



Issuance Date: June 30, 2022
Effective Date: August 1, 2022
Expiration Date: July 31, 2027
Amendment Date: December 20, 2024

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
WASTE DISCHARGE PERMIT NO. WA0000825**

State of Washington
Department of Ecology
Eastern Regional Office
4601 N. Monroe Street
Spokane, Washington 99205

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.

**Inland Empire Paper Company
3320 N. Argonne Road
Spokane, Washington 99212**

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

Facility Location: 3320 N. Argonne Road, Spokane, WA Treatment Type: Primary Clarification, Secondary Treatment, Membrane Filtration Industry Type: Pulp and Newsprint Paper Mill	Receiving Water: Spokane River SIC Code: 2611 NAICS Code: 322122 Categorical Industry: Pulp, Paper, and Paperboard Point Source Category, 40 CFR Part 430
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Summary of Permit Submittals

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

Table 1: Summary of Permit Report Submittals

Permit Section	Submittal	Frequency	First Submittal Date
S3.A.3.a	Discharge Monitoring Report (DMR)	1/month	September 15, 2022
S3.A.3.c	Discharge Monitoring Report (DMR)	1/year	January 15, 2023
S3.A.3.d	Discharge Monitoring Report (DMR)	2/year	January 15, 2023
S3.F.2.c	Reporting Permit Violations – Five Day Written Report	As necessary	-
S4. Item 1	Compliance Schedule Annual Status Reports	1/year	November 1, 2022
S4. Item 2	Approvable Engineering Report, Plans, and Specifications for Fine Bubble Aeration System	Once	December 31, 2024
S4. Item 3	Letter Confirming Installation and Operation of Fine Bubble Aeration System	Once	May 31, 2025
S5.A.1.a	Operations and Maintenance Manual Update	1/permit cycle; updates submitted as necessary	February 1, 2023
S6.C	Solid Waste Control Plan Update	1/permit cycle	July 31, 2026
S6.C	Solid Waste Control Plan Modification	30 days prior to implementation.	-
S7.	Application for Permit Renewal	1/permit cycle	July 31, 2026
S8.A	PCB Pollutant Minimization Plan (PMP)	1/permit cycle	August 1, 2023
S8.B	PCB PMP Annual Report Update	1/year	July 1, 2024
S9.	Non-Routine and Unanticipated Discharges	As necessary	-
S10.A.1	Spill Control Plan Update	1/permit cycle, updates submitted as necessary	February 1, 2023
S11.	Acute Toxicity Effluent Test Results - Submit with Permit Renewal Application	Once	July 31, 2026
S12.	Chronic Toxicity Effluent Test Results with Permit Renewal Application	Once	July 31, 2026
G1.	Notice of Change in Authorization	As necessary	-

Permit Section	Submittal	Frequency	First Submittal Date
G4.	Permit Application for Substantive Changes to the Discharge	180 days prior to discharge	-
G5.	Engineering Report for Construction or Modification Activities	180 days prior to construction	-
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.

Beginning on the effective date of this permit, the Permittee is authorized to discharge treated process wastewater and non-contact cooling water to the Spokane River at the permitted location subject to complying with the following limits:

1. Final discharge to Spokane River - Outfall 001

Table 2: Effluent Limits – Outfall 001 (January - December)

Latitude: **47.6891052410492** Longitude: **-117.279231379965**

Parameter	Average Monthly ^a	Maximum Daily ^b
Total Suspended Solids (TSS)	1,149 lbs/day	2,367 lbs/day
Zinc (Total)	126.5 µg/L	145.4 µg/L
Lead (Total)	3.18 µg/L	4.58 µg/L
Cadmium (Total)	1.5 µg/L	2.3 µg/L
Total PCBs	170 pg/L	248 pg/L
Total PCBs	0.00017 µg/L	0.000248 µg/L

Footnotes for Table 2: Effluent Limits – Outfall 001 (January – December)

^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. The average daily measurement does not apply to pH or temperature.

Table 3: Effluent pH Limits – Outfall 001 (January - December)

Latitude: **47.6891052410492** Longitude: **-117.279231379965**

Parameter	Minimum	Maximum
pH ^a	6.6 standard units	9.0 standard units

Footnotes for Table 3: Effluent pH Limitations for January – December

^a When pH is continuously monitored, excursions between 5.6 and 6.6, or 9.0 and 10.0 are not 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 5.6 and above 10.0 at any time are violations.

Table 4: Effluent Limits – Outfall 001 (November – February)

Latitude: **47.6891052410492** Longitude: **-117.279231379965**

Parameter	Average Monthly ^a	Maximum Daily ^b
Biochemical Oxygen Demand (5-day) (BOD ₅) ^c	1,138 lbs/day	1,872 lbs/day

Footnote for Table 7: Effluent Limits – Outfall 001 (November - February)

^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. The average daily measurement does not apply to pH or temperature.

^c Compliance with seasonal average permit limits begins on the effective date of this permit; August 1, 2022.

