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STATE WASTE DISCHARGE PERMIT NUMBER ST0004500
200 AREA EFFLUENT TREATMENT FACILITY

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Issuance Date: **TBD**
Effective Date: 01/01/2015
Expiration Date: 12/31/2019

State Waste Discharge Permit Number ST0004500

State of Washington
DEPARTMENT OF ECOLOGY
3100 Port of Benton Boulevard
Richland, Washington 99354

In compliance with the provisions of the
State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington, as amended,

United States Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

is authorized to discharge wastewater in accordance with the special and general conditions which follow.

Facility Location: 200 Area Effluent Treatment Facility (ETF), located in the 200 East Area of the Hanford Site	Discharge Location: State-Approved Land Disposal Site (SALDS), located north of the 200 West Area
Treatment Type: Industrial Wastewater Industry Type: Clean-up Site	NAICS Code: 562211

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Jane A. Hedges
Program Manager
Nuclear Waste Program
Washington State Department of Ecology

Table of Contents

1		
2		
3	Summary of Permit Report Submittals	6
4	Special Conditions.....	7
5	S1. Discharge Limits.....	7
6	S1.A. Effluent limits	7
7	S1.B. Best management practices/pollution prevention	8
8	S2. Monitoring Requirements	9
9	S2.A. Process wastewater monitoring.....	9
10	S2.B. Flow measurement and continuous monitoring devices	11
11	S2.C. Laboratory accreditation	11
12	S3. Reporting and Recording Requirements	11
13	S3.A. Reporting	11
14	S3.B. Records retention	13
15	S3.C. Recording of results	13
16	S3.D. Additional monitoring by the Permittee	13
17	S3.E. Reporting permit violations	13
18	S3.F. Other reporting.....	15
19	S3.G. Maintaining a copy of this permit.....	15
20	S4. Operation and Maintenance.....	15
21	S4.A. Operations and maintenance (O&M) manual	16
22	S4.B. Bypass procedures	16
23	S4.D. Best management practices\pollution prevention program.....	18
24	S5. Solid Wastes	19
25	S6. Application for Permit Renewal or Modification for Facility Changes.....	19
26	S7. Facility Loading.....	19
27	S7.A. Design criteria.....	19
28	S8. Non-Routine and Unanticipated Discharges.....	19
29	S9. Spill plan.....	20
30	S9.A. Spill control plan submittals and requirements.....	20
31	S9.B. Spill control plan components	20
32	S10. Tritium Tracking and Groundwater Monitoring.....	21
33	General Conditions	22
34	G1. Signatory Requirements.....	22
35	G2. Right of Entry.....	22
36	G3. Permit Actions.....	23
37	G4. Reporting a Cause for Modification.....	23
38	G5. Plan Review Required	23

1 **G6. Compliance with Other Laws and Statutes..... 23**
2 **G7. Transfer of this Permit 23**
3 **G8. Payment of Fees..... 24**
4 **G9. Penalties for Violating Permit Conditions..... 24**
5 **G10. Duty to Provide Information..... 24**
6 **G11. Duty to Comply 24**

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SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S3.A	Discharge Monitoring Report	Quarterly	February 15, 2015
S3.E	Reporting Permit Violations	As necessary	
S3.F	Other Reporting	As necessary	
S4.A	Operations and Maintenance Manual Update or Review Confirmation Letter	Annually	July 1, 2015
S4.B	Reporting Bypasses	As necessary	
S4.D	Notification of New or Altered Sources	As necessary	
S4.D	Best Management Practices/Pollution Prevention Plan	1/permit cycle	By December 31, 2019
S6	Application for Permit renewal	1/permit cycle	June 30, 2019
S8	Non-Routine Discharge Report	As necessary	
S9.A	Spill Control Plan Changes	As necessary	
S10	Tritium Sampling Results	Annually	November 30
G1	Notice of Change in Authorization	As necessary	
G4	Permit Application for Substantive Changes to the Discharge	As necessary	
G5	Engineering Report for Construction or Modification Activities	As necessary	
G7	Notice of Permit Transfer	As necessary	
G8	Payment of Fees	As assessed	
G10	Duty to Provide Information	As necessary	

SPECIAL CONDITIONS

S1. DISCHARGE LIMITS

S1.A. Effluent Limits

All discharges and activities authorized by this permit must comply with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a concentration in excess of, that authorized by this permit violates the terms and conditions of this permit. Wastewater flows and loadings must not exceed the Design Criteria specified in Section S7.

