

# PUREX Storage Tunnels Permit Modification



## Public Comment Period

August 13 through  
September 27, 2018

Submit comments to:

Electronically (preferred) via:  
<http://wt.ecology.commentinput.com/?id=7mped>

Send by U.S. Mail, or  
hand-deliver to:

**Daina McFadden**  
3100 Port of Benton Blvd  
Richland WA 99354

## Public Hearing

Two public hearings are  
scheduled for this comment  
period.

**August 27, 2018**

**5:30 pm**  
Richland Public Library  
955 Northgate Dr  
Richland, Washington

**September 5, 2018**

**6:30 pm**  
University of Washington  
Center for Urban Horticulture  
NHS Hall, 3501 NE 41<sup>st</sup> St  
Seattle, Washington

For more information contact:

**Daina McFadden**  
509-372-7950  
[Hanford@ecy.wa.gov](mailto:Hanford@ecy.wa.gov)

## Public comment invited

The Washington State Department of Ecology (Ecology) is proposing a change to the Hanford Facility Resource Conservation and Recovery Act (RCRA) Permit, Revision 8c. This change affects the Dangerous Waste Portion for the Treatment, Storage, and Disposal of Dangerous Waste for the Plutonium Uranium Extraction (PUREX) Plant Storage Tunnels. The proposed changes are located in Part III, Operating Unit 2.

The permittees are:

U.S. Department of Energy Richland Operations  
P.O. Box 550  
Richland, Washington 99352

CH2M Hill Plateau Remediation Company  
P.O. Box 1600  
Richland, Washington 99354

Ecology invites you to review and comment on this proposed permit modification. The comment period begins August 13, 2018, and ends September 27, 2018.

This class 3 permit modification includes changes to multiple sections of the permit, including:

- Chapter 1, Part A Form
- Chapter 3, Waste Analysis Plan
- Chapter 4, Process Information
- Chapter 11, Closure and Financial Assurance
- Addendum F, Preparedness and Prevention
- Addendum I, Inspection Requirements
- Addendum J, Contingency Plan

On July 12, 2018, U.S. Department of Energy's Richland Operations Office (DOE-RL) submitted to Ecology a Temporary Authorization request to begin grouting. Ecology is currently reviewing the request.

## Background

The PUREX Plant is located in the 200 East Area of the Hanford Site near Richland, Washington. It operated from 1956 to 1988 to process spent nuclear reactor fuel, and recovered plutonium, uranium, and other radioactive isotopes. Spent nuclear fuel is fuel that has been exposed to radiation in a nuclear reactor.

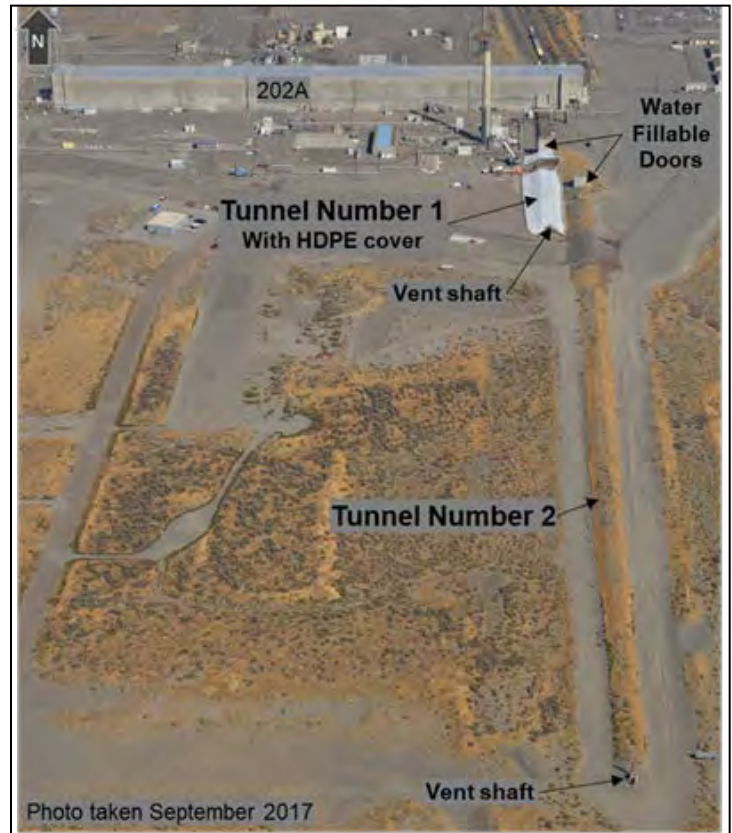
Two tunnels are used for the storage of waste – mostly large equipment components – from the PUREX Plant and other onsite sources. The tunnels protect workers, the environment, and the public from exposure to highly radioactive residues within the stored waste.

