

1
2
3
4

FACT SHEET
PART V, CLOSURE UNIT GROUP 12, 216-A-37-1 CRIB

DRAFT

1
2
3
4

This page intentionally left blank.

DRAFT

1 **FACT SHEET**

2 **PART V CLOSURE UNIT GROUP 13, 216-A-37-1 CRIB**

3 **UNIT DESCRIPTION**

4 The 216-A-37-1 Crib is inactive and is permitted as an unlined, man-made surface impoundment. It is
5 located outside the 200 East Area perimeter fence, east of the Plutonium-Uranium Extraction (PUREX)
6 Facility. The crib is included in the 200-EA-1 Operable Unit, and is within the 200-PO-1 Groundwater
7 Operable Unit.

8 The 216-A-37-1 Crib is about 5.2 meters (17 feet) deep, 213 meters (700 feet) long, and 3 meters (10
9 feet) wide at the bottom. The crib sides slope at 1:1.

10 The 216-A-37-1 Crib operated as a percolation unit for the 242-A Evaporator process condensate. It was
11 used from March 1977 through April 1989, when it was removed from service. After operations halted
12 in 1989, stabilization and preventive radiation control measures were implemented to prevent potential
13 radioactive emissions associated with this unit. The measures included sealing vent risers and grouting a
14 distribution box. The crib is marked and surrounded with concrete markers and signage indicating
15 underground radioactive material.

16 **TYPE AND QUANTITY OF WASTE**

17 The 216-A-37-1 Crib's design capacity was estimated at 327,000 liters (86,400 gallons) per day, based
18 on the daily output of evaporator process condensate during operation of the 242-A Evaporator. During
19 operation, the 216-A-37-1 Crib received approximately 3.7×10^8 liters (9.8×10^7 gallons) of process
20 condensate from the 242-A Evaporator. Mostly, the waste discharge to the crib consisted of water with
21 dilute quantities of various solvents.

22 The Permittees have investigated potential soil and groundwater contamination through

- 23 • Remedial investigations.
- 24 • Groundwater monitoring data.
- 25 • Available historical process operations and disposal knowledge.
- 26 • Waste site summary reports from Hanford's Waste Information Data System database.
- 27 • Documents referenced in *Interim Status Groundwater Plan for the 216-A-37-1 PUREX Plant*
28 *Crib*, DOE/RL-2010-92, Rev. 0.

29 **BASIS FOR PERMIT CONDITIONS**

30 Two Tri-Party Agreement milestones affect this unit. Milestone M-037-02 requires the Permittees to
31 submit a revised closure plan by June 30, 2014. The plan must meet the closure plan requirements in
32 WAC 173-303-610.

33 Condition V.13.B.1 requires the Permittees to submit a revised closure plan and post-closure plan
34 according to the schedule in Milestone M-037-10. Permit Condition V.13.B.7 requires submittal of a
35 revised sampling and analysis plan when the closure plan is submitted.

36 **Interfacing RCRA and CERCLA Closure Requirements**

37 The State of Washington's Dangerous Waste Regulations allow the director of the Department of Ecology
38 to substitute alternative groundwater monitoring requirements for the requirements prescribed for
39 regulated units under WAC 173-303-645 when the regulated unit is situated amongst other solid waste
40 management units or areas of concern and it is likely that releases from the regulated unit and the solid
41 waste management unit have comeingled.

1 Ecology can accept the CERCLA groundwater monitoring program as required by the Tri-Party
2 Agreement to fulfill its RCRA requirements if Ecology determines that the groundwater program will
3 support a remedy that is protective of human health and the environment. The criteria for meeting
4 protectiveness are the performance standard in WAC 173-303-610(2)(a).

5 Releases of contaminants to groundwater from this regulated unit have occurred, and these releases have
6 comingled with plumes from solid waste management units. Therefore, the Permittees can choose to
7 request approval for the use of alternative groundwater monitoring protection requirement provision in
8 WAC 173-303-645(1)(e) as specified in condition II.F.2.

9 Condition V.13.E.2 requires the Permittees to submit a final status groundwater monitoring plan in
10 conjunction with a final closure plan. The final closure plan along with permit conditions will qualify as
11 the enforceable document.