Beginning on the effective date, the Permittee is authorized to discharge process wastewater from the Effluent Treatment Facility (ETF) verification tanks to the State-Approved Land Disposal Site (SALDS) at the permitted location subject to the following limits:

Effluent Limits: Outfall # 001 Latitude <u>46.5725</u> Longitude <u>119.6333</u>		
Parameter	Average Monthly ^a	Maximum Daily ^b
Acetophenone (ethanone, 1-phenyl-)	10 µg/l	
Carbon Tetrachloride	5 µg/l	10 µg/l
N-Nitrosodimethylamine	20 µg/l	
Tetrachloroethylene	5 µg/l	10 µg/l
Total Organic Carbon	1,100 µg/l	
Arsenic (total)	15 µg/l	30 µg/l
Beryllium (total)	40 µg/l	
Chromium (total)	20 µg/l	
Ammonia (as N)	830 µg/l	
Chloride	250,000 µg/l	
Nitrate (as N)	100 µg/l	

Effluent Limits: Outfall # 001		
Latitude <u>46.5725</u> Longitude <u>119.6333</u>		
Nitrite (as N)	100 µg/l	
Sulfate	10,000 µg/l	
Total Suspended Solids	4,000 µg/l	
Acetone	160 µg/l	
Benzene	5 µg/l	
Chloroform	6.2 µg/l	
Tetrahydrofuran	100 µg/l	
Cadmium (total)	10 µg/l	
Copper (total)	70 µg/l	
Lead (total)	50 µg/l	
Mercury (total)	2 µg/l	
Total Dissolved Solids	500,000 µg/l	500,000 µg/l
	Average monthly effluent limit means the highest allowable average of daily discharges over a calendar month. To calculate the discharge value to compare to the limit, add the value of each daily discharge measured during a calendar month and divide this sum by the total number of daily discharges measured.	
	Maximum daily effluent limit means the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limits expressed in units of mass, calculate the daily discharge as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day.	

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S1.B. Best Management Practices/Pollution Prevention

The Permittee must comply with the following Best Management Practices to prevent pollution to waters of the State:

1. Do not commingle process wastewater streams with sanitary (domestic) sewage.
2. Do not discharge in excess of the hydraulic capacity of the drainfield.
3. Do not discharge priority pollutants, dangerous wastes, or toxics in toxic amounts.

S2. MONITORING REQUIREMENTS

S2.A. Process Wastewater Monitoring

The Permittee must monitor the process wastewater in the verification tank prior to its discharge to the State-Approved Land Disposal Site.

The Permittee must monitor the wastewater according to the following schedule. The Permittee must use the specified analytical methods unless the method used produces measurable results in the sample and EPA has listed it as an EPA-approved method in 40 CFR Part 136. If the Permittee uses an alternative method, not specified in the permit and as allowed above, it must report the test method, DL, and QL on the discharge monitoring report or in the required report. If the Permittee is unable to obtain the required DL and QL in its effluent due to matrix effects, the Permittee must submit a matrix-specific detection limit (MDL) and a quantitation limit (QL) to Ecology with appropriate laboratory documentation.

Parameter & CAS Number	Units & Speciation	Laboratory Method	Sampling Frequency	Sample Type
(1) Final Wastewater Effluent				
Flow	Gallons per month	N/A	Once per defined event ^a	Metered/Recorded
Specific Conductivity	µmhos/cm	120.1	Once per defined event	Grab
Acetone (67-64-1)	µg/l	624	Monthly ^c	Grab ^d
Acetophenone (98-86-2)	µg/l	625	Monthly	Grab
Benzene (71-43-2)	µg/l	624	Monthly	Grab
Carbon Tetrachloride (56-23-5)	µg/l	624	Monthly	Grab
Chloroform (67-66-3)	µg/l	624	Monthly	Grab
N-Nitrosodimethylamine (62-75-9)	µg/l	625	Monthly	Grab
Methylene Chloride (75-09-2)	µg/l	624	Monthly	Grab
Tetrachloroethylene (127-18-4)	µg/l	624	Monthly	Grab
Tetrahydrofuran (109-99-9)	µg/l	624	Monthly	Grab
Total Organic Carbon	µg/l	SM5310	Once per defined event	Grab
Gross Alpha (12587-46-1)	pCi/l	900	Once per defined event	Grab

Gross Beta (12587-47-2)	pCi/l	900	Once per defined event	Grab
Strontium-90 (10098-97-2)	pCi/l	905	Monthly	Grab
Technetium-99 (14133-76-7)	pCi/l	HASL-300 or Lab Specific	Monthly	Grab
Tritium (10028-17-8)	pCi/l	906	Monthly	Grab
Uranium (total) (7440-61-1)	µg/l	200.8	Monthly	Grab
Arsenic (total) (7440-38-2)	µg/l	200.8	Monthly	Grab
Beryllium (total) (7440-41-7)	µg/l	200.8	Monthly	Grab
Cadmium (total) (4770-43-9)	µg/l	200.8	Monthly	Grab
Chromium (total) (7440-47-3)	µg/l	200.8	Monthly	Grab
Copper (total) (7440-50-8)	µg/l	200.8	Monthly	Grab
Lead (total) (7439-92-1)	µg/l	200.8	Monthly	Grab
Mercury (total) (7439-97-6)	µg/l	245.1	Monthly	Grab
Ammonia (Nitrogen in ammonium))	µg/l	350.1	Monthly	Grab
Chloride (16887-00-6)	µg/l	300.0	Monthly	Grab
Nitrate (Nitrogen in nitrate)	µg/l	300.0	Once per defined event	Grab
Nitrite (Nitrogen in Nitrite)	µg/l	300.0	Monthly	Grab
Sulfate (14808-79-8)	µg/l	300.0	Monthly	Grab
Total Dissolved Solids	µg/l	SM2540C	Monthly	Grab
Total Suspended Solids	µg/l	SM2540D	Monthly	Grab
(2) Groundwater Monitoring Wells 699-48-77 A and 699-48-77D ^e				
Parameter	Units & Speciation	Laboratory Method	Sampling Frequency	Sample Type
Tritium	pCi/l	906	Quarterly	Grab
pH	units	SM4500-H ⁺ B (In lab)	Quarterly	Grab/Field Measurement
Specific Conductivity	µmhos/cm	120.1/SM2510B (In lab)	Quarterly	Grab/Field Measurement

