

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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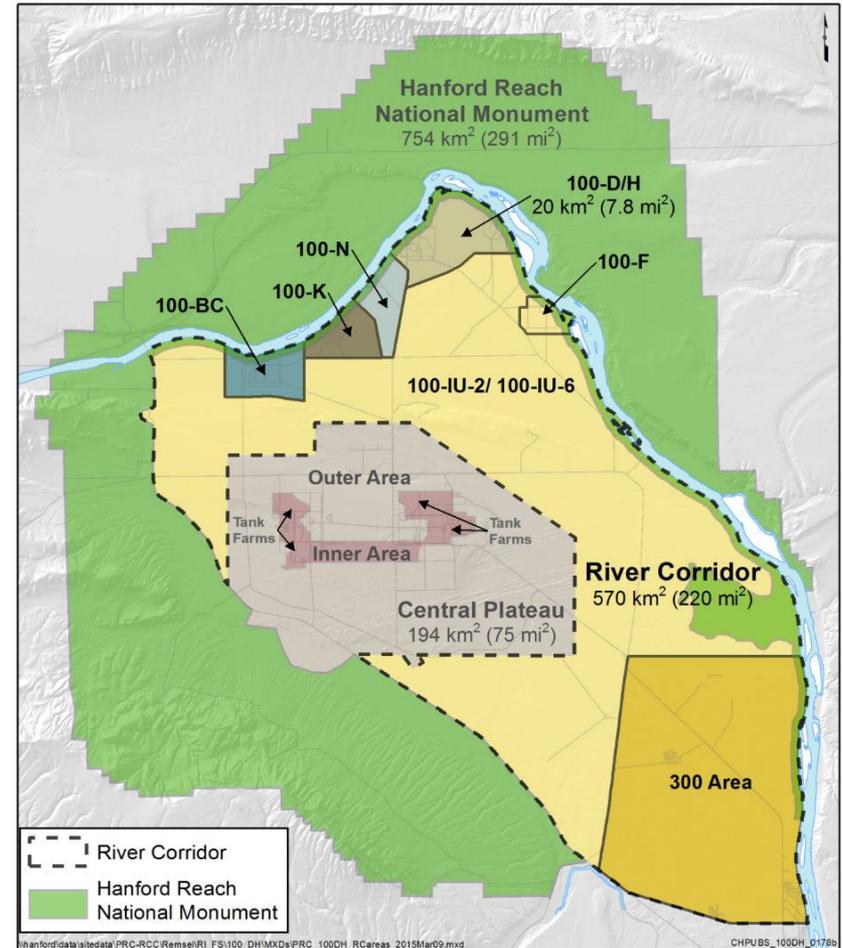


Introduction and Meeting Purpose

- Presented by the U.S. Department of Energy (DOE)
 - **Bryan Foley**
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)*
 - *Resource Conservation and Recovery Act of 1976 (RCRA)*



April 2012

324 Facility



August 2015

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

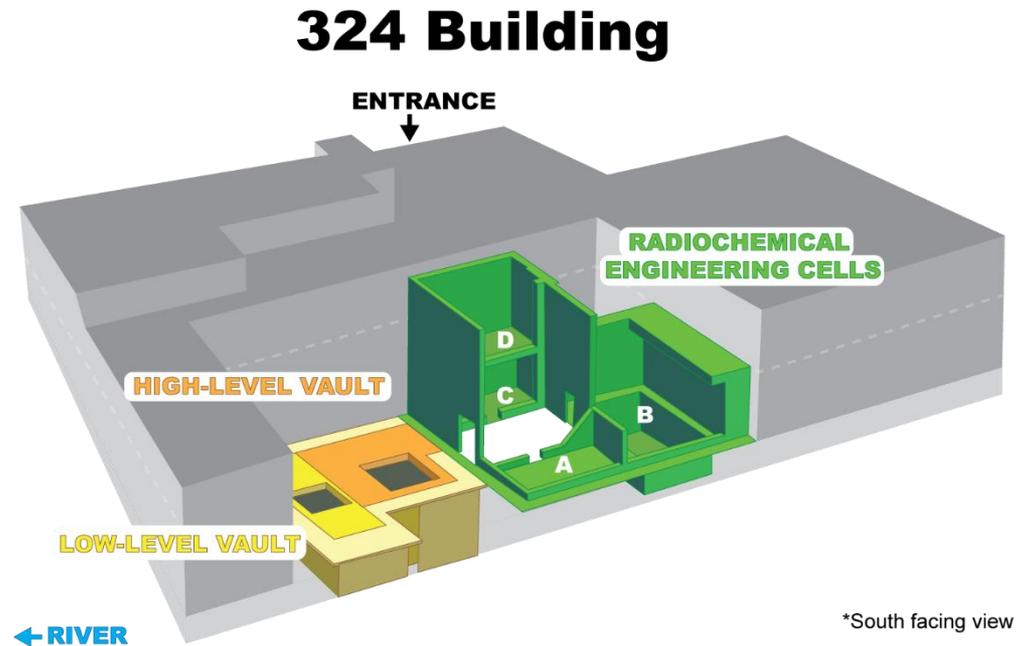
Used for dangerous waste activities. Includes the central airlock and pipe trench.

C-Cell

Not used for dangerous waste activities, therefore, no specific closure activities required.

D-Cell

Used for dangerous waste activities.



