



Public Comment Period

0071246

Waste Treatment & Immobilization Plant:
2+2 Melter Configuration Permit Modification

October 9 through November 27, 2006

The Washington State Department of Ecology invites you to comment on a permit modification for Hanford's Waste Treatment and Immobilization Plant (WTP). The plant will immobilize millions of gallons of highly radioactive and dangerous waste in glass. The permit modification would change Attachment 51 of the Dangerous Waste portion of the Hanford Facility Resource Conservation and Recovery Act (RCRA) Permit as follows:

- The melter configuration would change from one high-level waste (HLW) melter and three low-activity waste (LAW) melters to two HLW and two LAW melters.
- The permit would include detailed designs for the HLW melters.
- The permit would include secondary containment calculations for the pretreatment facility.

Background

For more than 40 years, the federal government made plutonium at Hanford for nuclear weapons. This process generated more than 53 million gallons of radioactive and dangerous waste. This waste is now stored in 177 aging underground tanks.

The Tri-Party Agreement governs cleanup of this waste. A key part of that cleanup is to build the WTP to immobilize the tank waste in glass.

First the wastes are pretreated to separate the waste into HLW and LAW streams. Each waste stream is combined with glass-forming materials and poured into melters. The melters heat the glass and waste mixture to very high temperatures until it becomes molten. Then the mixture is poured into steel containers and sealed. As the mixture cools, the waste is incorporated into the crystalline structure of the glass. The glass immobilizes the radioactive and dangerous waste. This is called vitrification.

The containers with immobilized LAW will be disposed of at Hanford. The containers with immobilized HLW will be stored at Hanford's canister storage building until permanent disposal is available in the nation's geologic repository.

What does this permit modification change?

U.S. Department of Energy (USDOE) first applied for this permit modification in 2004 and held a public comment period from March 31 to June 1. As a result of those public comments, Ecology determined the change was significant enough to reclassify the modification to a "Class 3." In a Class 3 modification, Ecology issues a draft permit for public review and comment. The changes in Ecology's draft permit are below:

Melter configuration

The current permit authorizes construction of three LAW melters and one HLW melter. The draft permit changes the melter configuration to two LAW melters and two HLW melters, and is referred to as the 2+2 permit modification.

The LAW building originally was to have three melters. Each melter was expected to make 10 metric tons of glass per day for a total of 30 metric tons. Recent pilot testing for the LAW melters proved that two melters will be able to make at least 30 metric tons of glass per day. At the same time USDOE wants to increase the output of the HLW building and is adding a second HLW melter.

Melter design

The current permit has a general description of the HLW melter design. The draft permit adds detailed design drawings and engineering specifications for the HLW melters.

Pretreatment Facility secondary containment

The draft permit adds details for secondary containment for the radioactive liquid waste system in the Pretreatment Facility. The details are for flooding volume scenarios and calculations, sump data, and to address findings from the Independent, Qualified, Registered Professional Engineer review.

How can you review the permit?

You can review the draft permit modification at the Hanford Public Information Repositories. To make an appointment to review the information at Ecology's Nuclear Waste Program Richland office, call 509-372-7920. Review the draft permit online at <http://www.ecy.wa.gov/programs/nwp/commentperiods.htm>.

Portland

Portland State University
Branford Price Millar Library
1875 SW Park Ave.
Attn: Don Frank 503-725-4132

Seattle

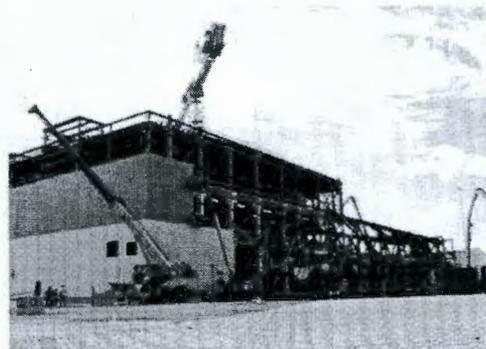
University of Washington
Suzzallo Library
Government Publications Division
Attn: Eleanor Chase 206-543-4664

Richland

U.S. Department of Energy Reading Room
Consolidated Information Center, Room 101-L
2770 University Dr.
Attn: Janice Parthree 509-372-7443

Spokane

Gonzaga University
Foley Center
502 E. Boone Ave.
Attn: Linda Pierce 509-323-3834



Construction on the Low Activity Waste facility at the Waste Treatment Plant.

RECEIVED
OCT 05 2006
EDMC

Attend the public hearing

Ecology will hold a public hearing the evening of Thursday, November 9, 2006, at the Nuclear Waste Program office, 3100 Port of Benton Blvd, Richland, WA 99354.

At 7:00 p.m, Ecology will give a presentation and be available to answer questions. The formal public hearing will follow. During the hearing you can submit official spoken or written comments.

Please contact Madeleine Brown, mabr461@ecy.wa.gov or 509-372-7936, for more information on the hearing.

How do you make a comment?

Please send all comments in writing to:

Brenda Becker-Khaleel
Washington State Dept of Ecology
3100 Port of Benton Blvd.
Richland, WA 99354
509-372-7971 fax
Bbec461@ecy.wa.gov

The public comment period runs from October 2 through November 17, 2006. Ecology will consider all comments it receives during the comment period. Ecology will also issue a response to comments when it issues the final decision on the modification.

If you need this publication in an alternate format, please call the Nuclear Waste Program at 509-372-7950. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

Public Comment Period

October 9 through November 27, 2006
Waste Treatment & Immobilization Plant: 2+2 Melter Configuration Permit Modification

Tell Us What You Think!

You are invited to participate in the decision to modify the Waste Treatment and Immobilization Plant permit. Public comments are critical to Ecology's decision-making process. Look inside to learn more about the proposed changes.



*****AUTO**3-DIGIT 998
DEBRA ISOM
LMSI
H6-08
PO BOX 950
RICHLAND WA 99352-0950

PRSR1 STD
U.S. POSTAGE PAID
WASHINGTON STATE
DEPT. OF PRINTING