Measured Depth to Groundwater	Feet (report to 0.01 feet)	Field	Quarterly	Field Measurement
a	Once per defined event means one sample from each verification tank discharge.			
b	The Permittee must report the instantaneous maximum and minimum pH monthly. Do not average pH values.			
c	Monthly means once per month.			
d	Grab means an individual sample collected over a fifteen (15) minute, or less, period.			
e	These groundwater monitoring wells must be sampled until they no longer produce representative data.			

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S2.B. Flow Measurement and Continuous Monitoring Devices

The Permittee must:

1. Select and use appropriate flow measurement devices and methods consistent with accepted scientific practices.
2. Install, calibrate, and maintain these devices to ensure the accuracy of the measurements is consistent with the accepted industry standard and the manufacturer’s recommendation for that type of device.
3. Calibrate flow monitoring devices at a minimum frequency of at least one calibration every other year.
4. Maintain calibration records for at least three years.

S2.C. Laboratory Accreditation

The Permittee must ensure that all monitoring data required by Ecology for permit specified parameters is prepared by a laboratory registered or accredited under the provisions of chapter 173-50 WAC, *Accreditation of Environmental Laboratories*. Flow, temperature, settleable solids, conductivity, pH, and internal process control parameters are exempt from this requirement.

S3. REPORTING AND RECORDING REQUIREMENTS

The Permittee must monitor and report in accordance with the following conditions. Falsification of information submitted to Ecology is a violation of the terms and conditions of this permit.

S3.A. Reporting

The first monitoring period begins on the effective date of the permit. The Permittee must:

1. Summarize, report, and submit monitoring data obtained during each monitoring period on the electronic Discharge Monitoring Report (DMR) form provided by Ecology within WAWebDMR. Include data for each of the

1 parameters tabulated in Special Condition S2 and as required by the form.
2 Report a value for each day sampling occurred (unless specifically exempted
3 in the permit) and for the summary values (when applicable) included on the
4 electronic form.

5 To find out more information and to sign up for WAWebDMR go to:

6 <http://www.ecy.wa.gov/programs/wq/permits/paris/webdmr.html>

- 7 2. Enter the “no discharge” reporting code for an entire DMR, for a specific
8 monitoring point, or for a specific parameter as appropriate, if the Permittee
9 did not discharge wastewater or a specific pollutant during a given monitoring
10 period.
- 11 3. Report single analytical values below detection as “less than the detection
12 level (DL)” by entering < followed by the numeric value of the detection level
13 (e.g. < 2.0, or B2.0) on the DMR. If the method used did not meet the
14 minimum DL and quantitation level (QL) identified in the permit, report the
15 actual QL and DL in the comments.
- 16 4. Report the test method used for analysis in the comments if the laboratory
17 used an alternative method not specified in the permit and as allowed in
18 Appendix A.
- 19 5. Calculate average values (unless otherwise specified in the permit) using:
 - 20 a. The reported numeric value for all parameters measured between the
21 agency-required detection value and the agency-required quantitation
22 value.
 - 23 b. One-half the detection value (for values reported below detection) if the
24 lab detected the parameter in another sample for the reporting period.
 - 25 c. Zero (for values reported below detection) if the lab did not detect the
26 parameter in another sample for the reporting period.
- 27 6. Report single-sample grouped parameters (for example, priority pollutants,
28 PAHs, pulp and paper chlorophenolics, TTOs) on the WAWebDMR form and
29 include: sample date, detection limit (DL), laboratory quantitation level (QL),
30 and concentration detected. The Permittee must submit an electronic PDF
31 copy of the contract laboratory report using WAWebDMR to provide this
32 information.
- 33 7. Ensure that DMRs are electronically submitted no later than the dates
34 specified below, unless otherwise specified in this permit.
- 35 8. Submit DMRs for parameters with the monitoring frequencies specified in S2
36 (monthly, quarterly, annual, etc.) at the reporting schedule identified below.
37 The Permittee must:
 - 38 a. Submit **quarterly DMRs** 45 days following a completed monitoring
39 period. Quarterly sampling periods are January through March, April
40 through June, July through September, and October through December.

