Determination of Nonsignificance
For the Current Phase of the SEPA Phased Review
Hanford Site Dangerous Waste Permit

Description of proposal The Washington State Department of Ecology (Ecology) is proposing a permit reissue for dangerous waste management at the United States Department of Energy (USDOE) Hanford Facility (the Hanford Permit). Ecology issued the initial permit at the Hanford Facility for six dangerous waste management units (Units) in 1994. The facility has been operating under that initial permit since that date. The permit has been modified eleven times since 1994 to incorporate changes or updates. Thirty Units were added, and 34 Units were closed. Ecology prepared individual State Environmental Policy Act (SEPA) determinations for each of the prior additions (Table 1).

The Hanford Permit reissue includes 37 separate treatment, storage, and disposal units (Units). The 37 Units are divided into operating units, closure units, and post-closure units. The Hanford Permit reissue also includes two corrective action units (CAUs), which address cleanup of soil and groundwater contamination.

For 11 units, Ecology fulfills the requirement for a closure plan with a compliance schedule or permit condition requiring a closure plan submittal. When the closure plans are submitted, Ecology will propose future modifications to the Hanford Permit, to add those closure plans as required by the compliance schedules or conditions.

Proponent

U.S. Department of Energy
Office of River Protection
P.O. Box 450
Richland, WA 99352

Location of proposal, including street address, if any

Lead agency Washington State Department of Ecology, Nuclear Waste Program

Determination Ecology is using a SEPA "phased review" [Washington Administrative Code (WAC) 197-11-060(5)] for the Hanford Permit. Doing a "phased" review allows Ecology to focus on the issues that are ripe for review and exclude from consideration those issues and decisions that are still premature. There is a prior phase, a current phase, and a future phase (*See* Tables 1-4, respectively).

Prior Phase – incorporated units

In the prior phase (initial permit plus eleven modifications), Ecology prepared individual SEPA determinations for each unit added to the Hanford Permit. The corresponding SEPA Determination of Nonsignificance (DNS) and Mitigated Determination of Nonsignificance (MDNS) for those Units previously incorporated in the Hanford Permit, and included in this renewal, are listed in Table 1. Other units previously incorporated in the Hanford Permit, and subsequently closed, are not included in this renewal. Therefore, the prior SEPA determinations for the closed Units are not listed in Table 1.

Prior Phase – unincorporated units

Ecology SEPA determinations from 1993-2002 to add seven units to the Permit; however, those Units were not added to the Hanford Permit until now (Table 2). Ecology determined that three of the Units did not have probable significant environmental impacts, and made a DNS for those three Units. For the other four Units, Ecology determined that the Units could have significant adverse environmental impacts (a determination of significance [DS]). Ecology used National Environmental Policy Act (NEPA) Environmental Impact Statements (EISs) to identify and analyze those probable adverse impacts, reasonable alternatives, and possible mitigation (Table 2). This reissue incorporates these seven previously unincorporated Units into the Hanford Permit. Ecology does not anticipate making closure decisions for these seven Units during the ten-year term of this permit reissue.

Current Phase

In the current phase, Ecology proposes to add 20 additional Units to the Hanford Permit (Table 3). All but three of the Units added in the current SEPA phase were already in operation on 19 August 1987, when USDOE became subject to the Washington state regulation of mixed waste. Ecology reviewed the Units added as separate and distinct project actions; therefore made the separate SEPA determinations listed in Table 3, for each of the 20 Units added. The Units added include 14 closure units, 4 operating Units and 2 corrective action units.

The Permitees' proposal for closure Units will continue inspection and monitoring of the Units until closure begins. Therefore, Ecology made a DNS for all but one of the closure Units. This Hanford Permit reissue does not include a closure plan for most of the closure Units, so the proposed action includes a compliance schedule for the Permittees to submit a closure plan to Ecology, and for the Permittees to close the Units. The closure plans would be made available for public comment as Class 2 Permit modifications.

Ecology made a MDNS for one of the closure units, the Non-Radioactive Dangerous Waste Landfill (NRDWL). The proposed action is to close the Unit in accordance with an approved closure plan. The Permittees proposed to establish a construction lay-down area adjacent to NRDWL. The proposed lay-down area is within a location identified as high-quality habitat. Therefore, Ecology identified the need for mitigation. Ecology is requiring the Permittees to submit a project-specific biological mitigation plan to Ecology for review and approval, 180 days before initiating closure activities.

The Permitees' proposal for the operating Units is to continue operation. None of these Units will close within the 10-year term of this Hanford Permit renewal.

Ecology made a DNS for two of the four operating Units, T Plant and the 222-S Laboratory (Table 3). Ecology based those DNS on review of SEPA checklists, and review of the permit conditions, to conclude that permit conditions protect human health and the environment. Ecology made a MDNS for each of two operating Units, the Low-Level Burial Grounds (LLBGs) Trenches 31 & 34, and the Central Waste Complex (CWC).

