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**FACT SHEET – PART V CLOSURE UNIT GROUP 14,
TREATMENT, STORAGE AND DISPOSAL UNIT,
216-S-10 POND AND DITCH**

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1 **FACT SHEET –**
2 **PART V CLOSURE UNIT GROUP 14, TREATMENT, STORAGE AND DISPOSAL UNIT,**
3 **216-S-10 POND AND DITCH**

4 **UNIT DESCRIPTION**

5 The 216-S-10 Pond and Ditch (216-S-10) is non-operational and is permitted as an unlined (non-
6 compliant) dangerous waste surface impoundment. It was used to dispose of chemical sewer discharges
7 from the Reduction Oxidation (REDOX) facility near the 200 West Area.

- 8 • The 216-S-10 Pond covered 20,234 square meters (5 acres). It included four finger-leach
9 trenches. The Permittees think the pond is 2.4 meters (8 feet) deep at its deepest point.
- 10 • The 216-S-10 Ditch is about 686 meters (2250 feet) long, 1.2 meters (4 feet) wide at its base,
11 and at least 8 meters (6 feet) deep.

12 216-S-10 began receiving wastewater from the REDOX Facility chemical sewer in August 1951. The
13 Permittees added the 216-S-10 Pond to the southwest end of the ditch in February 1954 for more
14 disposal capacity. The wastewater Permittees discharged into the 216-S-10 Ditch flowed into the 216-S-
15 10 Pond, where it evaporated or infiltrated into the ground.

16 In October 1985, the Permittees decommissioned, backfilled, and stabilized the 216-S-10 Pond and the
17 southwest end of the 216-S-10 Ditch. The Permittees stopped using the northern portion of the 216-S-10
18 Ditch in October 1991. In July 1994, they plugged the effluent supply pipeline with concrete near the
19 outfall. The rest of the 216-S-10 Ditch was decommissioned in 1991.

20 **TYPE AND QUANTITY OF WASTE**

21 The 216-S-10 Pond and Ditch received waste from the Chemical Engineering Laboratory between 1980
22 and 1983. Generally, the waste received consisted of dilute quantities of inorganic and/or organic
23 chemicals. The Part A form (permit application) for this closure unit group identifies dangerous waste
24 constituents.

25 It received one documented discharge of dangerous waste, which was simulated double-shell tank slurry.
26 Approximately 1,000 pounds (450 kilograms) of dangerous waste were discharged to the unit. The waste
27 had the dangerous waste characteristics of ignitability, corrosivity, characteristic waste, and toxic
28 state-only waste.

29 The 216-S-10 Pond and Ditch also received non-regulated wastewater such as water tower overflow,
30 cooling water, and rainwater.

31 The Permittees have investigated soil and groundwater contamination at the 216-S-10 Pond and Ditch
32 through:

- 33 • Remedial investigations.
- 34 • Groundwater monitoring data.
- 35 • Knowledge of historical process operations and disposal.
- 36 • Waste site summary reports from Hanford's Waste Information Data System database.
- 37 • References in DOE/RL-2008-61, *Interim Status Groundwater Monitoring Plan for the 216-S-10*
38 *Pond and Ditch*.

39 The unit was designed to percolate approximately 150,000 gallons (567,800 liters) of waste a day.

40 **BASIS FOR PERMIT CONDITIONS**

41 Two Tri-Party Agreement milestones affect cleanup of 216-S-10. Milestone M-037-03 requires the
42 Permittees to submit a revised closure plan for 216-S-10 by June 30, 2014. Milestone M-037-11
43 requires the Permittees to finish the closure by September 30, 2016.

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Interfacing RCRA and CERCLA Closure Requirements

The State of Washington’s Dangerous Waste Regulations allow the director of the Department of Ecology to substitute alternative groundwater monitoring requirements for the requirements prescribed for regulated units under [WAC 173-303-645](#) when the regulated unit is situated amongst other solid waste management units or areas of concern and it is likely that releases from the regulated unit and the solid waste management unit have comingled.

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

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

Condition V.14.E.2 requires the Permittees to submit a final status groundwater monitoring plan in conjunction with a final closure plan. The final closure plan along with permit conditions will qualify as the enforceable document.

CLOSURE AND POST-CLOSURE

Milestone M-037-03 requires the Permittees to submit, by April 30, 2013, a revised closure plan that meets the closure plan requirements in [WAC 173-303-610](#). Condition V.14.B.1 requires that the Permittees submit a revised closure and post-closure plan. Condition V.14.B.7 requires the Permittees to submit a revised sampling and analysis plan when the revised closure plan is submitted.

Ecology may accept the final CERCLA remedial actions for the 200-UP-1 Operable Unit, including institutional controls, as satisfying the post-closure care and maintenance requirements of [WAC 173-303-650\(6\)\(c\)\(i\)](#) and [WAC 173-303-610\(8\)](#). The Permittees must submit a post-closure groundwater monitoring plan with a final closure plan.

Closure Activities

Conditions V.14.B.2 through V.14.B.6 list what the Permittees must, at a minimum, include in the closure plan. Requirements include a schedule for closure, identification of cleanup levels and standards, and a sampling and analysis plan.

The Permittees will comply with the closure requirements of [WAC 173-303-610\(2\)](#) for cleanup of underlying soils.

Groundwater

Condition V.14.E.1 requires the Permittees to follow the interim status groundwater monitoring plan in Addendum D. Condition V.14.E.2 requires the Permittees to submit a final status groundwater monitoring plan with the closure plan required in Condition V.14.B.1. Interfacing of RCRA and CERCLA for groundwater is discussed above.

RECORDKEEPING AND REPORTING

Condition V.14.F requires the Permittees to place documentation of all work conducted (such as results of monitoring, testing, and analytical work and quality assurance and control data) in the Hanford Facility Operating Record.

SECURITY

1 The 216-S-10 Pond and Ditch is within the secured area of Hanford. Access to the unit is subject to the
2 general security provision of Condition II.L. Security provisions, access controls, and signage specific to
3 this unit will comply with the requirements of [WAC 173-303-310](#).

4 **CONTINGENCY PLAN**

5 Since the 216-S-10 Pond and Ditch no longer accepts liquid waste and is not in operation, there is no
6 need for a unit-specific contingency plan. However, to ensure the safety of Hanford workers and to
7 protect public health and the environment during closure of the unit, the Permittees must follow
8 contingency planning and emergency management requirements for Hanford.

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

11 **INSPECTIONS**

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

15 **TRAINING**

16 The Permittees will include the training requirements established in Addendum G in a written training
17 plan, as required by Condition II.C.1 and [WAC 173-303-330](#)(2)(a) and (b). The plan will include the job
18 classifications identified for 216-S-10 Pond and Ditch closure work.

19 **REQUESTED VARIANCES OR ALTERNATIVES**

20 Condition V.14.B.1 requires a schedule for submitting a revised closure plan. The schedule is justified
21 because the removal and remediation work will take longer than the 180 days required by [WAC 173-303-](#)
22 [610](#) (4)(b). Milestone M-037-03 sets April 30, 2013, as the date the Permittees must submit a revised
23 closure plan, contingent closure plan, and post-closure plan.

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

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

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