

Issue Date:  
Effective Date:  
Expiration Date:

**National Pollutant Discharge Elimination System  
Waste Discharge Permit No. WA0000892**

State of Washington  
DEPARTMENT OF ECOLOGY  
Eastern Regional Office  
4601 North Monroe Street  
Spokane, Washington 99205-1295

In compliance with the provisions of  
The State of Washington Water Pollution Control Law  
Chapter 90.48 Revised Code of Washington  
and  
The Federal Water Pollution Control Act  
(The Clean Water Act)  
Title 33 United States Code, Section 1342 et seq.

Kaiser Aluminum Washington, LLC  
P.O. Box 15108  
Spokane Valley, Washington 99215

is authorized to discharge in accordance with the Special and General Conditions that follow.

Facility Location: 15000 E Euclid Ave, Spokane Valley, WA 99215	Receiving Water: Spokane River
Treatment Type: Oil removal, lime addition, settling, and filtration Industry Type: Aluminum casting and forming	SIC Code: 3353 NAICS Code: 331315 Categorical Industry: Aluminum Forming (40 CFR Part 467)

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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
All permit required submittals must be submitted electronically through the WQWebPortal.			
S3.A	Discharge Monitoring Report (DMR)	Monthly	<u>Insert start date</u>
S3.A	Permit Renewal Application Monitoring Data	1/permit cycle	<u>with Application for Permit renewal insert date from S10</u>
S3.F	Reporting Permit Violations	As necessary	
S3.F	Reporting Bypasses Discharging to a Source of Drinking Water	As necessary	
S4.	Best Management Plan for Total Phosphorus, CBOD, and Ammonia Update	Once/year	July 1, 2017
S5.	Annual Status Report	Annually	July 1, 2017
S5.	Engineering Report for Treatment Technology	Once	January 1, 2017
S5.	Installation and Operation of Phosphorus Treatment Technology (confirmation letter)	Once	January 1, 2019
S6.A	Best Management Plan for Total PCBs	1/permit cycle	July 1, 2017
S6.A.	Best Management Plan for Total PCBs Update	1/year	July 1, 2018
S6.B.a	Quality Assurance/Quality Control (QA/QC) Plan for PCB Effluent Monitoring	Once	<u>Enter a specific date within three months after permit effective date</u>
S6.B.b	Updated Scope of Work for PCB Source Identification and Reduction	Once	<u>Enter a specific date within six months after permit effective date</u>
S6.B.c.2	Outfall 006 Influent PCB Loading Investigation	As necessary	-
S6.B.g Item 1	Scope of Work for Termination of Discharges from Outfall 007	1/permit cycle	<u>Enter a specific date within six months after permit effective date</u>
S6.B.g Item 2	Final Plan for Termination of Discharges from Outfall 007	1/permit cycle	<u>Enter a specific date within eighteen months after permit effective date</u>
S7.	Annual Status Report (Total PCBs)	Annually	<u>Enter a specific date within one year after permit effective date</u>
S7.	Scope of Work for Engineering Report (Total PCBs)	Once	<u>Enter a specific date within 7 years after permit effective date</u>

Permit Section	Submittal	Frequency	First Submittal Date
S7.	Engineering Report (Total PCBs)	Once	<u>Enter a specific date within 8 years after permit effective date</u>
S7.	Installation of Total PCBs Treatment System Confirmation Letter	Once	<u>Enter a specific date within 9 years, 6 months after permit effective date</u>
S9.A.a	Operations and Maintenance Manual	1/permit cycle	<u>Enter a specific date within two years after permit effective date</u>
S9.A.a	Operations and Maintenance Manual Update or Review Confirmation Letter	Annually	March 15, 2017
S9.A.c	Treatment System Operating Plan	1/permit cycle	<u>Enter a specific date within two years after permit effective date</u>
S9.B	Reporting Construction Bypasses	As necessary	-
S10.C.a	Solid Waste Control Plan	1/permit cycle	<u>Enter a specific date within two years after permit effective date</u>
S10.C.a	Modification to Solid Waste Plan	As necessary	-
S10.C.a	Solid Waste Control Plan Update	1/permit cycle	<u>with Application for Permit renewal insert date from S10</u>
S11.	Application for Permit Renewal	1/permit cycle	<u>insert date from S10</u>
S12.	Non-Routine and Unanticipated Discharges	As necessary	-
S13.A	Spill Plan	1/permit cycle	<u>Enter a specific date within two years after permit effective date</u>
S13.A	Modification of Spill Plan	As necessary	-
S14.B	Cooling Water Intake Structure Information and Compliance Report	1/permit cycle	<u>Enter a specific date within three years after permit effective date</u>
S15.C	Acute Toxicity: Compliance Monitoring Reports	1/quarter	<u>Enter specific dates included in Special Condition S15.C</u>
S15.D	Acute Toxicity: Response to noncompliance reporting	As necessary	-
S15.D	Acute Toxicity: TI/TRE Plan	As necessary	-
S16.C	Chronic Toxicity: Compliance Monitoring Reports	1/quarter	<u>Enter specific dates included in Special Condition S16.C</u>
S16.D	Chronic Toxicity: Response to noncompliance reporting	As necessary	-

<b>Permit Section</b>	<b>Submittal</b>	<b>Frequency</b>	<b>First Submittal Date</b>
S16.D	Chronic Toxicity: TI/TRE Plan	As necessary	-
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	-
G10.	Duty to Provide Information	As necessary	-
G21.	Compliance Schedules	As necessary	-

## Special Conditions

### S1. Discharge limits

#### S1.A. Process wastewater discharges

All discharges and activities authorized by this permit must be consistent with the terms and conditions of this permit.

The discharge of any of the following pollutants more frequently than, or at a level in excess of that identified and authorized by this permit violates the terms and conditions of this permit.

#### 1. Final discharge to Spokane River - Outfall 001

Beginning on the effective date of this permit, the Permittee is authorized to discharge stormwater, groundwater and treated wastewater to the Spokane River at the permitted location subject to complying with the following limitations:

<b>Effluent Limits: Outfall 001</b>		
Latitude 47.6860445517192 Longitude -117.223793548856		
Parameter	Average Monthly <sup>a</sup>	Maximum Daily <sup>b</sup>
Zinc (Total)	75 micrograms per liter (ug/L)	146 ug/L
Lead (Total)	7.0 ug/L	12.1 ug/L
Cadmium (Total)	1.3 ug/L	2.2 ug/L
	Minimum	Maximum
pH <sup>c</sup>	6.0 standard units	9.0 standard units
Parameter	Effluent Limit	
Acute Toxicity	No acute toxicity detected in a test concentration representing the acute critical effluent concentration (ACEC) <sup>d</sup>	
Chronic Toxicity	No toxicity detected in a test concentration representing the chronic critical effluent concentration (CCEC) <sup>e</sup>	
	Interim Limits <sup>f</sup>	
Parameter	Average Monthly <sup>a</sup>	Maximum Daily <sup>b</sup>
Total Phosphorus <sup>g</sup> (as P)	1.91 pounds per day (lbs/day)	3.96 lbs/day
Ammonia <sup>g</sup> (as N)	3.85 lbs/day	8.69 lbs/day
Carboneous Biochemical Oxygen Demand (five day) (CBOD <sub>5</sub> ) <sup>g</sup>	269.5 lbs/day	393.0 lbs/day
Total Polychlorinated Biphenyls (PCBs)	129 milligrams per day (mg/day)	146 mg/day
<sup>a</sup>	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, you add the value of each daily discharge measured during a calendar month and divide this sum by the total number of daily discharges measured.	

<b>Effluent Limits: Outfall 001</b>	
<b>Latitude 47.6860445517192 Longitude -117.223793548856</b>	
b	Maximum Daily effluent limit is the highest allowable daily discharge. The daily discharge is the average 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. This does not apply to pH or temperature.
c	When pH is continuously monitored, excursions between 5.0 and 6.0, or 9.0 and 10.0 are not be considered violations if no single excursion exceeds 60 minutes in length and total excursions do not exceed 7 hours and 26 minutes per month. Any excursions below 5.0 and above 10.0 at any time are violations.
d	The ACEC means the maximum concentration of effluent during critical conditions at the boundary of the acute mixing zone, defined in <b>Section S1.B</b> of this permit. The ACEC equals 71.4% effluent.
e	The CCEC means the maximum concentration of effluent during critical conditions at the boundary of the mixing zone, defined in <b>Section S1.B</b> of this permit. The CCEC equals 18.5% effluent.
f	See <b>Special Condition S5</b> for the Waste Load Allocations, Schedule of Compliance, and Final Water Quality Based Effluent Limits for total phosphorus, ammonia, and CBOD.  See <b>Special Condition S7</b> for the Schedule of Compliance and Final Effluent Limit for total PCBs.
g	These limits apply from March 1st to October 31st.

**2. Black walnut shell (BWS) effluent - Outfall 006**

Beginning on the effective date of this permit, the Permittee is authorized to discharge treated wastewater into final Outfall 001 subject to complying with the following limitations:

<b>Effluent Limits: Outfall 006</b>		
<b>Latitude 47.6860445517192 Longitude -117.223793548856</b>		
Parameter	Average Monthly <sup>a</sup>	Maximum Daily <sup>b</sup>
Chromium (total)	2.1 lbs/day	5.1 lbs/day
Cyanide	0.53 lbs/day	1.27 lbs/day
Aluminum (total)	7.5 lbs/day	14.4 lbs/day
Oil & Grease	374.7 lbs/day	565.3 lbs/day
Total Suspended Solids (TSS)	406.1 lbs/day	903.9 lbs/day
a	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, you add the value of each daily discharge measured during a calendar month and divide this sum by the total number of daily discharges measured.	
b	Maximum Daily effluent limit is the highest allowable daily discharge. The daily discharge is the average 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. This does not apply to pH or temperature.	

### 3. Sanitary sewage effluent - Outfall 003

Beginning on the effective date of this permit, the Permittee is authorized to discharge treated sanitary sewage into the wastewater lagoon subject to complying with the following limitations:

Effluent Limits: Outfall 003		
Latitude 47.68611226945 Longitude -117.223966511704		
Parameter	Average Monthly <sup>a</sup>	Average Weekly <sup>b</sup>
Biochemical Oxygen Demand (5-day) (BOD <sub>5</sub> )	30 milligrams/liter (mg/L) 42 lbs/day	45 mg/L 72 lbs/day
Total Suspended Solids (TSS)	30 mg/L 42 lbs/day	45 mg/L 72 lbs/day
Parameter	Monthly Geometric Mean <sup>c</sup>	Weekly Geometric Mean <sup>c</sup>
Fecal Coliform Bacteria <sup>d</sup>	200/100 milliliter (mL)	400/100 mL
<sup>a</sup>	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, you add the value of each daily discharge measured during a calendar month and divide this sum by the total number of daily discharges measured. See footnote c for fecal coliform calculations.	
<sup>b</sup>	Average Weekly discharge limit means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges <sup>1</sup> measured during that week. See footnote c for fecal coliform calculations.	
<sup>c</sup>	Ecology provides directions to calculate the monthly and the weekly geometric mean in publication No. 04-10-020, Information Manual for Treatment Plant Operators available at: <a href="http://www.ecy.wa.gov/pubs/0410020.pdf">http://www.ecy.wa.gov/pubs/0410020.pdf</a>	
<sup>d</sup>	Total residual chlorine must be maintained which is sufficient to attain the fecal coliform limits specified above. Chlorine concentrations in excess of that necessary to reliably achieve these limits must be avoided.	

### 4. Groundwater remediation flow – Outfall 007

Beginning on the effective date of this permit and lasting through two years after the effective date of this permit, the Permittee is authorized to discharge groundwater remediation flow from Outfall 007 to the Spokane River. See schedule of compliance for the termination of this discharge to the Spokane River (Permit Condition S6.F).