Ecology determined that mitigation was required for the Trenches 31 & 34. As mitigation, Ecology identified what waste may be managed at the LLBG Trenches 31 & 34 (dangerous or mixed waste that is generated from processes at the Hanford site, and waste that is specifically identified in Section II, paragraph 8, of the Settlement Agreement re: Washington versus Bodman, Civil No. 2:30-cv-05018-AAM, January 6, 2006). Ecology also added mitigation to the Hanford Permit by requiring the Permittees to create and maintain a modeling - risk budget tool.

Ecology determined that mitigation was required for the CWC, because numerous large boxes of dangerous and mixed waste are not currently stored to meet the requirements of WAC 173-303-630, Use and Management of Containers. As mitigation, the draft Hanford Permit requires the Permittees to provide, within 30 days of the effective date of the Hanford permit, a detailed schedule of how they will achieve compliance. Also, Ecology determined there has been a release to the environment at CWC, and issued an Immediate Action letter[1] to the Permittees.

Ecology added 2 CAUs to the Hanford Permit, for soil waste sites and groundwater respectively. The Permittees did not submit a permit application for these units. Ecology added these units to the Hanford Permit consistent with a December 8, 2000 settlement agreement with USDOE. That agreement settled the Permittees' appeal of modification to the corrective action section of the Hanford Permit. Consistent with that settlement agreement, the CAUs added in this reissue do not include unit-specific requirements at this time. Therefore, Ecology has made a DNS for the CAUs. In 2010, Ecology and the Permittees agreed on a Class 3 Permit modification to the corrective action conditions (II.Y conditions) in the Hanford Permit. In the responsiveness summary for that modification, Ecology stated that "Ecology will comply with SEPA in issuing corrective action decisions." Ecology is making no corrective action decisions in this renewal, and at this time is not

[1] Price, John, 12-NWP-039, letter, March 22, 2012.

making any SEPA determinations for corrective action decisions.

Future Phase

In the future phase, Ecology will propose to add to the Hanford Permit additional requirements for individual Units specified in Table 4. Therefore, the Units in Table 4 are not yet ripe for review under SEPA.

Ecology expects to make future permit modifications adding operating requirements for the Integrated Disposal Facility (IDF), and adding requirements for closure of three Units. The future addition of requirements for operation and closure of the Table 4 Units is a "closely-related" proposal, that would likely result in significant adverse environmental impacts. Therefore, Ecology agreed to be a cooperating agency for the preparation of a NEPA EIS (the Tank Closure-Waste Management [TC-WM] EIS). Ecology anticipates a future adoption (in whole or part) of the TC-WM EIS, to satisfy SEPA requirements. The TC-WM EIS analyzes those probable adverse impacts, evaluates reasonable alternatives, and identifies possible mitigation. Adoption will support the future addition of Hanford Permit requirements for operation and closure of Table 4 Units.

The lead agency for this proposal has determined that the current phase of this SEPA phased review does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030 (2) (c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

X This DNS is issued under WAC 197-11-340(2); the lead agency will not act on this proposal until the conclusion of the public comment period on the *Hanford Site Dangerous Waste Permit*, Rev. 9. That comment period ends September 30, 2012.

Responsible official: John B. Price

Position/title: Section Manager, Tri-Party Agreement Section

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Date April 25, 2012 **Signature** John B. Price

X There is no agency appeal.

Table 1 Prior Phase: Hanford SEPA Phased Review

Unit Number	Unit Name	Proposed Action	Prior Determination Type	Prior Determination Date Signed
not applicable	Hanford Facility Dangerous Waste Permit	The permitting of Hazardous Waste Management activities at the Hanford Facility. Each treatment, storage, and disposal unit at the Hanford Facility has or will submit a separate SEPA checklist for determination.	DNS	1/13/92
CG 2	1301-N Crib	Complete unit closure in accordance with approved closure plan, update post-closure plan, and conduct post-closure care.	MDNS	9/18/98
PC 3	1325-N Crib	Conduct post-closure care.	MDNS	9/18/98
PC 4	1324-N & 1324-NA	Conduct post-closure care.	MDNS	9/18/98
CG 25	PUREX Plant and Storage Tunnels	Continue management of waste.	DNS (tunnels only)	5/23/96
OG 15	331-C Storage Unit	Continue waste storage. Close unit (all waste has already been removed) – administrative closure.	DNS	3/09/06
OG 3	LERF/200 Area ETF	Continue unit operation.	DNS	3/5/91
OG 5	325 Hazardous Waste Treatment Units	Continue unit operation.	DNS	12/17/97
OG 10	WTP	Complete unit construction and begin unit operation.	Significant TWRS EIS	8/28/96
OG 11	IDF	Authorize excavation of first two cells Install a test bed to test compacted liner material performance, and install two groundwater monitoring wells Disposal of ILAW and up to 50 boxes of bulk waste, and leachage storage.	DNS and Adoption DNS and Adoption MDNS and Adoption	9/7/04 3/22/05 5/4/05
OG 16	400 Area Waste Management Unit	Continue unit operation.	DNS	8/22/07
OG 4	242-A Evaporator	Continue unit operation.	DNS	12/12/97
PC 1	300 Area Process Trenches	Continue post-closure care.	DNS	12/19/97
PC 2	183-H Solar Evap Basins	Continue post-closure care.	DNS	12/19/97

