



DEPARTMENT OF
ECOLOGY
State of Washington

Fact Sheet

**Proposed Permit Modification to Part V, of the
*Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous
Waste Portion, Revision 8c, for the Treatment, Storage, and Disposal of
Dangerous Waste, WA7890008967***

May 2016

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Fact Sheet

Proposed Permit Modification to Part V of the *Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion, Revision 8c, for the Treatment, Storage, and Disposal of Dangerous Waste, WA7890008967*

Permittees

This draft permit modification is to be issued to the United States Department of Energy (USDOE), as the owner and operator of the 207-A South Retention Basin Closure Unit Group, and to CH2M HILL Plateau Remediation Company as the co-operator.

United States Department of Energy
Richland Operations Office
(Owner/Operator)
PO Box 550
Richland, Washington 99352

CH2M HILL Plateau Remediation Company
(Co-Operator)
PO Box 1600 MSIN H7-30
Richland, Washington 99352

The Washington State Department of Ecology (Ecology) is proposing a draft permit modification to Part V of the *Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion, Revision 8C, for the Treatment, Storage, and Disposal of Dangerous Waste* (hereafter called the Hanford Site-wide Permit). The draft permit modification adds Closure Unit Group 5, 207-A South Retention Basin (207-A SRB), to Part V of the Hanford Site-wide Permit. This draft permit modification consists of the Closure Unit Group 5 chapter permit conditions, Part A form, and closure plan.

Ecology developed this Fact Sheet to fulfill the requirements of [Washington Administrative Code \(WAC\) 173-303-840\(2\)\(f\)](#).

This Fact Sheet is divided into seven sections:

- 1.0 Hanford Site-wide Permit
- 2.0 207-A South Retention Basin Unit Description and Closure Plan History
- 3.0 Class 3 Permit Modification Process for 207-A SRB
- 4.0 Proposed Modification to Part V of the Site-wide Permit
- 5.0 State Environmental Policy Act (SEPA)
- 6.0 Temporary Authorization
- 7.0 Procedures for Reaching a Final Decision on the Draft Permit Modification

1.0 Hanford Site-wide Permit

The Washington State Department of Ecology's (Ecology) Nuclear Waste Program (NWP) manages dangerous waste within the State by writing permits to regulate its treatment, storage, and disposal.

Ecology has authority to regulate dangerous waste and the dangerous waste components of mixed (radioactive and dangerous) waste, under [Chapter 70.105 RCW](#) and [WAC 173-303](#). The Hanford Site-wide Permit has requirements for the treatment, storage, and disposal of dangerous and mixed waste at Hanford. Ecology does not regulate waste that is solely radioactive. USDOE has exclusive authority to regulate radioactive materials and radioactive waste at Hanford.

Ecology first issued the Hanford Site-wide Permit in 1994. The facility has been operating under that initial permit since then. Since 1994, the permit has been modified several times to incorporate changes or updates and to incorporate and close out several dangerous waste management units (DWMU).

The Hanford Site-wide Permit provides standard and general facility conditions, as well as unit-group conditions for the operation, closure, and post-closure care of DWMUs at Hanford. These DWMUs are administratively grouped into operating, closure, or post-closure unit groups in the Site-wide Permit. Each unit group may contain one or more DWMU.

The Hanford Site-wide Permit is organized as follows:

Part I and Part II	Standard and General Facility Permit Conditions
Part III	Operating Units
Part IV	Corrective Action
Part V	Closure Units
Part VI	Post Closure Units

The Washington State Dangerous Waste Regulations in [WAC 173-303-830](#) describe the types of changes or modifications that may be made to the Hanford Site-wide Permit issued by Ecology.

In 2012, the NWP issued draft Revision 9 of the Hanford Site-wide Permit with 37 unit groups and two Corrective Action units. The DWMUs within the unit groups are operating, closing, or in post-closure. At this time, Ecology is reconciling the over 5,000 public, United States Environmental Protection Agency (EPA), and Permittee comments received on that Revision 9 draft. Until a new Revision 9 of the Hanford Site-wide Permit is issued, the legal and enforceable revision of the Hanford Site-wide Permit is Revision 8c.