In May 2017, a 20-foot section of the roof of Tunnel 1 collapsed. The collapse caused a two-day emergency response that involved notifying the public and regulatory agencies, sheltering site employees until surveys verified no contamination was released, and filling the collapsed portion of the tunnel with soil.

Ecology issued an Administrative Order to the U.S. Department of Energy’s Richland Operations Office (DOE-RL) on May 10, 2017, requiring corrective actions for Tunnels 1 and 2. DOE-RL addressed the threat of further failure in Tunnel 1 by filling it with engineered grout. That work began in October 2017 and was completed in November 2017.

DOE-RL also evaluated the structural integrity of Tunnel 2, identified a threat of potential collapse, and also determined that filling Tunnel 2 with engineered grout is necessary to stabilize the tunnel and mitigate the risk of potential failure.

The purpose of the proposed permit modification is to describe the stabilization actions taken for Tunnel 1, actions proposed for stabilizing Tunnel 2, and their relationship for future closure and cleanup actions.

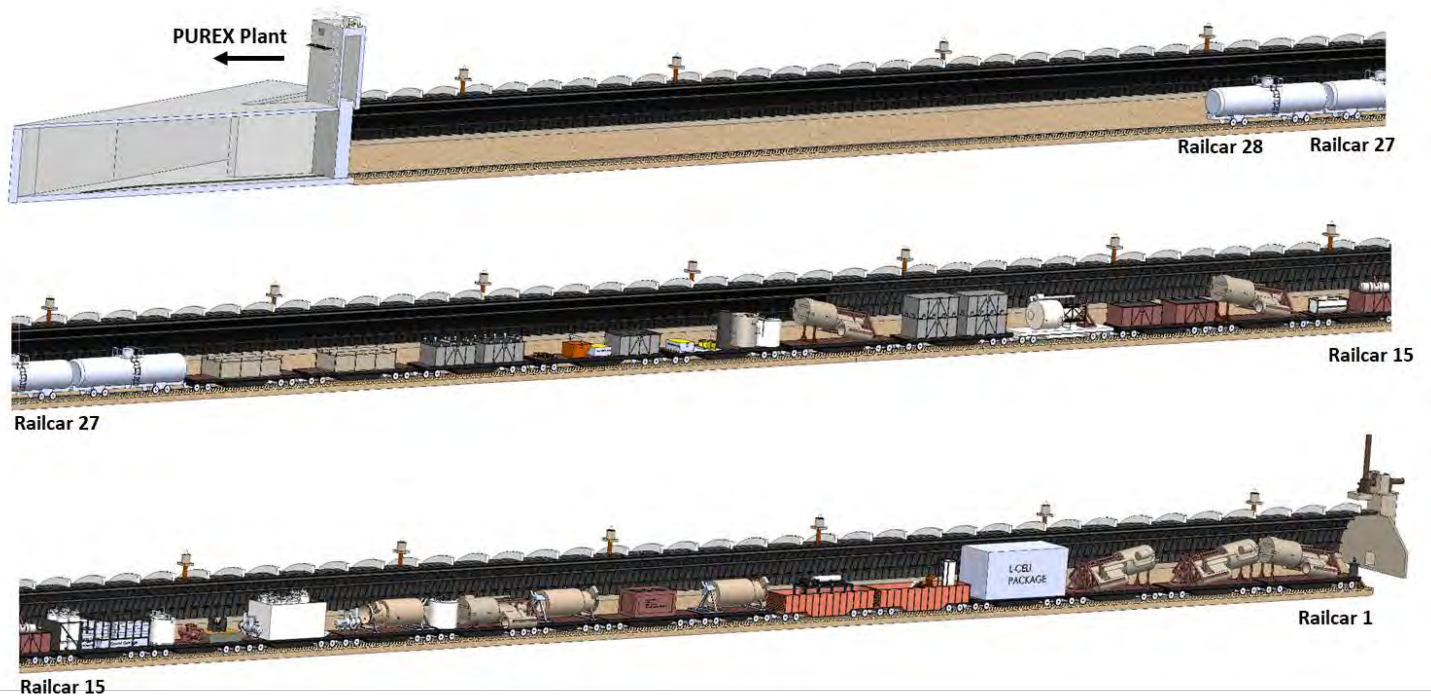


*PUREX Storage Tunnels and PUREX Canyon*

## Why this cleanup matters

The proposed permit modifications affect the PUREX Storage Tunnels. The tunnels store waste, mostly large equipment components, from the PUREX Plant and other onsite sources. By completing the response action for Tunnel 1 and the proposed interim closure action for Tunnel 2, the tunnels will continue to safely store the waste.

The proposed changes include draft permit language reflecting the response actions taken to grout Tunnel 1 and the proposed interim closure action for Tunnel 2. The draft changes include a proposal to fill Tunnel 2 with engineered grout to help mitigate potential threats to human health and the environment. This will not preclude remedial or final closure actions until future cleanup decisions have been reached. 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.



