

2734ZL Facility Status Change Form

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

Contractor for the U.S. Department of Energy
under Contract DE-AC06-08RL14788

CH2MHILL
Plateau Remediation Company

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APPROVED
By Lynn M. Ayers at 6:55 am, Oct 28, 2020

Release Approval

Date

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FACILITY STATUS CHANGE FORM

Date Submitted: 06/04/2019	Area: 200W	Control Number: D4-PFP-059
Originator: James Leary	Facility ID: 2734ZL	Phone: 509-942-6675

Action Memorandum/Removal Action Work Plan:

DOE/RL-2005-13 / DOE/RL-2011-03

This form documents the status of facility decontamination, deactivation, decommissioning, and demolition operations or debris removal in accordance with the applicable regulatory decision documents.

Section 1: Facility Status

All D4 operations required by action memo complete.

Description of Completed Activities and Current Conditions:

The 2734ZL Hydrogen Fluoride Facility was deactivated and demolished in September 2017. Deactivation and demolition activities included but were not limited to the following:

- Mechanical and electrical utility isolation
- Characterization
- Removal of hazardous materials
- Inspection for presence of asbestos-containing material
- Evaluation for presence of beryllium
- Removal of the structure above the slab using standard demolition practices and equipment such as excavators with attachments for shearing, handling, and size reduction
- Disposal of demolition wastes in the Environmental Restoration Disposal Facility (ERDF)
- Evaluation of radiological conditions and posting in accordance with procedures

Actions were completed in accordance with the Action Memorandum, Removal Action Work Plan, and applicable endpoint criteria as identified in the following documents:

- DOE/RL-2005-13, *Action Memorandum for the Plutonium Finishing Plant Above-Grade Structures Non-Time Critical Removal Action*
- DOE/RL-2011-03, *Removal Action Work Plan for the Deactivation, Decontamination, Decommissioning, and Demolition of the Plutonium Finishing Plant Complex*
- HNF-22401, *Plutonium Finishing Plant (PFP) Complex End Point Criteria*
- DOE/RL-2015-36, *234-5Z and Attached Structures Endpoint Criteria Checklist*

Total D4 Cost for the Facility:

\$3,000

Section 2: Underlying Soil Status

- No waste site(s) present. No additional actions anticipated.
- Documented waste site(s) present. Cleanup and closeout to be addressed under a separate CERCLA Response Action.
- Potential waste site discovered during D4 operations. Waste site identification number <to be> assigned. Cleanup and closeout to be addressed under a separate CERCLA Response Action.

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Description of Current/As-Left Conditions:

Demolition was completed on September 21, 2017. The 2734ZL slab has been left in place and will be integrated into the 234-5Z contamination control cap. A walkdown of the area where the structure previously stood was conducted to confirm that demolition was completed, waste was removed, and the area had been appropriately posted in accordance with radiological and occupational safety requirements.

Identification of Documented Waste Site(s) or Nature of Potential Waste Site Discovery (as applicable):

N/A

Section 3: List of Attachments

- Attachment 1: Facility Information
- Attachment 2: Pre-Demolition and Post-Demolition Photographs
- Attachment 3: Supporting Information

DOE-RL	<u>THOMAS TEYNOR</u> <small>Print First and Last Name</small>	 <small>Signature</small>	<u>June 04, 2019</u> <small>Date</small>
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NOTE: The information on this form also satisfies the related DOE 430.1B Facility Closeout Reporting Requirements.

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Attachment 1: Facility Information

The 2734ZA, 2734ZB, 2734ZC, 2734ZD, and 2734ZL were all close together between 234-5Z and 291Z Buildings. 2734ZL was underneath the large duct between 234-5Z and 291Z. Figure 1 from H-2-80248, Sht. 2 shows the location of all five facilities.

2734ZL Hydrogen Fluoride Facility

The Hydrogen Fluoride Facility (2734ZL) was an insulated pre-engineered 144 ft² building constructed in 1984, attached to the south side of 234-5Z. The building consisted of two rooms: one for bottle storage and the other for process control. A 6 by 7 ft attachment was used for acid suit storage. The building had an independent ventilation system and a stack located to the west side of the structure. It contained the hydrogen fluoride bottles and supply piping for the fluorinator in the Remote Mechanical C line. When the fluorination process ended in 1989, the fluoride bottles were removed, the stack was shut down, and the building was used for storage (Figure 2 in this Facility Status Change Form and drawings H-2-93503 and H-2-95511 provide additional details).

Characterization

Table 1 summarizes the characterization information collected prior to demolition.