Table 5: Effluent Limits – Outfall 001 (March - October)

Latitude: **47.6891052410492** Longitude: **-117.279231379965**

Parameter	Season Average ^{a, b}
Total Ammonia (as N)	24.29 lbs/day

Footnote for Table 4: Effluent Limits – Outfall 001 (March – October)

^a **Seasonal Average** effluent limit means the highest allowable average of daily discharges over a March 1 through October 31 time period. To calculate the discharge value to compare to the limit, add the value of each daily discharge measured during the March 1 through October 31 time-period and divide this sum by the total number of daily discharges measured.

^b Compliance with seasonal average permit limits begins on the effective date of this permit; August 1, 2022.

Table 6: Interim Effluent Limits – Outfall 001

Latitude: **47.6891052410492** Longitude: **-117.279231379965**

Parameter	Average Monthly ^a	Daily Maximum ^b
Total Phosphorus (as P), lbs/day ^{c, e}	16.3	35.7
Carbonaceous Biochemical Oxygen Demand (5-day) (CBOD ₅), lbs/day ^{d, e}	1,024	1,685

Footnotes for Table 5: Interim Effluent Limits – Outfall 001

^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. The average daily measurement does not apply to pH or temperature.

^c Applicable from February 1 through October 31

^d Applicable from March 1 through October 31

^e Compliance with these interim permit limits begins on the effective date of this permit; August 1, 2022 and lasts through October 31, 2027.

Final Effluent Limits for – Outfall 001 (March – October)

See Permit Condition S4 for the Schedule of Compliance for meeting the Final Water Quality Based Effluent Limitations for CBOD₅.

Carbonaceous Biochemical Oxygen Demand (5-day) (CBOD₅)

- a. The March 1 through October 31: seasonal average individual limit for CBOD₅ is 123.2 lbs/day.
- b. The March 1 through October 31: seasonal average bubble (aggregate) limit for CBOD₅ is:
 - i. 123.2 lbs/day, when the CBOD₅ seasonal average individual load from Kaiser Aluminum Washington (NPDES Permit No. WA0000892) during February 1 to October 31 is equal to or greater than 462.7 lbs/day.
 - ii. $123.2 + [462.7 - \text{CBOD}_5 \text{ seasonal average individual load from Kaiser Aluminum Washington during March 1 to October 31 (lbs/day)}] \div 4.247$ lbs/day, when the CBOD₅ seasonal average individual load from Kaiser Aluminum Washington (NPDES Permit No. WA0000892) during March 1 to October 31 is less than 462.7 lbs/day.

- c. The Permittee will not be considered in violation of the seasonal average individual limit for CBOD₅ listed in b.i, above, unless the seasonal average bubble (aggregate) limit listed in b.ii, above, is also exceeded for the same reporting period.

Final Effluent Limits – Outfall 001 (February – October)

See Permit Condition S4 for the Schedule of Compliance for meeting the Final Water Quality Based Effluent Limitations for Total Phosphorus (as P).

Beginning November 1, 2024, the bubble limits would apply. The first full season would be in 2025.

Total Phosphorus (as P)

- a. The February 1 through October 31 seasonal average individual limit for total phosphorus (as P) is 2.39 lbs/day.
- b. The February 1 through October 31 seasonal average bubble (aggregate) limit for total phosphorus (as P) is:
 - i. 2.39 lbs/day, when the total phosphorus (as P) seasonal average individual load from Kaiser Aluminum Washington (NPDES Permit No. WA0000892) during March 1 to October 31 is equal to or greater than 3.21 lbs/day.
 - ii. $2.39 + [3.21 - \text{total phosphorus (as P) seasonal average individual load from Kaiser Aluminum Washington during March 1 to October 31 (lbs/day)}] \div 3.4$ lbs/day, when the total phosphorus (as P) seasonal average individual load from Kaiser Aluminum Washington (NPDES Permit No. WA0000892) during March 1 to October 31 is less than 3.21 lbs/day.
- c. The Permittee will not be considered in violation of the seasonal average individual limit for total phosphorus (as P) listed in b.i, above, unless the seasonal average bubble (aggregate) limit listed in b.ii, above, combined with d. below, is also exceeded for the same reporting period.
- d. The Permittee may calculate discharge quantities of total phosphorus using an allowance (credit) for the fraction of river water phosphorus loads in Outfall 004 (non-contact cooling water). The allowance shall be the lesser of the observed non-contact water loads and 0.182 in lbs/day of total phosphorus (as P).

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 chronic mixing zone is limited to twenty-five percent of the river flow. 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 acute mixing is limited to two and one-half percent of the river flow. The concentration of pollutants at the edge of the acute zone must meet Acute Aquatic Life Criteria.

Table 7: Available Dilution (Dilution Factor)

Criteria	Factor
Acute Aquatic Life Criteria	2.4 (ACEC of 41% effluent)
Chronic Aquatic Life Criteria	16.8 (CCEC of 6.0 % effluent)
Human Health Criteria - Non-carcinogen	19.8
Human Health Criteria - Carcinogen	56.3

S2. MONITORING REQUIREMENTS

S2.A. Monitoring Schedule

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

Table 8: Monitoring Schedule – Outfall 001 (Final Discharge to Spokane River)

