TPA) agencies. Ecology prefers to issue an individual response to the annual cleanup priorities advice, but we are providing a point-by-point response as requested.

Ecology accepts the Board's Fiscal Year 2026 Hanford Cleanup Priorities advice and supports the Board's request for this advice to be provided to the U.S. Department of Energy's (Energy) headquarters as required.

Our agency also agrees that Energy should request a compliant budget to meet all TPA milestones on an annual basis. We continue to heavily advocate for [achieving and maintaining a compliant budget](#)¹ for Hanford and all other Environmental Management cleanup sites.

Ecology notes this advice largely tracks [Energy's 5-Year Plan](#)² goals. We request the Board include other considerations when developing future pieces of cleanup priorities advice, such as the Tri-Party Agreement, Consent Decree, System Plan, Lifecycle Report, Analysis of Alternatives, Agreed Order(s), and other initiatives and agreements.

¹ Ecology's Lowering Hanford's Price Tag one-pager: <https://apps.ecology.wa.gov/publications/documents/2305003.pdf>

² Energy's 5-Year Plan webpage: <https://www.hanford.gov/page.cfm/5-YearPlan2023to2027>

The point-by-point response below provides our agency's perspective on each of the Board's specific cleanup priorities.

Core Operations

- **C-a – Reporting:** Ecology agrees that improved data tracking and reporting would be helpful for the public. Ecology has already started working with Energy to improve metrics for tracking environmental work done onsite, and intends to include target goals alongside actual results in this process.
- **C-b – Public Involvement:** Ecology agrees with this priority. In our response to comments documents, our program strives to publish and respond to every comment received. For TPA response to comments documents, we work with the U.S. Environmental Protection Agency (EPA) and Energy on comment responses.

Ecology is committed to providing robust and meaningful public outreach and engagement. Our agency provides multiple types of outreach and education for the public, and also issues [Public Participation Grants](#) to individuals and nonprofit organizations³. We are also working with EPA and Energy on providing more TPA engagement opportunities.

- **C-c – HAB:** Ecology agrees with this priority, and remains committed to regularly engaging with the Board, EPA, and Energy on development and execution of the Board's annual workplan and calendar, to maintain regular full Board and committee meetings. We encourage participation from all Board members and request appointed Board members regularly attend and participate in full Board and committee meetings.
- **C-d – Workforce Issues:** Ecology assumes this recommended priority pertains solely to Energy's workforce. Our agency believes the complexities of funding and fluctuating staffing needs across Hanford present a challenge to Energy in addressing the increasing demand to support tank waste treatment efforts while also maintaining a workforce to address cleanup of legacy contamination across the site.

Ecology agrees that strategizing on the maintenance and procurement of a stable workforce should be a priority for Energy, but does not agree that this strategy should be implemented into the TPA. Ecology also requests further clarification on how the TPA agencies would collaborate in the development of a strategy, and what a long-term strategy would resemble.

³ Ecology Public Participation Grants: <https://ecology.wa.gov/About-us/Payments-contracts-grants/Grants-loans/Find-a-grant-or-loan/Public-participation-grants>

Waste Treatment

- **WT-a – DFLAW:** As we shared in our advice response last year, it is Ecology’s expectation that the Direct-Feed Low-Activity Waste (DFLAW) suite of systems will operate effectively to reach 21 metric tons of glass per day (at 70 percent total operating capacity) as noted in the [2016 Amended Consent Decree](#).⁴

It is also our agency’s expectation that the DFLAW suite of equipment will increase production rates to achieve the “nameplate capacity,” of the Low-Activity Vitrification Facility, totaling 30 metric tons per day with two melters.

- **WT-b – Greenhouse Gas Emissions:** Ecology defers to Energy on this point. However, of note, Ecology’s current [Air Operating Permit Renewal 3](#)⁵ requires Energy to report greenhouse gas emissions to Ecology if certain thresholds are triggered. Energy could be subject to Climate Commitment Act requirements if the department switches to natural gas or increases its onsite emissions.

Risk Reduction

- **R-a – 324 Building:** EPA is the lead regulatory agency for Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) cleanup of the 324 Building and the underlying soils. However, Ecology agrees the 324 Building is of high priority for risk reduction, and supports EPA and Energy’s work to address soil contamination and groundwater monitoring. Although much of the work revolves around the CERCLA cleanup with EPA as the lead regulatory agency, Ecology will be overseeing closure of 12 Dangerous Waste Management Units within the 324 Building.
- **R-b – 105-KW Fuel Storage Basin:** EPA is the lead regulatory agency for this fuel basin. Ecology generally agrees reducing the risk along the river corridor remains a top priority.
- **R-c – Groundwater Protection:** This priority is consistent with Ecology’s perspective for river corridor groundwater and commitments in the TPA, including those under the M-016, M-024, M-026, and M-045 milestone series.
- **R-d – Deep Vadose Zone Contamination:** This priority is consistent with Ecology’s perspective for 200-DV-1. However, Ecology would also like to see the corrective and remedial action studies proceed to address milestone M-015-110B, which is currently in abeyance.
- **R-e – 100-K and 100-N Records of Decision:** Ecology supports this priority. We are lead on 100-N, and EPA is lead on 100-K. Ecology continues to work with Energy and EPA on development of the Record of Decision (ROD) for 100-N, and supports EPA and Energy’s work on the 100-K ROD. This priority requires RODs to be written first for both areas.

