

# 2735Z 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

**P.O. Box 1600  
Richland, Washington 99352**

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Plateau Remediation Company  
P.O. Box 1600  
Richland, Washington 99352

**APPROVED**  
*By Sarah Harrison at 4:16 pm, Oct 26, 2020*

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Release Approval

Date

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## FACILITY STATUS CHANGE FORM

Date Submitted: 04/04/2019	Area: 200W	Control Number: D4-PFP-060
Originator: James Leary	Facility ID: 2735Z	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 2735Z Bulk Chemical Storage Tanks were deactivated and demolished to slab-on-grade in August and September 2017.

Deactivation and demolition activities included but were not limited to the following:

- Isolated mechanical and electrical utilities.
- Removed and disposed of unattached materials and equipment.
- Performed nonradiological and radiological facility characterization.
- Removed and properly disposed of hazardous materials (e.g., refrigerants, lights [fluorescent and incandescent], batteries, and any items containing lead).
- Conducted and documented a thorough inspection for asbestos-containing material (ACM) and completed a report confirming that ACM was present. Removed and disposed of regulated ACM.
- Completed a beryllium assessment.
- Removed and properly disposed of the above-grade structure. Depending on waste characterization, disposal of mixed and non-mixed waste occurred in the Environmental Restoration Disposal Facility (ERDF).
- Performed demolition using standard practices and equipment such as excavators with attachments for shearing, handling, and size reduction of the structure and associated equipment/components.
- Completed required facility removal actions in accordance with the following documents:
  - DOE/RL-2005-13, 2005, *Action Memorandum for the Plutonium Finishing Plant Above-Grade Structures Non-Time Critical Removal Action*
  - DOE/RL-2011-03, 2014, *Removal Action Work Plan for the Deactivation, Decontamination, Decommissioning, and Demolition of the Plutonium Finishing Plant Complex*
  - HNF-22401, 2004, *Plutonium Finishing Plant (PFP) Complex End Point Criteria*
  - DOE/RL-2015-62, *Plutonium Finishing Plant Endpoint Criteria Checklist for Seven Ancillary Buildings*

### **Total D4 Cost for the Facility:**

\$87,601.45

## FACILITY STATUS CHANGE FORM (continued)

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### 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.

### Description of Current/As-Left Conditions:

The 2735Z slab has been left in place, and a layer of gravel placed on top and contoured to provide a stabilized condition suitable for D4 activities to proceed in adjacent areas.

(See CWR-PFP-00008, Rev. 1, *Ancillary Facilities Demolition Report*.)

### 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

THOMAS TEYNOR  
DOE-RL

Print First and Last Name

  
Signature

04-05-2019  
Date

NOTE: The information on this form also satisfies the related DOE 430.1B Facility Closeout Reporting Requirements.

## FACILITY STATUS CHANGE FORM (continued)

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### Attachment 1: Facility Information

#### 2735Z Bulk Chemical Storage Tank Farm

The 2735Z Bulk Chemical Storage Tank Farm is an aboveground chemical storage tank complex formerly located on the east side of the 234-5Z Building. This complex consisted of four tanks: a carbon tetrachloride tank, a nitric acid tank, an aluminum nitrate nonahydrate (ANN) tank, and a small chemical waste tank. Each tank had its own secondary containment in the form of a rectangular concrete diked/basin. The 2735Z Tank Farm was approximately 37 ft long and 26 ft wide (962 ft<sup>2</sup>). The 2735Z Tank Farm was constructed and began operation in 1949. The oldest design drawings on file are from a renovation in 1953.

#### Characterization

Table 1 summarizes the characterization information collected prior to demolition.