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type	Monitoring Months
Flow	Million gallons per day (MGD)	Continuous ^a	Meter/Recorded	Year-round
pH ^b	Standard Units	Continuous ^a	Meter/Recorded	Year-round
Temperature	Degrees Fahrenheit (°F)	Continuous ^a	Meter/Recorded	Year-round
Zinc (total)	µg/L	1/month	24-Hour Composite ^c	Year-round
Lead (total)	µg/L	1/month	24-Hour Composite ^c	Year-round
Hardness (as CaCO ₃)	mg/L	1/month	24-Hour Composite ^c	Year-round
Total Alkalinity (as CaCO ₃)	mg/L	1/month	24-Hour Composite ^c	Year-round
Cadmium (total)	µg/L	2/year ^d	24-Hour Composite ^c	Year-round
Total PCBs (sum of Aroclors)	pg/L	2/year ^d	24-Hour Composite ^c	Year-round
Total PCBs (sum of Aroclors)	µg/L	2/year ^d	24-Hour Composite ^c	Year-round
Total Suspended Solids (TSS)	mg/L	5/week ^e	24-Hour Composite ^c	Nov – Jan
Total Suspended Solids (TSS)	lbs/day	5/week ^e	Calculated ^f	Nov – Jan
Biochemical Oxygen Demand (BOD ₅)	mg/L	5/week ^e	24-Hour Composite ^c	Nov - Feb

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type	Monitoring Months
Biochemical Oxygen Demand (BOD ₅)	lbs/day	5/week ^e	Calculated ^f	Nov - Feb
Ammonia (as N)	mg/L	1/week ^g	24-Hour Composite ^c	Nov - Feb
Ammonia (as N)	lbs/day	1/week ^g	Calculated ^f	Nov - Feb
Total Phosphorus (as P)	µg/L	1/week ^g	24-Hour Composite ^c	Nov - Jan
Total Phosphorus (as P)	lbs/day	1/week ^g	Calculated ^f	Nov - Jan
Total Suspended Solids (TSS)	mg/L	2/week ^h	24-Hour Composite ^c	Feb - Oct
Total Suspended Solids (TSS)	lbs/day	2/week ^h	Calculated ^f	Feb - Oct
Total Phosphorus (as P)	µg/L	2/week ^h	24-Hour Composite ^c	Feb - Oct
Total Phosphorus (as P)	lbs/day	2/week ^h	Calculated ^f	Feb - Oct
Total Phosphorus (as P)	lbs/day, running average	1/month	Summary Only ⁱ	Feb - Sept
Total Phosphorus (as P)	lbs/day, seasonal average	1/year	Summary Only ^j	Oct
Carbonaceous Biochemical Oxygen Demand (CBOD ₅)	mg/L	5/week ^e	24-Hour Composite ^c	Mar - Oct
Carbonaceous Biochemical Oxygen Demand (CBOD ₅)	lbs/day	5/week ^e	Calculated ^f	Mar - Oct
Carbonaceous Biochemical Oxygen Demand (CBOD ₅)	lbs/day, running average	1/month	Summary Only ⁱ	Mar - Sept
Carbonaceous Biochemical Oxygen Demand (CBOD ₅)	lbs/day, seasonal average	1/year	Summary Only ^j	Oct
Ammonia (as N)	mg/L	2/week ^h	24-Hour Composite ^c	Mar - Oct
Ammonia (as N)	lbs/day	2/week ^h	Calculated ^f	Mar - Oct

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type	Monitoring Months
Ammonia (as N)	lbs/day, running average	1/month	Summary Only ⁱ	Mar - Sept
Ammonia (as N)	lbs/day, seasonal average	1/year	Summary Only ^j	Oct

Footnotes for Table 9: Monitoring Schedule – Outfall 001 (Final Discharge to Spokane River)

^a Continuous 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 The Permittee must report the instantaneous maximum and minimum pH monthly. Do not average pH values. The Permittee must record and report the:

- Number of minutes the pH value measured between 5.6 and 6.6 and between 9.0 and 10.0 for each day.
- Total minutes for the month.
- Monthly instantaneous maximum and minimum pH.

If multiple excursions occur during the day, note the duration for each excursion in the notation field in the parameter notes.

^c 24-Hour Composite means a series of individual samples collected over a 24-hour period into a single container, and analyzed as one sample.

^d 2/year means twice per year, the first sample collected during the 1st half of the year (January-June) and the second sample collected during the 2nd half of the year (July – December).

^e 5/week means five times during each calendar week.

^f Calculate using the respective sample results, using the following formula:

Concentration (in mg/L) X Flow (in MGD) X Conversion Factor (8.34) = lbs/day;
 or
 Concentration (in µg/L) X Flow (in MGD) X Conversion Factor (8.34x10³) = lbs/day

^g 1/week means one time during each calendar week.

^h 2/week means two times during each calendar week on alternating days.

ⁱ Summarize the **running seasonal average** load by averaging the current months value with the previous months. Applicable running average seasons are February through September for total phosphorus; and March through September for ammonia and CBOD₅.

^j Summarize the **seasonal average** load by averaging the monthly average values over the corresponding seasonal time period. Applicable seasons are February through October for total phosphorus; and March through October for ammonia and CBOD₅. Report these values at the end of their corresponding seasons.

