



# Focus

## Proposed Modifications to the Dangerous Waste Portion of the Hanford Facility-Wide RCRA Permit

### Background

A facility-wide Dangerous Waste Permit was issued in August 1994 for the Hanford Site by the Washington State Department of Ecology (Ecology) and the U.S. Environmental Protection Agency. The Permit was granted under provisions of the federal Resource Conservation and Recovery Act (RCRA) and the Washington State Dangerous Waste Regulations. The Permit outlines conditions for the operation and closure of dangerous and mixed waste Treatment, Storage and Disposal (TSD) units at Hanford.

Approximately 50 Treatment, Storage and Disposal units at Hanford operate under RCRA interim status. The units described in this focus sheet will be incorporated into the Permit, transitioning them from interim status to final status. After incorporation into the Permit, general conditions apply. In addition, individual units will be subject to conditions based on their status as operating, clean-closed, or post-closure. Prior to the modifications addressed in this focus sheet, the Permit had three operating TSD units, and eleven closed TSD units.

### The Modification Process

The Washington State Dangerous Waste Regulations state: "When a permit is modified, only the conditions subject to modification are reopened." The proposed modifications have been initiated by Ecology in accordance with the Washington State Dangerous Waste Regulations. The U.S. Department of Energy-Richland Operations Office, Fluor Daniel Hanford, Incorporated, Pacific Northwest National Laboratories, and Bechtel Hanford, Incorporated were notified by Ecology that the proposed changes to the Permit were determined to be complete and satisfactory.

### Statement of Basis

Washington State Dangerous Waste Regulations require Ecology to prepare a Statement of Basis when a fact sheet is not prepared for the proposed permit modification(s). Since an extensive fact sheet was prepared for the Hanford Dangerous Waste Permit in September of 1994, and because the proposed modifications will not affect any of the conditions of the permit as issued, a Statement of basis is added to this focus sheet.



### 1997 Modifications to the Dangerous Waste Portion of the Hanford Facility-Wide Permit

The 1997 modifications to the Permit include incorporation of four new operating units, a new Modified Closure Plan, and a modified existing Closure Plan.

The four newly permitted operating units include:

- ◆ **The Low-Level Burial Grounds** consist of eight burial grounds on Hanford's central plateau. Two double-lined trenches are serving as greater than 90-day storage units until disposal occurs. An unlined trench currently receives submarine reactor compartments, for which an exemption from lined trench requirements is being considered. The Permit will schedule near and long term activities to address potential impacts to the environment.
- ◆ **The 200 Area Liquid Waste Facilities** are comprised of the Liquid Effluent Retention Facility (LERF) and the Effluent Treatment Facility (ETF), which are located in the 200 East Area of Hanford. These two units are part of an aqueous waste treatment system. Aqueous waste is generated by various Hanford facilities. The term "effluent" refers to the treated aqueous waste that is discharged from the ETF. The LERF is composed of three surface impoundments with a capacity of 24.6 million liters each, which provide interim storage and treatment until the aqueous waste is transferred to the ETF via pipelines for final treatment.
- ◆ **The 242-A Evaporator** receives and treats mixed waste from Hanford's Double-Shell Tank System (DST) that contain inorganic and organic constituents, and radionuclides. The 242-A Evaporator separates mixed waste into two components, slurry and process condensate. After treatment at the 242-A Evaporator the slurry is routed back to the DST System for storage pending further treatment. The process condensate is transferred to the LERF for interim storage and treatment until later processing at the ETF.
- ◆ **The 325 Hazardous Waste Treatment Units (HWTU's)** are located in the 325 Building in the southern portion of Hanford's 300 Area. The 325 HWTU's consist of three units, the Shielded Analytical Laboratory (SAL), the Hazardous Waste Treatment Unit, and the Collection/Loadout Station Tank. The Collection/Loadout Station Tank is currently in the design process, and is awaiting construction. When complete, the tank will be used to collect liquid dangerous and/or mixed waste generated in the 300 Area. That waste will then be transferred to double-shelled tanks once the existing Radioactive Liquid Waste System is closed in 1998.

Two units are already in the Permit are being modified:

◆ **The 183-H Solar Evaporation Basins** is a final status TSD unit undergoing RCRA modified postclosure care. The current closure plan will be superseded by the updated postclosure plan upon its incorporation into Chapter VI of the Permit. The 183-H Solar Evaporation Basins are located in the 100 H Area of the Hanford Site. Following shutdown of reactor operations in the mid-1960's, 12 of the 16 concrete reactor cooling water basins were demolished. Four basins were retained for use as solar evaporation basins for chemical wastes from the 300 Area. The last shipment of waste to these basins occurred in November 1985. This facility is undergoing modified closure due to elevated levels of nitrate and fluoride left in the vadose zone after the remaining four concrete basins were demolished and the upper 15 feet of contaminated soil was removed and backfilled with clean soil. USDOE and its contractors have certified their completion of the requirements of the modified closure option available under Permit Condition II. K.3. The option for clean closure of the facility will be periodically discussed in conjunction with the Comprehensive Environmental Response, Compensation and Liability Act Remedial Actions of groundwater for the 100-HR-1 and 100-HR-3 Operating Units.

◆ **The 303-K Storage Facility** is located in the northwest portion of the 300 Area at Hanford. The 303-K Storage Facility was built as a small, single-story cinderblock building. Various radioactive and dangerous wastes have been stored in the building and on nearby concrete, asphalt and gravel pads. This Permit update details new conditions to the existing Closure Plan.

**How can you get involved?**

A 45-day public comment period will start **September 2** and conclude **October 16, 1997**. A Public Hearing will be held **September 18** at Ecology's Kennewick Office, 1315 W. 4th Ave. All comments received during the comment period will be considered and responded to before the final decisions are made on these proposals.

Send written comments to:  
**Moses Jaraysi**  
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(509) 736-3016

Copies of the Dangerous Waste portion of the Hanford Facility-Wide RCRA Permit and the proposed 1997 modifications are available for review at these **Hanford Public Information Repositories**:  
For additional information, call Hanford Cleanup toll-free at 1-800-321-2008.

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If you have special accommodation needs, or require this material in an alternative format, please contact Michelle Davis at (360) 407-7126 (voice) or (360) 407-6206 (TDD).

All information in the repositories, plus the administrative record, including all data submitted by the applicants, may be reviewed at the **Hanford administrative record**.

Lockheed Martin Services  
2440 Stevens Center Place, Suite 1101  
Richland, WA  
Debbie Isom (509) 376-2530  
Mon.-Fri. 9 a.m. -noon; 1-3:30 p.m.

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