This draft permit modification adds Closure Unit Group 5, 207-A SRB to Part V of the Hanford Site-wide Permit. The Part V, Closure Unit Group 5 draft permit modification consists of the unit group permit conditions specific to closure of the 207-A SRB, the 207-A SRB Part A form in Chapter 1, and the 207-A SRB Closure Plan in Chapter 4. Adding the 207-A SRB to Part V of the Hanford Site-wide Permit is a Class 3 permit modification.

2.0 207-A South Retention Basin Closure Unit Group Description and Closure Plan History

The 207-A SRB are inactive surface impoundments. USDOE used 207-A SRB to temporarily store, sample, and analyze 242-A Evaporator process condensate before discharging it to the 216-A-37-1 Crib. The 207-A SRB first received process condensate (mixed waste) from the 242-A Evaporator in March 1977. Discharge to the 207-A SRB ended in April 1989. The 207-A SRB no longer receives or stores waste. A total of approximately 377,000,000 liters (99,590,000 gallons) of process condensate passed through the 207-A SRB.

The 207-A SRB is located in the 200 East Area of the Hanford Site, near the east perimeter fence, directly east of the 242-A Evaporator. The 207-A SRB consists of three concrete storage cells, which are each generally trapezoidal in shape. Each cell has a 264,979 liter (70,000 gallon) design capacity. The bottom dimension of each cell is 16.8 meters (55 feet) long, 3 meters (10 feet) wide at the bottom, and 2.1 meters (7 feet) deep. At construction in 1977, a Hypalon® liner was installed beneath the concrete. The cells were covered with an elastomeric coating in 1982 to minimize the process condensate from potentially penetrating the concrete. Hypalon® is a registered trademark of the DuPont Corporation, Wilmington, Delaware.

In 2003, the Permittees sampled the concrete of the 207-A SRB as well as the soil beneath the concrete basin. Concentrations of dangerous waste constituents in soil were less than the applicable Model Toxics Control Act (MTCA) Method B cleanup levels for unrestricted land use.

The Permittees submitted an initial closure plan in 2014 for the purpose of satisfying Tri-Party Agreement Milestone M-037-02.



Figure 1. Ground level view of the 207-A SRB, looking west towards the 242-A Evaporator (upper left in photo). Photo taken by United States Department of Energy in July 2015.

3.0 Class 3 Permit Modification Process for 207-A SRB

On June 25, 2015, the Permittees submitted a Class 3 permit modification request to Ecology for the 207-A SRB which included:

- 1) A temporary authorization request.
- 2) A draft closure plan.
- 3) A SEPA checklist.

The Permittees held a public comment period from June 30 through August 28, 2015, with a public presentation of the 207-A SRB draft closure plan on August 5, 2015. The draft closure plan to be included as Chapter 4, Part V of the Revision 8c permit as a closure unit, was received by Ecology on December 14, 2015. On December 17, 2015, Ecology issued a State Environmental Policy Act (SEPA) Determination of Non-significance (DNS) for the 207-A SRB work. The Permittees submitted a revised Part A Form on January 28, 2016. Ecology will hold a 45 day comment period regarding the draft Class 3 permit modification in the second quarter of 2016.

Public comments from the Permittees' comment period (June 30 through August 28, 2015) are addressed by Ecology in a Response to Comments document which accompanies the draft permit. The 207-A SRB closure will modify the Revision 8c permit, but public comments regarding the 207-A SRB in the Draft Revision 9 permit public comment period (May 1 through October 22, 2012) are also addressed by Ecology in the Response to Comments document.

The response to comment document from the USDOE 60-day public comment period and the Draft Revision 9 permit is available online at <http://www.ecy.wa.gov/programs/nwp/commentperiods.htm>.