- 1 9. Submit reports to Ecology online using Ecology’s electronic WAWebDMR
2 submittal forms (electronic DMRs) as required above. Send paper reports to
3 Ecology at:

Water Quality Permit Coordinator
Department of Ecology
Nuclear Waste Program
3100 Port of Benton Blvd.
Richland, WA 99354

4 **S3.B. Records Retention**

5 The Permittee must retain records of all monitoring information for a minimum of
6 three (3) years. Such information must include all calibration and maintenance
7 records and all original recordings for continuous monitoring instrumentation,
8 copies of all reports required by this permit, and records of all data used to
9 complete the application for this permit. The Permittee must extend this period of
10 retention during the course of any unresolved litigation regarding the discharge of
11 pollutants by the Permittee or when requested by Ecology.

12 The Permittee must retain all records pertaining to the monitoring/sampling of
13 process wastewater and groundwater described in Section S2 for a minimum of
14 five (5) years.

15 **S3.C. Recording of Results**

16 For each measurement or sample taken, the Permittee must record the following
17 information:

- 18 1. The date, exact place, method, and time of sampling or measurement
19 2. The individual who performed the sampling or measurement
20 3. The dates the analyses were performed
21 4. The individual who performed the analyses
22 5. The analytical techniques or methods used
23 6. The results of all analyses

24 **S3.D. Additional Monitoring by the Permittee**

25 If the Permittee monitors any pollutant more frequently than required by Special
26 Condition S2 of this permit, then the Permittee must include the results of such
27 monitoring in the calculation and reporting of the data submitted in the
28 Permittee's DMR unless otherwise specified by Special Condition S2.

29 **S3.E. Reporting Permit Violations**

30 The Permittee must take the following actions when it violates or is unable to
31 comply with any permit condition:

- 32 1. Immediately take action to stop, contain, and cleanup unauthorized discharges
33 or otherwise stop the noncompliance and correct the problem.

- 1
2 2. If applicable, immediately repeat sampling and analysis. Submit the results of
any repeat sampling to Ecology within thirty (30) days of sampling.

3 **a. Twenty-four-hour reporting**

4 The Permittee must report the following occurrences of noncompliance by
5 telephone, to Ecology at 509-372-7950, within 24 hours from the time the
6 Permittee becomes aware of any of the following circumstances. The
7 Permittee must report:

- 8 1. Any noncompliance that may endanger health or the environment.
9 2. Any unanticipated bypass that causes an exceedance of an effluent
10 limit in the permit (See Part S4.B., "Bypass Procedures").
11 3. Any upset that causes an exceedance of an effluent limit in the permit.
12 Upset means an exceptional incident in which there is unintentional
13 and temporary noncompliance with technology-based permit effluent
14 limits because of factors beyond the reasonable control of the
15 Permittee. An upset does not include noncompliance to the extent
16 caused by operational error, improperly designed treatment facilities,
17 inadequate treatment facilities, lack of preventive maintenance, or
18 careless or improper operation.
19 4. Any violation of a maximum daily or instantaneous maximum
20 discharge limit for any of the pollutants in Section S1.A of this permit.
21 5. Any overflow prior to the treatment works, whether or not such
22 overflow endangers health or the environment or exceeds any effluent
23 limit in the permit.
24 6. Any leak or failure of the wastewater transmission pipeline.

25 **b. Report within five days**

26 The Permittee must also submit a written or electronic report within five days
27 of the time that the Permittee becomes aware of any reportable event under
28 subpart a, above. The report must contain:

- 29 1. A description of the noncompliance and its cause.
30 2. Maps, drawings, aerial photographs, or pictures to show the location
31 and cause(s) of the non-compliance.
32 3. The period of noncompliance, including exact dates and times.
33 4. The estimated time the Permittee expects the noncompliance to
34 continue if not yet corrected.
35 5. Steps taken or planned to reduce, eliminate, and prevent recurrence of
36 the noncompliance.
37 6. If the noncompliance involves an overflow prior to the treatment
38 works, an estimate of the quantity (in gallons) of untreated overflow.
39

1 **c. Waiver of written reports**

2 Ecology may waive the written report required in subpart b, above, on a
3 case-by-case basis upon request if the Permittee has submitted a timely oral
4 report.

5 **d. All other permit violation reporting**

6 The Permittee must report all permit violations, which do not require
7 immediate or within 24 hours reporting, when it submits monitoring reports
8 for S3.A ("Reporting"). The reports must contain the information listed in
9 subpart b, above. Compliance with these requirements does not relieve the
10 Permittee from responsibility to maintain continuous compliance with the
11 terms and conditions of this permit or the resulting liability for failure to
12 comply.