Proposed Changes – Closure

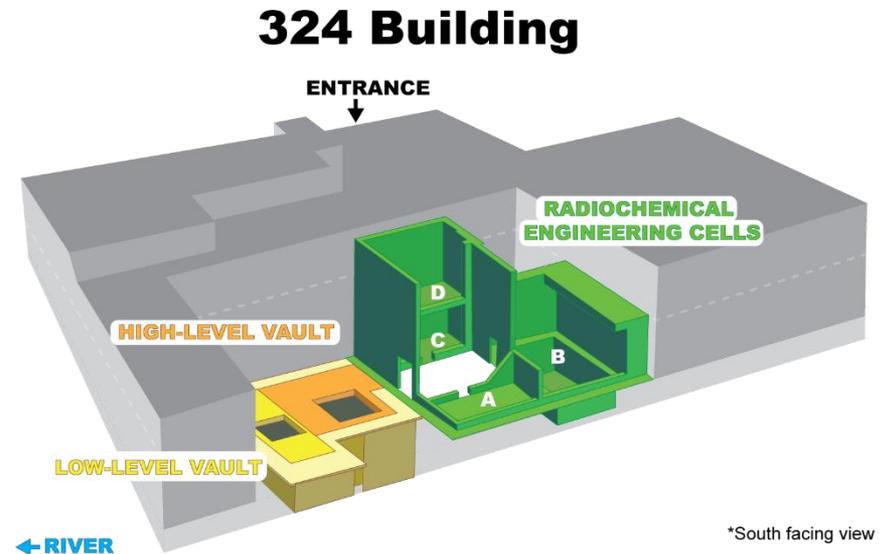
DWMUs continued:

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)

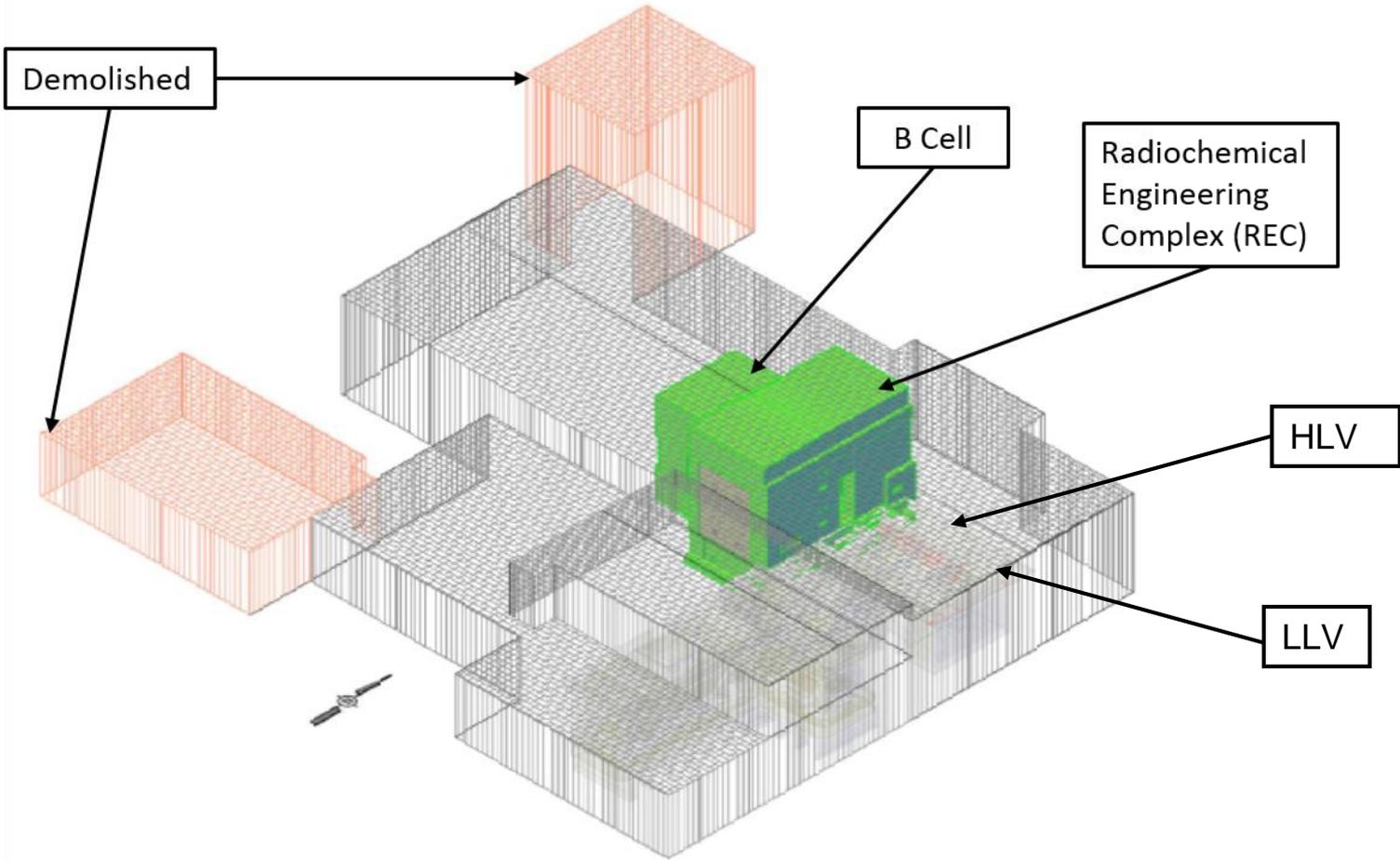
- Contains four stainless steel tanks
 - (tanks 101, 102, 103, and 108)
- Tank 103 has been filled with grout and stabilized
- Includes piping to and from the REC



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
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graph LR; A[Notifies public] --> B[60-Day Public Comment Period]; B --> C[Written comments due to Ecology];
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# Conclusion

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- 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](http://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:



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# Questions

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