Table 2 Unincorporated units with Prior Determinations

Unit Number	Unit Name	Proposed Action	Prior Determination Type	Prior Determination Date Signed
OG 12	DST/204-AR	Continue management of tank facility operations for 28 Double Shell Tanks (DSTs). A draft closure plan is included in the renewal, but closure will not occur within the 10-year term of the Permit.	Significant TWRS EIS	8/30/96
OG 14	Waste Encapsulation & Storage Facility	Continued management of approximately 1,930 cesium and strontium capsules. The two mixed waste streams are highly radioactive with cesium-137 in chloride salt and strontium-90 in fluoride salt. The USDOE sealed the salts inside of stainless steel tube containers (termed capsules). The capsules meet the definition of a container that appears in Washington Administrative Code (WAC) Chapter 173-303 *Dangerous Waste Regulations* (WAC 173-303-040). US DOE deferred the decision on disposition of the capsules.	Significant TWRS EIS	8/30/96
OG 18	Low Level Burial Ground Trench 94	Dispose of defueled reactor plants from U.S. Navy nuclear-powered cruisers and submarines, by land burial of the entire reactor compartment.	Significant – FEIS 1984 FEIS 1996	May 1984 April 1996
CG 4	Single Shell Tanks	Management of mixed, radioactive, and hazardous waste currently stored or projected to be stored in 149 underground storage tanks and approximately 60 active and inactive miscellaneous underground storage tanks. See also Table 4 regarding unit closure.	Significant - TWRS EIS	8/30/96
OG 6	Central Waste complex	CWC is an existing facility storing radioactive, mixed (radioactive and hazardous), and hazardous waste.	DNS	8/19/02

		See also Table 3 regarding a current determination.		
OG 7	WRAP	WRAP Module 1 will characterize, treat and certify radioactive and mixed wastes.	DNS	11/18/93
CG 24	B Plant	Present and future operations of the dangerous waste tank systems at the B Plant Complex. The units have been inactive since September 28, 1998. See also Table 4, regarding Unit closure.	DNS	3/10/94

Table 3 Current Phase: Hanford SEPA Phased Review

Unit Number	Unit Name	Proposed Action	Determination	Effective Date
CG 16	1706-KE	USDOE conducted a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) non-time critical removal action for facilities (buildings) at the 100-K Area. USDOE removed and disposed of all hazardous materials from the 1706-KE hazardous waste management unit while conducting the CERCLA removal action. Because all closure requirements were met by the CERCLA removal action, clean closure is proposed. The final HDWP will reflect that closure in the Unit Status Table.	DNS	conclusion of the public comment period on the *Hanford Site Dangerous Waste Permit*, Rev. 9
CG 19	Hexone	USDOE proposes clean closure of two underground carbon-steel tanks (276-S-141 and 276-S-142) and ancillary equipment, in accordance with a closure plan submitted within 180 days of the effective date of the Hanford Permit. The U.S. Department of Energy (USDOE) proposes to close the Hexone Storage and Treatment Facility (HSTF) to meet the closure standards of Washington's Dangerous Waste Regulations (Washington Administrative Code [WAC] Chapter 173-303). To close the HSTF, USDOE will remove two underground carbon-steel tanks (276-S-141 and 276-S-142) and ancillary equipment that includes two above-ground centrifugal transfer pumps, 42 feet of underground piping, aboveground vent piping between the two underground tanks, an obsolete mercury manometer the operators used for measuring liquid, and weight factor liquid level instrumentation. These components remain from the operation of the HSTF from 1951 through 1990.	DNS	conclusion of the public comment period on the *Hanford Site Dangerous Waste Permit*, Rev. 9
CG 8	600 Area Purgewater	Close unit (PSTF Unit 1) in accordance with an approved closure plan. The PSTF Unit 1 is an aboveground, open containment unit that began operation in 1990. It stored purgewater that USDOE's contractors removed as they constructed groundwater wells or before they sampled such wells. In the purgewater were metals and organics that Washington State regulates as dangerous wastes or dangerous waste constituents. When USDOE's contractor put the purgewater into PSTF Unit 1, the wastes contacted liquids and sediments there. USDOE plans to remove the contents, then the unit, as well as any soil that exceeds clean-closure standards. USDOE will treat the waste, if necessary, and then dispose of it at Hanford in compliance with the Dangerous Waste Regulations.	DNS	conclusion of the public comment period on the *Hanford Site Dangerous Waste Permit*, Rev. 9