#### S1.B. Mixing zone authorization

##### Mixing zone for Outfall 001

The paragraph below defines the maximum boundaries of the mixing zones.

##### Chronic mixing zone

The mixing zone extends from the bottom to the top of the water column. The concentration of pollutants at the edge of the chronic zone must meet chronic aquatic life criteria and human health criteria.

**Acute mixing zone**

The mixing zone extends from the bottom to the top of the water column. The concentration of pollutants at the edge of the acute zone must meet acute aquatic life criteria.

Available Dilution (dilution factor)	
Acute Aquatic Life Criteria	1.4 (ACEC of 71.4% effluent)
Chronic Aquatic Life Criteria	5.4 (CCEC of 18.5% effluent)
Human Health Criteria - Carcinogen	38.2
Human Health Criteria - Non-carcinogen	6.9

**S2. Monitoring requirements**

**S2.A. Monitoring schedule**

The Permittee must monitor in accordance with the following schedule and the requirements specified in **Appendix A**.

Parameter	Units & Speciation	Minimum Sampling Frequency <sup>a</sup>	Sample Type <sup>b</sup>
<b>(1) Final discharge to Spokane River - Outfall 001</b>			
Flow	million gallons/day (mgd)	Continuous	Meter
pH <sup>c</sup>	s.u.	"	"
Temperature	°F	"	"
Zinc (total)	µg/L	2/week	24-Hour Composite
Lead (total)	µg/L	"	"
Cadmium (total)	µg/L	"	"
Total Phosphorus (as P)	µg/L	"	"
Total Phosphorus (as P)	lbs/day	"	Calculated
Total Reactive Phosphorus (as P)	µg/L	"	24-Hour Composite
Total Reactive Phosphorus (as P)	lbs/day	"	Calculated
CBOD <sub>5</sub>	mg/L	"	24-Hour Composite
CBOD <sub>5</sub>	lbs/day	"	Calculated
Ammonia (as N)	mg/L	"	24-Hour Composite
Ammonia (as N)	lbs/day	"	Calculated
Hardness (as CaCO <sub>3</sub> )	mg/L	"	24-Hour Composite
Acute Toxicity	see S14.A.	Once/quarter	"
Chronic Toxicity	see S15.A.	Once/quarter	"
<b>Monitoring for compliance with effluent limits in Special Conditions S1.A and S7. (use requirements specified in Appendix A)</b>			
Total PCBs	pg/L	2/year	24-Hour Composite
Total PCBs	mg/day	"	Calculated

Parameter	Units & Speciation	Minimum Sampling Frequency <sup>a</sup>	Sample Type <sup>b</sup>
<b>Monitoring for effluent characterization only</b>			
Total PCBs <sup>d</sup>	pg/L	1/two weeks	24-Hour Composite
Total PCBs <sup>d</sup>	mg/day	"	Calculated
<b>(2) Black Walnut Shell (BWS) Effluent - Outfall 006</b>			
Flow	mgd	Continuous	Meter
Chromium (total)	mg/L	2/week	24-Hour Composite
Chromium (total)	lbs/day	"	Calculated
Cyanide <sup>e</sup>	mg/L	"	24-Hour Composite
Cyanide <sup>e</sup>	lbs/day	"	Calculated
Aluminum (total)	mg/L	"	24-Hour Composite
Aluminum (total)	lbs/day	"	Calculated
TSS	mg/L	"	24-Hour Composite
TSS	lbs/day	"	Calculated
Oil & Grease	mg/L	"	24-Hour Composite
Oil & Grease	lbs/day	"	Calculated
<b>(3) Black Walnut Shell (BWS) Influent</b>			
Flow	mgd	Continuous	Meter
Total PCBs <sup>f</sup>	ng/L	1/every other week	24-Hour Composite
Total PCBs <sup>f</sup>	g/day	"	Calculated
<b>(4) Groundwater Remediation Flow – Outfall 007</b>			
Flow	mgd	Continuous	Meter
Total PCBs <sup>d</sup>	pg/L	Once/month	Grab
Total PCBs <sup>d</sup>	g/day	"	Calculated
<b>(5) Sanitary Sewage Effluent - Outfall 003</b>			
Flow	gpd	Continuous	Meter
pH	s.u.	5/week	Grab
BOD <sub>5</sub> <sup>g</sup>	mg/L	1/week	24-Hour Composite
BOD <sub>5</sub> <sup>g</sup>	lbs/day	"	Calculated
TSS	mg/L	"	24-Hour Composite
TSS	lbs/day	"	Calculated
Fecal Coliform <sup>h</sup>	colonies /100 mL	"	Grab
<b>(6) River Intake (Spokane River)</b>			
Flow	gpd	Continuous <sup>i</sup>	Meter
Temperature	°F	Continuous	"
Chromium (total)	mg/L	2/week	24-Hour Composite
Chromium (total)	lbs/day	"	Calculated
Aluminum (total)	mg/L	"	24-Hour Composite
Aluminum (total)	lbs/day	"	Calculated
TSS	mg/L	"	24-Hour Composite
TSS	lbs/day	"	Calculated

Parameter	Units & Speciation	Minimum Sampling Frequency <sup>a</sup>	Sample Type <sup>b</sup>
Oil & Grease	mg/L	“	24-Hour Composite
Oil & Grease	lbs/day	“	Calculated
<b>(4) Permit Renewal Application Requirements – Final discharge to Spokane River - Outfall 001, Black Walnut Shell (BWS) Effluent - Outfall 006, Sanitary Sewage Effluent - Outfall 003</b>			
See Appendix A to identify the specific pollutants in the priority pollutant groups listed below			
Cyanide	µg/L	Once in the last year	Grab
Total Phenolic Compounds	µg/L	“	“
Priority Pollutants (PP) – Total Metals	µg/L; ng/L for mercury	“	24-Hour Composite Grab for mercury
PP – Volatile Organic Compounds	µg/L	“	Grab
PP – Acid-extractable Compounds	µg/L	“	24-Hour Composite
PP – Base-neutral Compounds	µg/L	“	“
PP - Dioxin	pg/L	“	“
PP – Pesticides/PCBs	µg/L	“	“
a	Sampling frequency definitions: <b>Continuous</b> sampling means uninterrupted except for brief lengths of time for calibration, power failure, or unanticipated equipment repair or maintenance. The time interval for the associated data logger must be no greater than 30 minutes. The Permittee must sample once per day when continuous monitoring is not possible. <b>1/two weeks</b> sampling means once every 2 weeks. <b>Quarterly</b> sampling periods are January through March, April through June, July through September, and October through December. <b>The Permittee must begin quarterly monitoring for the quarter beginning on <u>1/1/XX 4/1/XX 7/1/XX 10/1/XX</u> and submit results by <u>4/15/XX, 7/15/XX, 10/15/XX, 1/15/XX.</u></b> <b>2/year</b> sampling means once every 6 months.		
b	Sampling type definitions: <b>24-hour composite</b> means a series of individual samples collected over a 24-hour period into a single container, and analyzed as one sample. <b>Grab</b> means an individual sample collected over a fifteen (15) minute, or less, period. <b>Calculated</b> means figured concurrently with the respective sample, using the following formula: Concentration (in mg/L) X Flow (in MGD) X Conversion Factor (8.34) = lbs/day; or Concentration (in pg/L) X Flow (in MGD) X Conversion Factor (3.7854x10 <sup>-3</sup> ) = mg/day; or Concentration (in ng/L) X Flow (in MGD) X Conversion Factor (3.7854x10 <sup>-3</sup> ) = g/day		
c	The Permittee must report the instantaneous maximum and minimum pH monthly. Do not average pH values. The Permittee must also record and report the: <ul style="list-style-type: none"> <li>• Number of minutes the pH value measured between 5.0 and 6.0 and between 9.0 and 10.0 for each day.</li> <li>• Total minutes for the month.</li> <li>• Monthly instantaneous maximum and minimum pH.</li> </ul> If multiple excursions occur during the day, note the duration for each excursion in the notation field in the parameter notes.		
d	Total PCBs for Outfall 001 and 007 must be tested using EPA method 1668.		
e	Periodic analyses for cyanide will not be required if both of the following conditions are met:		

Parameter	Units & Speciation	Minimum Sampling Frequency <sup>a</sup>	Sample Type <sup>b</sup>
	1. The first wastewater sample taken each calendar year is analyzed and found to contain less than 0.07 mg/l cyanide; and 2. The Permittee certifies in writing to Ecology that cyanide is not and will not be used in the aluminum forming and finishing operations.		
f	Total PCBs for the BWS filter influent must be tested using EPA method 8082 (low-level) having a target detection limit of 5 ng/L for aroclor 1242.		
g	Take effluent samples for the BOD <sub>5</sub> analysis before or after the disinfection process. If taken after, dechlorinate and reseed the sample.		
h	Report a numerical value for fecal coliforms following the procedures in Ecology's <i>Information Manual for Wastewater Treatment Plant Operators</i> , Publication Number 04-10-020 available at: <a href="http://www.ecy.wa.gov/programs/wq/permits/guidance.html">http://www.ecy.wa.gov/programs/wq/permits/guidance.html</a> . Do not report a result as too numerous to count (TNTC).		
i	Determine by difference from other metered flowrates.		

**S2.B. Sampling and analytical procedures**

Samples and measurements taken to meet the requirements of this permit must represent the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.

Sampling and analytical methods used to meet the monitoring requirements specified in this permit must conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 (or as applicable in 40 CFR subchapters N [Parts 400–471] or O [Parts 501-503]) unless otherwise specified in this permit. Ecology may only specify alternative methods for parameters without limits and for those parameters without an EPA approved test method in 40 CFR Part 136.

**S2.C. Flow measurement, field measurement, and continuous monitoring devices**

The Permittee must:

1. Select and use appropriate flow measurement, field measurement, and continuous monitoring 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, the manufacturer's recommendation, and approved O&M manual procedures for the device and the wastestream.
3. Calibrate continuous monitoring instruments weekly unless it can demonstrate a longer period is sufficient based on monitoring records. The Permittee:
  - a. May calibrate apparatus for continuous monitoring of dissolved oxygen by air calibration.

- b. Must calibrate continuous pH measurement instruments using a grab sample analyzed in the lab with a pH meter calibrated with standard buffers and analyzed within 15 minutes of sampling.
- c. Must calibrate continuous chlorine measurement instruments using a grab sample analyzed in the laboratory within 15 minutes of sampling.
4. Use field measurement devices as directed by the manufacturer and do not use reagents beyond their expiration dates.
5. Establish a calibration frequency for each device or instrument in the O&M manual that conforms to the frequency recommended by the manufacturer.
6. Maintain calibration records for at least three years.

#### **S2.D. 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.

#### **S2.E. Request for reduction in monitoring**

The Permittee may request a reduction of the sampling frequency after twelve (12) months of monitoring. Ecology will review each request and at its discretion grant the request when it reissues the permit or by a permit modification.

The Permittee must:

1. Provide a written request.
2. Clearly state the parameters for which it is requesting reduced monitoring.
3. Clearly state the justification for the reduction.

### **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. Discharge monitoring reports**

The first monitoring period begins on the effective date of the permit (unless otherwise specified). 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 the Water Quality Permitting Portal. Include data for each of the parameters tabulated in Special Condition S2 and as required by the form. Report a value for each day sampling occurred (unless specifically exempted in the permit) and for the summary values (when applicable) included on the electronic form.

To find out more information and to sign up for the Water Quality Permitting Portal go to: <http://www.ecy.wa.gov/programs/wq/permits/paris/webdmr.html>.