13 **e. Report submittal**

14 The Permittee must submit reports to the address listed in S3A.

15 **S3.F. Other Reporting**

16 **a. Spills of Oil or Hazardous Materials**

17 The Permittee must report a spill of oil or hazardous materials in accordance with
18 the requirements of RCW 90.56.280 and chapter 173-303-145. You can obtain
19 further instructions at the following website:
20 <http://www.ecy.wa.gov/programs/spills/other/reportaspill.htm> .

21 **b. Failure to submit relevant or correct facts**

22 Where the Permittee becomes aware that it failed to submit any relevant facts in a
23 permit application, or submitted incorrect information in a permit application, or
24 in any report to Ecology, it must submit such facts or information promptly.

25 **S3.G. Maintaining a Copy of this Permit**

26 The Permittee must keep a copy of this permit at the facility and make it available
27 upon request to Ecology inspectors.

28 **S4. OPERATION AND MAINTENANCE**

29 The Permittee must, at all times, properly operate and maintain all facilities or
30 systems of treatment and control (and related appurtenances) which are installed
31 to achieve compliance with the terms and conditions of this permit. Proper
32 operation and maintenance includes adequate laboratory controls and appropriate
33 quality assurance procedures. This provision requires the operation of back-up or
34 auxiliary facilities or similar systems, which are installed by a Permittee only
35 when the operation is necessary to achieve compliance with the conditions of this
36 permit.

1 **S4.A. Operations and Maintenance (O&M) Manual**

2 **a. O&M manual submittal and requirements**

3 The Permittee must:

- 4 1. Review the O&M Manual at least annually and confirm this review by letter
5 to Ecology by July 1 of each year.
- 6 2. Submit to Ecology for review substantial changes or updates to the O&M
7 Manual whenever it incorporates them into the manual. The Permittee must
8 submit a paper copy and an electronic copy (preferably as a PDF).
- 9 3. Keep the approved O&M Manual at the permitted facility.
- 10 4. Follow the instructions and procedures of this manual.

11
12 **b. O&M manual components**

13 In addition to the requirements of WAC 173-240-150 (1) and (2), the O&M
14 Manual must include:

- 15 1. Emergency procedures for plant shutdown and cleanup in the event of a
16 wastewater system upset or failure including pipeline leaks.
- 17 2. Wastewater system maintenance procedures that contribute to the generation
18 of wastewater.
- 19 3. Any directions to maintenance staff when cleaning or maintaining other
20 equipment or performing other tasks which are necessary to protect the
21 operation of the wastewater system (for example, defining maximum
22 allowable discharge rate for draining a tank, blocking all floor drains before
23 beginning the overhaul of a stationary engine.)
- 24 4. Treatment plant process control monitoring schedule.
- 25 5. Wastewater sampling protocols and procedures for compliance with the
26 sampling and reporting requirements in the wastewater discharge permit.
- 27 6. Minimum staffing adequate to operate and maintain the treatment processes
28 and carry out compliance monitoring required by the permit.

29 **S4.B. Bypass Procedures**

30 This permit prohibits a bypass, which is the intentional diversion of waste streams
31 from any portion of a treatment facility.

32 Ecology may take enforcement action against a Permittee for a bypass unless one
33 of the following circumstances (1, 2, or 3) applies.

- 34 1. Bypass for essential maintenance without the potential to cause violation of
35 permit limits or conditions.
36 This permit authorizes a bypass if it allows for essential maintenance and does
37 not have the potential to cause violations of limits or other conditions of this
38 permit, or adversely impact public health as determined by Ecology prior to

1 the bypass. The Permittee must submit prior notice, if possible, at least ten
2 (10) days before the date of the bypass.

- 3 2. Bypass is unavoidable, unanticipated, and results in noncompliance of this
4 permit.

5 This permit authorizes such a bypass only if:

- 6 a. Bypass is unavoidable to prevent loss of life, personal injury, or severe
7 property damage. "Severe property damage" means substantial physical
8 damage to property, damage to the treatment facilities which would cause
9 them to become inoperable, or substantial and permanent loss of natural
10 resources which can reasonably be expected to occur in the absence of a
11 bypass.
- 12 b. No feasible alternatives to the bypass exist, such as:
- 13 • The use of auxiliary treatment facilities.
 - 14 • Retention of untreated wastes.
 - 15 • Stopping production.
 - 16 • Maintenance during normal periods of equipment downtime, but not if
17 the Permittee should have installed adequate backup equipment in the
18 exercise of reasonable engineering judgment to prevent a bypass.
 - 19 • Transport of untreated wastes to another treatment facility or
20 preventative maintenance, or transport of untreated wastes to another
21 treatment facility.
- 22 c. The Permittee has properly notified Ecology of the bypass as required in
23 Special Condition S3.E of this permit.

- 24 3. If bypass is anticipated and has the potential to result in noncompliance of this
25 permit.