CG 9	207-A-S Retention Basin	The U.S. Department of Energy (USDOE) proposes to close the 207-A South Retention Basin. The Basin contains three concrete Process Condensate Basins (PC 1, PC 2, and PC 3) that each has 70,000 gallons of capacity. From March 1977 to April 1989, the basins provided interim storage for process condensate that remained after the 242-A Evaporator reduced a volume of Hanford tank waste. The unit is currently inactive. A compliance schedule is the proposed action; it appears in Milestones M-037-02 and M-037-10 in *HFFACO* Action Plan Appendix D. A closure plan submitted in accordance with the compliance schedule will include a detailed description of the methods that USDOE and its contractors propose to use during closure to meet the closure performance standard of WAC 173-303-610(2). Ecology will incorporate the approved closure plan into the Unit permit, per WAC 173-303-610(3). Ecology will use an updated environmental checklist to complete a threshold determination of the environmental effects of the proposed closure methods. Ecology will make the threshold determination available to the public at the same time as the public comment period on the draft closure plan.	DNS	conclusion of the public comment period on the *Hanford Site Dangerous Waste Permit*, Rev. 9
CG 11	216-A-29 Ditch	The US Department of Energy (USDOE) proposes to close the 216-A-29 Ditch, an open, unlined, man-made earthen percolation unit disposal facility that has been out of service since 1991. The Washington State Department of Ecology (Ecology) requires USDOE and its contractor to perform groundwater monitoring activities per an interim status groundwater monitoring plan and to inspect the 216-A-29 Ditch at least once every five years. No other operating or maintenance activities occur at 216-A-29 Ditch. A compliance schedule is the proposed action; it appears in Milestones M-037-02 and M-037-10 in *HFFACO* Action Plan Appendix D. A closure plan submitted in accordance with the compliance schedule will include a detailed description of the methods that USDOE and its contractors propose to use during closure to meet the closure performance standard of WAC 173-303-610(2). Ecology will incorporate the approved closure plan into the Unit permit, per WAC 173-303-610(3). Ecology will use an updated environmental checklist to complete a threshold determination of the environmental effects of the proposed closure methods. Ecology will make the threshold determination available to the public at the same time as the public comment period on the draft closure plan.	DNS	conclusion of the public comment period on the *Hanford Site Dangerous Waste Permit*, Rev. 9

CG 12	216-A-36B	The US Department of Energy (USDOE) proposes to close the 216-A-36B Crib, which includes the southern 500 feet of the original 216-A-36 Crib. The 216-A-36B Crib is an engineered sub-surface liquid effluent disposal facility that received its final volume of waste on September 6, 1987. The Washington State Department of Ecology (Ecology) requires the USDOE and its contractor to perform groundwater monitoring activities per an interim status groundwater monitoring plan and to inspect the 216-A-36B Crib at least once every five years. No other operating or maintenance activities occur at 216-A-36B Crib. A compliance schedule is the proposed action; it appears in Milestones M-037-02 and M-037-10 in *HFFACO* Action Plan Appendix D. A closure plan submitted in accordance with the compliance schedule will include a detailed description of the methods that USDOE and its contractors propose to use during closure to meet the closure performance standard of WAC 173-303-610(2). Ecology will incorporate the approved closure plan into the Unit permit, per WAC 173-303-610(3). Ecology will use an updated environmental checklist to complete a threshold determination of the environmental effects of the proposed closure methods. Ecology will make the threshold determination available to the public at the same time as the public comment period on the draft closure plan.	DNS	conclusion of the public comment period on the *Hanford Site Dangerous Waste Permit*, Rev. 9
CG 13	216-A-37-1 Crib	The US Department of Energy (USDOE) proposes to close the 216-A-37-1 crib, an engineered sub-surface liquid effluent disposal facility that has been out of service since April 1989. The Washington State Department of Ecology (Ecology) requires the USDOE and its contractor to perform groundwater monitoring activities per an interim status groundwater monitoring plan and to inspect the 216-A-37-1 Crib at least once every five years. No other operating or maintenance activities occur at 216-A-37-1 Crib. A compliance schedule is the proposed action; it appears in Milestones M-037-02 and M-037-10 in *HFFACO* Action Plan Appendix D. A closure plan submitted in accordance with the compliance schedule will include a detailed description of the methods that USDOE and its contractors propose to use during closure to meet the closure performance standard of WAC 173-303-610(2). Ecology will incorporate the approved closure plan into the Unit permit, per WAC 173-303-610(3). Ecology will use an updated environmental checklist to complete a threshold determination of the environmental effects of the proposed closure methods. Ecology will make the threshold determination available to the public at the same time as the public comment period on the draft closure plan.	DNS	conclusion of the public comment period on the *Hanford Site Dangerous Waste Permit*, Rev. 9

