324 Building

Class 2 Permit Modification Request to the Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion
Overview

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Introduction and Meeting Purpose

• Presented by the U.S. Department of Energy (DOE)
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    River Corridor Division

• Purpose:
  – Provide information to the public on Class 2 Permit Modification Request (PMR) for the 324 Building Dangerous Waste Management Units Closure Plan
  – Answer questions
  – Meet the regulatory requirements of Washington Administrative Code for public involvement (WAC 173-303-830(4)(b)(iv))
History and Regulatory Background

- Hanford Site was established in 1943 to produce plutonium for national defense
- Production ended in 1988
- Significant amounts of waste were created
- In 1989, Hanford’s mission shifted to environmental cleanup and waste management operations
- Hanford Site cleanup is one of the largest, most complex environmental projects in the U.S.
**History and Regulatory Background**

- The 324 Building is located in the 300 Area of the Hanford Site
  - Supported materials and chemical processing research and development activities
  - Design allowed employees to safely work with highly radioactive materials
- Major regulatory statutes related to the 324 Building
  - *Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)*
Proposed Permit Modification Request

- The Permit Modification Request (PMR) is required by Tri-Party Agreement (TPA) Milestone M-89-06:
  “Submit to Ecology in accordance with procedures in WAC 173-303-830(4)(b), a request for a Class 2 modification to the Hanford dangerous waste permit, to include in the permit the ‘324 Bldg. Radiochemical Engineering Cells, High-Level Vault, Low-Level Vault, and Associated Area Closure Plan’ (Closure Plan), DOE/RL-96-73’ revised as necessary to address releases to soil and to ensure compliance with requirements of WAC-173-303-610. DOE's revised closure plan will include a schedule for completing closure activities.”

- The PMR proposes to add the 324 Building to Part V of the Permit (unit-specific conditions for units undergoing closure) and includes the Part A Form and Addendum H, Closure Plan

- Ecology issued a letter to DOE reclassifying this permit modification to a class 3 permit modification. A listserv notice was sent out identifying the change in classification.

- Proposed changes will allow for closure activities
Proposed Changes – Closure

The 324 Building consists of six (6) Dangerous Waste Management Units (DWMUs):

**A-Cell**
Not used for dangerous waste activities, therefore, no specific closure activities required.

**B-Cell**
Used for dangerous waste activities.
Includes the central airlock and pipe trench.

**C-Cell**
Not used for dangerous waste activities, therefore, no specific closure activities required.

**D-Cell**
Used for dangerous waste activities.
Proposed Changes – Closure

DWMUs continued:

High-Level Vault (HLV)
- Contains four stainless steel tanks
  - (tanks 104, 105, 106, and 107)
- Tank 105 has been filled with grout and stabilized
- Includes piping to and from the Radiochemical Engineering Cells (REC)

Low-Level Vault (LLV)
- Contains four stainless steel tanks
  - (tanks 101, 102, 103, and 108)
- Tank 103 has been filled with grout and stabilized
- Includes piping to and from the REC
Proposed Changes – Closure

• PMR proposes physical removal of the following:
  – Radiochemical Engineering Cells (REC)
    • Consists of the four hot cells (A-Cell, B-Cell, C-Cell, and D-Cell), the central airlock, and the pipe trench
  – High Level Vault (HLV)
  – Low Level Vault (LLV)

• Closure activities include removing associated piping and 0.5 meters (1.6 feet) of soil. Removal actions will be completed per the Removal Action Work Plan (RAWP) for the 300 Area.

• Cleanup of the waste site under the 324 Building is NOT included in the RCRA closure scope
  – 300-296 waste site cleanup will be conducted in accordance with *Final Record of Decision for 300-FF-2 and 300-FF-5 and Record of Decision Amendment for 300-FF-1*
324 Facility
Proposed Changes – Closure

Closure will be achieved as part of a seven year, four-phase process implementing both RCRA closure activities and CERCLA removal and remedial actions:

• Phase 1 – through-cell retrieval (~22 months)
  ▪ Removal of grout and debris from B-Cell
  ▪ B-Cell floor removal
  ▪ B-Cell soil removal
  ▪ Backfill waste site
• Phase 2 – deactivation and demolition of the 324 Building shell (~30 months)
• Phase 3 – cell and vault removal (~19 months)
• Phase 4 – final remediation and backfill of soil (~15 months)

RCRA closure will be achieved at the completion of Phase 3.
Class 2 Permit Modification Process

• Hanford Facility
  – Submits PMR to Ecology (permitting agency)
  – Notifies public
    • Public mailing list
    • Local newspaper
  – Hosts public meeting
• Written comments due to Ecology
• Ecology
  – Approves PMR (with or without changes)
  – Denies PMR (issues notice of deficiency)
  – Reclassify PMR to Class 3
  – Requires 45-day comment period at the end of the initial 60-day comment period
Conclusion

• The 60-day public comment period for this PMR ends at the close of business on September 9, 2016.

• The PMR may be accessed through the:
  – Hanford Event Calendar at www.hanford.gov
  – **Hanford Facility Administrative Record**
    2440 Stevens Drive
    Richland, WA 99354

• Comments may be submitted to the Washington State Department of Ecology, Richland Nuclear Waste Office via U.S. mail or email:
  
  Stephanie Schleif
  3100 Port of Benton Blvd.
  Richland, WA 99354
  Hanford@ecy.wa.gov
Questions