2. Enter the “No Discharge” reporting code for an entire DMR, for a specific monitoring point, or for a specific parameter as appropriate, if the Permittee did not discharge wastewater or a specific pollutant during a given monitoring period.
3. Report single analytical values below detection as “less than the detection level (DL)” by entering < followed by the numeric value of the detection level (e.g. < 2.0) on the DMR. If the method used did not meet the minimum DL and quantitation level (QL) identified in the permit, report the actual QL and DL in the comments or in the location provided.
4. **Not** report zero for bacteria monitoring. Report as required by the laboratory method.
5. Calculate and report an arithmetic average value for each day for bacteria if multiple samples were taken in one day.
6. Calculate the geometric mean values for bacteria (unless otherwise specified in the permit) using:
  - a. The reported numeric value for all bacteria samples measured above the detection value except when it took multiple samples in one day. If the Permittee takes multiple samples in one day it must use the arithmetic average for the day in the geometric mean calculation.
  - b. The detection value for those samples measured below detection.
7. Report the test method used for analysis in the comments if the laboratory used an alternative method not specified in the permit and as allowed in Appendix A.
8. Calculate average values and calculated total values (unless otherwise specified in the permit) using:
  - a. The reported numeric value for all parameters measured between the agency-required detection value and the agency-required quantitation value.
  - b. One-half the detection value (for values reported below detection) if the lab detected the parameter in another sample from the same monitoring point for the reporting period.
  - c. Zero (for values reported below detection) if the lab did not detect the parameter in another sample for the reporting period.
9. Report single-sample grouped parameters (for example: priority pollutants, PAHs, pulp and paper chlorophenolics, TTOs) on the WQWebDMR form and include: sample date, concentration detected, detection limit (DL) (as necessary), and laboratory quantitation level (QL) (as necessary).

The Permittee must also submit an electronic copy of the laboratory report as an attachment using WQWebDMR. The contract laboratory reports must also include information on the chain of custody, QA/QC results, and documentation of accreditation for the parameter.

10. Report PCB results from EPA Method 1668 by submitting an electronic copy of the laboratory report and spreadsheet results as an attachment using WQWebDMR. The contract laboratory reports must also include information on the chain of custody, QA/QC results, and documentation of accreditation for the parameter. At a minimum, the spreadsheet results must include congener, homolog, dioxin like PCB congeners, and total PCB results (uncorrected and blank censored using 3 and 10 times values detected in laboratory blank samples).
11. Ensure that DMRs are electronically submitted no later than the dates specified below, unless otherwise specified in this permit.
12. Submit DMRs for parameters with the monitoring frequencies specified in S2 (monthly, quarterly, annual, etc.) at the reporting schedule identified below. The Permittee must:
  - a. Submit **monthly** DMRs by the 15<sup>th</sup> day of the following month.
  - b. Submit permit renewal application monitoring data in WQWebDMR as required in Special Condition S2 by X/X/20XX.

### **S3.B. Permit Submittals and Schedules**

The Permittee must use the Water Quality Permitting Portal – Permit Submittals application (unless otherwise specified in the permit) to submit all other written permit-required reports by the date specified in the permit.

When another permit condition requires submittal of a paper (hard-copy) report, the Permittee must ensure that it is postmarked or received by Ecology no later than the dates specified by this permit. Send these paper reports to Ecology at:

Water Quality Permit Coordinator  
Department of Ecology  
Eastern Regional Office  
4601 North Monroe Street  
Spokane, WA 99205-1295

### **S3.C. Permit Submittals and Schedules**

The Permittee must ensure that all other written permit-required reports are postmarked or received by Ecology no later than the dates specified in the permit. Send these paper reports to Ecology at the address included above in Special Condition S3.A.

**S3.D. Records retention**

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

**S3.E. Recording of results**

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

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

**S3.F. Additional monitoring by the Permittee**

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

**S3.G. Reporting permit violations**

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

1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the noncompliance and correct the problem.
2. If applicable, immediately repeat sampling and analysis. Submit the results of any repeat sampling to Ecology within thirty (30) days of sampling.

**a. Immediate reporting – bypasses discharging to a source of drinking water**

The Permittee must immediately report to the Department of Ecology and the Department of Health, Drinking Water Program (at the numbers listed below), all plant bypasses discharging to a waterbody used as a source of drinking water.

Eastern Regional Office	509-329-3400
Department of Health,	800-521-0323 (business hours)
Drinking Water Program	877-481-4901 (after business hours)

**b. Immediate reporting - other**

The Permittee must immediately report the following occurrences of noncompliance by telephone, to Ecology at the telephone number listed above:

1. Any noncompliance that may endanger health or the environment, unless previously reported under immediate reporting requirements.
2. Any unanticipated bypass that causes an exceedance of any effluent limit in the permit (See Part S4.B., "Bypass Procedures").
3. Any upset that causes an exceedance of an effluent limit in the permit (See G.15, "Upset").
4. Any violation of a maximum daily or instantaneous maximum discharge limit for any of the pollutants in Section S1.A of this permit.
5. Any overflow prior to the treatment works, whether or not such overflow endangers health or the environment or exceeds any effluent limit in the permit. This requirement does not include industrial process wastewater overflows to impermeable surfaces which are collected and routed to the treatment works.

**c. Report within five days**

The Permittee must also submit a written report within five days of the time that the Permittee becomes aware of any reportable event under subparts a or b, above. The report must contain:

1. A description of the noncompliance and its cause.
2. The period of noncompliance, including exact dates and times.
3. The estimated time the Permittee expects the noncompliance to continue if not yet corrected.
4. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
5. If the noncompliance involves an overflow prior to the treatment works, an estimate of the quantity (in gallons) of untreated overflow.

**d. Waiver of written reports**

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

**e. All other permit violation reporting**

The Permittee must report all permit violations, which do not require immediate reporting, when it submits monitoring reports for S3.A ("Reporting"). The reports must contain the information listed in subpart c, above.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

### **S3.H. Other reporting**

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

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

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

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

### **S3.I. Maintaining a copy of this permit**

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

## **S4. Best Management Practices (BMP) plan for total phosphorus, CBOD, and ammonia**

The goal of the BMP plan is to maintain, or lower, effluent concentrations of total phosphorus, CBOD, and ammonia at or below current discharge levels through the evaluation and implementation of best management practices (BMPs).

By within one year after the effective date of this permit, the permittee must update their existing BMP plan and submit it to Ecology for review and approval. The updated plan must include the following:

1. A list of members of a cross-functional team responsible for developing the BMP plan. The list must include the name of a designated team leader.
2. Identification of technical/economical evaluation of new BMPs. BMPs should include: substitution of materials; reformulation or redesign of products; modification of equipment, facilities, technology, processes, and procedures; and improvement in management, inventory control, materials handling or general operational phases of the facility.
3. A schedule for implementation of economically feasible BMPs.
4. Methods used for measuring progress towards the BMP goal and updating the BMP plan.

5. A description of the testing of any wastestreams (not already required under Special Condition S3. of this permit) and products used within the facility for total phosphorus, CBOD, and ammonia. A summary of these results should also be provided.

Thereafter, the permittee must submit annual reports to Ecology by July 1<sup>st</sup> of every year. The annual report must include: a) all BMP plan monitoring results for the year; b) a summary of effectiveness of all BMPs implemented to meet the BMP plan goal; and c) any updates to the BMP plan.

This permit may be modified, or revoked and reissued, to revise or remove the requirements of this Section based on information collected under this Section.

## S5. Schedule of compliance for total phosphorus, CBOD, and ammonia

Target Pursuit Action	Compliance Date
Annual Status Reports <sup>a</sup>	July 1 <sup>st</sup> of each year
Engineering Report for Selected Treatment Technology <sup>b</sup>	January 1, 2017
Phosphorus Treatment Technology	January 1, 2019 <sup>c</sup>
Meet Final Water Quality Based Effluent Limits <sup>d</sup>	July 1, 2021
<sup>a</sup> The Annual Status Report must, at a minimum, include detailed updates on the treatment technology (status of report preparation, construction, and/or performance reviews, etc.) and delta elimination plans (status of report preparation, implementation progress, accounting of delta credits earned and expended, etc.). The report must also include an assessment on the progress of meeting the final water quality based effluent limits (WQBELs) through the combination of treatment technology and delta elimination.	
<sup>b</sup> After the Permittee implements the technology selection protocol, the permit holder will prepare, and submit to Ecology for approval, an Engineering Report concerning the chosen technology, including any updates to the construction schedule. The Engineering Report will (if necessary) be accompanied by amendments to the schedule and substance of the target pursuit actions so that in combination with the Engineering Report on expected technology performance, there is reasonable assurance of meeting the final WQBELs in ten (10) years.	
<sup>c</sup> The Permittee must confirm the installation and operation of the phosphorus treatment technology in writing to Ecology.	
<sup>d</sup> The wasteload allocations for ammonia, total phosphorus, and CBOD are 9.0, 3.21, and 462.7 lbs/day seasonal average from March to October, respectively (0.07, 0.025, and 3.6 mg/L, respectively, at a discharge flow of 15.4 mgd). The final WQBELs are shown below:	
<b>FINAL WATER QUALITY BASED EFFLUENT LIMITATIONS: OUTFALL # 001</b> <b>March through October</b>	
<b>Parameter</b>	<b>Season Average</b>
Ammonia, lbs/day	9.0
Total Phosphorus, lbs/day	3.21
CBOD, lbs/day	462.7

Compliance with these limitations will be determined by the mass of pollutant measured in the effluent combined with any credits from the Delta Elimination Plan following Ecology approval and public review and comment. Ecology may adjust the final water quality based effluent limitations on the basis of new information following a revision to the Spokane River DO TMDL. This new information may include: the fraction of bio-available phosphorus in the effluent and alternate modeled water quality based effluent limits extended into February or January. Any adjustment of the final effluent limitations that result in less stringent limitations must ensure the dissolved oxygen responsibility for Avista identified in Table 7 of the DO TMDL remains unchanged as determined through the use of the DO TMDL model and is subject to the provisions of the Clean Water Act for deriving limitations in section 303(d)(4)(A), 42 U.S.C. § 1313(d)(4)(A) as well as the anti-backsliding provisions of the Clean Water Act, including the exceptions in section 402(o)(2) of the Clean Water Act, 33 U.S.C. § 1342(o)(2).

## **S6. Best management practices plan (BMP) for PCBs**

### **S6.A PCB BMP Plan**

The goal of the BMP plan is to maintain, or lower, effluent concentrations of total PCBs at or below current discharge levels through the evaluation and implementation of best management practices (BMPs).

Within one year after the effective date of this permit, the permittee must develop a PCB BMP plan and submit it to Ecology for review and approval. The plan must include:

1. A list of members of a cross-functional team responsible for developing the BMP plan. The list must include the name of a designated team leader.
2. A description of any current and past BMPs implemented and their effectiveness.
3. Methods used for measuring progress towards the BMP goal and updating the BMP plan.
4. Identification of new BMPs and an evaluation of their feasibility (both technical and economical). In addition to those identified in **Section S6.B** below, these BMPs can include: substitution of materials; reformulation or redesign of products; modification of equipment, facilities, technology, processes, and procedures; and improvement in management, inventory control, materials handling or general operational phases of the facility.
5. A schedule for implementation of economically feasible BMPs.
6. A description of the testing of any wastestreams (not already required under Special Condition S3. of this permit) and products used within the facility for total PCBs. A summary of these results must also be provided.
7. A summary of effluent PCB data and any other PCB data relevant to the discharge collected over the previous twelve months.
8. A comparison of effluent PCB data collected over the previous twelve month to older effluent data.