CG 14	216-S10-P&D	The US Department of Energy (USDOE) proposes to close the 216-S-10 Pond and Ditch which are open, unlined, man-made earthen percolation units. The units last received waste in October 1991. The Washington State Department of Ecology (Ecology) requires the USDOE and its contractor to perform groundwater monitoring activities per an interim status groundwater monitoring plan and to inspect the 216-S-10 Pond and Ditch at least once every five years. No other operating or maintenance activities occur at the 216-S-10 Pond and Ditch. A compliance schedule is the proposed action; it appears in Milestones M-037-03 and M-037-11 in *HFFACO* Action Plan Appendix D. A closure plan submitted in accordance with the compliance schedule will include a detailed description of the methods that USDOE and its contractors propose to use during closure to meet the closure performance standard of WAC 173-303-610(2). Ecology will incorporate the approved closure plan into the Unit permit, per WAC 173-303-610(3). Ecology will use an updated environmental checklist to complete a threshold determination of the environmental effects of the proposed closure methods. Ecology will make the threshold determination available to the public at the same time as the public comment period on the draft closure plan.	DNS	conclusion of the public comment period on the *Hanford Site Dangerous Waste Permit*, Rev. 9

CG 21	216-B-63 Trench	The U.S. Department of Energy (USDOE), proposes to close the 216-B-63 Trench. The 216-B-63 Trench includes an open, unlined, manmade percolation trench closed at one end, a 16-inch inlet pipe that entered the Trench 3 feet below grade, and a 15-inch pipe that extends to the 207-B basin. USDOE's predecessor constructed 216-B-63 to receive contaminated emergency cooling water and chemical sewer waste from B Plant. Trench 216-B-63 operated as a waste management unit from March 1970 through February 1992. Operators treated corrosive dangerous waste that resulted from regeneration of demineralizer columns in B Plant by adding acidic and caustic waste successively to the trench, thereby neutralizing the waste. USDOE stopped dangerous waste flows to 216-B-63 Trench in 1985. The corrosive discharges constituted the only dangerous waste discharges to the 216-B-63 Trench. A compliance schedule is the proposed action; it appears in Milestones M-037-02 and M-037-10 in *HFFACO* Action Plan Appendix D. A closure plan submitted in accordance with the compliance schedule will include a detailed description of the methods that USDOE and its contractors propose to use during closure to meet the closure performance standard of WAC 173-303-610(2). Ecology will incorporate the approved closure plan into the Unit permit, per WAC 173-303-610(3). Ecology will use an updated environmental checklist to complete a threshold determination of the environmental effects of the proposed closure methods. Ecology will make the threshold determination available to the public at the same time as the public comment period on the draft closure plan.	DNS	conclusion of the public comment period on the *Hanford Site Dangerous Waste Permit*, Rev. 9

CG 22	216-B-3 Main Pond	The U.S. Department of Energy (USDOE) Richland Operations Office proposes to close the 216-B-3 Main Pond and 216-B-3-3 Ditch (Main Pond dangerous waste management unit [DWMU]). The Main Pond DWMU includes one unlined and one constructed surface impoundment that USDOE operated from April 1945 to May 1994. The Main Pond received liquid effluent from B Plant via the 216-B-3-2 Ditch, then after 1970, via the 216-B-3-3 Ditch. The 216-B-3-3 Ditch received effluents from B Plant, 241-BY Tank Farm, 244-CR Vault, and the plutonium-uranium extraction (PUREX) Plant. Most of the dangerous waste that Main Pond received came from the 216-A-29 Ditch (to be closed separately from this group) that drained the PUREX chemical sewer. The 216-A-29 Ditch discharged into the 216-B-3-3 Ditch approximately 1,000 feet west of the 216-B-3 Pond. A compliance schedule is the proposed action; it appears in Milestone M-037-03 and M-037-11 in *HFFACO* Action Plan Appendix D. A closure plan submitted in accordance with the compliance schedule will include a detailed description of the methods that USDOE and its contractors propose to use during closure to meet the closure performance standard of WAC 173-303-610(2). Ecology will incorporate the approved closure plan into the Unit permit, per WAC 173-303-610(3). Ecology will use an updated environmental checklist to complete a threshold determination of the environmental effects of the proposed closure methods. Ecology will make the threshold determination available to the public at the same time as the public comment period on the draft closure plan.	DNS	conclusion of the public comment period on the *Hanford Site Dangerous Waste Permit*, Rev. 9
CG 15	241-Z CX Tanks	Continue management of waste pending closure. Clean-close 2 of 3 tanks in accordance with approved compliance schedule and closure plan. The third of three tanks has very high levels of radioactivity, which has impacted USDOE's ability to propose closure methods. USDOE's draft closure plan proposes further sampling leading to development of a closure approach for the third tank. USDOE will follow a compliance schedule for all 3 tanks; it appears in Milestone M-037-10 in *HFFACO* Action Plan Appendix D.	DNS	conclusion of the public comment period on the *Hanford Site Dangerous Waste Permit*, Rev. 9