- 26 a. The Permittee must notify Ecology at least thirty (30) days before the
27 planned date of bypass. The notice must contain:
- 28 • A description of the bypass and its cause.
 - 29 • An analysis of all known alternatives which would eliminate, reduce,
30 or mitigate the need for bypassing.
 - 31 • A cost-effectiveness analysis of alternatives including comparative
32 resource damage assessment.
 - 33 • The minimum and maximum duration of bypass under each
34 alternative.
 - 35 • A recommendation as to the preferred alternative for conducting the
36 bypass.
 - 37 • The projected date of bypass initiation.
 - 38 • A statement of compliance with SEPA.

- 1 • A request for modification of water quality standards as provided for
2 in WAC 173-201A-410, if an exceedance of any water quality
3 standard is anticipated.
- 4 • Details of the steps taken or planned to reduce, eliminate, and prevent
5 reoccurrence of the bypass.
- 6 b. For probable construction bypasses, the Permittee must notify Ecology of
7 the need to bypass as early in the planning process as possible. The
8 Permittee must consider the analysis required above during preparation of
9 the engineering report or facilities plan and plans and specifications and
10 must include these to the extent practical. In cases where the Permittee
11 determines the probable need to bypass early, the Permittee must continue
12 to analyze conditions up to and including the construction period in an
13 effort to minimize or eliminate the bypass.
- 14 c. Ecology will consider the following prior to issuing an administrative
15 order for this type of bypass:
 - 16 • If the bypass is necessary to perform construction or
17 maintenance-related activities essential to meet the requirements of
18 this permit.
 - 19 • If feasible alternatives to bypass exist, such as the use of auxiliary
20 treatment facilities, retention of untreated wastes, stopping production,
21 maintenance during normal periods of equipment down time, or
22 transport of untreated wastes to another treatment facility.
 - 23 • If the Permittee planned and scheduled the bypass to minimize adverse
24 effects on the public and the environment.

25 After consideration of the above and the adverse effects of the proposed bypass
26 and any other relevant factors, Ecology will approve or deny the request. Ecology
27 will give the public an opportunity to comment on bypass incidents of significant
28 duration, to the extent feasible. Ecology will approve a request to bypass by
29 issuing an administrative order under RCW 90.48.120.

30 **S4.C. Best Management Practices\Pollution Prevention Program**

31 The Permittee must comply with the following Best Management Practices to
32 prevent pollution to waters of the State:

- 33 1. Do not commingle process wastewater streams with sanitary (domestic) sewage.
- 34 2. Do not discharge in excess of the hydraulic capacity of the infiltration basin.
- 35 3. Do not discharge priority pollutants, dangerous wastes, or toxics in toxic
36 amounts.
- 37 4. Wastewater from the infiltration basins must not run off into any surface
38 waters of the state or to any land not owned by or under control of the Permittee.
- 39 5. The Permittee must use recognized good practices, and all available and
40 reasonable procedures.

1 6. Do not apply wastewater to the infiltration basins in quantities that
2 significantly reduce or destroy the long-term infiltration rate of the soil or that
3 would alter groundwater quality in amounts that would affect current and future
4 beneficial uses.

5
6 **S5. SOLID WASTES**

7 Management of solid waste is managed through the Hanford Facility Resource
8 Conservation and Recovery Act Permit, Dangerous Waste Portion, WA7 89000
9 8967, Part III, Operating Unit Group 3, LERF and 200 Area ETF.

10 **S6. APPLICATION FOR PERMIT RENEWAL OR MODIFICATION FOR**
11 **FACILITY CHANGES**

12 The Permittee must submit an application for renewal of this permit by June 30,
13 2019. The Permittee must submit a paper copy and an electronic copy (preferably
14 as a PDF).

15 The Permittee must also submit a new application or supplement at least one
16 hundred eighty (180) days prior to commencement of discharges, resulting from
17 the activities listed below, which may result in permit violations. These activities
18 include any facility expansions, production increases, or other planned changes,
19 such as process modifications, in the permitted facility.

20 **S7. FACILITY LOADING**

21 **S7.A. Design Criteria**

22 The flows or waste loads for the permitted facility must not exceed the following
23 design criteria:

Maximum Daily Discharge Flow	670,000 gallons per day
Maximum Average Monthly Discharge Flow	250,000 gallons per day

24 **S8. NON-ROUTINE AND UNANTICIPATED DISCHARGES**

25 1. Beginning on the effective date of this permit, the Permittee is authorized to
26 discharge non-routine wastewater on a case-by-case basis, if approved by
27 Ecology. Prior to any such discharge, the Permittee must contact Ecology and
28 at a minimum provide the following information:

- 29 a. The proposed discharge location
30 b. The nature of the activity that will generate the discharge
31 c. Any alternatives to the discharge, such as reuse, storage, or recycling of
32 the water
33 d. The total volume of water it expects to discharge

- 1 e. The results of the chemical analysis of the water
- 2 f. The date of proposed discharge
- 3 g. The expected rate of discharge discharged, in gallons per minute.
- 4 2. The Permittee must analyze the water for all constituents limited for the
- 5 discharge and report them as required by subpart 1.e above. The analysis
- 6 must also include any parameter deemed necessary by Ecology. All
- 7 discharges must comply with the effluent limits as established in Special
- 8 Condition S1 of this permit, water quality standards, and any other limits
- 9 imposed by Ecology.
- 10 3. The Permittee must limit the discharge rate, as referenced in subpart 1.g
- 11 above, so it will not cause erosion of ditches or structural damage to culverts
- 12 and their entrances or exits.
- 13 4. The discharge cannot proceed until Ecology has reviewed the information
- 14 provided and has authorized the discharge by letter to the Permittee or by an
- 15 Administrative Order.