9. An estimate of the reduction in PCB loading and concentration achieved through BMP plan activities during the previous twelve months.

Thereafter, the permittee must submit annual reports to Ecology by July 1<sup>st</sup> of every year. The annual report must include: a) all BMP plan monitoring results for the previous year(s); b) a summary of effectiveness of all BMPs implemented to meet the BMP plan goal; c) any updates to the BMP plan; and d) items 4 through 9 above.

This permit may be modified, or revoked and reissued, to revise the requirements of this Section based on information collected under this Section.

### **S6.B PCB BMP Plan Requirements**

The PCB BMP Plan must include the following items:

- a. **Quality Assurance/Quality Control (QA/QC) Plan for PCB Effluent Monitoring**

The Permittee must submit a sampling and quality assurance plan for Ecology review and approval by Insert date within three months after effective date of the permit for all PCB monitoring required by **Special Condition S2.** of this permit. Prepare all quality assurance plans in accordance with the guidelines given in *Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies*, Ecology Publication 04-03-030. This document is available at: <https://fortress.wa.gov/ecy/publications/SummaryPages/0403030.html>.

The Permittee must conduct all PCB sampling and analysis as required by **Special Condition S2.** of this permit in accordance with the approved quality assurance project plan.

The Permittee must report PCB sampling results according to the approved quality assurance project plan and in accordance with **Special Condition S3.** of this permit.

- b. **PCB source identification and cleanup**

The Permittee must continue the PCB source identification and cleanup actions that were initiated the previous permit issued on June 23, 2011. In continuation of its PCB source identification and cleanup actions, the Permittee must prepare an updated scope of work for additional source identification and removal efforts within the facility's wastewater conveyance system. The Permittee must submit this updated scope of work Insert date within six months after the permit effective date.

Following the department's review and acceptance, the Permittee must initiate the scope of work within 60 days. This scope of work, which may be phased, should include a sampling plan with proposed sampling locations, sampling and QA/QC protocols, PCB test methods, and a work schedule. The Permittee must provide Ecology a report summarizing the status of PCB source identification and cleanup on a semiannual basis (November 15th and May 15th of every year).

**c. Design criteria**

1. The permittee must not exceed the following flows and waste loadings for the Black Walnut Shell Filtration System:

Monthly Average flow: 11 mgd

Total PCB loading: 0.78 g/day

The Monthly Average flow means the average of the daily flows during a calendar month and the Monthly Average Total PCB Loading is the average of all daily inlet loadings during a calendar month. Consistent with the Engineering Design Report, one-half of the detection limit for Aroclor 1242 will be used for non-detect results for calculating the monthly average loading.

2. Loading Investigation

Bi-weekly grab samples of the influent to the lagoon (north inlet and south inlet) must be collected during each sampling event for the BWSF system inlet (Special Condition S2). The Permittee must archive these samples until analytical results for the corresponding BWSF system inlet samples during the reporting period are received. In the event that the monthly average BWSF system inlet loading criteria (0.78 grams/day) is exceeded, 1) the Department of Ecology must be notified within one working day after receipt of the final analytical results, 2) the archived samples from the lagoon inlets must be analyzed using low-level 8082 laboratory procedures with a target detection limit of 5 ng/L for Aroclor 1242, and 3) the findings of this sampling effort must be reported to the Department of Ecology within 15 days of receiving the final analytical results.

**d. PCB purchasing standards**

The Permittee must institute procurement practices with a goal of eliminating products, through product substitution, that may contribute PCBs to the final discharge. These products include, but are not limited to:

- Electrical equipment and components containing insulating or dielectric oil, such as transformers, capacitors, regulators, reactors, circuit breakers, switch gear and fluorescent lighting ballasts.
- Construction materials such as paints and caulking,
- Commercial materials such as inks, dyes, and lubricants.
- Soaps and cleaners.

**e. Survey of existing site materials and equipment**

1. The Permittee must perform a survey of existing site materials and equipment that may contribute PCBs to the final discharge. These materials and equipment include, but are not limited to:

- Machinery manufactured prior to May 31, 1979.
  - Electrical equipment and components containing insulating or dielectric oil manufactured prior to May 31, 1979, such as transformers, capacitors, regulators, reactors, circuit breakers, switch gear and fluorescent lighting ballasts.
  - Construction material such as paints and caulking.
  - Commercial materials such as inks, dyes and lubricants.
2. After completion of the survey, the Permittee must prepare a schedule for eliminating any contribution of PCBs from these site materials and equipment to the final discharge.

**f. Site demolition and remodeling**

The Permittee must develop site specific BMPs to prevent contributions of PCBs to the final discharge during site demolition and remodeling work. These contributions include but are not limited to contaminated soils, sediments, and storm water and groundwater entering the wastewater collection systems.

**g. Compliance schedule for outfall 007**

By the dates tabulated below, the Permittee must complete the following tasks and submit a report describing, at a minimum:

- Whether it completed the task and, if not, the date on which it expects to complete the task.
- The reasons for delay and the steps it is taking to return the project to the established schedule.

	<b>Tasks</b>	<b>Date Due</b>
1.	Scope of work for the termination of discharges from outfall 007 to the Spokane River	<u>within six months after permit effective date</u>
2.	Final plan for the termination of discharges from outfall 007 to the Spokane River	<u>within eighteen months after permit effective date</u>

**S7. Schedule of compliance for total PCBs**

<b>Target Pursuit Action</b>	<b>Compliance Date</b>
Annual Status Reports <sup>a</sup>	<u>insert annual date based on one year after the effective date of the permit</u>
Scope of Work for Engineering Report <sup>b</sup>	<u>insert date within 7 years after the effective date of the permit</u>
Engineering Report <sup>c</sup>	<u>insert date within 8 years after the effective date of the permit</u>
Installation of Total PCBs Treatment System Confirmation Letter <sup>d</sup>	<u>insert date within 9 years, six months after the effective date of the permit</u>

Meet Final Effluent Limits <sup>d</sup>	<u>insert date within 10 years after the effective date of the permit</u>						
<p><sup>a</sup> The Annual Status Report must, at a minimum, include detailed updates on the treatment technology evaluation (status of report preparation, construction, and/or performance reviews, etc.). The Annual Status Report must also include an assessment on the progress of meeting the total PCBs final effluent limit through the combination of treatment technology and implementation of best management practices.</p>							
<p><sup>b</sup> The Scope of Work must include a comprehensive technology selection process for choosing the most effective and feasible technology for removing total PCBs from the effluent. If pilot testing is a part of the selection process, there will be appropriate provisions for quality assurance and control. The selection process must include a preliminary schedule for construction of the total PCBs treatment system.</p>							
<p><sup>c</sup> After the Permittee implements the technology selection protocol, the permit holder will prepare, and submit to Ecology for approval, an Engineering Report concerning the chosen treatment technology, including any updates to the construction schedule. Based on the expected treatment system performance, the Engineering report must provide a reasonable assurance of meeting the final effluent limit by <u>insert date within ten (10) years after the effective date of the permit</u>.</p>							
<p><sup>d</sup> The Permittee must confirm the installation of the total PCBs removal technology in writing to Ecology.</p>							
<p><sup>e</sup> The final effluent limit for total PCBs is shown below:</p> <table border="1" data-bbox="298 940 1321 1115"> <thead> <tr> <th colspan="2" data-bbox="298 940 1321 1020"><b>FINAL WATER QUALITY BASED EFFLUENT LIMITATIONS: OUTFALL # 001 March through October</b></th> </tr> <tr> <th data-bbox="298 1020 896 1066"><b>Parameter</b></th> <th data-bbox="896 1020 1321 1066"><b>Monthly Average</b></th> </tr> </thead> <tbody> <tr> <td data-bbox="298 1066 896 1115">Total PCBs, pg/L</td> <td data-bbox="896 1066 1321 1115">170</td> </tr> </tbody> </table>		<b>FINAL WATER QUALITY BASED EFFLUENT LIMITATIONS: OUTFALL # 001 March through October</b>		<b>Parameter</b>	<b>Monthly Average</b>	Total PCBs, pg/L	170
<b>FINAL WATER QUALITY BASED EFFLUENT LIMITATIONS: OUTFALL # 001 March through October</b>							
<b>Parameter</b>	<b>Monthly Average</b>						
Total PCBs, pg/L	170						
<p>Ecology may adjust the final effluent limitation for total PCBs on the basis of new information. This new information may include, but is not limited to, a detailed loading analysis for the Spokane River for total PCBs that demonstrates compliance with applicable water quality criteria for PCBs; or the completion of a Total PCBs TMDL for the Spokane River. Any adjustment of the final effluent limitations that results in less stringent limitations is subject to the provisions of the Clean Water Act for deriving limitations in section 303(d)(4)(A), 42 U.S.C. § 1313(d)(4)(A) as well as the anti-backsliding provisions of the Clean Water Act, including the exceptions in section 402(o)(2) of the Clean Water Act, 33 U.S.C. § 1342(o)(2).</p>							

## S8. Regional Toxics Task Force

The permittee must continue to participate in the cooperative efforts and functions of the Regional Toxics Task Force. The goal of the Regional Toxics Task Force is to develop a comprehensive plan to bring the Spokane River into compliance with applicable water quality standards for PCBs.

To accomplish that goal, Ecology anticipates that the Task Force functions will:

1. Complete the Comprehensive Plan **by December 2016**, including targets and milestones for achieving water quality standards.

2. Create a 5-year Work Plan with short term goals and strategies, needed financial and technical assistance, and adapt Toxics Management Plans towards achieving these goals.
3. Measure Progress toward meeting targets listed in EPA's July 14, 2015 Plan for addressing PCBs in the Spokane River, through a monitoring program, annual reports, and adaptive measures

If Ecology determines the Regional Toxics Task Force is failing to make measurable progress toward meeting applicable water quality criteria for PCBs, Ecology would be obligated to proceed with development of a TMDL in the Spokane River for PCBs or determine an alternative to ensure water quality standards are met.

## **S9. Operation and maintenance**

The Permittee must, at all times, properly operate and maintain all facilities or systems of treatment and control (and related appurtenances), which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes keeping a daily operation logbook (paper or electronic), adequate laboratory controls, and appropriate quality assurance procedures. This provision of the permit requires the Permittee to operate backup or auxiliary facilities or similar systems only when the operation is necessary to achieve compliance with the conditions of this permit.

The Permittee must schedule any facility maintenance, which might require interruption of wastewater treatment and degrade effluent quality, during non-critical water quality periods and carry this maintenance out according to the approved O&M manual or as otherwise approved by Ecology.

### **S9.A. Operations and maintenance (O&M) annual**

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

The Permittee must:

1. Update the O&M Manual that meets the requirements of 173-240-150 WAC and submit it to Ecology for approval by within two years after the effective date of this permit.
2. Review the O&M Manual at least annually and confirm this review by letter to Ecology **by March 15<sup>th</sup> of each year**.
3. Submit to Ecology for review and approval substantial changes or updates to the O&M Manual whenever it incorporates them into the manual.
4. Keep the approved O&M Manual at the permitted facility.
5. Follow the instructions and procedures of this manual.
6. Submit reviews, changes, and updates through the WQWebPortal.

**b. O&M manual components**

In addition to the requirements of WAC 173-240-150, the O&M Manual must be consistent with the guidance in Table G1-3 in the *Criteria for Sewage Works Design* (Orange Book) 2008. The O&M Manual must include:

1. Emergency procedures for plant shutdown and cleanup in the event of a wastewater system upset or failure.
2. A review of system components which if failed could pollute surface water or could impact human health. Provide a procedure for a routine schedule of checking the function of these components.
3. Wastewater system maintenance procedures that contribute to the generation of process wastewater.
4. Any directions to maintenance staff when cleaning, or maintaining other equipment or performing other tasks which are necessary to protect the operation of the wastewater system (for example, defining maximum allowable discharge rate for draining a tank, blocking all floor drains before beginning the overhaul of a stationary engine).
5. Wastewater sampling protocols and procedures for compliance with the sampling and reporting requirements in the wastewater discharge permit.
6. Minimum staffing adequate to operate and maintain the treatment processes and carry out compliance monitoring required by the permit.
7. Treatment plant process control monitoring schedule.

