Second Comment Period on Proposed Permit Modifications to PUREX Tunnels*

Comment Period: August 13 – September 27, 2018

Say What?

A step by-step-guide to creating a comment you can stand by.

1. What are you commenting on?

The Washington State Department of Ecology is inviting comments on a plan that resulted in filling PUREX Tunnel One with grout to stabilize it, and a plan that is already in action to fill PUREX Tunnel Number Two with grout. Your comments affect the proposed permit modification for the PUREX Storage Tunnels located on the Hanford site, which involves a series of documents linked below, which have tracked changes in red to show the edits of Washington State Department of Ecology proposed permit conditions for the PUREX Storage Tunnels grouting, monitoring, emergency preparedness, and moving the tunnels into a closure unit as opposed to an operating unit, meaning no new waste can go in the tunnels.

The PUREX Storage Tunnels store waste, mostly large equipment components, including rail cars that store extremely radioactive waste from the PUREX Plant and other Hanford sources. (See visual on page two.) Following the collapse of PUREX Tunnel 1 the Department of Energy and Ecology agreed to a response action to stabilize Tunnel 1 by filling the void space in the tunnel with grout. The agencies are proposing to stabilize Tunnel 2 with grout as well. In order to do this work, Ecology has updated its Resource Conservation and Recovery Act (RCRA) Permit with a proposed permit modification that reflects actions taken to grout Tunnel 1 and the proposed interim closure action to grout Tunnel 2. RCRA gives Washington State the authority it needs to regulate the Hanford Site, for all cleanup sites that have both radioactive and chemical wastes.

The draft changes include a proposal to fill Tunnel 2 with engineered grout to protect human health and the environment from a future collapse. Ecology has stated that grouting Tunnel 2 will not prevent the removal of the grouted waste when a final closure decision is made. Because the tunnels will no longer accept waste, this proposed permit modification will add the PUREX Storage Tunnels as a closing unit to the Hanford Facility RCRA Permit, Revision 8c.

Background

In the Spring of 2017, a radioactive waste tunnel at the Hanford nuclear site partially collapsed, creating a gaping hole from which radioactive and chemical waste was exposed. The accident prompted a site-wide emergency and made international news. Hanford officials were aware of

^{*} Proposed Permit Modification to Part V of the Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion, Revision 8C, for the Treatment, Storage, and Disposal of Dangerous Waste, WA7890008967, to add Closure Unit Group 25, Plutonium Uranium Extraction (PUREX) Plant Storage Tunnels

the decaying condition of the tunnel, called the "PUREX Tunnels," for decades. The first PUREX Tunnel was stabilized using grout (cement), and now federal officials at the US Department of Energy are proposing to fill a second tunnel with grout as soon as possible to prevent another collapse.



PUREX Tunnel Number 2. The drawing shows a rendition of the 28 railroad cars in the tunnel. The waterfillable door is at top left, and the end of the tunnel is at bottom right.

Hanford officials have claimed that "visual examinations show severe degradation of the tunnel support structure in the south end of the tunnel and further supports the conclusion that PUREX Storage Tunnel 2 remains at a potential high risk of localized collapse." Such an event could result in "possibly breaching the highly radiologically-contaminated equipment in PUREX Storage Tunnel 2 and potentially releasing contamination to the environment," according to a letter from the DOE to the State of Washington (Aug. 2, 2018). They have also stated that the action they are proposing is "interim stabilization," and that at some point in the future, they can use diamond wire saws to cut through the concrete to make removable sections.

Hanford Challenge Concerns

There are several key concerns being expressed about the actions proposed by federal officials to stabilize the PUREX Tunnel. They include:

 There is not a good inventory of the radioactive and chemical materials stored in the PUREX Tunnels. If the tunnels contain materials that qualify as high-level radioactive waste, then certain legal requirements must be followed for appropriate disposal, which do not include leaving such waste in shallow land burial.