CG 20	NRDWL	The Non-Radioactive Dangerous Waste Landfill (NRDWL) is a 10 acre land disposal unit that was used from January 1975 through May 1985. It consists of 19 unlined trenches approximately 400 feet long, 16 feet wide at the base, and 15 feet deep. Currently permitted activities are inspection and groundwater monitoring. The proposed action is to close the Unit in accordance with an approved closure plan, 24 months prior to initiation of closure activities. Mitigation is required so that construction laydown areas, required for closure, do not impact high-quality habitat adjacent to NRDWL. Ecology is requiring the Permittees to submit a project specific biological mitigation plan for Ecology review and approval 180 days before the initiation of closure activities. The biological mitigation plan shall include specific mitigation measures to protect vegetation plant species, avian species, and mammalian species in the Washington State Natural Heritage Program element occurrence of the bitterbrush/Indian ricegrass sand dune complex surrounding the NRDWL. The biological mitigation plan shall also list specific mitigation measures to mitigate significant adverse impacts to two cultural resources of concern next to the Army Loop Road between Beloit Avenue and the northwest corner of the NRDWL.	MDNS	conclusion of the public comment period on the *Hanford Site Dangerous Waste Permit*, Rev. 9
CG 23	Grout Treatment	USDOE submitted a dangerous waste permit application for the Grout Treatment Facility (GTF) treatment and disposal unit in 1988. The GTF was a pilot project to test mixing cement grout slurry with phosphate-sulfur waste (PSW) and then disposing of the grouted waste in concrete vaults. The USDOE abandoned the concept in the early 1990's; however, approximately one million gallons of grouted PSW in a monolithic form were already in GTF Vault V-101. The USDOE wishes to close the GTF with the waste remaining in place and to leave the surrounding land in industrial use. Ecology intends to allow the USDOE to close the GTF by denying the USDOE's permit application and to allow the USDOE to leave the monolithic waste in Vault V-101. Ecology considers the GTF vaults as solid waste management units subject to corrective action. Ecology will not preclude permitting the GTF as a dangerous waste treatment, storage and disposal unit should the USDOE identify an appropriate future use.	DNS	conclusion of the public comment period on the *Hanford Site Dangerous Waste Permit*, Rev. 9

OG 6	Central Waste complex	The United States Department of Energy (USDOE) Richland Operations Office submitted an application for a permit to operate the Central Waste Complex (CWC) as a dangerous and/or mixed waste storage and treatment unit. The CWC may manage Hanford waste and also specific wastes that arrive from off-site. Section II, paragraph 8 of the *Washington v. Chu* Settlement Agreement (Civil No. 2:30-CV-050 18-AAM) enumerates those offsite wastes. At the CWC, the USDOE and its contractor may accept, store, and treat waste in: • 24 flammable and alkali metal waste storage modules. • Numerous waste storage buildings (pre-engineered steel 2401-W Storage Building, 12 pre-engineered steel 2402-W Series Storage Buildings, and four 2403-W Series Storage Buildings). • Six outside storage areas (designated as outside storage areas A through F). The dangerous and/or mixed waste that the USDOE manages in the CWC includes: • Containerized liquids/free liquids. • Pressurized gas cylinders and aerosol cans within containers. • Bulk sodium metal. • Labpack liquids. • Solids/debris. • Sludges/soils In addition, the permit will allow the USDOE to revise the boundaries for the CWC to exclude Building 2404-WA. Ecology will issue another permit to govern dangerous/mixed waste management activities in the 2404-W buildings that now lie within the Waste Receiving and Packaging Facility (WRAP). There have been releases to the environment at the outside storage areas. As mitigation, Ecology intends that the USDOE and the contractor will comply with the state's requirements for secondary containment of dangerous waste in containers outdoors. USDOE must also cleanup releases to the environment. Specific permit conditions address secondary compliance for containers that the USDOE contractor stores outdoors. The USDOE must submit a detailed schedule and timeline to achieve compliance with the secondary containment regulations in Washington Administrative Code 173-303-630(7). The USDOE must take timely actions to avoid violations and to continue its operations.	MDNS	conclusion of the public comment period on the *Hanford Site Dangerous Waste Permit*, Rev. 9