**c. Treatment system operating plan**

The Permittee must summarize the following information in the initial chapter of the O&M Manual entitled the “Treatment System Operating Plan.” For the purposes of this permit, a Treatment System Operating Plan (TSOP) is a concise summary of specifically defined elements of the O&M Manual.

The Permittee must submit an updated Treatment System Operating Plan to Ecology within two years after the effective date of this permit. The Permittee must update and submit this plan, as necessary, to include requirements for any major modifications of the treatment system.

The TSOP must not conflict with the O&M Manual and must include the following information:

1. A baseline operating condition, which describes the operating parameters and procedures, used to meet the effluent limits of S1 at the production levels used in developing these limits.

2. In the event of production rates, which are below the baseline levels used to establish these limits, the plan must describe the operating procedures and conditions needed to maintain design treatment efficiency. The monitoring and reporting must be described in the plan.
3. In the event of an upset, due to plant maintenance activities, severe stormwater events, start ups or shut downs, or other causes, the plan must describe the operating procedures and conditions employed to mitigate the upset. The monitoring and reporting must be described in the plan.
4. A description of any regularly scheduled maintenance or repair activities at the facility which would affect the volume or character of the wastes discharged to the wastewater treatment system and a plan for monitoring and treating/controlling the discharge of maintenance-related materials (such as cleaners, degreasers, solvents, etc.).

### **S9.B. Bypass procedures**

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

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

1. Bypass for essential maintenance without the potential to cause violation of permit limits or conditions.

This permit authorizes a bypass if it allows for essential maintenance and does not have the potential to cause violations of limits or other conditions of this permit, or adversely impact public health as determined by Ecology prior to the bypass. The Permittee must submit prior notice, if possible, at least ten (10) days before the date of the bypass.

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

This permit authorizes such a bypass only if:

- a. Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.
- b. No feasible alternatives to the bypass exist, such as:
  - The use of auxiliary treatment facilities.
  - Retention of untreated wastes.
  - Stopping production.
  - Maintenance during normal periods of equipment downtime, but not if the Permittee should have installed adequate backup equipment in the exercise of reasonable engineering judgment to prevent a bypass.

- Transport of untreated wastes to another treatment facility.
- c. The Permittee has properly notified Ecology of the bypass as required in Special Condition S3.F of this permit.
3. If bypass is anticipated and has the potential to result in noncompliance of this permit.
- a. The Permittee must notify Ecology at least thirty (30) days before the planned date of bypass. The notice must contain:
- A description of the bypass and its cause.
  - An analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing.
  - A cost-effectiveness analysis of alternatives including comparative resource damage assessment.
  - The minimum and maximum duration of bypass under each alternative.
  - A recommendation as to the preferred alternative for conducting the bypass.
  - The projected date of bypass initiation.
  - A statement of compliance with SEPA.
  - A request for modification of water quality standards as provided for in WAC 173-201A-410, if an exceedance of any water quality standard is anticipated.
  - Details of the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.
- b. For probable construction bypasses, the Permittee must notify Ecology of the need to bypass as early in the planning process as possible. The Permittee must consider the analysis required above during the project planning and design process. The project-specific engineering report as well as the plans and specifications must include details of probable construction bypasses to the extent practical. In cases where the Permittee determines the probable need to bypass early, the Permittee must continue to analyze conditions up to and including the construction period in an effort to minimize or eliminate the bypass.
- c. Ecology will consider the following prior to issuing an administrative order for this type of bypass:
- If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
  - If feasible alternatives to bypass exist, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
  - If the Permittee planned and scheduled the bypass to minimize adverse effects on the public and the environment.

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

## **S10. Solid wastes**

### **S10.A. Solid waste handling**

The Permittee must handle and dispose of all solid waste material in such a manner as to prevent its entry into state ground or surface water.

### **S10.B. Leachate**

The Permittee must not allow leachate from its solid waste material to enter state waters without providing all known, available, and reasonable methods of treatment, nor allow such leachate to cause violations of the State Surface Water Quality Standards, Chapter 173-201A WAC, or the State Ground Water Quality Standards, Chapter 173-200 WAC. The Permittee must apply for a permit or permit modification as may be required for such discharges to state ground or surface waters.

### **S10.C. Solid waste control plan**

#### **a. Submittal Requirements**

The Permittee must:

1. Submit a solid waste control plan to Ecology by within two years after effective date of this permit.
2. Submit to Ecology any proposed revision or modification of the solid waste control plan for review and approval at least 30 days prior to implementation.
3. Comply with the plan and any modifications.
4. Submit an update of the solid waste control plan by Insert the application for permit renewal date.

#### **b. Solid waste control plan content**

The solid waste control plan must:

1. Follow Ecology's guidance for preparing a solid waste control plan ([www.ecy.wa.gov/biblio/0710024.html](http://www.ecy.wa.gov/biblio/0710024.html)) and address all solid wastes generated by the permittee.
2. Include at a minimum a description, source, generation rate, and disposal methods of these solid wastes.
3. Not conflict with local or state solid waste regulations.

## S11. Application for permit renewal or modification for facility changes

The Permittee must submit an application for renewal of this permit **by XX/XX/XXXX**.

Applications are available online at

[http://www.ecy.wa.gov/programs/wq/permits/forms.html#state\\_forms](http://www.ecy.wa.gov/programs/wq/permits/forms.html#state_forms). Submit the application electronically through the Water Quality Permitting Portal under 'Permit Submittal'.

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

An application for renewal must be received by Ecology at least 180 days prior to permit expiration (WAC 173-220-180). If an application for renewal is received past the permits expiration date, the permit will be formally cancelled and the Permittee will be required to submit an application for a new NPDES permit.

## S12. Non-routine and unanticipated wastewater

1. Beginning on the effective date of this permit, the Permittee is authorized to discharge non-routine wastewater or unanticipated wastewater and therefore not listed on the permit application, on a case-by-case basis if approved by Ecology. Prior to any such discharge, the Permittee must contact Ecology and **at a minimum** provide the following information:
  - a. The proposed discharge location.
  - b. The nature of the activity that will generate the discharge.
  - c. Any alternatives to the discharge, such as reuse, storage, or recycling of the water.
  - d. The total volume of water it expects to discharge.
  - e. The results of the chemical analysis of the water.
  - f. The date of proposed discharge.
  - g. The expected rate of discharge discharged, in gallons per minute.
2. The Permittee must analyze the water for all constituents limited for the discharge and report them as required by subpart 1.e above. The analysis must also include any parameter deemed necessary by Ecology. All discharges must comply with the effluent limits as established in Special Condition S1 of this permit, water quality standards, and any other limits imposed by Ecology.
3. The Permittee must limit the discharge rate, as referenced in subpart 1.g above, so it will not cause erosion of ditches or structural damage to culverts and their entrances or exits.

4. The discharge cannot proceed until Ecology has reviewed the information provided and has authorized the discharge by letter to the Permittee or by an Administrative Order. Once approved and if the proposed discharge is to a municipal storm drain, the Permittee must obtain prior approval from the municipality and notify it when it plans to discharge.

## **S13. Spill control plan**

### **S13.A. Spill control plan submittals and requirements**

The Permittee must:

1. Submit to Ecology an update to the existing spill control plan by within two years after the effective date of this permit.
2. Review the plan at least annually and update the spill plan as needed.
3. Send changes to the plan to Ecology.
4. Follow the plan and any supplements throughout the term of the permit.

### **S13.B. Spill control plan components**

The spill control plan must include the following:

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

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

## **S14. Cooling water intake structure (CWIS)**

### **S14.A. Operations and Maintenance**

The Permittee must, at all time, properly operate and maintain the CWIS including any existing technologies used to minimize impingement and entrainment.

- Report any significant impingement or entrainment events to Ecology within 24 hours at the telephone number listed in **Permit Condition S3F.a**.

#### **S14.B. Information and Compliance Report**

The Permittee must prepare an information and compliance report for the CWIS and submit it to Ecology for review and approval through the Water Quality Permitting Portal – Permit Submittals application within three years after the effective date of this permit.

The information and compliance report must address the submittal requirements of 40 CFR 122.21(r)(2) and (3) and applicable provisions of paragraphs (4), (5), (6), (7), and (8).

### **S15. Acute toxicity**

#### **S15.A. Effluent limit for acute toxicity**

**The effluent limit for acute toxicity is:**

**No acute toxicity detected in a test concentration representing the acute critical effluent concentration (ACEC).**

The ACEC means the maximum concentration of effluent during critical conditions at the boundary of the acute mixing zone, defined in **Section S1.B** of this permit. The ACEC equals 71.4% effluent.

#### **S15.B. Compliance with the effluent limit for acute toxicity**

Compliance with the effluent limit for acute toxicity means the results of the testing specified in Section C show no statistically significant difference in survival between the control and the ACEC.

If the test results show a statistically significant difference in survival between the control and the ACEC, and Ecology has not determined the test result to be anomalous under Section D, and the test is otherwise valid, the result is a violation of the effluent limit for acute toxicity. The Permittee must immediately conduct the additional testing described in Section D.

The Permittee must determine the statistical significance by conducting a hypothesis test at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in survival between the control and the ACEC is less than 10%, the Permittee must conduct the hypothesis test at the 0.01 level of significance.

#### **S15.C. Compliance testing for acute toxicity**

The Permittee must:

1. Perform the acute toxicity tests with 100% effluent, the ACEC, and a control.
2. Conduct quarterly acute toxicity testing on the final effluent. Testing must begin by within sixty (60) days of the permit effective date. Quarters means January through March, April through June, July through September, and October through December.
3. Submit a quarterly written report to Ecology within 45 days of sampling and starting no later than April 30th, July 30th, October 30th, or January 30<sup>th</sup> (assuming 30 days after the end of the quarter).

Each subsequent report is due on April 30<sup>th</sup>, July 30<sup>th</sup>, October 30<sup>th</sup>, and January 30<sup>th</sup> of each year. Further instructions on testing conditions and test report content are in Section E below.

4. The Permittee must perform compliance tests using each of the species and protocols listed below on a rotating basis:

Acute Toxicity Tests	Species	Method
Fathead minnow 96-hour static-renewal test	<i>Pimephales promelas</i>	EPA-821-R-02-012
Daphnid 48-hour static test	<i>Ceriodaphnia dubia</i> , <i>Daphnia pulex</i> , or <i>Daphnia magna</i>	EPA-821-R-02-012

**S15.D. Response to noncompliance with the effluent limit for acute toxicity**

If a toxicity test conducted under Section C determines a statistically significant difference in response between the ACEC and the control, using the statistical test described in Section B, the Permittee must begin additional testing within one week from the time of receiving the test results. The Permittee must:

1. Conduct one additional test each week for four consecutive weeks, using the same test and species as the failed compliance test.
2. Test at least five effluent concentrations and a control to determine appropriate point estimates. One of these effluent concentrations must equal the ACEC. The results of the test at the ACEC will determine compliance with the effluent limit for acute toxicity as described in Section A.
3. Return to the original monitoring frequency in Section C after completion of the additional compliance monitoring.

