

# ***U.S. Dept. of Energy COMMENT PERIOD*** **Draft Waste Incidental to Reprocessing (WIR) Evaluation for Vitrified Low-Activity Waste at Hanford**

**COMMENT DEADLINE: Friday, November 27, 2020**

**Submit Comments by email: [VLAWDraftWIR@rl.gov](mailto:VLAWDraftWIR@rl.gov)**

## **Hanford Challenge's Suggested Comments:**

Thank you for the opportunity to provide public comment on the Department of Energy's Draft WIR Evaluation for Vitrified Low-Activity Waste for disposal at the Integrated Disposal Facility, and thank you for extending the comment period.

Safely removing, vitrifying and isolating Hanford's tank waste is imperative to protect future generations and the environment. I have concerns about DOE's use of WIR and assumptions about the protectiveness of the lined landfill where the vitrified low-activity waste would be disposed.

Thank you for considering my comments:

**NRC Determination Not WIR Determination:** Vitrifying Hanford's tank waste liquids is important, however, DOE should use an NRC determination process not a WIR determination to determine if Hanford's tank waste liquids have been treated to remove sufficient concentrations of radionuclides for onsite disposal at the Integrated Disposal Facility.

**Engineered Controls, Not Institutional Controls:** The uncertainties in the draft WIR evaluation are well-documented and substantial, therefore the landfill must be "over-engineered" to keep the waste isolated from future humans, instead of using institutional controls to keep humans away from the waste. Failure to add additional controls makes it likely that the project will not meet the acceptance criteria.

**Remove Key Radionuclides and Add to HLW Waste Stream:** The glass making process preferentially removes iodine-129 and technetium-99. Rather than recycle the "steam" containing these key radionuclides to get it into the VLAW glass, the volatilized Tc-99 and I-129 "steam" should be captured and sent into the high-level waste stream.

**Resolve NRC Staff Concerns and Comments:** Prior to finalization of the VLAW WIR, all Nuclear Regulatory Commission concerns and comments related to the draft VLAW WIR, should be resolved to the NRC staff's satisfaction.

**Consider Cumulative Impacts:** The WIR evaluation should include consideration of cumulative health and safety impacts from other waste that may be left on the Hanford Site long-term, to ensure that impacts from multiple waste sites and sources were all considered.