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# Waste Site Reclassification Form

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|---|---|---|
| **Date Submitted:** 8/26/1999 | **Operable Unit(s):** 200-CW-1 | **Control Number:** 99-061 |
| **Originator:** B. H. Ford | **Waste Site ID:** UPR-200-E-138 | |
| **Phone:** 372-9176 | **Type of Reclassification Action:**<br>Rejected ◉<br>Closed-Out ○<br>No Action ○ | |

This form documents agreement among the parties listed below authorizing classification of the subject unit as rejected, closed-out, or no action and authorizing backfill of the site, if appropriate. Final removal from the NPL of no action or closed-out sites will occur at a future date.

**Description of current waste site condition:**

This is a liquid Unplanned Release from 221-B to the 216-B-2-2 Ditch that terminated in the 216-B-3 Pond. The site is within a large, surface stabilized, Underground Radioactive Material area that includes the 216-B-2-1, 216-B-2-2 and 216-B-2-3 Ditches. The Unplanned Release is not separately marked.

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**Basis for reclassification:**

The release site is within the boundary of the 216-B-2-2 Ditch and the 216-B-3 Main Pond. Any contaminated soil from this release will be addressed with the cleanup of WIDS Site 216-B-2-2 and 216-B-3 Pond. This site has been consolidated with the 216-B-2-2 Ditch

| | | |
|---|---|---|
| BRYAN L. FOLEY | [signature] | 1/19/00 |
| DOE Project Manager | Signature | Date |
| Wayne Sopter | Wayne Sopter | 1-19-00 |
| Ecology Project Manager | Signature | Date |
| | | |
| EPA Project Manager | Signature | Date |

# Waste Information Data System
## General Summary Report

10/7/1999

**Site Code:** UPR-200-E-138 **Site Classification:** Accepted **Page 1**

| | | | |
|---|---|---|---|
| **Site Names:** | UPR-200-E-138, Liquid release from B-Plant, UN-200-E-138, UPR-200-W-66, UN-216-W-66 | | |
| **Site Type:** | Unplanned Release | **Start Date:** | 1970 |
| **Status:** | Inactive | **End Date:** | 1970 |
| **Operable Unit:** | 200-CW-1 | **Coordinates:** | |
| **Hanford Area:** | 200E | (E) 574043.75 | |
| | | (N) 137174.672 | |
| | | Washington State Plane | |

**Site Description:** This is a liquid Unplanned Release from 221-B to the 216-B-2-2 Ditch that terminated in the 216-B-3 Pond. The site is within a large, surface stabilized, Underground Radioactive Material area that includes the 216-B-2-1, 216-B-2-2 and 216-B-2-3 Ditches. The Unplanned Release is not separately marked.

This site has been consolidated with the 216-B-2-2 Ditch.

**Location Description:** The origin of the release occurred at the 8-1 Tank, inside the 221-B Building, in the 200 East Area. The release contaminated an area in the 216-B-2-2 Ditch and the 216-B-3 Pond.

**Process Description:** After UPR-200-E-138 occurred, the piping from the 221-B Building was flushed to the 216-B-2-2 Ditch. Due to the contamination levels from the release, the ditch was then backfilled and a replacement ditch (216-B-2-3) was excavated parallel to and south of the entire length of the old ditch. B Plant effluent was then routed to the new ditch.

**Associated Structures:** UPR-200-E-138 was associated with a manometer sensing line from the 8-1 Tank (inside the 221-B Building), the 216-B-2-2 Ditch, the 216-B-2-3 Ditch and the 216-B-3 Pond.

**Site Comment:** On March 23, 1970, earthen dams were built to keep as much contamination out of the 216-B-3 Pond as possible. Chicken wire was placed over the contaminated ditch to keep weeds from blowing into the ditch. A new ditch (216-B-2-3) was dug to replace 216-B-2-2.

**Cleanup Activities:** The ditch has been backfilled and surface stabilized with clean dirt. In 1971, contaminated vegetation was found growing on the backfilled ditch. The first 730 meters (2,400 feet) of the ditch was covered with a plastic sheet root barrier. Final surface stabilization of the "B" ditches (216-B-2-1, 216-B-2-2 and 216-B-2-3) was completed in 1987.

**Release Description:** On March 22, 1970, a leaking manometer sensing line from the 8-1 Tank inside the 221-B Building was flushed down a floor drain connected to a chemical sewer that contaminated an area in the 216-B-2-2 Ditch and the 216-B-3 Pond. The 207-B Retention Basin was bypassed and was not contaminated as a result of this release.