Table 9: Monitoring Schedule – Outfall 004 (Non-contact Cooling Water)

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type	Monitoring Months
Flow	Million gallons per day (MGD)	Continuous ^a	Meter/Recorded	Feb - Oct
Total Phosphorus (as P)	µg/L	1/week ^b	Grab ^c	Feb - Oct
Total Phosphorus (as P)	lbs/day	1/week ^b	Calculated ^d	Feb - Oct
Total Phosphorus (as P)	lbs/day, running average	1/month	Summary Only ^e	Feb - Sept
Total Phosphorus (as P)	lbs/day, seasonal average	1/year	Summary Only ^f	Oct

Footnotes for Table 10: Monitoring Schedule – Outfall 004 (Non-contact cooling water)

^a **Continuous** 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.

^g 1/week means one time during each calendar week.

^c Grab means an individual sample collected in less than 15 minutes time

^d Calculate using the respective sample results, using the following formula:

Concentration (in mg/L) X Flow (in MGD) X Conversion Factor (8.34) = lbs/day;
 or
 Concentration (in µg/L) X Flow (in MGD) X Conversion Factor (8.34x10³) = lbs/day

^e Summarize the **running seasonal average** load by averaging the current months value with the previous months. Applicable running average seasons are February through September for total phosphorus; and March through September for ammonia and CBOD₅.

^f Summarize the **seasonal average** load by averaging the monthly average values over the corresponding seasonal time period. Applicable seasons are February through October for total phosphorus; and March through October for ammonia and CBOD₅. Report these values at the end of their corresponding seasons.

Table 10: Monitoring Schedule – Production

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
Total Production	Machine Dry Tons per day (MDT)	1/day	Measured
Thermo-Mechanical Pulp Production	% of Total Production	1/day	Measured
Deink Pulp Production	% of Total Production	1/day	Measured

Permit Renewal Application Requirements – Final Wastewater Effluent

See Appendix A to identify the specific pollutants in the Priority Pollutant groups listed below.

Table 11: Monitoring Schedule – Outfall 001, Permit Renewal Application Requirements

See Appendix A to identify the specific pollutants in the Priority Pollutant groups listed below. Submit monitoring results with the permit renewal application as specified in Special Condition S8 as an attachment to the application form.

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
Cyanide	µg/L	Once in the last year	Grab ^a
Total Phenolic Compounds	µg/L	Once in the last year	Grab ^a
Priority Pollutants (PP) – Total Metals	µg/L; ng/L for Mercury	Once in the last year	24-Hour Composite ^b Grab ^a for Mercury
PP – Volatile Organic Compounds	µg/L	Once in the last year	Grab ^a
PP – Acid-extractable Compounds	µg/L	Once in the last year	24-Hour Composite ^b
PP – Base-neutral Compounds	µg/L	Once in the last year	24-Hour Composite ^b
PP – Dioxin	pg/L	Once in the last year	24-Hour Composite ^b
PP – Pesticides/PCBs	µg/L	Once in the last year	24-Hour Composite ^b
PBDEs ^c	pg/L	Twice in the last year	24-Hour Composite ^b

Footnotes for Table 13: Monitoring Schedule – Outfall 001, Permit Renewal Application Requirements

^a Grab means an individual sample collected over a 15-minute, or less, period.

^b 24-Hour Composite means a series of individual samples collected over a 24-hour period into a single container, and analyzed as one sample.

^c Outfall 001 effluent characterization. Test using EPA Method 1614.

Table 12: Monitoring Schedule – Outfall 001, Toxicity Testing

Parameter	Sampling and Sample Type Frequency
Acute Toxicity Testing	See Permit Condition S11
Chronic Toxicity Testing	See Permit Condition S12

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 Code of Federal Regulations (CFR) Part 136 [or as applicable in 40 CFR subchapter N (Parts 400-471) or 40 CFR Subchapter 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 the devices to ensure the accuracy of the measurements is consistent with the accepted industry standard, the manufacturer's recommendation, and approved Operation and Maintenance (O&M) Manual procedures for the device and the waste stream.
3. Calibrate continuous monitoring instruments weekly unless it can demonstrate a longer period is sufficient based on monitoring reports.

The Permittee:

Must calibrate continuous pH measurement instruments according to the manufacturer's requirements.

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 (including flow monitoring) 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 Washington Administrative Code (WAC), Accreditation of Environmental Laboratories. Flow, Temperature, Settleable Solids, Conductivity, pH, and internal process control parameters are exempt from the requirement. The Permittee must obtain accreditation for Conductivity and pH if it must receive accreditation or registration for other parameters.

S2.E. Request for Reduction in Monitoring

The Permittee may request a reduction of the sampling frequency after 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, and
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 Conditions 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 <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Water-quality-permits-guidance/WQWebPortal-guidance>.

2. Ensure that DMRs are electronically submitted no later than the dates specified below, unless otherwise specified in this permit.
3. 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 **1/month DMRs** by the 15th day of the following month.
 - b. Submit **1/year DMRs** by January 15 for the previous calendar year. The annual sampling period is a calendar year, starting with 2022.
 - c. Submit **2/year (or semi-annual) DMRs** by July 15 and January 15 of each year. 2/year sampling periods are January through June, and July through December, starting with the second monitoring period; July 1, 2022.
4. Enter the “No Discharge” reporting code for an entire DMR, for a specific monitoring point, or a specific parameter as appropriate, if the Permittee did not discharge wastewater or a specific pollutant during a given monitoring period.
 5. Report single analytical values below detection as “less than the Detection Level (DL)” by entering the < 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.
 6. Report single analytical values between the DL and the QL by entering the estimated value, the code for estimated value/below quantitation limit (J) and any additional information in the comments. Submit a copy of the laboratory report as an attachment using WQWebDMR.
 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 detection value and the quantitation value for the sample analysis.

