



WASHINGTON STATE
DEPARTMENT OF
E C O L O G Y

Waste Treatment Plant Draft Permit modification for Construction

Tell Us What You Think!

Your careful thought and input is needed on a group of draft permit conditions for constructing a portion of Hanford's Waste Treatment and Immobilization Plant (WTP). The plant is being built to vitrify (turn into a safer glass form) millions of gallons of highly radioactive waste currently stored in aging underground tanks. This draft modification incorporates construction details of the tank waste treatment facility into the Hanford Facility's Dangerous Waste permit.

Specifically, this modification includes **information for:**

- Pouring concrete in the Pretreatment, Low-Activity Waste, and High Activity Waste Buildings
- Installation of tanks and ancillary equipment in the Pretreatment, Low-Activity Waste, and High Activity Waste Buildings

The draft permit modification also includes adding information to the appendices, clarify conditions, and correct minor errors.

Waste Treatment Plant Information

Under the Tri-Party Agreement that governs Hanford cleanup, the U.S. Department of Energy (USDOE) is required to build a waste treatment facility to treat waste remaining from years of nuclear production. The process outlined in the Tri-Party Agreement is vitrification. The waste treatment process treats the radioactive tank waste by separating the waste into high-level and low-activity waste streams, combining each waste stream with glass-forming materials, and melting the glass formers and waste at very high temperatures (a process called "vitrification"). The molten waste is poured into containers and the waste rapidly cools to form a glass which immobilizes the radioactive and most dangerous elements in a stable waste form. The treatment facility will have the capability to treat and immobilize both low-activity and high-level waste, producing containers of immobilized low-activity waste and immobilized high-level waste. The containers of low-activity glass will be disposed of at Hanford. The containers of high-level glass will be stored at Hanford temporarily, with final disposition planned for the National Repository. Building this type of dangerous/hazardous waste facility requires permits from the State of Washington.

Waste Treatment Plant Permit Process

The Hanford Facility's Dangerous Waste permit encompasses both dangerous and mixed waste management requirements for the Hanford Site. Ecology issued this permit in August 1994 under provisions of the federal Resource Conservation and Recovery Act (RCRA) and the Washington State Dangerous Waste Regulations. This permit is modified periodically to remove, modify and/or add permit conditions for treatment, storage, and disposal units currently in the permit, and to add new units, such as the Waste Treatment Plant.

Ecology plans to modify the WTP portion of the permit in phases as new design information becomes available, and as new or modified permit conditions are developed. This phased approach has already allowed construction to begin on one section of the treatment plant while design on future sections is being completed.

As each phase of design work is completed, Ecology will review the design information for the next section of to be built, and once approved, modify the WTP portion of the permit to include the new design information. Ecology will ask for your input on each of these future permit modifications before they are finalized.

What Does This Permit Cover?

This draft permit modification will allow USDOE and its contractor to pour concrete floors and walls for the tank and containment building systems and install tanks, piping, valves and liners in the in the Pretreatment Building, Low-Activity Waste Building, and High Level Waste Building.

Future permit modifications will incorporate new or modified design information, and new or modified permit conditions (as necessary) for installing equipment such as processing tanks, piping, leak detection instruments, and construction of subsequent levels of each building. Ecology will ensure that each phase of the construction meets state requirements before issuing each subsequent phase of the permit.

This permit modification does not cover future operations of the Waste Treatment Plant. Once construction is complete, Ecology will conduct inspections and prepare a draft permit modifications detailing operational permit conditions, and will ask for your input before approving the final operations permit.

How can you get involved?

A 45-day public-comment period runs from August 2 – September 16, 2004. No public hearing is planned at this time; however, Ecology will consider requests for a hearing. All comments received during the public-comment period will be considered and responded to before Ecology issues the final permit decision on whether to approve modification of this portion of the permit.

The permittee is the U.S. Department of Energy (USDOE), Office of River Protection (Owner/Operator), 2440 Stevens Center Place, Richland, Washington, 99352; and Bechtel National Incorporated, (Co-Operator), 2535 Stevens Center Plan, Richland, Washington, 99352.

Copies of the permit are available for review at the Hanford Public Information Repositories listed below. The documents are also available on Ecology's Web site: <http://www.ecy.wa.gov/programs/nwp/index.html>

Send written comments to:

Steve Skurla
Department of Ecology Nuclear Waste Program
3100 Port of Benton Blvd.
Richland, WA 99352
ssku461@ecy.wa.gov

For additional information, call the Hanford Cleanup line at 800-321-2008.

If you have special accommodation needs, or require this document in alternative format, please contact Mary Anne Wuennecke, Department of Ecology, Nuclear Waste Program, at (509) 372-7936 (voice) or 711 or 1-800-833-6388 (TTY).

HANFORD PUBLIC INFORMATION REPOSTIORES

Portland

Portland State University
Branford Price Millar Library
934 SW Harrison and Park
Portland, OR 97207
(503) 725-3690
Attn: Michael Bowman/Jocelyn Kramer
E-mail: bowman@lib.pdx.edu

Spokane

Gonzaga University
Foley Center
East 502 Boone
Spokane, WA 99258
(509) 323-3839
Attn: Connie Scarpelli
E-mail: carter@its.gonzaga.edu

Richland

Public Reading Room
2770 University Drive
Consolidated Information Center, Rm. 101L
Richland, WA 99352
(509) 372-7443
Attention: Terri Traub
E-mail: reading_room@pnl.gov

Seattle

University of Washington Suzzallo Library
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