OG 8	222-S Laboratory D&MWTS & D unit	The USDOE Office of River Protection proposes to operate four dangerous waste management units at the 222-S Laboratory on the Hanford Site. These units are: 1. The 222-S Dangerous and Mixed Waste Storage Area (DMWSA). 2. The Room 4-E container storage area. 3. The Room 2-B container storage area (northern portion of Room 2-B). 4. The 219-S Waste Handling Facility (219-S WHF). The DMWSA, Room 4-E, and Room 2-B all store containers of dangerous or mixed (dangerous and radioactive) waste in various forms. The DMWSA, which includes two metal storage structures sitting on an elevated platform, lies outside of the 222-Laboratory building. Rooms 4-E and 2-B are inside the 222-Laboratory building. The 219-S WHF is a tank system that USDOE and its contractor use to treat and store liquid mixed waste. The 219-S WHF, which lies to the northeast of the 222-S Laboratory building, connects through piping with the 222-S Laboratory building. The 219-S WHF includes the 219-S Tank System of four tanks that sit in below-grade vaults or cells, the tanks' ancillary piping and equipment, an operating gallery and a sample gallery. In the operating gallery is a below-grade pipe trench that contains piping and electrical connections to the vaulted tank area. Tanks 101 and 102 sit in stainless steel lined, below-grade concrete Cell A, and Tank 104 sits in the stainless-steel lined southern compartment of Cell B. USDOE and its contractor emptied, rinsed, and isolated Tank 103, which is no longer in service. At the outside wall, the 219-S WHF connects with piping in the Hanford Double Shell Tank (DST) System. USDOE and its contractor may transfer waste that meets the DST waste acceptance criteria from the 219-S WHF to the DST System or to another onsite or offsite treatment, storage, and disposal facility.	DNS	conclusion of the public comment period on the *Hanford Site Dangerous Waste Permit*, Rev. 9

OG 9	T Plant Complex	USDOE Richland Operations Office proposes to operate the T-Plant Complex to store and treat dangerous and/or mixed (dangerous and radioactive) waste. The dangerous and/or mixed waste may come from generators on the USDOE's Hanford Site or from other sites that the Parties agreed the USDOE could accept as part of the settlement of *Washington v. Bodman* (CV-05-18-AAM, January 6, 2006). At the T-Plant Complex, dangerous waste management units include both indoor and outdoor units. Those dangerous and/or mixed waste units include 15 container storage units, two container storage and treatment units (221-T Railroad Tunnel and 214-T Building), a tank system (221-T Tank System in the 221-T Building), a containment building (221-T Building) with two storage and treatment units (221-T Cells and 221-T Canyon Deck), and two miscellaneous storage and treatment units (2706-T and 2706-TA Buildings). The USDOE and its contractors do not have authorization to receive waste in the 221-T Tank System or the 2706-TB Building Tank System. The 221-T Tank System will undergo closure with the 221-T Canyon Building. The two tanks that could manage liquid mixed waste in the 2706-TB are out of service and blank flanges in their inlet and outlet piping prevent waste from entering them. The USDOE and the contractor may not use the 2706-TB tanks for dangerous and/or mixed waste management.	DNS	conclusion of the public comment period on the *Hanford Site Dangerous Waste Permit*, Rev. 9
OG 17	Low Level Burial Ground Trenches 31 and 34	LLBG Trenches 31 & 34 receive dangerous and/or mixed waste for disposal. Permittees may manage the following wastes at the LLBG Trenches 31 & 34 Operating Unit Group: dangerous or mixed waste that is 9 generated from processes at the Hanford site, or waste that is specifically identified in Section II, paragraph 8 of the Settlement Agreement re: Washington v. Bodman, Civil No. 2:30-cv-05018-AAM, January 6, 2006. No other wastes may be managed at LLBG Trenches 31 and 34 unless authorized via a permit modification decision. Environmental mitigation is provided by this specificity about accepted wastes, and by requiring the Permittees to create and maintain a modeling – risk budget tool, which models the future impacts of the planned waste forms to be disposed including input from analysis performed and their 18 impact to underlying vadose and ground water.	MDNS	conclusion of the public comment period on the *Hanford Site Dangerous Waste Permit*, Rev. 9

CG 26	Low Level Burial Ground "Green Islands"	There are 25 radioactive solid waste burial grounds in the central part (200 Area) of the Hanford facility. The Hanford Federal Facility Agreement and Compliance Order (HFFACO) organizes the 25 into the 200-SW-2 OU. The burial grounds were generally constructed as individual trenches; there are an estimated 333 total trenches. Radioactive mixed waste was disposed at a few locations within individual trenches, called "Green Islands" because disposal locations were shown in green on maps. In addition, retrievably stored waste (that may be either non-regulated radioactive waste or mixed waste) was stored within portions of 4 burial grounds. Ecology is requiring the Permittee to comply with HFFACO compliance schedules for retrieving stored waste, to prepare the Green Islands for closure. See also CA1 in Table 3.	DNS	conclusion of the public comment period on the *Hanford Site Dangerous Waste Permit*, Rev. 9

