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**FACT SHEET**  
**PART VI, POST-CLOSURE UNIT GROUP 4, 1324-N/NA SURFACE IMPOUNDMENT AND PERCOLATION POND**

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1 **FACT SHEET**

2 **PART VI, POST-CLOSURE UNIT GROUP 4, 1324-N/NA SURFACE IMPOUNDMENT AND**  
3 **PERCOLATION POND**

4 **UNIT DESCRIPTION**

5 The Permittees used the 1324-N/NA Surface Impoundment and Percolation Pond to dispose of liquid  
6 waste from the 163-N Demineralization Plant and 183-N Filtered Water Plant. This post-closure group  
7 includes the 1324-N Surface Impoundment and the 1324-NA Percolation Pond and the pipelines to the  
8 units and between the units.

9 1324-NA Percolation Pond was an unlined man-made pond (earthen percolation unit) used to treat and  
10 dispose of corrosive effluent wastes from 163-N Water Plant, the 183-N Filtered Water Plant, and the  
11 1324-N Surface Impoundment. It operated continuously from 1977 until 1991.

12 From 1977 until 1983 the treatment and disposal system operated as a cascade in which particles dropped  
13 out in settling ponds and effluent flowed through the ponds and percolated into the soil column.  
14 Dredging was done frequently to improve percolation.

15 In 1983 1324-NA pond was enlarged from 4.5 million liters (1.2 million gallons) to 11.4 million liters (3  
16 million gallons) to accept all remaining waste from 163-N Demineralization Plant.

17 The 1324-N Surface Impoundment was a lined pond with two 45-mil Hypalon™ liners and a leachate  
18 collection system. It was used to treat corrosive effluents from 163-N Demineralization Plant prior to  
19 discharge to 1324-NA Percolation Pond.

20 1324-N Surface Impoundment had a design capacity of 1,514,160 liters (4,000,000 gallons) per day.  
21 1324-N Surface Impoundment operated from 1986 until 1988. It was replaced by the Elemental  
22 Neutralization Unit installed in 163-N Demineralization Plant.

23 **TYPE AND QUANTITY OF WASTES**

24 The waste consisted of:

- 25 • Listed waste (F003)
- 26 • Toxicity characteristic waste (D006, D007, D008, and D009)
- 27 • Corrosivity characteristic waste (D002)
- 28 • State-only carcinogenic waste (WC02)
- 29 • State-only (WT02)

30 Reports on quantities of effluent discharged to 1324 N and 1324-NA vary through the life of the  
31 combined unit. Conservative estimates are approximately 1,500,000,000 pounds of corrosives waste  
32 (D002) were treated and disposed annually.

33 **BASIS FOR PERMIT CONDITIONS**

34 The 1324-N Surface Impoundment & 1324-NA Percolation Pond were included in the Hanford Facility  
35 Dangerous Waste Permit, Revision 8C, as Part V, Closure Unit 3. The 1324-N Surface Impoundment and  
36 1324-NA Percolation Pond were closed under the closure plan in Closure Unit 3, Chapter 4. The  
37 independent, qualified, registered, professional engineer certification was submitted to Ecology on  
38 February 7, 2003 (letter 03-RCA-0136).

39 **CLOSURE**

40 The Permittees will submit the following documents to comply with the closure requirements in [WAC](#)  
41 [173-303-610\(3\)](#):

- 1 • A detailed plan for a final cover that complies with the requirements of [WAC 173-303-650\(6\)\(a\)\(ii\)](#) or a technical report that could justify Ecology granting alternative requirements
- 2 under [WAC 173-303-610\(1\)\(e\)](#).
- 3
- 4 • A final status integrated groundwater monitoring plan as required by Condition VI.4.D.1 will be
- 5 submitted 6 months after the Record of Decision for the 100-NR-1 Operable Unit is issued.

6 The Permittees will install the final cover as a part of the final remedial action work plan for the 100-N  
7 Area.

## 8 **POST-CLOSURE CARE AND MAINTENANCE**

9 Condition VI.4.B.1 requires the Permittees to comply with the post-closure plan in Addendum H.  
10 Condition VI.4.B.2 requires the Permittees to submit a revised, updated post-closure plan to include  
11 maintenance and repair of the final cover as necessary 6 months after the 100-NR-1 Operable Unit Record  
12 of Decision is issued.

## 13 **GENERAL WASTE MANAGEMENT REQUIREMENTS**

14 Condition VI.4.C.1 requires the Permittees to conduct all waste analyses according to the approved  
15 sampling and analysis plan in Addendum D. Condition requires the Permittees to receive prior Ecology  
16 approval according to [WAC 173-303-830](#) for changes to the analytical methods used in this permit.

## 17 **GROUNDWATER MONITORING REQUIREMENTS**

18 Condition VI.4.D.1 requires the Permittees to submit a revised integrated groundwater monitoring plan  
19 for the 100-NR-2 operable unit in accordance with the requirements in [WAC 173-303-610\(8\)](#) and -650(6)  
20 6 months after the 100-NR-1 Operable Unit Record of Decision is issued.

21 Condition VI.4.D.2 requires that the requirements and schedules for performance monitoring for the 100-  
22 NR-2 operable unit to be included in the 100-NR-2 RD/RA Work Plan are incorporated under the terms  
23 of Condition I.A.4.

24 Condition VI.4.D.3 requires the Permittees to comply with the interim status groundwater monitoring  
25 plan in Addendum D, including specific sampling requirements for metals and anions.

26 Condition VI.4.D.4 requires the Permittees to sample wells described in Addendum D three times a year.

27 Condition VI.4.D.5 requires the Permittees to evaluate the effectiveness of the 100-NR-2 remedy for  
28 groundwater.

29 Condition VI.4.D.6 requires the Permittees to summarize the evaluations in the Annual Hanford Site  
30 Groundwater Monitoring Report.

## 31 **RECORDKEEPING AND REPORTING**

32 The Permittees are required to place documentation of all work conducted (such as results of monitoring,  
33 testing, analytical work and quality assurance and control data) in the Hanford Facility Operating Record,  
34 per Condition II.I.2.

## 35 **SECURITY**

36 1324-N/NA Surface Impoundment and Percolation Pond is within the secured area of Hanford. Access to  
37 the unit is subject to the general security provision of Condition II.L. Security provisions, access  
38 controls, and signage specific to this unit will comply with the requirements of [WAC 173-303-310](#).

## 39 **INSPECTIONS**

40 Conditions VI.4.I require the Permittees to follow the inspection schedule in Permit Condition II.X. In  
41 the event of potential threats to human health or the environment, the Permittees will increase inspections  
42 to quarterly until the threats are removed.

1 **TRAINING**

2 The Permittees will follow Condition II.C requirements for personnel training. Requirements include a  
3 training program, a written training plan, and training records. WAC 173-303-330 is the basis for these  
4 conditions.

5 **REQUESTED VARIANCES OR ALTERNATIVES**

6 There are no requested variances or alternatives for the 1324-N/NA Surface Impoundment and  
7 Percolation Pond.

8 **STATE ENVIRONMENTAL POLICY ACT (SEPA)**

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

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