**Table 1. Summary of Characterization Information**

Type	Documented In	Results Summary
Asbestos	<i>CWR-PFP-00024, Rev. 0, Asbestos NESHAP Thorough Inspection Report at 2735Z</i>	An asbestos thorough inspection was conducted for 2735Z. Thermal System Insulation (TSI) and insulation on the exterior of the ANN tank were determined to be regulated ACM and were removed prior to demolition. Gaskets, packings, and mastic were deemed to be Category I or Category II ACM in good condition and were left in place in accordance with the RAWP (DOE/RL-2011-03).
Beryllium	<i>BFA-B-20906-Rev 0, Beryllium Facility Assessment for 2735Z Chemical Storage Spill Containment, dated 10/12/2015</i>	The beryllium assessment determined that 2735Z is a beryllium-cleared facility.
Radiological	No radiological characterization document was completed for 2735Z. Radiological survey reports: <ul style="list-style-type: none"> <li>• Z-1605749</li> <li>• Z-1703041</li> </ul>	The radiological characterization of 2735Z was done in conjunction with asbestos abatement and tank inspections. There were no significant levels of radiological contamination.

#### Waste Disposition

Hazardous materials identified during walkdowns and inspections (including regulated ACM) were removed prior to demolition to meet Environmental Restoration Disposal Facility (ERDF) waste acceptance criteria. Low-level and low-level mixed demolition debris was sent to and disposed of at ERDF. The work associated with removal of the 2735Z Tank Farm was performed under Work Package 2Z-17-01699.

#### Associated Waste Information Data System (WIDS) Sites

No WIDS sites were associated with the 2735Z Building; however, an adjacent underground injection control well (UIC) with stream number 227 received steam condensate from 2735Z. The UIC was closed in conjunction with the demolition of 2735Z.

#### Anomalies Discovered During Demolition

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

**FACILITY STATUS CHANGE FORM** (continued)

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**Attachment 2: Pre-Demolition and Post-Demolition Photographs**



**Figure 1. Bulk Chemical Storage Tank Farm Pre-Demolition**



**Figure 2. Bulk Chemical Storage Tank Farm Post-Demolition**

<b>FACILITY STATUS CHANGE FORM</b> (continued)		
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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-00008-ADD2, Rev. 0, *PFP Ancillary Facilities Endpoint Documentation*, which provides the evidence to document how applicable endpoints for demolition were satisfied. The following list is the Summary of Contents from Appendix B of CWR-PFP-00008-ADD2.

#### **Summary of Contents**

##### **B1 Ready for Demolition Task Checklist**

The 2735Z Ready for Demolition Checklist identifies tasks to be completed prior to demolition. Completion of each task on the checklist is verified by appropriate personnel after a walkdown and review of documentation, as needed.

##### **B2 Completed Work Package Signature Pages**

Electrical isolation of 2735Z was performed under work package 2Z-15-05725, work package 2Z-15-05238 addressed potential chemical residuals in the piping and tanks, and work package 2Z-17-01699 performed the demolition of many structures, including 2735Z. The demolishing of the tanks occurred in August 2017. Work package 2Z-17-1699 completion sheet is not available due to ongoing work and will be included in the 234-5Z demolition report.

The work packages document the demolition of 2735Z and support verification for completion of endpoints F-02 and F-14.

##### **B3 Beryllium Facility Assessment**

The beryllium facility assessment report documents the verification activities associated with the 2735Z structure. The report concluded that the building was clear of beryllium contamination.

##### **B4 Pre-Demolition Radiological Survey Report of 2735Z**

The pre-demolition documentation after the Plutonium Reclamation Facility (PRF) June 8, 2017 contamination release event was limited to a radiological survey taken when the aluminum nitrate nonahydrate [sic] (ANN) tank was verified empty. The survey indicated minor alpha contamination on top of the ANN tank.

##### **B5 Review of Waste Handling and Disposal Records**

The memorandum documents a successful review of waste disposal records.

##### **B6 Email Summary and Post-Demolition Walkdown Checklist**

The email and the work site assessment documents the results of the post-demolition walkdown of 2735Z.

##### **B7 Asbestos NESHAP Thorough Inspection Report at 2735Z and EPA Approval**

CWR-PFP-00024 documents the thorough inspection of 2735Z for asbestos-containing material (ACM) prior to demolition. The report identified the ACM both to be removed prior to and that to remain during demolition. Approval from the U.S. Environmental Protection Agency to allow material to remain during demolition is also attached following the approval page for CWR-PFP-00024.