16 **S9. SPILL PLAN**

17 **S9.A. Spill Control Plan Submittals and Requirements**

18 The Permittee must:

- 19 1. Review the plan at least annually and update the spill plan as needed.
- 20 2. Send substantive changes to the plan to Ecology.
- 21 3. Follow the plan and any supplements throughout the term of the permit.

22 **S9.B. Spill Control Plan Components**

23 The spill control plan must include the following:

- 24 1. A list of all oil and petroleum products and other materials used and/or stored
- 25 on-site, which when spilled, or otherwise released into the environment,
- 26 designate as Dangerous Waste (DW) or Extremely Hazardous Waste (EHW)
- 27 by the procedures set forth in WAC 173-303-070. Include other materials
- 28 used and/or stored on-site which may become pollutants or cause pollution
- 29 upon reaching state's waters.
- 30 2. A description of preventive measures and facilities (including an overall
- 31 facility plot showing drainage patterns) which prevent, contain, or treat spills
- 32 of these materials.
- 33 3. A description of the reporting system the Permittee will use to alert
- 34 responsible managers and legal authorities in the event of a spill.
- 35 4. A description of operator training to implement the plan.

36 The Permittee may submit plans and manuals required by 40 CFR Part 112,
37 contingency plans required by Chapter 173-303 WAC, or other plans required by
38 other agencies, which meet the intent of this section.

39

1 **S10. TRITIUM TRACKING AND GROUNDWATER MONITORING**

2 The permittee has an approved Tritium Tracking and Groundwater Monitoring
3 Plan on file with Ecology. In accordance with this plan:

- 4 1. The Permittee shall report tritium sampling results for each fiscal year to
5 Ecology at least annually, by November 30th of the following fiscal year.
- 6 2. The Permittee shall update and maintain computer model(s) that predict the
7 travel time of the tritium plume created by this discharge and also predict the
8 concentration of the tritium plume at the area of the plume's discharge to the
9 Columbia River. Model update(s) and reports to Ecology should occur at least
10 once per permit cycle and within six (6) months of detection of the tritium plume
11 from SALDS in a new monitoring well. The plan should include the proposed
12 reporting format, e.g., maps, tables, etc.
- 13 3. The Permittee shall sample Wells 699-48-77C and 699-48-77D at least once per
14 calendar quarter for the constituents listed in Section S2.B of this permit. These
15 sample results shall be reported in the quarterly Discharge Monitoring Reports
16 (DMRs) per the requirement of Section S3.
- 17 4. Other reports and submissions that are required by the Ecology approved
18 Tritium Tracking and Groundwater Monitoring Plan shall be submitted to
19 Ecology per the schedule included in the plan.

20 The Permittee must submit proposed revisions or modifications to the Tritium
21 Tracking and Groundwater Monitoring Plan to Ecology for review and approval
22 at least thirty (30) days prior to implementation. Once approved, the Permittee
23 must comply with any plan modifications.

1 **GENERAL CONDITIONS**

2
3 **G1. SIGNATORY REQUIREMENTS**

4 All applications, reports, or information submitted to Ecology must be signed as
5 follows:

- 6 1. All permit applications must be signed by either a principal executive officer
7 or ranking elected official.
- 8 2. All reports required by this permit and other information requested by
9 Ecology must be signed by a person described above or by a duly authorized
10 representative of that person. A person is a duly authorized representative
11 only if:
- 12 a. The authorization is made in writing by the person described above and is
13 submitted to Ecology at the time of authorization, and
- 14 b. The authorization specifies either a named individual or any individual
15 occupying a named position.
- 16 3. Changes to authorization. If an authorization under paragraph G1.2. above is
17 no longer accurate because a different individual or position has responsibility
18 for the overall operation of the facility, a new authorization must be submitted
19 to Ecology prior to or together with any reports, information, or applications
20 to be signed by an authorized representative.
- 21 4. Certification. Any person signing a document under this section must make
22 the following certification:
- 23 "I certify under penalty of law, that this document and all attachments were
24 prepared under my direction or supervision in accordance with a system
25 designed to assure that qualified personnel properly gathered and evaluated
26 the information submitted. Based on my inquiry of the person or persons who
27 manage the system or those persons directly responsible for gathering
28 information, the information submitted is, to the best of my knowledge and
29 belief, true, accurate, and complete. I am aware that there are significant
30 penalties for submitting false information, including the possibility of fine and
31 imprisonment for knowing violations."