- b. One-half (1/2) 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 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 detection, DL (as necessary), and laboratory QL (as necessary).

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 submittal 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 Program
Department of Ecology
Eastern Regional Office
4601 North Monroe Street
Spokane, WA 99205-1265

S3.C. Records Retention

The Permittee must retain records of all monitoring information for a minimum of three 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.D. 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.E. 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.F. 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 30 days of sampling.

a. Immediate Reporting

The Permittee must **immediately** report to Ecology and the Department of Health, Drinking Water Program (at the numbers listed below), for all:

- Collection system overflows discharging to a water body used as a source of drinking water.
- Plant bypasses discharging to a water body used as a source of drinking water.

Ecology Eastern Regional Office 509-329-3400

Department of Health 800-521-0323 (business hours)
Drinking Water Program 877-481-4901 (after hours)

b. Immediate Reporting - Other

The Permittee must report the following occurrences of noncompliance by telephone, to Ecology at the telephone number listed above as soon as the Permittee becomes aware of any of the following circumstances:

- i. Any noncompliance that may endanger health or the environment, unless previously reported under immediate reporting requirements.
- ii. Any unanticipated bypass that causes an exceedance of any effluent limit in the permit (See Part S4.B., Bypass Procedures).

- iii. Any upset that causes an exceedance of an effluent limit in the permit (See G15., Upset).
- iv. Any violation of a maximum daily or instantaneous maximum discharge limit for any of the pollutants in Special Condition S1.A. of this permit.
- v. 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 that 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:

- i. A description of the noncompliance and its cause.
- ii. The period of noncompliance, including exact dates and times.
- iii. The estimated time the Permittee expects the noncompliance to continue if not yet corrected.
- iv. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
- v. If the noncompliance involves an overflow prior to the treatment works, an estimated 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 Special Condition 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.G. Other Reporting

1. Spills of Oil or Hazardous Materials

The Permittee must [Report a Spill](#) of oil or hazardous materials in accordance with the requirements of Revised Code of Washington (RCW) 90.56.280 and chapter 173-303-145 WAC.

Instructions on how to report a spill are available on Ecology's website at <https://ecology.wa.gov/About-us/Get-involved/Report-an-environmental-issue/Report-a-spill>.

2. 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.H. 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. Schedule of Compliance for CBOD₅ and Total Phosphorus (as P)

By the dates tabulated below, the Permittee must complete the following task 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 the delay and the steps it is taking to return the project to the established schedule
- The Annual Status Reports must contain a detailed description of the steps taken and planned to optimize the treatment system performance (including reducing wastewater temperatures); and progress in meeting the Final Water Quality Based Effluent Limits.

Table 13: Compliance Schedule

Item	Task	Due Date
1.	Annual Status Reports	November 1 of each year

Item	Task	Due Date
2.	Prepare and submit an approvable engineering report, plans, and specifications for Ecology review and approval for the installation of a fine bubble aeration system in the Orbal carousel in accordance with Chapter 173-240 WAC	December 31, 2024
3.	Letter confirming the installation and operation of the fine bubble aeration system	May 31, 2025
4.	Meet Final Water Quality Based Effluent Limits for CBOD ₅ and Total Phosphorus (as P)	November 1, 2027

S5. 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 interrupting 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.

S5.A. Operation and Maintenance (O&M) Manual

1. O&M Manual Submittal and Requirements

The Permittee must:

- a. **Update the O&M Manual** that meets the requirements of WAC 173-240-150 and submit it to Ecology for approval **by February 1, 2023**.
- b. Submit to Ecology for review and approval substantial changes or updates to the O&M Manual.
- c. Keep the approved O&M Manual at the permitted facility.
- d. Follow the instructions and procedures of this manual.

2. 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](#) available online at <https://apps.ecology.wa.gov/publications/documents/9837.pdf>.

The O&M Manual must include:

- a. Emergency procedures for plant shutdown and cleanup in the event of a wastewater system upset or failure.
- b. 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.
- c. Wastewater system maintenance procedures that contribute to the generation of process wastewater.
- d. 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).
- e. Wastewater sampling protocols and procedures for compliance with the sampling and reporting requirements in the wastewater discharge permit.
- f. Minimum staffing adequate to operate and maintain the treatment processes and carry out compliance monitoring required by the permit.
- g. Treatment plant process control monitoring schedule.

S5.B. Bypass Procedures

A bypass is the intentional diversion of waste streams from any portion of a treatment facility. This permit prohibits all bypass except when the bypass is for essential maintenance, as authorized in Special Condition S5.B.1, or is approved by Ecology as an anticipated bypass following the procedures in Special Condition S5.B.2.

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

This permit allows bypasses for essential maintenance of the treatment system when necessary to ensure efficient operation of the system. The Permittee may bypass the treatment system for essential maintenance only if doing so does not cause violations of effluent limits. The Permittee is not required to notify Ecology when bypassing for essential maintenance.