4.0 Proposed Modification to Part V of the Site-wide Permit

4.1 Closure Plan

Closure of the 207-A SRB will be conducted in accordance with approval of the draft closure plan, included as Chapter 4, Closure Plan. Closure will be performed based on the requirements under [WAC 173-303-610\(2\)](#), the "Closure performance standard." The standard:

- i. Minimizes the need for further maintenance.
- ii. Controls, minimizes, or eliminates to the extent necessary to protect human health and the environment, post-closure escape of dangerous waste, dangerous constituents, leachate, contaminated runoff, or dangerous waste decomposition products to the ground, surface water, groundwater, or the atmosphere.
- iii. Returns the land to the appearance and use of surrounding land areas to the degree possible give the nature of the previous dangerous waste activity.

The 207-A SRB is anticipated to clean close. However, soil analytical results must meet the cleanup levels established in the closure plan in order for the 207-A SRB to clean close. Because the 207-A SRB is anticipated to clean close, no alternative requirements were considered.

4.2 Basis for Closure Unit Group 5 Permit Conditions

The proposed draft Class 3 permit modification adds Closure Unit Group 5, 207-A SRB to Part V of the Site-wide Permit. The draft permit modification consists of a unit description and set of permit conditions, Part A Form as Chapter 1, and the closure plan as Chapter 4. Once modified, the following chapters will be present under 207-A SRB in Part V of the Site-wide permit:

Chapter 1: Part A Form

Chapter 3: Groundwater Monitoring – Reserved

Chapter 4: Closure Plan

Chapter 5: Post-closure Plan – Reserved

Chapters 3 and 5 are reserved because no requirement exists to generate these chapters as of yet. If the 207-A SRB cannot clean close under the closure plan comprising Chapter 4, then the Permittees will submit the requested plans per permit condition V.5.B.5.

The unit group permit conditions and chapters in Part V, Closure Unit Group 5, ensure protection of human health and environment by requiring compliance with the closure requirements under [WAC 173-303](#). Ecology reviewed the closure plan submittal for the 207-A SRB; and has included permit conditions which require the Permittees to close in accordance with the closure plan. The closure plan has been modified to ensure sufficiency for documenting and implementing draft closure requirements for the 207-A SRB. However, the draft closure plan can be revised based on comments from Ecology's comment period or based on necessary changes driven by analytical results of samples collected.

Permit Condition V.5.A is a standard condition that appears as the first permit condition for each unit group. V.5.A refers to the Site-wide Permit Attachment 9: Permit Applicability Matrix, which identifies which Part I and Part II Permit Conditions are applicable to DWMUs within Part III, V, or VI unit groups. The V.5.A permit condition also mitigates any potential conflicts between the unit group permit conditions, and the Part I and II permit conditions.

Permit Condition V.5.B.1 requires the Permittees to comply with all closure plan requirements. The closure plan is located in permit Chapter 4, Closure Plan. The 207-A SRB must be closed in accordance with the closure plan.

Permit Condition V.5.B.2 requires the Permittees to validate analytical data and submit the Visual Sample Plan Data Analysis Report to Ecology.

Permit Condition V.5.B.3 requires the Permittees to comply with requirements regarding use of temporary loading stockpile(s).

Permit Condition V.5.B.4 requires the Permittees to modify the closure plan with 60 days upon determination that the unit cannot be clean closed.

Permit Condition V.5.B.5 requires the Permittees to submit post closure and groundwater monitoring plans within 90 days upon determination that the unit cannot be clean closed.

5.0 State Environmental Policy Act (SEPA)

In compliance with [WAC 197-11-960](#), the Permittees provided a certified environmental checklist for the 207-A SRB. The checklist addressed removal of the unit, characterization to confirm closure, and stabilization of the site, in accordance with the closure plan. Ecology reviewed the checklist and issued a Determination of Non-significance (DNS) on December 17, 2015.

