

## It's time to talk about grout, again.

You may remember hearing about the Test Bed Initiative. This is not, as the name implies, a Goldilocks test to find the bed that is "just right", but rather a test to see if the US Department of Energy (USDOE) can successfully treat 2,000 gallons of liquid tank waste using an "in-tank" tool that removes Cesium-137 from tank SY-101 and send it offsite to be grouted and disposed in shallow, lined landfills in Texas and Utah.

To be clear, this is a comment period about the 2,000-Gallon Test Bed Initiative Demonstration Draft Research, Development, and Demonstration Permit. The permit would be issued by Washington State Department of Ecology (Ecology) and it specifies the rules that have to be followed onsite in order for the retrieval and pretreatment activities to go forward, plans for the onsite portion of the test, and what happens onsite once the test is complete. USDOE submitted a permit application and Ecology organized it and put it out for public comment. Ecology will take comments you submit, update the permit language, potentially add in/edit/clarify language about the test, and if/when Ecology is satisfied, the permit will be issued and the test will have the green light to proceed.

## This email is your one-stop-shop comment guide for this comment period.

Hanford Challenge does not endorse the current plans to grout Hanford's tank waste because we do not think grout has met the "as-good-as-glass" litmus test. Our position on grout has been misunderstood as being totally against grout and against shipping Hanford waste off site. Neither are true. We want tank waste treatment and disposal done right, without cutting corners. If you want a deeper dive into our concerns check out our <u>grout webpage</u>, but the basic gist is we're worried that:

- grout is a distraction from glass,
- grout does not pass the "as-good-as-glass" test
- claims that grout is cheaper and faster have been over-promised without rigorous documentation to back them up,
- historic failures at Hanford tend to repeat and past attempts to grout Hanford tank waste failed because it was too expensive and too difficult, and

• so many groups have been convinced that grout is the answer and that it is going to work. There is an unsettling amount of pressure for this to work.

What is being proposed? USDOE's tank farm contractor will use an in-tank pretreatment system to remove mostly Cesium-137 from the liquid tank waste of tank SY-101 in the 200-West area. Treated waste will be moved into a "delay tote" for a radiological test to make sure enough Cesium-137 was removed. If the radiological test fails, the waste goes back into the tank. If it passes, the waste goes into the "process totes." It is estimated that it will take two weeks to fill the totes, with operations assumed to be running 24/7.

There are six process totes, and once all of them are filled, samples will be taken from each tote to find out if the waste meets the criteria to be shipped to Texas and Utah. The samples must be sent to the lab the same day they are taken. And then we wait.

The lab has 100-180 days to get a report back about the sampling results. The sampling results must show that the waste meets the criteria of allowable limits (Waste Acceptance Criteria) for disposal at the offsite facility before the waste is shipped offsite. If limits are not met, they look for mistakes that could have been made, and if results still indicate that levels of contaminants are too high, the waste goes back in the tank.

Once the results are back and confirm that the waste meets the offsite facilities' acceptance criteria, USDOE has 90 days to ship the waste off site, but can request an additional 90 days. At the long end it could be a year before the pretreated waste goes offsite, at the lower end, 190 days.

Because the permit is just about what happens at Hanford, we're filling in the blanks a bit during the wait. We're assuming based on references in the report that information about the waste in the totes is sent to the offsite facilities so they can figure out their grout formulas. As we understand it, the grout recipe is tailored to the waste it is going to be mixed with. We'd love more information about this piece of the puzzle.

Then the totes are shipped by truck. Half will go to Waste Control Specialists in Texas, and half to EnergySolutions in Clive, Utah. The offsite facilities decide if they accept the waste or not. Offsite facilities have to confirm that everything is labeled properly etc. If not, it comes back to Hanford. If yes, it stays for grouting.

We are concerned about what we see as the overly confident stance that everything is going to go perfectly according to plan. Permit Condition II.K.5 addresses what happens if the off-site facility sends the waste back to Hanford; it prohibits the disposal of grouted waste at Hanford and requires that USDOE give Ecology a disposition plan for the waste before it comes back to Hanford. We want to know more about the disposition plan. What happens if grout doesn't work? We don't think this is adequately addressed in the permit. If you've gotten this far, congratulations! Permit comment periods are rough. They are overly technical and weedy. This may be our longest email yet!

To make it easier, we prepared a petition you can personalize to <u>send in a</u> <u>comment</u>. You can also use <u>this link</u> to submit a comment directly to Ecology. **COMMENTS DUE BY APRIL 25th!** 

## Our suggested comments are:

- **Ensure Toxic Vapor Protections**: Ensure that permit conditions require protection for workers from toxic chemical vapor exposure consistent with the terms and conditions of the Vapor Lawsuit Settlement Agreement.
- Add Detail About Disposition Plan for Bounce-Back Waste: Add detail to the permit about the disposition plan Ecology is requiring USDOE to provide in the event that waste that was shipped to the offsite facilities is sent back to Hanford.
- **Clarify Sampling Procedure**: Clarify the language in the permit about whether it is one discrete sample per tote or two 250 ml samples per tote (and four 250ml samples for the final tote filled).
- Improve the Public Process: In the future, please provide a high-level overview of the cleanup work the administrative tool (permit) is planned to facilitate and how that tool protects the environment, workers, and the public, instead of overly focusing on the administrative tool itself. Please set an expectation that USDOE and contractor staff are available to provide answers to questions instead of directing attendees to submit their questions as a comment. Questions are meant to help attendees understand the issue so they can write informed comments. How are attendees supposed to write informed comments to influence the decision-making process if that information is not provided? Please note that answers do not need to be highly technical, but rather provide clarity in plain language about the work being planned, not just the administrative framework in which that work takes place.
- **Clarify Consent-Based Process**: Require an attachment to the permit that includes information about how consent has been achieved for offsite disposal and transportation routes.
- Keep the Focus on Vit: Grout does not meet the "as-good-as-glass" criteria. Please keep the focus on vitrifying tank waste and wait to press go on any alternative tank waste immobilization forms that do not meet the "as-goodas-glass" criteria.

## Learn More!

- 2,000-gallon Test Bed Initiative Draft RD&D Permit
- 2,000-gallon Test Bed Initiative Draft RD&D Permit public meeting
- Submit comments directly to Ecology here
- Submit comments via our petition here

- Read Hanford Challenge formal comments here
- Learn about our concerns with grouting Hanford tank waste here

We want to express our appreciation to Ecology for insisting on a public meeting despite it not being a requirement, having staff from Ecology and USDOE available to answer questions, following up with our staff to address our concerns, and being open to our suggestions to improve accessibility for the public in the future. We also appreciate the clarity that does exist in the draft permit about many aspects of this test that were confusing in the application that was submitted by USDOE in spring 2023. We were happy to see that many of our original questions that we shared with Ecology after reviewing the permit application in May 2023 were addressed in the draft permit that is out for public comment.

Thanks so much for sticking with us (we know this one is a doozy)! Let us know if you have any questions! Liz & Miya

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