However, the Permittee must comply with the monitoring requirements specified in Special Condition S2.B.

2. Anticipated bypass for non-essential maintenance.

Ecology may approve an anticipated bypass under the conditions listed below. This permit prohibits any anticipated bypass that is not approved through the following process.

- a. If a bypass is for non-essential maintenance, the Permittee must notify Ecology at least 10 days before the planned date of bypass.

The notice must contain:

- A description of the bypass and the reason the bypass is necessary.
 - An analysis of all known alternatives that would eliminate, reduce, or mitigate the potential impacts from the proposed bypass.
 - A cost-effectiveness analysis of alternatives.
 - 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 State Environmental Policy Act (SEPA).
 - A request for modification of Water Quality Standards as provided 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 recurrence 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 determine if the Permittee has met the conditions of Special Condition S4.B.2.a and b, and consider the following prior to issuing a determination letter, an Administrative Order, or a permit modification as appropriate for an anticipated bypass:
- If the Permittee planned and scheduled the bypass to minimize adverse effects on the public and the environment.
 - If the bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to the 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. Severe property damage does not mean economic loss caused by delays in production.
 - If 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 which occurred during normal periods of equipment downtime or preventative maintenance.
 - Transport of untreated wastes to another treatment facility

S6. Solid Wastes

S6.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.

S6.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 (AKART), nor allow such leachate to cause violation of 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 water.

S6.C. Solid Waste Control Plan

The Permittee must submit all proposed revisions or modifications to the Solid Waste Control Plan to Ecology for review and approval at least 30 days prior to implementation.

The Permittee must comply with the approved Solid Waste Control Plan and any modifications once approved. The Permittee must **submit an update of the Solid Waste Control Plan by July 31, 2026.**

The Solid Waste Control Plan must:

1. Follow Ecology's guidance for [Developing a Solid Waste Control Plan](https://apps.ecology.wa.gov/publications/documents/0710024.pdf) (<https://apps.ecology.wa.gov/publications/documents/0710024.pdf>) 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.

S7. Application for Permit Renewal or Modification for Facility Changes

The Permittee must submit an application for renewal of this permit **by July 31, 2026.**

Mail the **original, signed application** to the Water Quality Program, Eastern Regional Office, Department of Ecology, 4601 N. Monroe Street, Spokane, Washington 99205.

Send an electronic copy of the application (preferably as a PDF) by email to Ecology at ewqpermits@ecy.wa.gov. Scan any attachments to the application and submit them with the application.

The Permittee must also submit a new application or addendum at least 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.

S8. PCB Pollutant Minimization Plan (PMP)

The goal of the PCB Pollutant Minimization Plan (PMP) is to maintain, or lower, effluent loading of total PCB in the discharge through identified and quantified control actions. The Permittee will identify, implement, and evaluate the efficacy of these actions in the PMP.

S8.A. PCB PMP

By August 1, 2023, the Permittee must **prepare a PCB PMP** and submit it to Ecology for review and approval.

The updated PMP must include:

1. A section that lists members of the cross functional team that developed the initial PCB PMP and those that are responsible for the implementation and on-going revisions to the Plan. The designated team leader for the PCB PMP development, implementation, and on-going revisions must be identified.
2. A section that describes PCB PMP items that have been implemented and an estimate of their effectiveness with respect to either total PCB effluent loading or effluent concentration reductions.
3. A section that identifies any proposed or considered PCB PMP items along with an evaluation of their feasibility, both technical and economic.
4. As appropriate, these PCB PMP items may include substitution of materials, treatment system performance improvement actions, and operational process or procedure revisions or modifications. The PCB PMP shall also include the elements identified in Permit Condition S8.C.
5. A section on site specific BMPs to minimize contributions of PCB to the final discharge during any site disturbance, demolition, and remodeling.

Potential contributions may include, but are not limited to, contaminated soil, contaminated sediments, and contaminated stormwater entering the wastewater collection systems during site disturbance, demolition, and remodeling.
6. A section that provides a schedule for the implementation of feasible PCB PMP items that have been identified above.
7. Quality Assurance/Quality Control (QA/QC) Plan for PCB source control and effluent characterization. The QA/QC Plan must include a minimum testing frequency of once per quarter for routine monitoring of PCBs in the final effluent (Outfall 001) for effluent characterization using EPA method 1668. Prepare the QA/QC Plan in accordance with the guidelines provided in Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies, Ecology publication 04-03-030.

S8.B. PCB PMP Annual Report Update

By July 1 of each year beginning with 2024, a PCB PMP Annual Report Update for the previous calendar year must be submitted to Ecology.

The Annual Report must include:

1. A section that provides a summary of the previous calendar year's effluent PCB characterization data collection under this section. The data summary shall include PCB effluent loading and concentration data. The data summaries must include congener, homologue, dioxin like congener, and total PCB results.

Results shall be presented on an uncensored basis and on a blank censored basis using 5 and 10 times the values detected in the corresponding laboratory blank.

2. A section, as appropriate, that contains any monitoring information relative to the PCB PMP not already provided elsewhere in the Annual Report.
3. A section that evaluates the overall effectiveness of all PCB PMP activities that have been implemented with respect to effluent loadings and concentrations.
4. A section that describes actions and schedules related to PCB source identification and cleanup within the industrial wastewater treatment system.
5. A section that describes any updates made to the PCB PMP.
6. A section that describes the implementation of actions associated with condition S8.C, below.