6.0 Temporary Authorization

The Permittees requested a Temporary Authorization (TA) per [WAC 173-303-830\(4\)\(e\)](#), to begin closure actions at the 207-A SRB. Ecology granted the TA request for 180 days, effective July 27, 2015, until January 23, 2016. On January 21, 2016, Ecology granted an additional 180 day extension. The TA extension expires on July 22, 2016. If the Class 3 permit modification has not been issued and taken effect by July 22, 2016, then all field activities will terminate until the Class 3 permit modification takes effect.

7.0 Procedures for Reaching a Final Decision on the Draft Permit Modification

The Washington State Dangerous Waste Regulations in [WAC 173-303-830](#) describe the types of changes or modifications that may be made to a Dangerous Waste Permit issued by Ecology.

Part I, Part II, and the Attachment 9 Permit Applicability Matrix will be updated after the public comment period to add the 207-A SRB to the Part V lists.

This draft permit modification was prepared according to the procedures in [WAC 173-303-840\(2\)](#). As required by [WAC 173-303-840\(3\)\(d\)](#), draft permits Ecology issues will have at least a 45-day public comment period. The public comment period for this draft permit begins on May 9, 2016, and ends on June 24, 2016.

Comments must be post-marked, received by e-mail, or hand-delivered no later than close of business (5:00 p.m. PST) June 24, 2016. Direct all written comments to:

Nina Menard
Washington State Department of Ecology
3100 Port of Benton Blvd.
Richland, Washington 99354
E-mail address: hanford@ecy.wa.gov

In accordance with [WAC 173-303-840\(10\)\(c\)](#), when a permit is modified, only those conditions to be modified will be reopened when a new draft permit is prepared. All other aspects of the existing Permit remain in effect for the duration of the modification.

Ecology will consider and respond to all written comments on this draft permit modification submitted by the deadline. Ecology will then issue a final permit modification that will become effective 30 days after the issuance date. If the final decision includes substantial changes to the draft permit modification because of public comment, we will consider initiating a new public comment period.

A public hearing is not scheduled, but if there is enough interest, Ecology will consider holding one. To request a hearing or for more information, contact:

Ginger Wireman
Washington State Department of Ecology
509-372-7950

E-mail address: hanford@ecy.wa.gov

After closing the 45-day public comment period, Ecology will issue the final Hanford Site-wide Permit to the Permittees with the modification described in this Fact Sheet. Ecology will also issue a Response to Comments document. The final permit decision may be appealed within 30 days after issuance of that decision. If there is no appeal, the permit modification will become effective.

Copies of this permit modification are available for review at the NWP Resource Center, USDOE Administrative Record, and Hanford Public Information Repositories. For additional information, call the Hanford Cleanup Hotline toll-free at 800-321-2008 or email hanford@ecy.wa.gov.

Washington State Department of Ecology
Nuclear Waste Program Resource Center
3100 Port of Benton Boulevard
Richland, Washington 99354
Contact: Valarie Pardue 509-372-7950

United States Department of Energy
Administrative Record and Public Information Repository
2440 Stevens Center Place, Room 1101
Richland, Washington 99354
Contact: Heather Childers 509-376-2530

Hanford Public Information Repositories

Richland

United States Department of Energy
Public Reading Room
Washington State University, Tri Cities Consolidated Information Ctr., Rm. 101-L
2770 University Drive
Richland, Washington 99354
Contact: Janice Scarano 509-375-7443

Portland

Portland State University
Government Information
Branford Price Millar Library
1875 Southwest Park Avenue
Portland, Oregon 97207
Contact: Claudia Weston 503-725-4542

Seattle

University of Washington Suzzallo Library
PO Box 352900
Seattle, Washington 98195
Contact: Hilary Reinert 206-543-5597

Spokane

Gonzaga University
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East 502 Boone Avenue
Spokane, Washington 99258
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Information on the proposed permit modification is also available online at <http://www.ecy.wa.gov/programs/nwp/commentperiods.htm>. If special accommodations are needed for public comment, contact Ecology's Nuclear Waste Program at 509-372-7950.