Table 1. Summary of Characterization Information

Type	Documented In	Results Summary
Asbestos	CWR-PFP-00019, <i>Asbestos NESHAP Thorough Inspection Report at 2734ZL</i> , Rev. 0	No asbestos-containing material was found during the thorough inspection of the 2734ZL Hydrogen Fluoride Facility.
Beryllium	BFA-B-20530-Rev1, <i>Beryllium Facility Assessment for 2734ZL</i> dated 06/08/16	The beryllium assessment noted that sample results associated with the 2734ZL Building were below the trigger level. The structure is beryllium cleared but is adjacent to a beryllium controlled facility.
Radiological	CWR-PFP-00036, <i>PFP 234-5Z Facility Radiological Data Summary</i> , Rev. 0	The 2734ZL was considered to be a radiological facility with low levels of contamination.

Waste Disposition

Hazardous materials identified during walk downs were removed prior to demolition to meet ERDF waste acceptance criteria (ERDF-00011, 2016, *Environmental Restoration Disposal Facility Waste Acceptance Criteria formerly WCH-191 Rev 4*). Demolition debris was sent to and disposed of at ERDF. The work associated with removal of the 2734ZL Building was performed under Work Package 2Z-17-01699.

Associated Waste Information Data System (WIDS) Site

Although not identified as WIDS sites, two french drains that received discharges from the safety shower, eyewash, and floor drain at 2734ZL were adjacent to the facility. The drains were registered as an underground injection control wells (UIC) and were closed in conjunction with demolition of 2734ZL.

Anomalies Discovered During Demolition

No anomalies were discovered during demolition. Soils around the slab displayed no visual evidence of staining or discoloration.

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Attachment 2: Pre-Demolition and Post-Demolition Photographs

