

PUREX Plant permit modification

Tanks TK-P4 and TK-40

- Public comment period June 7 – July 23, 2021
- Modification proposes clean-closure of Tanks TK-P4 and TK-40
- Also proposes adding Tanks TK-P4 and TK-40 to Part V of the permit

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 (Site-wide Permit).

This change affects the Dangerous Waste Portion for the Treatment, Storage, and Disposal of Dangerous Waste for tanks TK-P4 and TK-40 located in the Plutonium-Uranium Extraction (PUREX) Plant Complex in the 200 East Area of the Hanford Site.

This permit modification would include the incorporation of a Closure Plan into Part V of the permit.

The permittees are:

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

Central Plateau Cleanup Company, LLC
P.O. Box 1464
Richland, WA 99352

Background

The Hanford Site occupies 580 square miles in southeastern Washington State. Beginning in 1943, the site produced plutonium for the nation's defense program. Plutonium production ceased in the late 1980s. Today, waste management and

environmental cleanup are the primary missions at Hanford.

The PUREX Plant is located in the 200 East Area of the Hanford Site (see map on page 3).

The PUREX facility consists of the PUREX canyon building, two storage tunnels, several support structures including chemical storage areas, cribs, and retention basins. There are also two PUREX support areas, the 203A acid storage area and the 211A chemical storage area. These storage areas house systems of chemical storage tanks, which include tanks TK-P4 and TK-40 and associated ancillary equipment. Tank TK-P4 is located in the southeast corner of the 203A acid storage area, and tank TK-40 is located in the northeast corner of the 211A chemical storage area. Both tanks stored process chemicals during PUREX facility operations, and have since been drained, flushed, emptied as much as possible, and deactivated.

Overview of changes

The Permit Modification proposes clean-closure of Tanks TK-P4 and TK-40, including the concrete pads below them. The modification also proposes adding Tanks TK-P4 and TK-40 to Part V of the permit. This includes adding an Addendum H, Closure Plan. These changes will allow for clean-closure activities.

Clean-closure will be accomplished by removing both tanks, the concrete pads underneath the tanks, and sampling the soil beneath the concrete pads in accordance with WAC 173-303-610(2)(b)(ii). Tanks TK-P4 and TK-40 will be dismantled and demolished using heavy equipment. The concrete pads that were used for secondary containment below the tanks will be demolished using an excavator. Sampling and analysis will be performed

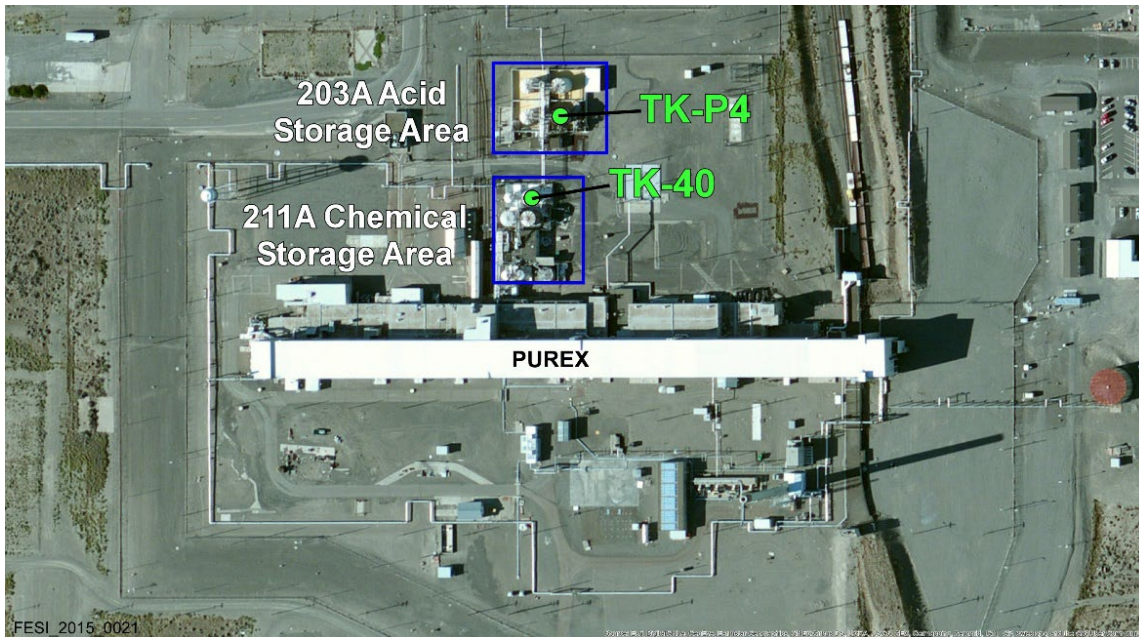


Figure 1 - TK-P4 and TK-40 tanks at PUREX - Photo courtesy of DOE

to verify clean-closure of the soil beneath the tanks.

If required, waste will be treated to meet the requirements of WAC 173-303-140. The waste will be disposed of at the Environmental Restoration Disposal Facility (ERDF). If the waste is not disposed



Figure 2 - Aerial View of ERDF - photo courtesy of DOE

of at ERDF, it will be disposed at a permitted RCRA treatment, storage, and disposal unit authorized for disposal.