**Anomalous test results:** If a toxicity test conducted under Section C indicates noncompliance with the acute toxicity limit and the Permittee believes that the test result is anomalous, the Permittee may notify Ecology that the compliance test result may be anomalous. The Permittee may take one additional sample for toxicity testing and wait for notification from Ecology before completing the additional testing. The Permittee must submit the notification with the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous.

If Ecology determines that the test result was not anomalous, the Permittee must complete all of the additional monitoring required in this Section.

If the one additional sample fails to comply with the effluent limit for acute toxicity, then the Permittee must complete all of the additional monitoring required in this section.

If Ecology determines that the test result was anomalous, the one additional test result will replace the anomalous test result.

If all of the additional testing in this Section complies with the permit limit, the Permittee must submit a report to Ecology on possible causes and preventive measures for the transient toxicity event, which triggered the additional compliance monitoring. This report must include a search of all pertinent and recent facility records, including:

- Operating records
- Monitoring results
- Inspection records
- Spill reports
- Weather records
- Production records
- Raw material purchases
- Pretreatment records, etc.

If the additional testing in this section shows another violation of the acute toxicity limit, the Permittee must submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to Ecology within sixty (60) days after the sample date (WAC 173-205-100(2)).

#### **S15.E. Sampling and reporting requirements**

1. The Permittee must submit all reports for toxicity testing in accordance with the most recent version of Ecology Publication No. WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. Reports must contain toxicity data, bench sheets, and reference toxicant results for test methods. In addition, the Permittee must submit toxicity test data in electronic format (CETIS export file preferred) for entry into Ecology's database.
2. The Permittee must collect 24-hour composite effluent samples for toxicity testing. The Permittee must cool the samples to 0 - 6 degrees Celsius during collection and send them to the lab immediately upon completion. The lab must begin the toxicity testing as soon as possible but no later than 36 hours after sampling was completed.
3. The laboratory must conduct water quality measurements on all samples and test solutions for toxicity testing, as specified in the most recent version of Ecology Publication No. WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*.
4. All toxicity tests must meet quality assurance criteria and test conditions specified in the most recent versions of the EPA methods listed in Subsection C and the Ecology Publication No. WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If Ecology determines any test results to be invalid or anomalous, the Permittee must repeat the testing with freshly collected effluent.
5. The laboratory must use control water and dilution water meeting the requirements of the EPA methods listed in Section A or pristine natural water of sufficient quality for good control performance.

6. The Permittee must conduct whole effluent toxicity tests on an unmodified sample of final effluent.
7. The Permittee may choose to conduct a full dilution series test during compliance testing in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the acute critical effluent concentration (ACEC). The ACEC equals 71.4% effluent.
8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing must comply with the acute statistical power standard of 29% as defined in WAC 173-205-020. If the test does not meet the power standard, the Permittee must repeat the test on a fresh sample with an increased number of replicates to increase the power.

## **S16. Chronic toxicity**

### **S16.A. Effluent limit for chronic toxicity**

**The effluent limit for chronic toxicity is:**

**No toxicity detected in a test concentration representing the chronic critical effluent concentration (CCEC).**

The CCEC means the maximum concentration of effluent during critical conditions at the boundary of the mixing zone, defined in **Section S1.B** of this permit. The CCEC equals 18.5% effluent.

### **S16.B. Compliance with the effluent limit for chronic toxicity**

Compliance with the effluent limit for chronic toxicity means the results of the testing specified in Section C show no statistically significant difference in response between the control and the CCEC.

If the test results show a statistically significant difference in survival between the control and the CCEC, and Ecology has not determined the test result to be anomalous under Section D, and the test is otherwise valid, the result is a violation of the effluent limit for chronic toxicity. The Permittee must immediately conduct the additional testing described in Section D.

The Permittee must determine the statistical significance by conducting a hypothesis test at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in response between the control and the CCEC is less than 20%, the Permittee must conduct the hypothesis test at the 0.01 level of significance.

Ecology will reevaluate the need for the chronic toxicity limit in future permits. Therefore, the Permittee must also conduct this same hypothesis test (Appendix H, EPA/600/4-89/001) to determine whether a statistically significant difference in response exists between the acute critical effluent concentration (ACEC) and the control.

**S16.C. Compliance testing for chronic toxicity**

The Permittee must:

1. Perform the chronic toxicity tests using the CCEC, the ACEC, and a control, or with a full dilution series.
2. Conduct quarterly chronic toxicity testing on the final effluent. Testing must begin by within sixty (60) days of permit effective date. Quarters means January through March, April through June, July through September, and October through December.
3. Submit a quarterly written report to Ecology within 45 days of sampling and starting no later than April 30<sup>th</sup>, July 30<sup>th</sup>, October 30<sup>th</sup>, or January 30<sup>th</sup> (assuming 30 days after the end of the quarter). Each subsequent report is due on April 30<sup>th</sup>, July 30<sup>th</sup>, October 30<sup>th</sup>, and January 30<sup>th</sup> of each year. Further instructions on testing conditions and test report content are in Section E below.
4. Perform compliance tests using the following species on a rotating basis and the most recent version of the following protocols:

Freshwater Chronic Test	Species	Method
Fathead minnow survival and growth	<i>Pimephales promelas</i>	EPA-821-R-02-013
Water flea survival and reproduction	<i>Ceriodaphnia dubia</i>	EPA-821-R-02-013

**S16.D. Response to noncompliance with the effluent limit for chronic toxicity**

If a toxicity test conducted under Section C determines a statistically significant difference in response between the CCEC and the control using the statistical test described in Section B, the Permittee must begin additional testing within one week from the time of receiving the test results. The Permittee must:

1. Conduct additional testing each month for three consecutive months using the same test and species as the failed compliance test.
2. Use a series of at least five effluent concentrations and a control to determine appropriate point estimates. One of these effluent concentrations must equal the CCEC. The results of the test at the CCEC will determine compliance with the effluent limit for chronic toxicity as described in Section A.
3. Return to the original monitoring frequency in Section C after completion of the additional compliance monitoring.

**Anomalous test results:** If a toxicity test conducted under Section C indicates noncompliance with the chronic toxicity limit and the Permittee believes that the test result is anomalous, the Permittee may notify Ecology that the compliance test result may be anomalous. The Permittee may take one additional sample for toxicity testing and wait for notification from Ecology before completing the additional testing.

The Permittee must submit the notification with the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous.

If Ecology determines that the test result was not anomalous, the Permittee must complete all of the additional monitoring required in this section.

If the one additional sample fails to comply with the effluent limit for chronic toxicity, then the Permittee must complete all of the additional monitoring required in this section.

If Ecology determines that the test result was anomalous, the one additional test result will replace the anomalous test result.

If all of the additional testing required in this Section complies with the permit limit, the Permittee must submit a report to Ecology on possible causes and preventive measures for the transient toxicity event, which triggered the additional compliance monitoring. This report must include a search of all pertinent and recent facility records, including:

- Operating records
- Monitoring results
- Inspection records
- Spill reports
- Weather records
- Production records
- Raw material purchases
- Pretreatment records, etc.

If the additional testing required by this section shows another violation of the chronic toxicity limit, the Permittee must submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to Ecology within 60 days after the sample date (WAC 173-205-100(2)).

#### **S16.E. Sampling and reporting requirements**

1. The Permittee must submit all reports for toxicity testing in accordance with the most recent version of Ecology Publication No. WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. Reports must contain toxicity data, bench sheets, and reference toxicant results for test methods. In addition, the Permittee must submit toxicity test data in electronic format (CETIS export file preferred) for entry into Ecology's database.
2. The Permittee must collect 24-hour composite effluent samples for toxicity testing. The Permittee must cool the samples to 0 - 6 degrees Celsius during collection and send them to the lab immediately upon completion. The lab must begin the toxicity testing as soon as possible but no later than 36 hours after sampling was completed.

3. The laboratory must conduct water quality measurements on all samples and test solutions for toxicity testing, as specified in the most recent version of Ecology Publication No. WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*.
4. All toxicity tests must meet quality assurance criteria and test conditions specified in the most recent versions of the EPA methods listed in Section C. and the Ecology Publication no. WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If Ecology determines any test results to be invalid or anomalous, the Permittee must repeat the testing with freshly collected effluent.
5. The laboratory must use control water and dilution water meeting the requirements of the EPA methods listed in Subsection C. or pristine natural water of sufficient quality for good control performance.
6. The Permittee must conduct whole effluent toxicity tests on an unmodified sample of final effluent.
7. The Permittee may choose to conduct a full dilution series test during compliance testing in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the CCEC and the ACEC. The CCEC and the ACEC may either substitute for the effluent concentrations that are closest to them in the dilution series or be extra effluent concentrations. The CCEC equals 18.5% effluent. The ACEC equals 71.4% effluent.
8. All whole effluent toxicity tests that involve hypothesis testing must comply with the chronic statistical power standard of 39% as defined in WAC 173-205-020. If the test does not meet the power standard, the Permittee must repeat the test on a fresh sample with an increased number of replicates to increase the power.

## General Conditions

### G1. Signatory requirements

1. All applications, reports, or information submitted to Ecology must be signed and certified.
  - a. In the case of corporations, by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
    - A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or
    - The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
  - b. In the case of a partnership, by a general partner.
  - c. In the case of sole proprietorship, by the proprietor.
  - d. In the case of a municipal, state, or other public facility, by either a principal executive officer or ranking elected official.

Applications for permits for domestic wastewater facilities that are either owned or operated by, or under contract to, a public entity must be submitted by the public entity.

2. All reports required by this permit and other information requested by Ecology must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by a person described above and submitted to Ecology.
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

(A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

3. Changes to authorization. If an authorization under paragraph G1.2, above, is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph G1.2, above, must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. Certification. Any person signing a document under this section must make the following certification:

“I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

## **G2. Right of inspection and entry**

The Permittee must allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law:

1. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit.
2. To have access to and copy, at reasonable times and at reasonable cost, any records required to be kept under the terms and conditions of this permit.
3. To inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.
4. To sample or monitor, at reasonable times, any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

## **G3. Permit actions**

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the permittee) or upon Ecology’s initiative. However, the permit may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR 122.62, 122.64 or WAC 173-220-150 according to the procedures of 40 CFR 124.5.

1. The following are causes for terminating this permit during its term, or for denying a permit renewal application:
  - a. Violation of any permit term or condition.

- b. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.
  - c. A material change in quantity or type of waste disposal.
  - d. A determination that the permitted activity endangers human health or the environment, or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination.
  - e. A change in any condition that requires either a temporary or permanent reduction, or elimination of any discharge or sludge use or disposal practice controlled by the permit.
  - f. Nonpayment of fees assessed pursuant to RCW 90.48.465.
  - g. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.
2. The following are causes for modification but not revocation and reissuance except when the Permittee requests or agrees:
- a. A material change in the condition of the waters of the state.
  - b. New information not available at the time of permit issuance that would have justified the application of different permit conditions.
  - c. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.
  - d. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.
  - e. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR Part 122.62.
  - f. Ecology has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.
  - g. Incorporation of an approved local pretreatment program into a municipality's permit.
3. The following are causes for modification or alternatively revocation and reissuance:
- a. When cause exists for termination for reasons listed in 1.a through 1.g of this section, and Ecology determines that modification or revocation and reissuance is appropriate.
  - b. When Ecology has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer (General Condition G7) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new Permittee.

#### **G4. Reporting planned changes**

The Permittee must, as soon as possible, but no later than one hundred eighty (180) days prior to the proposed changes, give notice to Ecology of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in:

1. The permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b).
2. A significant change in the nature or an increase in quantity of pollutants discharged.
3. A significant change in the Permittee's sludge use or disposal practices. Following such notice, and the submittal of a new application or supplement to the existing application, along with required engineering plans and reports, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation.