The dose rate on the manometer line in the B Plant pipe gallery was 500 R/hr at a distance of 4 inches. On 3-23-70 at 6:00am, a dose rate of 5 R/hr was noted at check point one of the 216-B-2-2 Ditch. On 3-24-70 at 6:00am, the dose rate at check point one of the 216-B-2-2 ditch was 2 R/hr. Check point two was 10 mr/hr, check point three was 5 mr/hr, check point four was 2R/hr and check point five was 1 R/hr.

**Environmental Monitoring Description:** When active, water samples were collected frequently. Sediment and vegetation samples were collected from the ditch annually. A surface radiological survey of the stabilized ditches is done annually.

**References:**


1. R. E. Smith, et al, 4/23/70, 221-B Building Strontium-90 Release, March 22, 1970, Contract AT(45-1)-2130 Parts 1 & 2, ARH-1646.
2. R. D. Stenner, K. H. Cramer, D. A. Lamar, 10/88, Hazard Ranking System Evaluation of CERCLA Inactive Waste Sites at Hanford, PNL-6456 Vol 1,2,3.
3. 2/89, Preliminary Operable Units Designation Project, WHC-EP-0216.
4. 3/93, B Plant Source Aggregate Area Management Study Report, DOE/RL-92-05, Rev 0.
5. D.H. Deford, R.W. Carpenter, 5/15/95, B-Plant Aggregate Area Management Study Technical Baseline Report, BHI-00179.


## Regulatory Information:

*Programmatic Responsibility*

**DOE Program:** EM-40 **Confirmed By Program:** Yes

**DOE Division:** RPD - Restoration Projects Division

**Responsible Contractor/Subcontractor:** BHI - Bechtel Hanford, Inc.

**Site Evaluation**

**Solid Waste Management Unit:** No

**TPA Waste Management Unit Type:** Unplanned Release Unit

**This Site Was Consolidated With:**
216-B-2-2, 216-B-2-2W, 216-B-1 Ditch
**Reason:** Within Boundary Of Larger Site

**Permitting**

| | | | |
|---|---|---|---|
| **RCRA Part A Permit:** | No | **216/218 Permit:** | No |
| **RCRA Part B Permit:** | No | **NPDES:** | No |
| **Closure Plan:** | No | **State Waste Discharge Permit:** | No |
| **TSD Number:** | | **Septic Permit:** | No |
| **Air Operating Permit:** | No | **Inert Landfill:** | No |

**Air Operating Permit Number(s):**

**Tri-Party Agreement**

**Lead Regulatory Agency:** Ecology

**Unit Category:** RCRA Past Practice (RPP)

**TPA Appendix:** C

**Remediation and Closure**

**Decision Document:**

**Decision Document Status:**

**Remediation Design Group:**

**Closure Document:**

**Closure Type:**

**Post Closure Requirements:**

**Residual Waste:**

## Waste Information:

**Type:** Process Effluent

**Category:** Mixed

**Physical State:** Liquid

**Start Date:** 1970 **End Date:** 1970

**Description:** Radioactive liquid was released while attempting to measure the liquid level of product Storage Tank 8-1 inside the 221-B Building. A breakdown of the radioactive material released indicates 1,495 curies (total beta) was discharged to the ditch including approximately 950 curies of strontium-90, 96 curies of cerium/promethium-144 and 1 curie of cesium-137.

**References:**
1. H. L. Maxfield, 4/1/79, Handbook - 200 Area Waste Sites (Volumes 1, 2 and 3), RHO-CD-673.
2. R. E. Smith, et al, 4/23/70, 221-B Building Strontium-90 Release, March 22, 1970, Contract AT(45-1)-2130 Parts 1 & 2, ARH-1648.
3. 3/93, B Plant Source Aggregate Area Management Study Report, DOE/RL-92-05, Rev 0.

## Field Work:

| | | | |
|---|---|---|---|
| **Type:** | Site Walkdown | | |
| **Begin Date:** | 07/30/1999 | **Field Crew:** | CR Webb |
| **End Date:** | 07/30/1999 | | |
| **Purpose:** | verification | | |
| **Comment:** | Stabilized with the ditch. It is not separately marked or posted. | | |
| **References:** | 1. C. R. Webb, Field Logbook assigned to Christine Webb, EL-1255 and EL-1255-1. | | |

## Images:

| | |
|---|---|
| **Date Taken:** | 2/11/98 |
| **Pathname:** | \\bhl002\esd-img\200E\1317\1317_01.JPG |
| **Description:** | Photo shows the stabilized 216-B-2-2 ditch (looking west) |