Why this change matters

The proposed permit modification will add tanks TK-P4 and TK-40 to the Site-wide Permit. The draft language in the closure plan describes the requirements to meet clean closure for both tanks in accordance with WAC 173-303-610, “Dangerous Waste Regulations” and “Closure and Post-Closure”. Clean Closure of tanks TK-P4 and TK-40 will minimize the need for future post-closure inspections, monitoring, and maintenance.

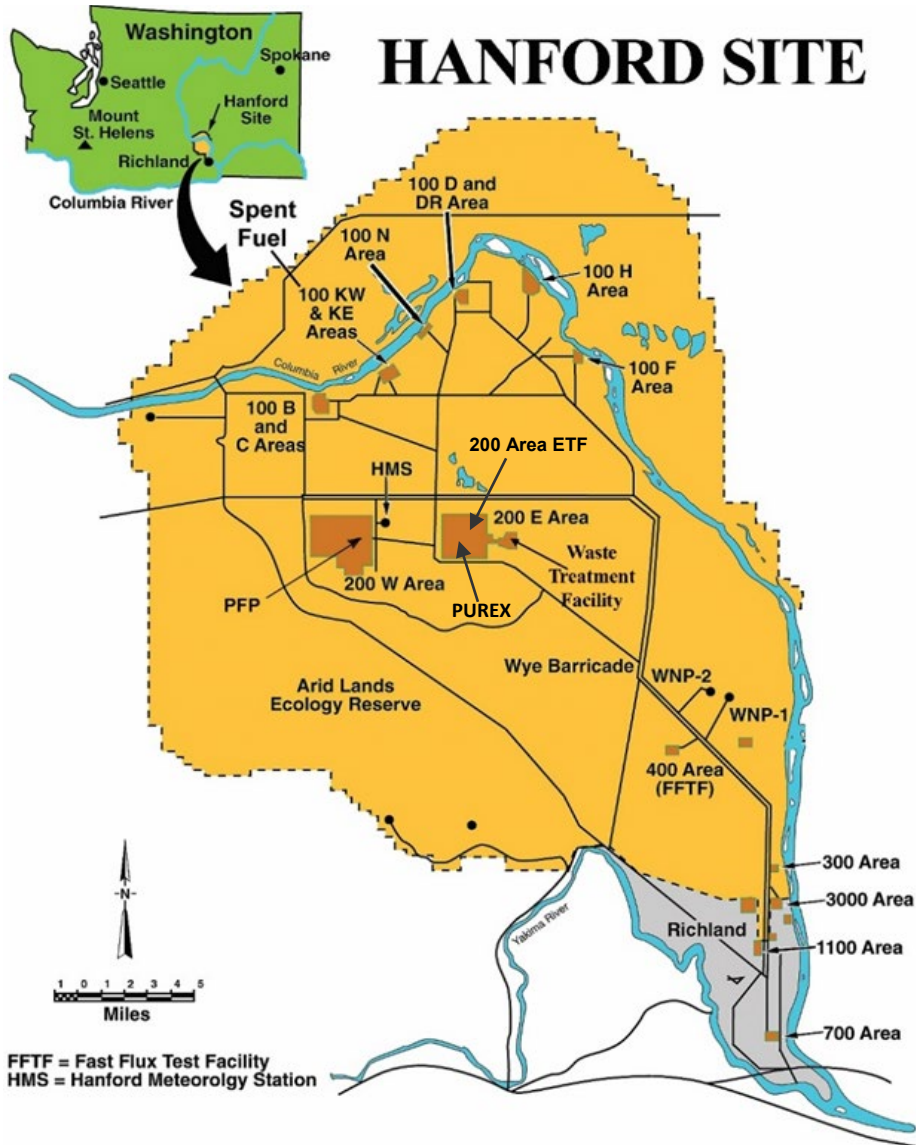
Reviewing the proposed changes

Ecology invites to you to review and comment on this proposed permit modification. See the last page for comment period dates and information on how to submit comments.

Copies of the application for the proposed permit and supporting documentation will be available during the public comment period online at [Ecology’s public comment period webpage](#)¹. The documents will also be available at the Hanford Public Information Repositories listed on the next page.

Ecology will consider and respond to all significant comments received during the public comment period. We will document our responses and issue a response to comments document when we make our final permitting decision.

¹ Ecology.wa.gov/Waste-Toxics/Nuclear-waste/Public-comment-periods



Hanford's Information Repositories

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

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

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

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



3100 Port of Benton Blvd
Richland WA 99354

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Public comment period June 7 – July 23, 2021

Electronic submission (preferred):
<http://nw.ecology.commentinput.com/?id=QuZx2>

Mail or hand delivery

Daina McFadden
3100 Port of Benton Blvd
Richland, WA 99354

A public hearing is not scheduled, but if there is enough interest, we will consider holding one. To request a hearing or for more information, contact:

Daina McFadden
509 372 7950
Hanford@ecy.wa.gov

To request an ADA accommodation, contact Ecology by phone at 509 372 7950, email at Daina.McFadden@ecy.wa.gov, or visit <https://ecology.wa.gov/accessibility>. For Relay Service or TTY call 711 or 877 833 6341.