

Perma-Fix Northwest Mixed Waste Facility

Draft Permit Renewal



Figure 1. Perma-Fix Northwest

- Public comment period Jan. 27, 12:00am –
 March 14, 2025, 11:59 pm.
- Renewal of the Dangerous Waste Permit initially issued in 1999

Public comment invited

The Washington State Department of Ecology (Ecology) is proposing a renewal of the Perma-Fix Northwest (PFNW) Mixed Waste Facility (MWF) Dangerous Waste Permit.

The permittee is:

Perma-Fix Northwest 2025 Battelle Boulevard Richland, WA 99354

Facility Background

The PFNW Site is located on 45 acres at the southeast corner of Logston Boulevard and Battelle Boulevard in Richland, Washington. The PFNW Site contains a MWF and a Low-Level Facility (LLF). The MWF is located within the 45-acre complex and is a mixed waste storage and treatment facility. The LLF is also located within the 45-acre complex and is a radioactive-only facility which is regulated by Washington State Department of Health (DOH). The MWF provides services for the treatment and storage

of mixed waste (waste that contains both a dangerous waste and a radioactive hazardous component) and radioactive Toxic Substance Control Act-regulated Polychlorinated Biphenyls waste for the U.S. Department of Energy and other commercial nuclear facilities. The MWF resides in Building 13 and consists of three areas: The Mixed Waste Non-Thermal Area, the Mixed Waste Thermal Area, and the Waste Storage Area.

Overview & Changes

This permit renewal would include updates to the 1999 PFNW Dangerous Waste Permit (Current Permit) including information on the MWF structures, organization, safety, training, and day to day operations.

The proposed permit will update the current permit to only contain existing, installed, and operable treatment units for the waste storage and treatment operation for the proposed renewal period.

The draft renewal permit includes the following permit files:

- Permit Conditions
 - Addendum A Part A Form



- Addendum B Facility Description and General Provisions
- Addendum C Waste Analysis Plan
- Addendum D Process Information
- Addendum E Releases from Solid Waste Management Units
- Addendum F Procedures to Prevent Hazards
- Addendum G Contingency Plan
- Addendum H Personnel Training
- Addendum I Closure Plan and Financial Assurance
- Addendum J Other Federal and State Laws
- Addendum K Engineering Drawings

Overview of the MWF Operations

The MWF operations include treatment and storage. In the proposed renewal permit, the MWF will be permitted to operate 37 container storage dangerous waste management units (DWMU) and nine miscellaneous DWMUs for treatment including:

- Bench Scale Waste Treatment System
- Shredder System
- Two In-Barrel Compactors
- Drum Compactor
- Super Compactor
- Aerosol Can Puncturing Device
- Low-Capacity Mixer
- In-Container Mixer

Treatment operations by the miscellaneous DWMUs may include stabilization, solidification, neutralization, deactivation, chemical oxidation/reduction, volume reduction, and macroencapsulation. Additional treatment process outside the permitted miscellaneous DWMUs above include cutting and shearing, draining/decanting, and

microencapsulation. The treated waste may be shipped off-site for further treatment, disposal or returned to the generator. No waste is disposed of on-site.



Figure 2. Perma-Fix Northwest

Reviewing the proposed changes

Ecology invites you to review and comment on this proposed PFNW MWF Dangerous Waste Permit renewal. See the last page for comment period dates and information on how to submit comments.

Copies of the application for the proposed permit renewal, the draft permit and fact sheet, and supporting documentation will be available during the public comment period online at Ecology's website¹.

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 <u>Ecology.wa.gov/Waste-Toxics/Nuclear-waste/Public-comment-periods</u>



PFNW information repository

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

For information on other comment periods or ways to get involved, go to <u>ecology.wa.gov/Hanford</u> and click "Public comment periods" on the left bar.

You can also follow us on social media.



@EcologyWAHanford



@ecyHanford



Figure 3: Nuclear Waste Program office - Richland



Nuclear Waste Program 3100 Port of Benton Blvd Richland WA 99354

PFNW permit renewal Jan. 27, 12:00am – March 14, 2025, 11:59pm

Electronic submission (preferred):

Perma-Fix Northwest permit renewal

A public hearing is not scheduled, but if there is enough interest, we will consider holding one.

To request a hearing, mail or hand-deliver comments, or for more information, contact:

Daina McFadden 509-372-7950 3100 Port of Benton Blvd Richland, WA 99354 Hanford@ecy.wa.gov