CA1	Corrective Action Soil	The Hanford Site has been in operation since the mid-1940. A total 3,312 waste management units (WMUs) [as of October 2010] must be investigated and, if necessary, cleaned up. WMUs include waste disposal units, unplanned release units (including those resulting from spills), inactive contaminated structures, dangerous waste treatment and storage units, and other storage areas. The two Hanford cleanup processes include *Comprehensive Environmental Response, Compensation, and Liability Act* (CERCLA) Past-Practice (CPP) process and *Resource Conservation and Recovery Act (RCRA)-CERCLA* Past-Practice (R-CPP) process. The processes include Feasibility Studies (FS) or Corrective Measures Studies (CMS) and FS, respectively. Ecology added these WMUs (grouped as Operable Units) to the Permit consistent with a December 8, 2000 settlement agreement with the USDOE. That agreement settled the Permittee's appeal of modification to the corrective action section of the Hanford Facility RCRA Permit. Consistent with that settlement agreement, the Operable Units listed in this renewal do not include unit-specific requirements at this time. Therefore, Ecology has made a DNS. In 2010, Ecology and the Permittee agreed on a Class 3 Permit modification to the corrective action conditions (II.Y conditions) in the Hanford Permit. In the responsiveness summary for that modification, Ecology stated that "Ecology will comply with SEPA in issuing corrective action decisions." Ecology will make corrective action decisions for R-CPP Operable Units, but not for CPP Operable Units. Ecology is making no corrective action decisions in this renewal, and at this time is not making any SEPA determinations for corrective action decisions.	DNS	conclusion of the public comment period on the *Hanford Site Dangerous Waste Permit*, Rev. 9

CA2	Corrective Action Groundwater	Operational discharges of billions of gallons of process wastewater to the ground resulted in groundwater contamination currently extending over 60 square miles. The Hanford Federal Facility Agreement and Consent Order (HFFACO) states that "Groundwater operable units can be established where multiple sources from different operable units have contributed to the same plume." Ten groundwater Operable Units will undergo *Comprehensive Environmental Response, Compensation, and Liability Act* (CERCLA) investigation and cleanup that is consistent with Ecology corrective action requirements. Ecology added these groundwater Operable Units to the Permit consistent with a December 8, 2000 settlement agreement with the USDOE. That agreement settled the Permittee's appeal of modification to the corrective action section of the Hanford Facility RCRA Permit. Consistent with that settlement agreement, the Operable Units listed in this renewal do not include unit-specific requirements at this time. Therefore, Ecology has made a DNS.	DNS	conclusion of the public comment period on the *Hanford Site Dangerous Waste Permit*, Rev. 9

References:

USN, 1984, *Final Environmental Impact Statement on the Disposal of Decommissioned, Defueled Naval Reactor Plants*, U.S. Department of the Navy, Washington, D.C., May 1984

USN 1996, *Final Environmental Impact Statement on the Disposal of Decommissioned, Defueled Cruiser, Ohio Class, and Los Angeles Class Naval Reactor Plants,* U.S. Department of the Navy, Washington, D.C., April 1996

Table 4 Future Phase – Future Hanford Permit Modifications: Hanford SEPA Phased Review

Unit Number	Unit Name	Proposed Action	Determination	Effective Date
CG 4	Single Shell Tanks	Complete unit closure in accordance with approved compliance schedule. Complete corrective actions for releases to soil in accordance with approved compliance schedule.	Significant – TC-WM EIS	When adopted (in whole or in part) to satisfy SEPA requirements
CG 24	B Plant	Complete closure in accordance with an approved closure plan. The USDOE proposes to submit a future permit modification request to add a closure/post-closure plan at the same time it submits a remedial action implementation plan (e.g., a Remedial Action Work Plan) to the lead regulatory agency pursuant to a CERCLA Record of Decision.	Significant – TC-WM EIS	When adopted in whole or in part
OG 11	IDF	Waste disposal is currently limited to the wastes identified in the MDNS listed in Table 2. A permit modification would be required to add additional wastes and/or additional waste capacity.	Significant – TC-WM EIS	When adopted in whole or in part
CG 25	PUREX Plant and Storage Tunnels	Close unit in accordance with approved closure plan. USDOE and Ecology will coordinate the future PUREX closure activities and the closure schedule with Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) response actions for the entire PUREX Plant.	Significant – TC-WM EIS	When adopted in whole or in part