32 **G2. RIGHT OF ENTRY**

33 Representatives of Ecology have the right to enter at all reasonable times in or
34 upon any property, public or private, for the purpose of inspecting and
35 investigating conditions relating to the pollution or the possible pollution of any
36 waters of the state. Reasonable times include normal business hours; hours
37 during which production, treatment, or discharge occurs; or times when Ecology
38 suspects a violation requiring immediate inspection. Representatives of Ecology
39 must be allowed to have access to, and copy at reasonable cost, any records
40 required to be kept under terms and conditions of the permit; to inspect any

1 monitoring equipment or method required in the permit; and to sample the
2 discharge, waste treatment processes, or internal waste streams.

3 **G3. PERMIT ACTIONS**

4 This permit is subject to modification, suspension, or termination, in whole or in
5 part by Ecology for any of the following causes:

- 6 1. Violation of any permit term or condition
- 7 2. Obtaining a permit by misrepresentation or failure to disclose all relevant facts
- 8 3. A material change in quantity or type of waste disposal
- 9 4. A material change in the condition of the waters of the state; or
- 10 5. Nonpayment of fees assessed pursuant to RCW 90.48.465.

11 Ecology may also modify this permit, including the schedule of compliance or
12 other conditions, if it determines good and valid cause exists, including
13 promulgation or revisions of regulations or new information.

14 **G4. REPORTING A CAUSE FOR MODIFICATION**

15 The Permittee must submit a new application at least sixty (60) days before it
16 wants to discharge more of any pollutant, a new pollutant, or more flow than
17 allowed under this permit. The Permittee should use the State Waste Discharge
18 Permit application, and submit required plans at the same time. Required plans
19 include an Engineering Report, Plans and Specifications, and an Operations and
20 Maintenance manual, (see Chapter 173-240 WAC). Ecology may waive these
21 plan requirements for small changes, contact Ecology if they do not appear
22 necessary. The Permittee must continue to comply with the existing permit until
23 it is modified or reissued. Submitting a notice of dangerous waste discharge (to
24 comply with Pretreatment or Dangerous Waste rules) triggers this requirement as
25 well.

26 **G5. PLAN REVIEW REQUIRED**

27 Prior to constructing or modifying any wastewater control facilities, an
28 engineering report and detailed plans and specifications must be submitted to
29 Ecology for approval in accordance with Chapter 173-240 WAC. Engineering
30 reports, plans, and specifications should be submitted at least 180 days prior to the
31 planned start of construction. Facilities must be constructed and operated in
32 accordance with the approved plans.

33 **G6. COMPLIANCE WITH OTHER LAWS AND STATUTES**

34 Nothing in the permit excuses the Permittee from compliance with any applicable
35 federal, state, or local statutes, ordinances, or regulations.

36 **G7. TRANSFER OF THIS PERMIT**

37 This permit is automatically transferred to a new owner or operator if:

- 1 1. A written agreement between the old and new owner or operator containing a
2 specific date for transfer of permit responsibility, coverage, and liability is
3 submitted to Ecology.
 - 4 2. A copy of the permit is provided to the new owner and
 - 5 3. Ecology does not notify the Permittee of the need to modify the permit.
- 6 Unless this permit is automatically transferred according to Section G7.1. above,
7 this permit may be transferred only if it is modified to identify the new Permittee
8 and to incorporate such other requirements as determined necessary by Ecology.

9 **G8. PAYMENT OF FEES**

10 The Permittee must submit payment of fees associated with this permit as
11 assessed by Ecology. Ecology may revoke this permit if the permit fees
12 established under Chapter 173-224 WAC are not paid.

13 **G9. PENALTIES FOR VIOLATING PERMIT CONDITIONS**

14 Any person who is found guilty of willfully violating the terms and conditions of
15 this permit is guilty of a crime, and upon conviction thereof shall be punished by a
16 fine of up to ten thousand dollars and costs of prosecution, or by imprisonment at
17 the discretion of the court. Each day upon which a willful violation occurs may
18 be deemed a separate and additional violation.

19 Any person who violates the terms and conditions of a waste discharge permit
20 incurs, in addition to any other penalty as provided by law, a civil penalty in the
21 amount of up to ten thousand dollars for every such violation. Each and every
22 such violation is a separate and distinct offense, and in case of a continuing
23 violation, every day's continuance is a separate and distinct violation.

24 **G10. DUTY TO PROVIDE INFORMATION**

25 The Permittee must submit to Ecology, within a reasonable time, all information
26 which Ecology may request to determine whether cause exists for modifying,
27 revoking and reissuing, or terminating this permit or to determine compliance
28 with this permit. The Permittee must also submit to Ecology upon request, copies
29 of records required to be kept by this permit.

30 **G11. DUTY TO COMPLY**

31 The Permittee must comply with all conditions of this permit. Any permit
32 noncompliance constitutes a violation of chapter 90.48 RCW and is grounds for
33 enforcement action; for permit termination, revocation and reissuance, or
34 modification; or denial of a permit renewal application.