12 **CLOSURE AND POST-CLOSURE**

13 Milestone M-037-02 requires the Permittees to submit, by June 30, 2014, a revised closure plan that
14 meets the closure plan requirements described in WAC 173-303-610. Condition V.13.B.1 requires that
15 the Permittees submit a revised closure plan and post-closure plan according to the schedule in Milestone
16 M-037-02. Condition V.13.B.7 requires the Permittees to submit a revised sampling and analysis plan
17 when the revised closure plan is submitted.

18 Ecology may accept the final CERCLA remedial actions for the 200-EA-1 Operable Unit, including
19 institutional controls, as satisfying the contingent post-closure care and maintenance requirements of
20 WAC 173-303-650(6)(c)(i) and WAC 173-303-610(8). A post-closure groundwater monitoring plan
21 will be submitted with a final closure plan.

22 **Closure Activities**

23 Conditions V.13.B.2 through V.13.B.6 list what the Permittees must include, at a minimum, in the closure
24 plan. Requirements include a schedule for closure, identification of cleanup levels and standards, and a
25 sampling and analysis plan.

26 The Permittees will comply with the closure requirements of WAC 173-303-610(5) for cleanup of
27 underlying soils.

28 **Groundwater**

29 Condition V.13.E.1 requires the Permittees to implement the interim status groundwater monitoring plan
30 in Addendum D. Condition V.13.E.2 requires the Permittees to submit a final status groundwater
31 monitoring plan with the closure plan required in Condition V.13.B.1. Interfacing of RCRA and
32 CERCLA for groundwater is discussed above.

33 **RECORDKEEPING AND REPORTING**

34 Condition V.13.F requires the Permittees to place documentation of all work conducted (such as results
35 of monitoring, testing, and analytical work and quality assurance and control data) in the Hanford
36 Facility Operating Record.

37 **SECURITY**

38 The 216-A-37-1 Crib is within the secured area of Hanford. Access to the unit is subject to the general
39 security provision of Condition II.L. Security provisions, access controls, and signage specific to this unit
40 will comply with the requirements of WAC 173-303-310.

41
42
43

1 **CONTINGENCY PLAN**

2 Because the 216-A-37-1 Crib no longer accepts liquid waste and is not in operation, there is no need for
3 a unit-specific contingency plan. However, to ensure the safety of Hanford workers and to protect public
4 health and the environment during closure of the unit, the Permittees must follow contingency planning
5 and emergency management requirements for Hanford.

6 Condition II.A describes the requirements for facility contingency planning and refers to the
7 requirements of Attachment 4, *Hanford Emergency Management Plan*.

8 **INSPECTIONS**

9 Addendum I contains the inspection schedule. Since this unit is inactive, the permit requires an
10 inspection once a year. If any potential threats to human health or the environment arise, the Permittees
11 will increase inspections to quarterly until the threats are removed.

12 **TRAINING**

13 The Permittees will include the training requirements established in Addendum G in a written training
14 plan, as required by Condition II.C.1 and WAC 173-303-330(2)(a) and (b). The plan will include the job
15 classifications identified for 216-A-37-1 Crib closure work.

16 **REQUESTED VARIANCES OR ALTERNATIVES**

17 It was discovered that the process code in Section XII, column A is incorrect. The 216-A-37-1 Crib is a
18 surface impoundment. The current code listed in Section XII, column A is for solid waste landfill.
19 Condition V.13.A.1 requires the Permittees to submit a revised Part A Permit Application to correct the
20 code 60 days after the Permit is in effect.

21 Condition V.13.B.1 requires a schedule for submitting a revised closure plan. The schedule is justified
22 because the removal and remediation work will take longer than the 180 days required by WAC 173-303-
23 610 (4)(b). Milestone M-037-02 sets June 30, 2014, as the date the Permittees must submit a revised
24 closure plan, contingent closure plan, and post-closure plan.

25 **STATE ENVIRONMENTAL POLICY ACT (SEPA) DETERMINATION**

26 The SEPA determination for this unit is in the Hanford-Wide Permit Fact Sheet.

27

1
2
3
4

This page intentional left blank.

DRAFT