#### **G5. Plan review required**

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications must be submitted to Ecology for approval in accordance with chapter 173-240 WAC. Engineering reports, plans, and specifications must be submitted at least one hundred eighty (180) days prior to the planned start of construction unless a shorter time is approved by Ecology. Facilities must be constructed and operated in accordance with the approved plans.

#### **G6. Compliance with other laws and statutes**

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

#### **G7. Transfer of this permit**

In the event of any change in control or ownership of facilities from which the authorized discharge emanate, the Permittee must notify the succeeding owner or controller of the existence of this permit by letter, a copy of which must be forwarded to Ecology.

1. Transfers by Modification  
Except as provided in paragraph (2) below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR 122.62(b)(2), or a minor modification made under 40 CFR 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.
2. Automatic Transfers  
This permit may be automatically transferred to a new Permittee if:
  - a. The Permittee notifies Ecology at least thirty (30) days in advance of the proposed transfer date.

- b. The notice includes a written agreement between the existing and new Permittees containing a specific date transfer of permit responsibility, coverage, and liability between them.
- c. Ecology does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under this subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

### **G8. Reduced production for compliance**

The Permittee, in order to maintain compliance with its permit, must control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

### **G9. Removed substances**

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters must not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

### **G10. Duty to provide information**

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

### **G11. Other requirements of 40 CFR**

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

### **G12. Additional monitoring**

Ecology may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

### **G13. Payment of fees**

The Permittee must submit payment of fees associated with this permit as assessed by Ecology.

## **G14. Penalties for violating permit conditions**

Any person who is found guilty of willfully violating the terms and conditions of this permit is deemed guilty of a crime, and upon conviction thereof must be punished by a fine of up to ten thousand dollars (\$10,000) and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit may incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars (\$10,000) for every such violation. Each and every such violation is a separate and distinct offense, and in case of a continuing violation, every day's continuance is deemed to be a separate and distinct violation.

## **G15. Upset**

Definition – “Upset” means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limits because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limits if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

1. An upset occurred and that the Permittee can identify the cause(s) of the upset.
2. The permitted facility was being properly operated at the time of the upset.
3. The Permittee submitted notice of the upset as required in Special Condition S3.F.
4. The Permittee complied with any remedial measures required under S3.F of this permit.

In any enforcement action the Permittee seeking to establish the occurrence of an upset has the burden of proof.

## **G16. Property rights**

This permit does not convey any property rights of any sort, or any exclusive privilege.

## **G17. Duty to comply**

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

## **G18. Toxic pollutants**

The Permittee must comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

## **G19. Penalties for tampering**

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit must, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two (2) years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this condition, punishment must be a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four (4) years, or by both.

## **G20. Reporting requirements applicable to existing manufacturing, commercial, mining, and silvicultural dischargers**

The Permittee belonging to the categories of existing manufacturing, commercial, mining, or silviculture must notify Ecology as soon as they know or have reason to believe:

1. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following “notification levels:”
  - a. One hundred micrograms per liter (100 µg/L).
  - b. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony.
  - c. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
  - d. The level established by the Director in accordance with 40 CFR 122.44(f).
2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following “notification levels:”
  - a. Five hundred micrograms per liter (500µg/L).
  - b. One milligram per liter (1 mg/L) for antimony.
  - c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
  - d. The level established by the Director in accordance with 40 CFR 122.44(f).

## **G21. Compliance schedules**

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted no later than fourteen (14) days following each schedule date.

## APPENDIX A

### **LIST OF POLLUTANTS WITH ANALYTICAL METHODS, DETECTION LIMITS AND QUANTITATION LEVELS**

The Permittee must use the specified analytical methods, detection limits (DLs) and quantitation levels (QLs) in the following table for permit and application required monitoring unless:

- Another permit condition specifies other methods, detection levels, or quantitation levels.
- 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.

When the permit requires the Permittee to measure the base neutral compounds in the list of priority pollutants, it must measure all of the base neutral pollutants listed in the table below. The list includes EPA required base neutral priority pollutants and several additional polynuclear aromatic hydrocarbons (PAHs). The Water Quality Program added several PAHs to the list of base neutrals below from Ecology’s Persistent Bioaccumulative Toxics (PBT) List. It only added those PBT parameters of interest to Appendix A that did not increase the overall cost of analysis unreasonably.

Ecology added this appendix to the permit in order to reduce the number of analytical “non-detects” in permit-required monitoring and to measure effluent concentrations near or below criteria values where possible at a reasonable cost.

### **CONVENTIONAL PARAMETERS**

<b>Pollutant &amp; CAS No. (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL)<sup>1</sup> µg/L unless specified</b>	<b>Quantitation Level (QL)<sup>2</sup> µg/L unless specified</b>
Biochemical Oxygen Demand	SM5210-B		2 mg/L
Soluble Biochemical Oxygen Demand	SM5210-B <sup>3</sup>		2 mg/L
Chemical Oxygen Demand	SM5220-D		10 mg/L
Total Organic Carbon	SM5310-B/C/D		1 mg/L
Total Suspended Solids	SM2540-D		5 mg/L
Total Ammonia (as N)	SM4500-NH3-B and C/D/E/G/H		20

<b>Pollutant &amp; CAS No. (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL)<sup>1</sup> µg/L unless specified</b>	<b>Quantitation Level (QL)<sup>2</sup> µg/L unless specified</b>
Flow	Calibrated device		
Dissolved Oxygen	SM4500-OC/OG		0.2 mg/L
Temperature (max. 7-day avg.)	Analog recorder or Use micro-recording devices known as thermistors		0.2° C
pH	SM4500-H <sup>+</sup> B	N/A	N/A

### **NONCONVENTIONAL PARAMETERS**

<b>Pollutant &amp; CAS No. (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL)<sup>1</sup> µg/L unless specified</b>	<b>Quantitation Level (QL)<sup>2</sup> µg/L unless specified</b>
Total Alkalinity	SM2320-B		5 mg/L as CaCO <sub>3</sub>
Chlorine, Total Residual	SM4500 CI G		50.0
Color	SM2120 B/C/E		10 color units
Fecal Coliform	SM 9221E,9222	N/A	Specified in method - sample aliquot dependent
Fluoride (16984-48-8)	SM4500-F E	25	100
Nitrate + Nitrite Nitrogen (as N)	SM4500-NO <sub>3</sub> -E/F/H		100
Nitrogen, Total Kjeldahl (as N)	SM4500-N <sub>org</sub> B/C and SM4500NH <sub>3</sub> -B/C/D/EF/G/H		300
Soluble Reactive Phosphorus (as P)	SM4500- PE/PF	3	10
Phosphorus, Total (as P)	SM 4500 PB followed by SM4500-PE/PF	3	10
Oil and Grease (HEM)	1664 A or B	1,400	5,000
Salinity	SM2520-B		3 practical salinity units or scale (PSU or PSS)
Settleable Solids	SM2540 -F		100
Sulfate (as mg/L SO <sub>4</sub> )	SM4110-B		200
Sulfide (as mg/L S)	SM4500-S <sup>2</sup> F/D/E/G		200
Sulfite (as mg/L SO <sub>3</sub> )	SM4500-SO <sub>3</sub> B		2000
Total Coliform	SM 9221B, 9222B, 9223B	N/A	Specified in method - sample aliquot dependent
Total Dissolved Solids	SM2540 C		20 mg/L
Total Hardness	SM2340B		200 as CaCO <sub>3</sub>
Aluminum, Total (7429-90-5)	200.8	2.0	10
Barium Total (7440-39-3)	200.8	0.5	2.0
BTEX (benzene +toluene + ethylbenzene + m,o,p xylenes)	EPA SW 846 8021/8260	1	2

<b>Pollutant &amp; CAS No. (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL)<sup>1</sup> µg/L unless specified</b>	<b>Quantitation Level (QL)<sup>2</sup> µg/L unless specified</b>
Boron Total (7440-42-8)	200.8	2.0	10.0
Cobalt, Total (7440-48-4)	200.8	0.05	0.25
Iron, Total (7439-89-6)	200.7	12.5	50
Magnesium, Total (7439-95-4)	200.7	10	50
Molybdenum, Total (7439-98-7)	200.8	0.1	0.5
Manganese, Total (7439-96-5)	200.8	0.1	0.5
NWTPH Dx <sup>4</sup>	Ecology NWTPH Dx	250	250
NWTPH Gx <sup>5</sup>	Ecology NWTPH Gx	250	250
Tin, Total (7440-31-5)	200.8	0.3	1.5
Titanium, Total (7440-32-6)	200.8	0.5	2.5

**PRIORITY POLLUTANTS**

<b>Pollutant &amp; CAS No. (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL)<sup>1</sup> µg/L unless specified</b>	<b>Quantitation Level (QL)<sup>2</sup> µg/L unless specified</b>
<b>METALS, CYANIDE &amp; TOTAL PHENOLS</b>			
Antimony, Total (7440-36-0)	200.8	0.3	1.0
Arsenic, Total (7440-38-2)	200.8	0.1	0.5
Beryllium, Total (7440-41-7)	200.8	0.1	0.5
Cadmium, Total (7440-43-9)	200.8	0.05	0.25
Chromium (hex) dissolved (18540-29-9)	SM3500-Cr EC	0.3	1.2
Chromium, Total (7440-47-3)	200.8	0.2	1.0
Copper, Total (7440-50-8)	200.8	0.4	2.0
Lead, Total (7439-92-1)	200.8	0.1	0.5
Mercury, Total (7439-97-6)	1631E	0.0002	0.0005
Nickel, Total (7440-02-0)	200.8	0.1	0.5
Selenium, Total (7782-49-2)	200.8	1.0	1.0
Silver, Total (7440-22-4)	200.8	0.04	0.2
Thallium, Total (7440-28-0)	200.8	0.09	0.36
Zinc, Total (7440-66-6)	200.8	0.5	2.5
Cyanide, Total (57-12-5)	335.4	5	10
Cyanide, Weak Acid Dissociable	SM4500-CN I	5	10
Cyanide, Free Amenable to Chlorination (Available Cyanide)	SM4500-CN G	5	10
Phenols, Total	EPA 420.1		50

<b>Pollutant &amp; CAS No. (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL)<sup>1</sup> µg/L unless specified</b>	<b>Quantitation Level (QL)<sup>2</sup> µg/L unless specified</b>
<b>ACID COMPOUNDS</b>			
2-Chlorophenol (95-57-8)	625	1.0	2.0
2,4-Dichlorophenol (120-83-2)	625	0.5	1.0
2,4-Dimethylphenol (105-67-9)	625	0.5	1.0
4,6-dinitro-o-cresol (534-52-1) (2-methyl-4,6,-dinitrophenol)	625/1625B	1.0	2.0
2,4 dinitrophenol (51-28-5)	625	1.0	2.0
2-Nitrophenol (88-75-5)	625	0.5	1.0
4-nitrophenol (100-02-7)	625	0.5	1.0
Parachlorometa cresol (59-50-7) (4-chloro-3-methylphenol)	625	1.0	2.0
Pentachlorophenol (87-86-5)	625	0.5	1.0
Phenol (108-95-2)	625	2.0	4.0
2,4,6-Trichlorophenol (88-06-2)	625	2.0	4.0

