

242BBL 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 Julia Raymer at 2:56 pm, Apr 02, 2020

Release Approval

Date

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FACILITY STATUS CHANGE FORM

Date Submitted:	Area: 200 East	Control Number: D4-242BBL-01
Originator: D. Turlington/ S. Guillen	Facility ID: 242BBL	Phone: 509-373-0176

Action Memorandum/Removal Action Work Plan:
DOE/RL-2010-102, Rev. 0

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 required facility removal actions were performed in accordance with the DOE/RL-2016-50, Rev. 0, *Removal Action Work Plan for the 200 East Tier 2 Miscellaneous Buildings/Structures*.

The 242B was a 3,067 ft² building constructed of reinforced concrete with an attached metal building. It was located in the 200E Area on the north side of the B Plant Complex. The building was constructed in 1951 and was first used as an evaporator until 1954 when the facility was prepared for its next mission. During 1954-1970, the building housed two fuel corrosion test loops until the mission ended in 1970. From 1970-1985 the 242B building was used by PNNL for research on radioactive particles until it was concluded in 1985.

The 242BL Cask Loading Building was a 600 ft² building constructed in 1963 of metal with a pool-basin in the center and equipment. It was located in the 200E Area on the north side of the B Plant Complex. A hallway connects the 242B and 242BL buildings. The 242BL building supported fuel element rupture tests in the 242B building until the fuel element casks were removed in 1981. There were no subsequent missions after.

To stabilize the 242BL pool-basin prior to final gravel capping of the slab, approximately 3,800 gallons of basin water was pumped into (13) Poly Totes and were filled to 90% of their capacity. Each tote was filled with two bags of Water Works absorbent to absorb the water into a jelled-type solid. As the de-watering pumping was taking place a PBS fixative was being applied inside the basin eternal walls as the basin water was being pumped down to help with contamination control. Once the draining of the 242BL Basin was complete the basin was then filled with a total of 35 yards of CDF Grout. The Poly Totes were shipped to ERDF for disposal and the 242BL Building was sprayed with PBS eternally in preparation for demolition. Air samples for the performance of the dewatering activities were <detectable.

During demolition preparation activities, three areas of radiological contamination were found. i.e. the 242-BL Basin area, a sump located at the wall between Rooms 3 and 4, and a sump beneath a laboratory hood located in Rm 11 (see 242-B/BL Post Demolition Survey Results in other supporting documents). The contamination in these locations were fixed in place with grout and remain on the slab.

The buildings were electrically and mechanically isolated. In 2019, facilities underwent the Cold and Dark process, which all electrical, utility and mechanical lines were isolated. The buildings were sampled and cleared for beryllium. The buildings were evaluated and sampled for asbestos and underwent asbestos abatement. All hazardous materials were removed prior to demolition, where required. The buildings were demolished to slab on grade. The slab was surveyed and a subsequent 6" gravel cap was

FACILITY STATUS CHANGE FORM (continued)

Date Submitted: _____ Area: 200 East Control Number: D4-242BBL-01

Description of Completed Activities and Current Conditions:

placed on top of the slab and contoured to remove tripping hazards and aid water run-off.

200 East Tier 2 Miscellaneous Facilities 242B/BL Field Execution Work started on 1/22/19. Activities associated with inspections and placing a gravel cap was completed on 08/10/19.

Total D4 Cost for the Facility:

Estimated Total Cost: \$4,280,300
Total Waste: 789 Tons.

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:

Above Grade structure completely removed down to grade, the slab was left in place, all penetrations were grouted and plugged and a minimum 6" gravel (5/8 minus) cap was placed over and contoured.

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

See WIDS Summary Sheet - WIDS # assigned - 200-E-332 in "Other supporting documents."

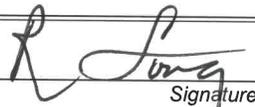
Section 3: List of Attachments

Attachment 1 - 242BBL pictures: Before demolition, during demolition, and after demolition

Other supporting documents:

1. 8-28-19 VSP Footprint 242-BBL Post Demolition Survey Result
2. 242BBL Historical and Cultural Review Letter HCRC#2019-200-011
3. Ecological Review for the 2019 Demolition of the 242B and 242BL Building
4. 242B Beryllium Characterization Apr 7 2016
5. 242BL Beryllium Characterization Apr 7 2016
6. 242B-BL Asbestos Characterization Report
7. TPA-CN-0862 ready for signature (002) DOE RL-2016-50, Removal Action Work Plan for the 200 East Tier 2 Miscellaneous
8. WIDS Summary Sheet - 200-E-332.pdf

BOB LONG
DOE-RL Print


Signature

11/26/2019
Date

FACILITY STATUS CHANGE FORM (continued)

Date Submitted:

Area: 200 East

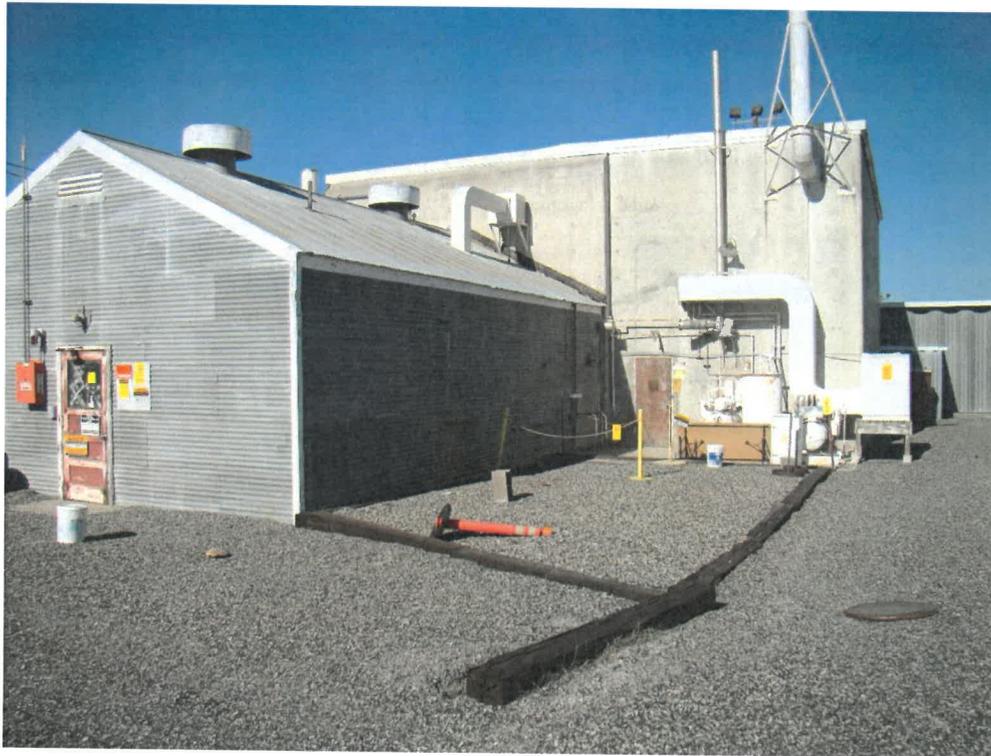
Control Number: D4-242BBL-01

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

Facility Status Change Form for 242BBL
ATTACHMENT 1



242BBL Before Demolition (South view)



242BBL Before Demolition (Northeast view)



242BBL Before Demolition (Northwest view)



242BBL During Demolition (North view)



242BBL During Demolition (North view)



242 BBL After Demolition (North view)