S8.C. Regional toxics task force

The Permittee must continue to participate in the cooperative efforts and functions of the Regional Toxics Task Force with the goal of implementing the [2016 Comprehensive Plan to Reduce Polychlorinated Biphenyls \(PCBs\)](http://srrttf.org/wp-content/uploads/2016/04/Comp_Plan_Final_11-29-16-2.pdf) in the Spokane River, review the plan online at http://srrttf.org/wp-content/uploads/2016/04/Comp_Plan_Final_11-29-16-2.pdf.

Participation in an equivalent citizen advisory organization or committee may substitute for the requirement to participate in the Spokane River Regional Toxics Task Force.

S9. Non-routine and Unanticipated Wastewater

- A. 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:
 1. The proposed discharge location;
 2. The nature of the activity that will generate the discharge;
 3. Any alternatives to the discharge, such as reuse, storage, or recycling of the water;
 4. The total volume of water it expects to discharge;
 5. The results of the chemical analysis of the water;
 6. The date of proposed discharge; and
 7. The expected rate of discharge discharged, in gallons per minute.

- B. The Permittee must analyze the water for constituents limited for the discharge and report them as required by subpart A.5 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.

- C. The Permittee must limit the discharge rate, as referenced in subpart A.7 above, so it will not cause erosion of ditches or structural damage to culverts and their entrances or exists.
- D. 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.

S10. Spill Control Plan

S10.A. Spill Control Plan Submittals and Requirements

The Permittee must:

1. **Submit to Ecology** an update to the existing Spill Control Plan **by February 1, 2023.**
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.

S10.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 a 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 that may become pollutants or cause pollution upon reaching State 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.

Approval of the Spill Control Plan with respect to this requirement does not constitute approval of the plans and manuals with respect to the underlying requirement.

S11. Acute Toxicity

S11.A. Testing When There is No Permit Limit for Acute Toxicity

The Permittee must:

1. **Conduct Acute Toxicity testing** on final effluent once in the last summer and once in the last winter prior to submission of the application for permit renewal.
2. **Conduct Acute Toxicity testing** on a series of at least five concentrations of effluent, including 100 percent effluent and a control.
3. Use each of the following species and protocols for each Acute Toxicity test:

Table 14: Acute Toxicity Tests

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	Ceriodaphnia Dubia, Daphnia Pulex, OR Daphnia Magna	EPA-821-R-02-012

4. **Submit the results to Ecology by July 31, 2026**

S11.B. 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](https://apps.ecology.wa.gov/publications/documents/9580.pdf) (<https://apps.ecology.wa.gov/publications/documents/9580.pdf>). 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 A 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 the 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 ACEC. The ACEC equals 41 percent 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 percent as defined in [WAC 173-205-020](https://apps.leg.wa.gov/WAC/default.aspx?cite=173-205-020) (<https://apps.leg.wa.gov/WAC/default.aspx?cite=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.

S12. Chronic Toxicity

S12.A. Testing When There is No Permit Limit for Chronic Toxicity

The Permit must:

1. **Conduct Chronic Toxicity testing** on final effluent once in the last winter and once in the last summer prior to submission of the application for permit renewal.
2. **Conduct Chronic Toxicity testing** on a series of at least five concentrations of effluent and a control. This series of dilutions must include the ACEC. The ACEC equals 41 percent effluent. The series of dilutions should also contain the CCEC of 6.0 percent effluent.
3. Compare the ACEC to the control using hypothesis testing at the 0.05 level of significance as described in Appendix H, EPA/600/4-89/001.

4. **Submit the results to Ecology by July 31, 2026**
5. Perform Chronic Toxicity Tests with all of the following species and the most recent version of the following protocols:

Table 15: Freshwater Chronic Test

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

S12.B. 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** (<https://apps.ecology.wa.gov/publications/documents/9580.pdf>).
 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** (link above).
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 A and the Ecology Publication No. WQ-R-95-80, **Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria** (link above) 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 the 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 41 percent effluent. The ACEC equals 6.0 percent effluent.

8. All Whole Effluent Toxicity tests that involve hypothesis testing must comply with the Chronic Statistical Power Standard of 39 percent as defined in [WAC 173-205-020](#) (<https://apps.leg.wa.gov/WAC/default.aspx?cite=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

A. All applications submitted to Ecology must be signed and certified.

1. 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 the 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.
2. In the case of a partnership, by a general partner.
3. In the case of sole proprietorship, by the proprietor.
4. In the case of 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 shall be submitted by the public entity.

B. 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:

1. The authorization is made in writing by a person described above and submitted to Ecology.
2. 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).

- C. Changes to authorization. If an authorization under paragraph G1.B., above, is no longer accurate because a different individual or position has responsibility for overall operation of the facility, a new authorization satisfying the requirements of paragraph G1.B., above, must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.
- D. 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 fines 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:

- A. 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.
- B. To have access to and copy, at reasonable times and at a reasonable cost, any records required to be kept under the terms and conditions of this permit.
- C. To inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.
- D. 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 Part 122.62, 40 CFR Part 122.64, or WAC 173-220-150 according to the procedures of 40 CFR Part 124.5.

