

WTP Permit Change Proposed to Support Hanford Tank Waste Treatment

The U.S. Department of Energy (DOE) Office of River Protection (ORP) and Bechtel National, Inc. (BNI) are holding a 60-day public comment period on a proposed modification to the Hanford Waste Treatment and Immobilization Plant (WTP) Dangerous Waste Permit (herein referred to as the "WTP Permit"). This proposed permit change supports the installation of the Direct Feed Low-Activity Waste (DFLAW) Effluent Management Facility (EMF) underground waste transfer pipelines.

April 2017

US Department of Energy – Office of River Protection

Background

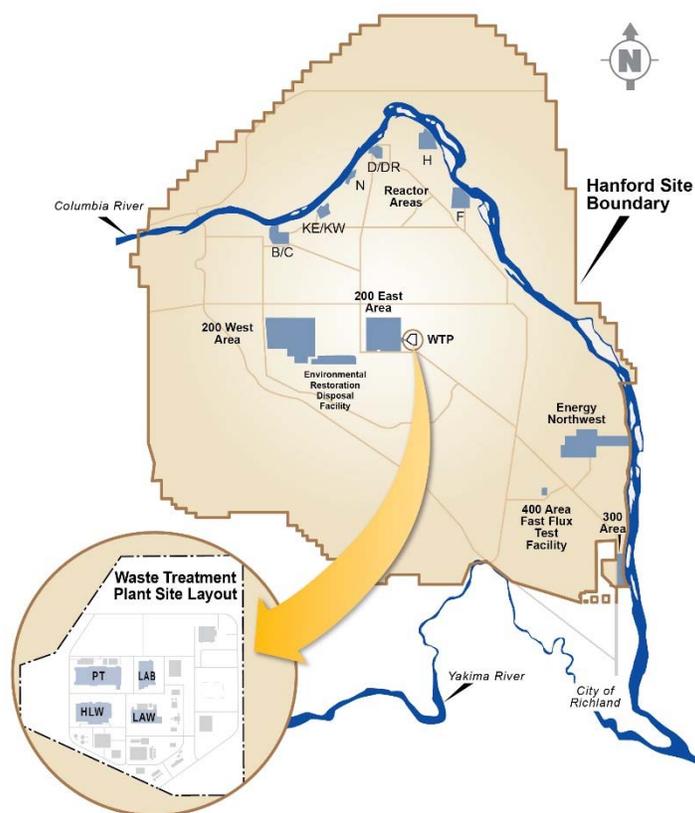
The Hanford Site is located in southeastern Washington State along the Columbia River. The 580 square-mile site was created in 1943 as part of the Manhattan Project to produce plutonium for the nation's defense program. Hanford's legacy defense waste is stored in 177 underground tanks containing approximately 56 million gallons of high-level radioactive and dangerous waste. Most of the tanks are beyond their engineered design life, and some have leaked in the past.

Direct Feed Low-Activity Waste (DFLAW)

To begin treating the tank waste as soon as practicable, ORP and BNI, as co-Permittees, developed a plan to begin feeding low-activity (mostly liquid) tank waste directly to the WTP Low-Activity Waste (LAW) Facility, allowing the treatment of Hanford tank waste to begin as early as 2022. This process is called Direct Feed LAW or DFLAW.

One of the advantages of DFLAW is that it allows the Permittees to begin treating a significant portion of the tank waste supernate (liquid portion of the waste) using the WTP facilities closest to completion while technical issues at the WTP Pretreatment and High-Level Waste facilities are resolved.

Most of the WTP facilities required to process waste in the direct-feed mode are complete or nearly complete; however, DFLAW does require construction of two new facilities: (1) the LAW Pretreatment System (LAWPS), and (2) the Effluent Management Facility (EMF). The LAWPS, which will be permitted separately from the WTP, will be built at the Hanford Tank Farms to condition waste to meet the acceptance criteria for WTP. The EMF, which is supported by this requested permit modification, will be constructed at the WTP to treat secondary liquid effluent generated by the LAW Facility off-gas ventilation system. This proposed permit modification involves the addition of the EMF to the WTP Permit and allows for changes to WTP facilities in order to accommodate the DFLAW configuration.



Public Comment Period

We welcome your feedback on this proposed modification. The public comment period is scheduled to run from **April 10 through June 9, 2017**.

A public meeting is scheduled for **Wednesday, May 3 at 5:30 p.m.**, at the Richland Public Library, 955 Northgate Drive, Richland, WA. The meeting will also be accessible via webinar. To register, go to <https://attendee.gotowebinar.com/register/5033401885913438465> (Webinar ID: 344-818-027).

Permit Modification Scope

The Permittees are requesting a Class 2 modification to the WTP Permit. This modification is seeking approval from the Washington State Department of Ecology (herein referred to as "Ecology") to install new underground waste transfer pipelines needed to support the DFLAW configuration for WTP operation activities. This modification is being submitted as a Class 2 modification in accordance with WAC 173-303-830(4)(b)(i-vi).

The scope of this modification request is limited to new underground waste transfer pipelines located within the WTP Facility boundary. The DFLAW configuration activities supported by the new pipelines include receipt of low-activity waste at the LAW Facility from LAWPS, as well as effluent transfers from the LAW Facility and the Analytical Laboratory to the EMF. The new underground pipelines also support line flushing and the transfer of effluent from EMF back to designated Hanford waste treatment, storage and disposal facilities via established Hanford waste transfer pipelines.

The proposed underground pipelines are all coaxial (double-walled) pipes constructed of stainless steel primary pipe, with a carbon steel encasement pipe coated with fusion bonded epoxy. The coating system and water barrier consist of the fusion bonded epoxy, polyethylene insulation, and a jacket or thermoplastic outer water barrier made of high-density polyethylene. This design is consistent with existing approved and installed pipelines at the WTP.