- Documents indicate that there may be explosive and ignitable chemicals stored in the tunnels.
- Long-lived radionuclides such as plutonium could be buried in the tunnels in amounts that exceed the legal disposal limits at Hanford.
- The agreed-upon remedy for these kinds of waste is removal, treatment and disposal in licensed repositories and landfills.
- Hanford Challenge and other organizations have expressed a deep concern that the tunnels will be filled with grout and then abandoned in place, rather than removed. Cement is not an acceptable long-term disposal medium for nuclear waste.
- Any permit that the State of Washington issues should include with it a deadline requiring the federal government to cut up and remove the grouted tunnel waste within a certain number of years.

2. How will you submit your comments to Ecology? What are the options?

By mail: Daina McFadden

3100 Port of Benton Blvd Richland, WA 99354

By Email: Hanford@ecy.wa.gov

By Web Form: http://wt.ecology.commentinput.com/?id=7mped

In Person: Wednesday, September 5, 2018 in Seattle at the University of

Washington's Center for Urban Horticulture, NHS Hall, 3501 NE 41st

Street | Public Meeting starts at 6:30pm

3. Is there a deadline?

Yes, September 27, 2018

4. Will there be public hearings?

RICHLAND, WA: Monday, **August 27, 2018 at 5:30pm** in Richland, WA at the Richland Public Library, 955 Northgate Drive

SEATTLE, WA: Wednesday, **September 5, 2018 at 6:30pm** in Seattle, WA at the University of Washington's Center for Urban Horticulture, NHS Hall, 3501 NE 41st Street.

5. What information is available to learn about the issue?

The majority of the following documents are parts of the RCRA Permit, see the descriptions below. Note that you will need to scroll through many pages that are left intentionally blank to get to the document and track changes.

Focus Sheet: Background about PUREX Tunnels, visuals, and why this cleanup matters.

- <u>Specific Conditions</u>: A RCRA Permit document that includes track changes for this proposed modification. It details with track changes the operating conditions for the PUREX Storage Tunnels.
- <u>Transmittal Letter</u>: Letter from Ecology to DOE and contractor CH2MHill about the proposed permit modification for PUREX Tunnels.
- <u>Fact Sheet</u>: A RCRA Permit document that explains the proposed permit change, provides background about the PUREX Tunnels and procedures for reaching a final decision on the draft permit modification.
- Response to Comments: A summary of comments and responses to comments from the first public comment period February 12 to April 12, 2018. There will be another response to comments document following this comment period.
- <u>SEPA Determination</u>: A required document as part of the RCRA Permit. Determination of Significance and Notice of Adoption of Existing Environmental Documents.
- Part A: A required form for the RCRA Permit. Shows maps, tunnel inventories. Great visuals to get a sense of how big the tunnels are and what is inside.
- <u>Chapter 3: Waste Analysis Plan</u>: A RCRA permit document. This chapter contains information about the chemical, biological, and physical characteristics of the dangerous waste stored in the PUREX Storage Tunnels. Track changes are visible to show the proposed changes.
- <u>Chapter 4: Process Information</u>: This chapter of the RCRA Permit document discusses the
 processes involved in the operation of the PUREX Storage Tunnels which are used for the
 storage of mixed radioactive and chemical wastes. Track changes are visible to show the
 proposed changes.
- <u>Chapter 11: Closure and Financial Assurance</u>: This RCRA Permit document details closure activities for grouting Tunnel 1 and plans to grout Tunnel 2. Track changes are visible to show the proposed changes.
- Addendum F: Preparedness and Prevention: This RCRA Permit document discusses preparedness and prevention measure for the PUREX Storage Tunnels including enhanced surveillance and monitoring measures using video equipment to provide daily observation of the tunnel surface. Track changes are visible to show proposed changes.
- <u>Addendum I: Inspection Requirements</u>: This RCRA Permit document discusses inspection requirements including how the tunnels will be inspected and timing of inspections.
- Addendum J: Contingency Plan: This RCRA Permit document includes the emergency response plans for the PUREX Storage tunnels. All of the document is in tracked changes, as it is a new document.

6. Given what you know at this point, are you ready to say something?

If yes, say it! If no, look to examples for help (<u>see sample comments</u>), or ask an expert!
 Contact Randy Bradbury (<u>Randy.Bradbury@ecy.wa.gov</u>) or Daina McFadden
 (<u>Daina.McFadden@ecy.wa.gov</u>) at Department of Ecology for resources.

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