

Draft Supplemental Environmental Impact Statement

For the Perma-Fix Northwest Permit renewal



Figure 1. Perma-Fix Northwest

- Public comment period Feb 6, 12:00am – March 24, 2025, 11:59pm.
- Renewal of the Dangerous Waste Permit requires additional review under the State Environmental Policy Act (SEPA).
- SEPA public comment period is running concurrently with PFNW permit public comment process.

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 permit renewal public comment period is separate from this SEPA review process, but uses the same public comment period.

This public comment is on the Draft Supplemental Environmental Impact Statement For Perma-Fix Northwest Mixed Waste Facility Dangerous Waste Permit Renewal.

The permittee is:

Perma-Fix Northwest
2025 Battelle Blvd.
Richland, WA 99352

Background

Ecology regulates the management of dangerous waste, including the dangerous waste component of mixed waste. Ecology issues Dangerous Waste Regulations (DWR) Permits to dangerous waste treatment, storage, and disposal facilities.

In addition to making permitting decisions, Ecology has additional responsibilities pursuant to SEPA. Under SEPA, Ecology must consider the probable significant environmental impacts of its permitting decisions, including whether a permitted facility may have probable adverse impacts to the environment, and, if so, evaluate possible mitigation measures.

The purpose of the Supplemental Environmental Impact Statement (SEIS) is to evaluate the probable significant adverse environmental impacts of the Perma-Fix Northwest proposal to renew its DWR Permit for operation of its Mixed Waste Facility located in Richland, WA.

The City of Richland issued a Final Environmental Impact Statement (EIS) for treatment of low-level mixed waste in 1998. Ecology issued the initial

DWR Permit for the MWF to PFNW's predecessor in 1999.

The focus of the SEIS is to address additional or new impacts associated with PFNW's proposal to renew the DWR Permit for its MWF operation that were not considered in the 1998 Final EIS.



Figure 2 – Aerial view of Perma-Fix Northwest

Overview & Changes

This SEIS will consider new information on increased transportation of waste and changes in MWF operations, waste streams, design, and treatment processes.

The MWF is a storage and treatment facility for mixed waste (i.e., mixed low-level waste). The original design of the MWF described in the 1998 Final EIS consisted of four separate buildings including the Stabilization (non-thermal treatment) Building, the GASVIT (gasification and vitrification) Building, the Waste Storage Building, and the

Administrative Building. Some of the buildings described in the 1998 Final EIS were not constructed separately. The current MWF has one 68,000 ft² building with three areas: the Mixed Waste Non-Thermal Area (MWNT area), the Mixed Waste Thermal Area (MWT area), and the Waste Storage Area (WSB area).

Based on the information from PFNW and the public comments received during the expanded scoping period and public meeting, three alternatives have been developed to evaluate the probable significant adverse environmental impacts of PFNW's proposal.

Alternative 1 describes the current permitted operations at PFNW. Many of the operations were implemented at significantly lower treatment capacity than described in the 1998 Final EIS.

Alternative 2 describes current operations plus additional activities and treatment units described in the DWR permit renewal application received in August of 2024.

Alternative 3 describes continued operations with all activities and treatment units described in the DWR permit renewal application. In addition, this alternative includes the application of the GeoMelt^{®1} Process Unit. This unit is not included in the DWR permit renewal application and would require additional permitting activities to authorize its use, including a thermal risk assessment included as part of a permit modification request. Consideration of this additional permit modification would include a public comment period.

¹ GeoMelt[®] Process Unit is a 8 ft wide (2.4 m) x 8 ft deep (2.4 m) x 12 ft high (3.7 m) stationary thermal treatment unit that would be operated in the MWT area. The GeoMelt[®] process

is a type of vitrification that treats reactive metal through deactivation to make the final form of the waste acceptable for disposal at an authorized disposal unit.

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.

The MWF provides services for the treatment and storage of mixed waste 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 MWNT Area, the MWT Area, and the WSB Area.

Reviewing the proposed changes

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

Copies of the Draft SEIS, as well as permit application materials will be available during the public comment period online at [Ecology's website](#)².

Additionally, SEPA documents can be found on Ecology's [SEPA register](#)³.

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.

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 ecology.wa.gov/Hanford and click "Public comment periods" on the left bar.

You can also follow us on social media.



@EcologyWAHanford



@ecyHanford

² [Ecology.wa.gov/Waste-Toxics/Nuclear-waste/Public-comment-periods](https://ecology.wa.gov/Waste-Toxics/Nuclear-waste/Public-comment-periods)

³ <https://apps.ecology.wa.gov/separ/Main/SEPA/Search.aspx>



Nuclear Waste Program
3100 Port of Benton Blvd
Richland, WA 99354

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Renewal Feb. 6, 12:00am – March 24,
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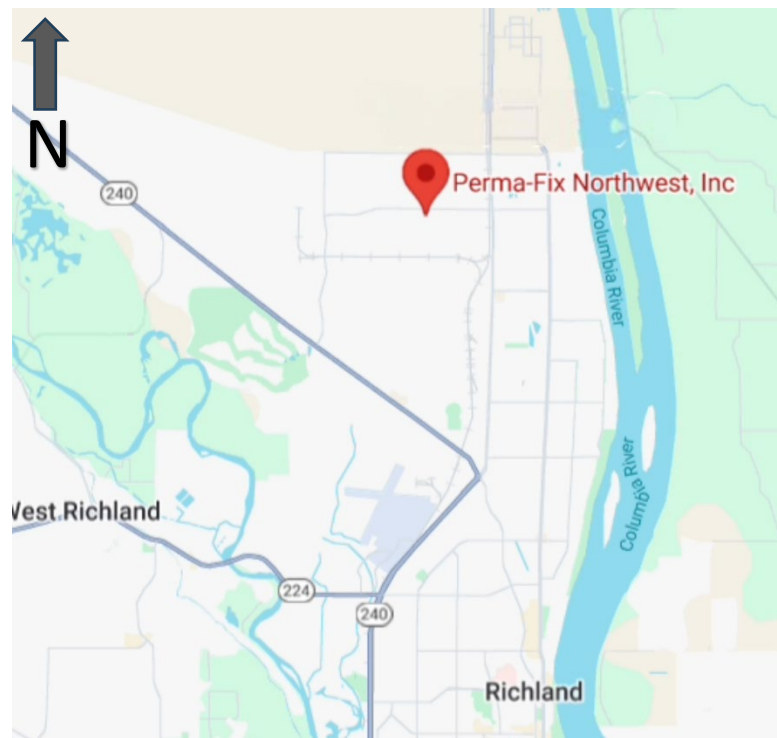


Electronic submission (preferred):
[Draft Supplemental Environmental Impact
Statement](#)

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:

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