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

## View the full proposal

Ecology invites to you to review and comment on this proposed PUREX Storage Tunnels permit modification. The draft document is a summary of the proposed permit changes. See page 1 for comment period dates and information on how to submit comments.

Copies of the proposed modification are available at the Administrative Record and Information Repositories listed on page 4. In addition, the proposed modification is online at

<https://ecology.wa.gov/Waste-Toxics/Nuclear-waste/Public-comment-periods>.

We will consider and respond to all comments received during the public comment period. We will make our final permitting decision after the close of the comment period. A Response to Comments document will be published with the issuance of the final permit.

### Special Accommodations

To request ADA accommodation including materials in a format for the visually impaired, call Ecology at 509-372-7950 or visit <https://ecology.wa.gov/accessibility>. People with impaired hearing may call Washington Relay Service at 711. People with speech disability may call TTY at 877-833-6341.



3100 Port of Benton Blvd  
Richland, WA 99354

### Hanford's Information Repositories and Document Review Locations

#### Washington

##### **Richland**

Ecology Nuclear Waste Program  
Resource Center  
3100 Port of Benton Blvd.  
Richland, WA 99354  
509-372-7950

U.S. Department of Energy  
Administrative Record  
2440 Stevens Drive, Room 1101  
Richland, WA  
99354  
509-376-2530

Washington State University Tri-Cities  
Department of Energy Reading Room  
2770 Crimson Way, Room 101L  
Richland, WA 99354  
509-375-7443

##### **Seattle**

University of Washington  
Suzzallo Library  
P.O. Box 352900  
Seattle, WA 98195  
206-543-5597

##### **Spokane**

Gonzaga University  
Foley Center  
502 E Boone Avenue  
Spokane, WA 99258  
509-313-6110

##### **Oregon**

##### **Portland**

Portland State University  
Millar Library  
1875 SW Park Avenue  
Portland, OR 97207  
503-725-4542