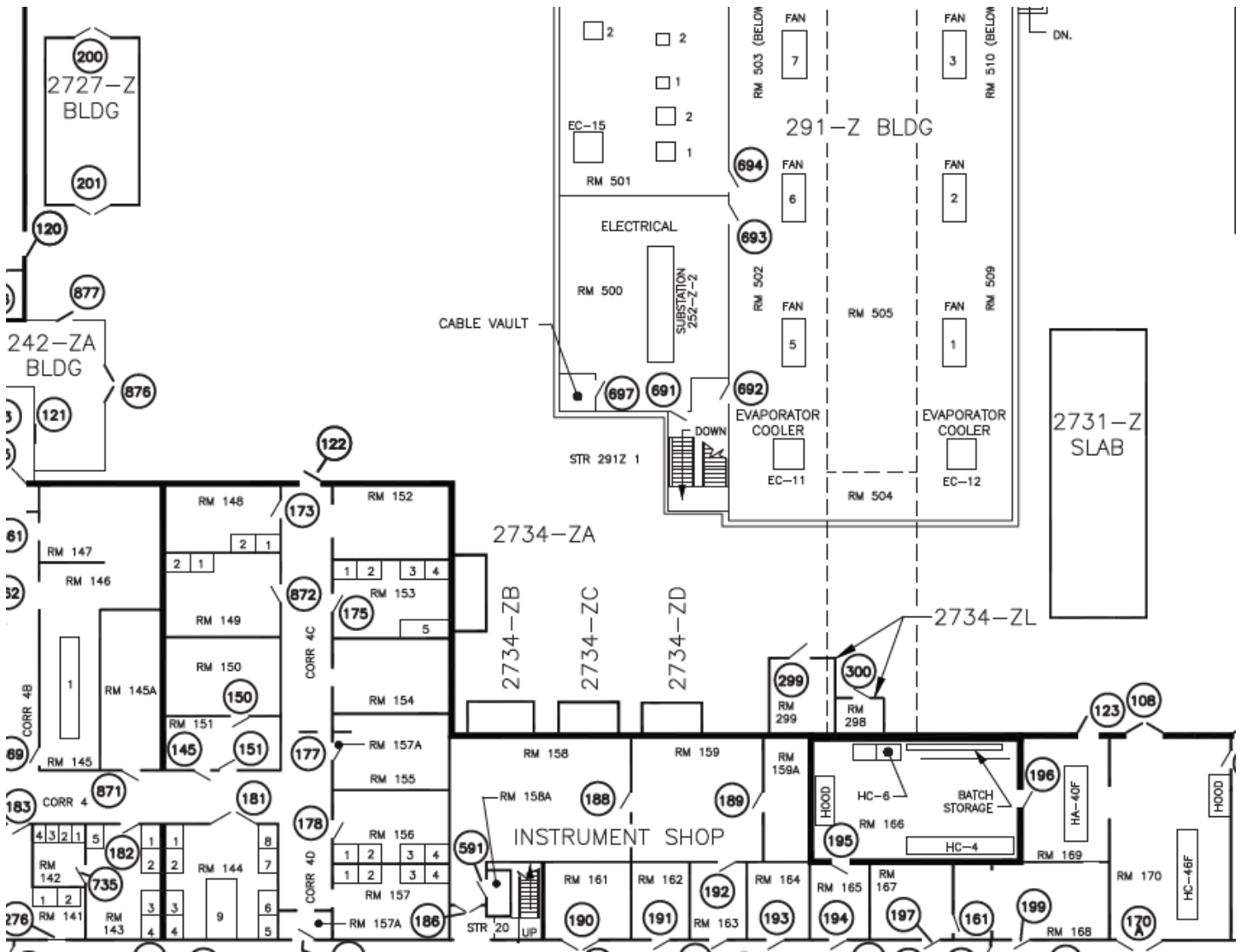


Figure 1. 2734ZL In Relation to Other Buildings

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Figure 1. 2734ZL Pre-Demolition



Figure 2. 2734ZL Post Demolition

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Attachment 3: Supporting Information

Supporting information and documentation for this Facility Status Change Form are provided in Appendix B of CWR-PFP-00012-ADD3, 2734ZA, 2734ZB, 2734ZC, 2734ZD, 2734ZL and 267Z *Endpoint Documentation*, which provides the evidence to document how applicable endpoints for 2734ZL demolition were satisfied. The following list is the Summary of Contents from Appendix B of CWR-PFP-00012-ADD3.

B1 Ready for Demolition Checklist

The attached structures were addressed in the 234-5Z Plutonium Processing and Storage Facility Ready for Demolition Checklist, which identifies tasks verified as complete prior to demolition. Completion of each task on the checklist is verified by appropriate personnel after a walkdown and review of documentation, as needed. The checklist supports the verification for completion of facility endpoints 5, 6, 7, and 14, as well as the complex endpoint C-27.

B2 Work Package Information

Demolition of 267Z, 2734ZA, 2734ZB, 2734ZC, 2734ZD, and 2734ZL was performed under work package 2Z-17-01699. The demolishing of the 2734ZA, 2734ZB, 2734ZC, 2734ZD, and 2734ZL Buildings occurred as part of demolition of Zone 3 of the main 234-5Z Building. The demolishing of 267Z occurred as part of demolition of Zone 2 of the main 234-5Z Building. Work packages 2Z-17-01699 and 2Z-15-04374 will remain open pending the completion of 234-5Z demolition.

B3 Isolation Information

Verification of drains from the 2734ZL Building was completed by inspection of the associated underground injection controls (UIC) prior to demolition. Photographic documentation is provided below. Revision 5 of CHPRC-03240, Verifications of Hazardous Energy Isolations for Buildings 234 5Z, 234 5ZA and 291-Z, documented the isolation of the remainder of the PFP Complex, which included the remaining structures attached to 234-5Z. The page from the section of the VOHEI that documents the only unique isolation from 267Z is provided in this section.

B4 Email Summary and Post Demolition Walkdown

The email documents the virtual walkdown of 2734ZA, 2734ZB, 2734ZC, 2734ZD, 2734ZL, and 267Z.

B5 Chemical Inventory Tracking System (CITS) Reports

The Chemical Inventory Tracking System (CITS) reports for 267Z, 2734ZA, 2734ZB, 2734ZC, 2734ZD, and 2734ZL provide documentation that no chemicals were in storage, supporting endpoint 234 5Z F 14.

B6 Beryllium Verification Reports

Beryllium Verification Reports, which document the sampling and verification activities associated with the attached buildings (267Z, 2734ZA, 2734ZB, 2734ZC, 2734ZD, and 2734ZL), are provided. The reports reflect that all facilities were sampled and none required beryllium controls. These documents support the verification for completion of endpoint 234-5Z-F-09.

B7 Review of Waste Handling and Disposal Records

The memorandum documents the successful review of waste disposal records for 2734ZA, 2734ZB, 2734ZC, 2734ZD, and 2734ZL that were removed as part of the Zone 3 demolition, documenting endpoint 234-5Z-F-20. Waste from 267Z will be addressed as part of the 234-5Z Zone 2 waste.

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B8 Asbestos NESHAP Thorough Inspection Reports

Release sheets for the documentation of the thorough inspection of the buildings for asbestos-containing material (ACM) prior to demolition. The email documents U.S. Environmental Protection Agency (EPA) compliance with the site asbestos program per endpoint C-27. Other asbestos reports include CWR-PFP-00017 for 2734ZA and 2734ZC, CWR PFP 00018 for 2734ZB and 2734ZD, CWR-PFP-00019 for 2734ZL, and CWR PFP 00023 for 267Z. Asbestos abatement was required only for 2734ZA, which was independently field verified, as reflected in the email below. An EPA approval email for leaving potential ACM materials associated with 2734Z and 267Z (potential asbestos gaskets) is also provided. EPA approval for the common wall between 267Z and 234-5Z is addressed in the 234-5Z report.