Public Review Process

A 60-day public comment period is scheduled for **April 10 through June 9, 2017**. A public meeting is scheduled for **May 3 at 5:30 PM** at the Richland Public Library (955 Northgate Drive). The meeting will also be accessible via webinar. To register, go to <https://attendee.gotowebinar.com/register/5033401885913438465> (Webinar ID: 344-818-027). At the conclusion of the comment period, Ecology will address public comments and, within 90 days of the modification request submittal, make the decision to either approve and incorporate the requested modifications into the revised WTP Permit or deny the request in writing in accordance with WAC 173-303-830(4)(b)(vi). If the modification is approved, any necessary changes to WTP Permit will be finalized, and the updated WTP Permit issued by Ecology at the end of this process.

Copies of the proposed modification and supporting documentation will be available during the public comment period online at <http://pdw.hanford.gov/arpir/index.cfm/viewDoc?accession=0071755H>, or on Ecology's website at <http://www.ecy.wa.gov/programs/nwp/commentperiods.htm>. Copies may also be viewed at the Hanford Public Information Repositories listed on the next page.

Whom to Contact

Submit written comments on the proposed WTP Permit modification by **June 9, 2017** to Dan McDonald, Ecology, at Hanford@ecy.wa.gov. For additional information, contact Dieter Bohrmann, ORP, at Dieter_G_Bohrmann@orp.doe.gov.

Comment Submission

A 60-day public comment period is scheduled to begin **April 10** and continue through **June 9, 2017**. We welcome your input by mail or email (preferred) by June 9 to:



Dan McDonald
Washington State Department of Ecology
3100 Port of Benton Boulevard
Richland, WA 99354
Email: Hanford@ecy.wa.gov
Phone: (509) 372-7950

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Hanford Public Information Repositories

Portland State University
 Government Information
 Branford Price Millar Library
 1875 SW Park Ave
 Portland, OR 97207-1151
 Attn: Claudia Irla
 (503) 725-4542
 Email:
westonc@pdx.edu

Map:
www.pdx.edu/map.html

University of Washington
 Suzzallo Library
 Government Publications Department
 Box 352900
 Seattle, WA 98195-2900
 Attn: Hilary Reinert
 (206) 685-3130
 Email:
cass@uw.edu;
reinerth@uw.edu

Map:
www.tinyurl.com/m8ebj

**U.S. Department of Energy
 Public Reading Room**
 Washington State University Tri-Cities
 Consolidated Information Center
 Rm 101-L
 2770 University Dr
 Richland, WA 99352
 Attn: Janice Scarano
 (509) 372-7443
 Email:
doe.reading.room@pnnl.gov

Map:
www.tricity.wsu.edu/campusmaps/campusmap.pdf

Gonzaga University
 Foley Center Library
 502 E. Boone Ave
 Spokane, WA 99258
 Attn: John Spencer
 (509) 313-6110
 Email:
spencer@gonzaga.edu

Map:
www.tinyurl.com/2c6bpm

Ecology Nuclear Waste Program Resource Center
 3100 Port of Benton Blvd
 Richland, WA 99354
 Attn: Teresa Booth
 (509) 372-7950
 Email:
Hanford@ecy.wa.gov

Online:
<http://www.ecy.wa.gov/programs/nwp/commentperiods.htm>

Administrative Record and Public Information Repository

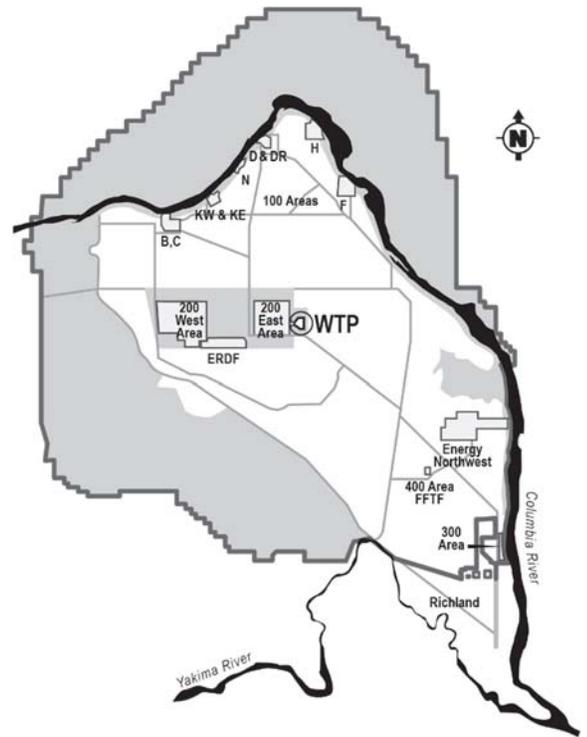
Address: 2440 Stevens Center Pl, Rm 1101, Richland, WA 99352 **Attn:** Heather Childers
Phone: (509) 376-2530 **Email:** heather_m_childers@rl.gov **Website:** www2.hanford.gov/arpir/

The Permittees' compliance history during the life of the WTP Permit being modified is available from the Washington State Department of Ecology. Contact Dan McDonald at Hanford@ecy.wa.gov.

Hanford Public Involvement Opportunity

We want to hear from you on the proposed modifications for the Hanford Waste Treatment and Immobilization Plant's Dangerous Waste Permit!

Comment Period: April 10 to June 9, 2017
Public Meeting: May 3 – Richland Public Library



Class 2 Permit Modification Fact Sheet
US Department of Energy
Office of River Protection
PO Box 450, MS H4-02
Richland, WA 99352

OFFICE OF RIVER PROTECTION
United States Department of Energy