**PRIORITY POLLUTANTS (continued)**

<b>Pollutant &amp; CAS No. (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL)<sup>1</sup> µg/L unless specified</b>	<b>Quantitation Level (QL)<sup>2</sup> µg/L unless specified</b>
<b>VOLATILE COMPOUNDS</b>			
Acrolein (107-02-8)	624	5	10
Acrylonitrile (107-13-1)	624	1.0	2.0
Benzene (71-43-2)	624	1.0	2.0
Bromoform (75-25-2)	624	1.0	2.0
Carbon tetrachloride (56-23-5)	624/601 or SM6230B	1.0	2.0
Chlorobenzene (108-90-7)	624	1.0	2.0
Chloroethane (75-00-3)	624/601	1.0	2.0
2-Chloroethylvinyl Ether (110-75-8)	624	1.0	2.0
Chloroform (67-66-3)	624 or SM6210B	1.0	2.0
Dibromochloromethane (124-48-1)	624	1.0	2.0
1,2-Dichlorobenzene (95-50-1)	624	1.9	7.6
1,3-Dichlorobenzene (541-73-1)	624	1.9	7.6
1,4-Dichlorobenzene (106-46-7)	624	4.4	17.6
Dichlorobromomethane (75-27-4)	624	1.0	2.0

<b>Pollutant &amp; CAS No. (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL)<sup>1</sup> µg/L unless specified</b>	<b>Quantitation Level (QL)<sup>2</sup> µg/L unless specified</b>
<b>VOLATILE COMPOUNDS</b>			
1,1-Dichloroethane (75-34-3)	624	1.0	2.0
1,2-Dichloroethane (107-06-2)	624	1.0	2.0
1,1-Dichloroethylene (75-35-4)	624	1.0	2.0
1,2-Dichloropropane (78-87-5)	624	1.0	2.0
1,3-dichloropropene (mixed isomers) (1,2-dichloropropylene) (542-75-6) <sup>6</sup>	624	1.0	2.0
Ethylbenzene (100-41-4)	624	1.0	2.0
Methyl bromide (74-83-9) (Bromomethane)	624/601	5.0	10.0
Methyl chloride (74-87-3) (Chloromethane)	624	1.0	2.0
Methylene chloride (75-09-2)	624	5.0	10.0
1,1,2,2-Tetrachloroethane (79-34-5)	624	1.9	2.0
Tetrachloroethylene (127-18-4)	624	1.0	2.0
Toluene (108-88-3)	624	1.0	2.0
1,2-Trans-Dichloroethylene (156-60-5) (Ethylene dichloride)	624	1.0	2.0
1,1,1-Trichloroethane (71-55-6)	624	1.0	2.0
1,1,2-Trichloroethane (79-00-5)	624	1.0	2.0
Trichloroethylene (79-01-6)	624	1.0	2.0
Vinyl chloride (75-01-4)	624/SM6200B	1.0	2.0

**PRIORITY POLLUTANTS (continued)**

<b>Pollutant &amp; CAS No. (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL)<sup>1</sup> µg/L unless specified</b>	<b>Quantitation Level (QL)<sup>2</sup> µg/L unless specified</b>
<b>BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)</b>			
Acenaphthene (83-32-9)	625	0.2	0.4
Acenaphthylene (208-96-8)	625	0.3	0.6
Anthracene (120-12-7)	625	0.3	0.6
Benzidine (92-87-5)	625	12	24
Benzyl butyl phthalate (85-68-7)	625	0.3	0.6
Benzo(a)anthracene (56-55-3)	625	0.3	0.6
Benzo(b)fluoranthene (3,4-benzofluoranthene) (205-99-2) <sup>7</sup>	610/625	0.8	1.6

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL) <sup>1</sup> µg/L unless specified	Quantitation Level (QL) <sup>2</sup> µg/L unless specified
<b>BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)</b>			
<b>Benzo(j)fluoranthene (205-82-3)</b> <sup>7</sup>	625	0.5	1.0
Benzo(k)fluoranthene (11,12-benzofluoranthene) (207-08-9) <sup>7</sup>	610/625	0.8	1.6
<b>Benzo(r,s,t)pentaphene (189-55-9)</b>	625	0.5	1.0
Benzo(a)pyrene (50-32-8)	610/625	0.5	1.0
Benzo(ghi)Perylene (191-24-2)	610/625	0.5	1.0
Bis(2-chloroethoxy)methane (111-91-1)	625	5.3	21.2
Bis(2-chloroethyl)ether (111-44-4)	611/625	0.3	1.0
Bis(2-chloroisopropyl)ether (39638-32-9)	625	0.3	0.6
Bis(2-ethylhexyl)phthalate (117-81-7)	625	0.1	0.5
4-Bromophenyl phenyl ether (101-55-3)	625	0.2	0.4
2-Chloronaphthalene (91-58-7)	625	0.3	0.6
4-Chlorophenyl phenyl ether (7005-72-3)	625	0.3	0.5
Chrysene (218-01-9)	610/625	0.3	0.6
<b>Dibenzo (a,h)acridine (226-36-8)</b>	610M/625M	2.5	10.0
<b>Dibenzo (a,i)acridine (224-42-0)</b>	610M/625M	2.5	10.0
Dibenzo(a-h)anthracene (53-70-3)(1,2,5,6-dibenzanthracene)	625	0.8	1.6
Dibenzo(a,e)pyrene (192-65-4)	610M/625M	2.5	10.0
Dibenzo(a,h)pyrene (189-64-0)	625M	2.5	10.0
3,3-Dichlorobenzidine (91-94-1)	605/625	0.5	1.0
Diethyl phthalate (84-66-2)	625	1.9	7.6
Dimethyl phthalate (131-11-3)	625	1.6	6.4
Di-n-butyl phthalate (84-74-2)	625	0.5	1.0
2,4-dinitrotoluene (121-14-2)	609/625	0.2	0.4
2,6-dinitrotoluene (606-20-2)	609/625	0.2	0.4

**PRIORITY POLLUTANTS (continued)**

<b>Pollutant &amp; CAS No. (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL)<sup>1</sup> µg/L unless specified</b>	<b>Quantitation Level (QL)<sup>2</sup> µg/L unless specified</b>
<b>BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)</b>			
Di-n-octyl phthalate (117-84-0)	625	0.3	0.6
1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	1625B	5.0	20
Fluoranthene (206-44-0)	625	0.3	0.6
Fluorene (86-73-7)	625	0.3	0.6
Hexachlorobenzene (118-74-1)	612/625	0.3	0.6
Hexachlorobutadiene (87-68-3)	625	0.5	1.0
Hexachlorocyclopentadiene (77-47-4)	1625B/625	0.5	1.0
Hexachloroethane (67-72-1)	625	0.5	1.0
Indeno(1,2,3-cd)Pyrene (193-39-5)	610/625	0.5	1.0
Isophorone (78-59-1)	625	0.5	1.0
<b>3-Methyl cholanthrene (56-49-5)</b>	625	2.0	8.0
Naphthalene (91-20-3)	625	0.3	0.6
Nitrobenzene (98-95-3)	625	0.5	1.0
N-Nitrosodimethylamine (62-75-9)	607/625	2.0	4.0
N-Nitrosodi-n-propylamine (621-64-7)	607/625	0.5	1.0
N-Nitrosodiphenylamine (86-30-6)	625	0.5	1.0
<b>Perylene (198-55-0)</b>	625	1.9	7.6
Phenanthrene (85-01-8)	625	0.3	0.6
Pyrene (129-00-0)	625	0.3	0.6
1,2,4-Trichlorobenzene (120-82-1)	625	0.3	0.6
<b>DIOXIN</b>			
2,3,7,8-Tetra-Chlorodibenzo- P-Dioxin (176-40-16) (2,3,7,8 TCDD)	1613B	1.3 pg/L	5 pg/L

**PRIORITY POLLUTANTS (continued)**

<b>Pollutant &amp; CAS No. (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL)<sup>1</sup> µg/L unless specified</b>	<b>Quantitation Level (QL)<sup>2</sup> µg/L unless specified</b>
<b>PESTICIDES/PCBs</b>			
Aldrin (309-00-2)	608	0.025	0.05
alpha-BHC (319-84-6)	608	0.025	0.05
beta-BHC (319-85-7)	608	0.025	0.05
gamma-BHC (58-89-9)	608	0.025	0.05
delta-BHC (319-86-8)	608	0.025	0.05
Chlordane (57-74-9) <sup>8</sup>	608	0.025	0.05
4,4'-DDT (50-29-3)	608	0.025	0.05
4,4'-DDE (72-55-9)	608	0.025	0.05 <sup>10</sup>
4,4' DDD (72-54-8)	608	0.025	0.05
Dieldrin (60-57-1)	608	0.025	0.05
alpha-Endosulfan (959-98-8)	608	0.025	0.05
beta-Endosulfan (33213-65-9)	608	0.025	0.05
Endosulfan Sulfate (1031-07-8)	608	0.025	0.05
Endrin (72-20-8)	608	0.025	0.05
Endrin Aldehyde (7421-93-4)	608	0.025	0.05
Heptachlor (76-44-8)	608	0.025	0.05
Heptachlor Epoxide (1024-57-3)	608	0.025	0.05
PCB-1242 (53469-21-9) <sup>9</sup>	608 - Revised	0.05	0.2
PCB-1254 (11097-69-1)	608 - Revised	0.05	0.2
PCB-1221 (11104-28-2)	608 - Revised	0.05	0.2
PCB-1232 (11141-16-5)	608 - Revised	0.05	0.2
PCB-1248 (12672-29-6)	608 - Revised	0.05	0.2
PCB-1260 (11096-82-5)	608 - Revised	0.05	0.2
PCB-1016 (12674-11-2) <sup>9</sup>	608 - Revised	0.05	0.2
Toxaphene (8001-35-2)	608	0.24	0.5

1. Detection level (DL) or detection limit means the minimum concentration of an analyte (substance) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero as determined by the procedure given in 40 CFR part 136, Appendix B.
2. Quantitation Level (QL) also known as Minimum Level of Quantitation (ML) – The lowest level at which the entire analytical system must give a recognizable signal and acceptable calibration point for the analyte. It is equivalent to the concentration of the lowest calibration standard, assuming that the lab has used all method-specified sample weights, volumes, and cleanup procedures. The QL is calculated by multiplying the MDL by 3.18 and rounding the result to the number nearest to (1, 2, or 5) x 10<sup>n</sup>, where n is an integer. (64 FR 30417).  
 ALSO GIVEN AS:

The smallest detectable concentration of analyte greater than the Detection Limit (DL) where the accuracy (precision & bias) achieves the objectives of the intended purpose. (Report of the Federal Advisory Committee on Detection and Quantitation Approaches and Uses in Clean Water Act Programs Submitted to the US Environmental Protection Agency December 2007).

3. Soluble Biochemical Oxygen Demand method note: First, filter the sample through a Millipore Nylon filter (or equivalent) - pore size of 0.45-0.50 um (prep all filters by filtering 250 ml of laboratory grade deionized water through the filter and discard). Then, analyze sample as per method 5210-B.  
3.
4. NWTPH Dx - Northwest Total Petroleum Hydrocarbons Diesel Extended Range – see <http://www.ecy.wa.gov/biblio/97602.html>  
4.
5. NWTPH Gx - Northwest Total Petroleum Hydrocarbons Gasoline Extended Range – see <http://www.ecy.wa.gov/biblio/97602.html>
6. 1, 3-dichloroproylene (mixed isomers) You may report this parameter as two separate parameters: cis-1, 3-dichloropropene (10061-01-5) and trans-1, 3-dichloropropene (10061-02-6).
7. Total Benzofluoranthenes - Because Benzo(b)fluoranthene, Benzo(j)fluoranthene and Benzo(k)fluoranthene co-elute you may report these three isomers as total benzofluoranthenes.
8. Chlordane – You may report alpha-chlordane (5103-71-9) and gamma-chlordane (5103-74-2) in place of chlordane (57-74-9). If you report alpha and gamma-chlordane, the DL/PQLs that apply are 0.025/0.050.
9. PCB 1016 & PCB 1242 – You may report these two PCB compounds as one parameter called PCB 1016/1242.