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Washington Department of Ecology  
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Department of Ecology  
NWP - Richland

September 14, 2025

Washington Department of Ecology  
Daina McFadden  
3100 Port of Benton Blvd  
Richland WA 99354

Dear Ms. McFadden:

Thank you for the opportunity to comment on changes to the Hanford Dangerous Waste Permit specific to Direct Feed HLW (DFHLW) at WTP. Comments are due by October 13, 2025.

My main concern is for the impact to Richland residents when unknown quantities of DFHLW-derived secondary wastes, brines, and effluents are shipped off-site for treatment, apparently to Perma-Fix Northwest (PFNW).

This is a phased approach permit. As a result, the estimated quantities and compositions of secondary wastes are unknown, leading to considerable risk.

1. TPA Milestone M-047-00 requires DOE to "Complete work "necessary to provide" facilities for management of secondary waste from the WTP (e.g., tank waste treatment facility liquid effluents)" by the time of Hot Commissioning of the WTP HLW Facility." In addition, Milestone M-062-45 requires DOE to reevaluate the secondary waste milestone dates within 6 months after publication of each system plan iteration, beginning April 30, 2030. Waiting until HLW hot commissioning is too late. Actual construction of facilities should be done before then. Waiting until 2030 to start "re-evaluating" is also too late. This should be done now.

A flowsheet and mass balance, publicly available, is needed now to inform the HLW design. Otherwise, we will have more "oops" moments when we discover there is no reasonable place to treat the effluents and the effluent returns to the tank farms are possibly too corrosive to be acceptable. HLW effluents should be treated on the Hanford Site, and a mass balance is needed now, to inform process development.

2. The Appendix 1.1 WTP FACILITY INTERIM COMPLIANCE SCHEDULE, Item WTP-49 requires “within nine (9) months of completion of HLW design, complete a gap analysis to determine if the HLW design changes affect the WTP mass balance. The analysis will be submitted to Ecology for inclusion in the Administrative Record.” The interim compliance date is June 30, 2028. Again, if HLW affects the effluent balances, Ecology needs to know that much sooner, before the design is accepted.
3. The CH4 Process Information states “Additional facilities and infrastructure outside of the WTP to support the direct feed of tank waste and return of effluents generated during the HLW vitrification process are planned but remain under development...” This appears to be asking for a permit based entirely on wishful thinking. Again, a flow sheet is needed now, including chemicals and radionuclides. Otherwise, you cannot know the extent of consequences from the HLW re-design decision.
4. The Permit Conditions document allows transfer of dangerous or mixed waste to off-site commercial facilities. DFHLW wastes should not be sent to Perma-Fix Northwest (PFNW) due to its 10 ft. proximity to the water table in Richland, and due to its continued failure to abide by its radioactive materials licenses. In 2025, PFNW performance includes long delays (license violations) in reporting a serious employee overexposure, and shipment of multiple surface-contaminated containers back to Hanford. Has Ecology considered disqualifying PFNW from future Hanford work? Ecology could evaluate the whole of Hanford’s involvement with PFNW by creating a secondary waste “risk-budget-tool” to evaluate PFNW’s capacity and risks as DOE adds waste streams. How long will it take for Richland to be swamped with WTP and TRUM waste? Please note that PFNW has reported multiple outdoor contaminated soil sites and has removed over 900 cubic feet of contaminated soil since 2014, according to annual environmental reports.

Thank you for considering these comments.