⁴ 2016 Amended Consent Decree: https://ecology.wa.gov/getattachment/c7baa4c9-818b-40e6-9872-09bc6293afdd/AmendedConsentDecree_WA_222.pdf

⁵ Hanford Air Operating Permit 00-05-006 Renewal 3: <https://fortress.wa.gov/ecy/nwp/permitting/AIR/AOP/renewal/three/index.html>

Waste Management

- **WM-a – TRU Waste:** Ecology generally agrees with this priority, and wants Energy to meet its obligations established in TPA milestone series M-091 and the M-091 Transuranic Mixed and Mixed Low-Level Waste Project Management Plan. If Energy is able to accelerate this work, Ecology supports that effort.
- **WM-b – 618-11 Burial Ground:** EPA is the lead regulatory agency for this site. Ecology agrees with the Board's advice on this topic.
- **WM-c – ERDF:** EPA is the lead regulatory agency for the Environmental Restoration Disposal Facility (ERDF). Ecology agrees with this priority and supports EPA's lead.
- **WM-d – Orphan Waste:** Ecology agrees a list of all orphan Hanford waste streams should be compiled. However, we note Ecology does not consider cesium and strontium capsules or ion exchange columns from Tank-Side Cesium Removal and the Test Bed Initiative as orphaned waste. Ecology considers these mixed high-level waste, and as such, it must go to deep geologic disposal. All three of these waste streams have TPA milestones and permit conditions requiring Energy to make a decision in the future on whether:
 - These streams will be fed into the front end of the High-Level Waste Vitrification Facility and mixed with tank waste for vitrification, followed by deep geologic disposal, **or**
 - These streams will be directly shipped to deep geologic disposal as is.

Regardless of which decision is made, these waste streams must go to deep geologic disposal per TPA milestones, permit conditions, and the Nuclear Waste Policy Act. This is also evaluated in the related Tank Closure and Waste Management Environmental Impact Statement. The Hanford Site Mixed Waste Land Disposal Restrictions Summary Report outlines treatment schedules for several of these waste streams and can be found in the Hanford Site Administrative Record.

In addition, Ecology has developed a permit condition to guard against the potential for orphan waste resulting from alternative treatment of low-activity tank waste. In the draft Research, Development, and Demonstration Permit for Energy's 2,000-gallon Test Bed Initiative Demonstration, Condition II.K.5 provides that if any of the waste shipped offsite for grouting and disposal is rejected by the disposal facility, Energy must provide Ecology with a disposition plan for that waste before it may be shipped back to Hanford.

- **WM-e – WESF:** Ecology agrees Energy needs to meet its obligations as established in TPA milestone M-92-01. Ecology is aware of Energy's challenges leading to delays at the Waste Encapsulation and Storage Facility (WESF). However, Ecology would still encourage Energy to work towards the startup and completion of capsule transfers from WESF to the Capsule Interim Storage by August 31, 2025.

- **WM-f – Tank Liquids:** Ecology appreciates and supports the Board’s priority on completing an analysis of alternatives for technologies on removing or stabilizing interstitial liquids in tanks.

Ecology and Energy continue to work together on implementation of the leaking tanks Agreed Order, announced August 2022, which includes the development of a single-shell tank leak response plan.

In addition, on April 29, 2024, the TPA agencies announced a [settlement agreement and proposed changes to the TPA and Consent Decree](#)⁶. Proposed milestones M-45-136 and M-45-137 involve the evaluation and development of new technologies for retrieving waste from tanks. There is a specific reference in proposed milestone M-45-136 for an independent expert panel to analyze and provide recommendations regarding saltwell pumping as a selective liquid removal technology for potential use on actively leaking single-shell tanks, with a provision in proposed milestone M-45-137 for Energy to potentially carry forward further testing, if recommended.

If you have any questions regarding this response, please contact Ryan Miller, Communications Manager, at ryan.miller@ecy.wa.gov or (509) 537-2228, or me at stephanie.schleif@ecy.wa.gov or (509) 537-2229.

Sincerely,



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Stephanie Schleif
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⁶ Holistic Negotiations Agreement and proposed changes: <https://fortress.wa.gov/ecy/ezshare/NWP/HN/HN-Agreement-Proposed-TPA-CD-Changes.pdf>