Public Comment Period

DEPARTMENT OF ECOLOGY
State of Washington

Nuclear Waste Program | **September 2010**

Focus on Waste Sampling, Leak Detection, and Containment Systems in the Waste Treatment Plant

The Washington State Department of Ecology is proposing a permit modification to the *Hanford Facility Resource Conservation and Recovery Act (RCRA) Permit, Dangerous Waste Portion for the Treatment, Storage, and Disposal of Dangerous Waste for the Waste Treatment and Immobilization Plant (WTP)*. The proposed changes are located in Part III, Operating Unit 10 for the WTP.

This permit modification affects the Pretreatment Facility (PTF) and the Low-Activity Waste (LAW) Facility, which are part of the WTP. The modification includes the design of leak-containing liners for Autosampling System sampler cabinets in both the PTF and the LAW Facility.

We invite you to comment on this permit modification. The comment period begins September 27, 2010, and ends November 12, 2010.

What will the new equipment do?

The sampler cabinets will routinely sample the waste stream being processed. This remote sampling method helps ensure worker safety by keeping WTP employees from contacting the waste. The collected samples will be tested to determine whether waste is being treated to the correct specifications.

The sampler cabinets have upper and lower liners to contain any leaks. The stainless steel liners are sloped and divert leaks to collection areas. When liquid is detected in one of the collection areas, a leak detection system will alert WTP employees.

How do we know this will work?

The sampler cabinets for the PTF and the LAW Facility have passed an Independent Qualified Registered Professional Engineer (IQRPE) Integrity Assessment as required by Washington Administrative Code (WAC) 173-303-604. The following is a summary of the IQRPE report.

WHY IT MATTERS

The proposed permit changes affect the Pretreatment Facility and Low-Activity Waste Facility, which are part of the Waste Treatment Plant (WTP). Once constructed, the WTP will process radioactive and chemical waste from the aging tank farms at Hanford and convert it into glass.

If the tank waste is not treated, it could pollute the groundwater beneath Hanford, and possibly reach the Columbia River. So working toward safely immobilizing it in glass is an important goal to help protect human health and the environment.

PUBLIC COMMENT PERIOD

September 27 – November 12

To Submit Comments

Send comments by e-mail, U.S. mail, or hand-deliver them to:

Erika Holmes
3100 Port of Benton Blvd.
Richland, WA 99354
Erika.Holmes@ecy.wa.gov

Public Hearing

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:

Erika Holmes
(509) 372-7880
Erika.Holmes@ecy.wa.gov

Or call the Hanford Cleanup line at 1-800-321-2008.

- The design was deemed appropriate for the intended use and meets all applicable code requirements.
- The sampler cabinets will completely contain any leaked waste because the liners are fully welded. The stainless steel containment liners will hold leaked waste without deteriorating, and leaks are to be removed within 24 hours.
- The cabinet structure and foundation will support the full weight of the sampler cabinets and leak containment liners, including leaked waste, at full capacity.
- The foundation under the sampler cabinets and the containment liners is compatible with the support structure and is equipped to withstand earthquakes.

Other Modifications

The following documents are also available for public comment as part of this permit modification.

- 24590-WTP-PER-M-08-001, *Integrity Assessment Program and Schedule for DWP-Regulated Equipment in the Analytical Laboratory and Low-Activity Waste Vitrification Facility*
- 24590-WTP-PER-M-08-002, *Integrity Assessment Program and Schedule for DWP-Regulated Equipment in the Pretreatment Facility and High-Level Waste Vitrification Facility*
- CCN 169564, *IQRPE Structural Integrity Assessment Report for LAW Secondary Containment*
- 24590-PTF-PER-M-04-0010, *Leak Detection Capability in the Pretreatment Facility*
- 24590-PTF-PER-M-04-0011, *Waste Removal Capability for the Pretreatment Facility*
- 24590-WTP-PCN-ENV-10-002, *Hanford Facility RCRA Permit Modification Form*, revises the permit condition requiring that Ecology be notified of minor nonconformance or construction deficiencies. These deficiencies are approved, code-compliant changes from permitted designs, plans, and specifications in the construction of critical systems as defined in the Hanford Site-wide permit. The reporting period is changed from five calendar days to seven calendar days.

TERMS TO KNOW

Dangerous Waste Permit (DWP): A State-issued permit allowing facilities to store, treat, and/or dispose of dangerous waste onsite.

Low-Activity Waste (LAW): Waste that remains after as much radioactivity as is technically and economically practical has been separated from high-level waste. When immobilized in glass, LAW may be disposed of as low-level radioactive waste in a near-surface facility at Hanford.

Resource Conservation & Recovery Act (RCRA): Law authorizing the U.S. Environmental Protection Agency to control hazardous waste, including the generation, transportation, treatment, storage, and disposal of hazardous and other solid waste and waste in underground tanks.

Washington Administrative Code (WAC): Regulations of the state's executive branch agencies codified and arranged by subject or agency.

Waste Treatment Plant (WTP): Facility designed and being built to thermally treat and immobilize tank waste at the U.S. Department of Energy's Hanford Site. The WTP is comprised of four facilities: pretreatment, high-level waste, low-activity waste, and an analytical laboratory.

View the Full Proposal

This is a brief summary of the proposed changes. The full proposal is available beginning September 27, on Ecology's Nuclear Waste Program website (www.ecy.wa.gov/programs/nwp/commentperiods.htm) or at one of the public information repositories listed below (maps available at http://bit.ly/aIEhHZ).

Public Information Repositories

Department of Energy Reading Room
2710 University Drive
Richland, WA 99354-1671
(509) 372-7443

University of Washington
Suzallo Library
PO Box 352900
Seattle, WA 98195-2900
(206) 543-9157

Portland State University
Branford Price Millar Library
1875 SW Park Avenue
Portland, OR 97201-3220
(503) 725-4552

Gonzaga University Foley Center
502 E Boone Avenue
Spokane, WA 99258-1774
(509)313-3834

Special Accommodations

To ask about the availability of this document in a version for the visually impaired, call the Nuclear Waste Program at 509-372-7950.

Persons with hearing loss, call 711 for Washington Relay Service. Persons with a speech disability, call 1-877-833-6341.

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3100 Port of Benton Boulevard
Richland, WA 99354

Tell us what you think!

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September 27 – November 12, 2010

On a proposed modification to waste sampling, leak detection, and containment systems in the Waste Treatment Plant.