Under condition B.4 below, Ecology will reopen the permit should the Human Health Criteria for PCBs be revised.

- A. The following are causes for terminating this permit during its term, or for denying a permit renewal application:
1. Violation of any permit term or condition.
 2. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.
 3. A material change in quantity or type of waste disposal.
 4. 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 modification or termination.
 5. A change in any condition requires either a temporary or permanent reduction, or elimination of any discharge or sludge use or disposal practice controlled by the permit.
 6. Nonpayment of fees assessed pursuant to RCW 90.48.465.
 7. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.
- B. The following are causes for modification but not revocation and reissuance except when the Permittee requests or agrees:
1. A material change in the condition of waters of the State.
 2. New information not available at the time of permit issuance that would have justified the application of different permit conditions.
 3. Material and substantial alterations or additions to the permitted facility or activities that occurred after this permit issuance.
 4. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.
 5. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR Part 122.62.
 6. Ecology has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.
 7. Incorporation of an approved local pretreatment program into a municipality's permit.
- C. The following are causes for modification or alternatively revocation and reissuance:
1. The permitted facility being determined to be a new source pursuant to 40 CFR Part 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 Part 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 the permit constitutes a violation.

G4. Reporting Planned Changes

The Permittee must, as soon as possible, but no later than 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 that will result in:

- A. The permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b).
- B. A significant change in the nature or an increase in quantity of pollutants discharged.
- C. A significant change in the Permittee's sludge use or disposal practices. Following such notice, and the submittal of 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, a 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 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 approval 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 emanates, 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.

A. Transfer by Modification

Except as provided in paragraph B 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 Part 122.62(b)(2), or a minor modification made under 40 CFR Part 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

B. Automatic Transfers

This permit may be automatically transferred to a new Permittee if:

1. The Permittee notifies Ecology at least 30 days in advance of the proposed transfer date.
2. The notice includes a written agreement between the existing and new Permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them.
3. 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 a minor modification under 40 CFR Part 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 re-suspended 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 that 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

The other requirements of 40 CFR Part 122.41 and 40 CFR Part 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 Violation 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, shall be punished by a fine up to \$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 \$10,000 for each such violation. Each 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 exception 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 operation error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative 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:

- A. An upset occurred and that the Permittee can identify the cause(s) of the upset.
- B. The permitted facility was being properly operated at the time of the upset.

- C. The Permittee submitted notice of the upset as required in Special Condition S3.F.
- D. The Permittee complied with any remedial measures required under Special Condition 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 of Comply

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

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 shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two 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 shall be a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or by both.

G20. Reporting Requirements Applicable to Existing Manufacturing, Commercial, Mining, and Silvicultural Discharges

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:

- A. 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:"
 - 1. One hundred micrograms per liter (100 µg/L)
 - 2. Two hundred micrograms per liter (200 µg/L) for Acrolein and Acrylonitrile; 500 µg/L for 2,4-Dinitrophenol and 2-Methyl-4,6-Dinitrophenol; and 1 mg/L for Antimony.

3. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR Part 122.21(g)(7).
 4. The level established by the Director in accordance with 40 CFR Part 122.44 (f).
- B. 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:"
1. Five hundred (500) µg/L
 2. One (1) mg/L for Antimony
 3. Ten times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR Part 122.21(g)(7).
 4. The level established by the Director in accordance with 40 CFR Part 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 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.

The lists below include conventional pollutants (as defined in CWA section 502(6) and 40 CFR Part 122.), toxic or priority pollutants as defined in CWA section 307(a)(1) and listed in 40 CFR Part 122 Appendix D, 40 CFR Part 401.15 and 40 CFR Part 423 Appendix A), and nonconventionals. 40 CFR Part 122 Appendix D (Table V) also identifies toxic pollutants and hazardous substances which are required to be reported by dischargers if expected to be present. This permit appendix A list does not include those parameters. The list also includes pulp and paper pollutants identified in 40 CFR Part 430 and the dioxin and furan congeners identified using EPA Method 1613.

Conventional Pollutants

Pollutant	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) ¹ µg/L Unless specified	Quantitation Level (QL) ² µg/L Unless specified
Biochemical Oxygen Demand		SM5210-B		2 mg/L
Biochemical Oxygen Demand, Soluble		SM5210-B ³		2 mg/L
Fecal Coliform		SM 9221E,9222	N/A	Specified in method sample aliquot dependent
Oil and Grease (HEM) (Hexane Extractable Material)		1664 A or B	1,400	5,000
pH		SM4500-H ⁺ B	N/A	N/A
Total Suspended Solids		SM2540-D		5 mg/L

Nonconventional Pollutants

Pollutant	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) ¹ µg/L Unless specified	Quantitation Level (QL) ² µg/L Unless specified
Alkalinity, Total		SM2320-B		5 mg/L as CaCO ₃
Aluminum, Total	7429-90-5	200.8	2.0	10
Ammonia, Total (as N)		SM4500-NH ₃ -B and C/D/E/G/H		20
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
Boron, Total	7440-42-8	200.8	2.0	10.0

Pollutant	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L Unless specified	Quantitation Level (QL)² µg/L Unless specified
Chemical Oxygen Demand		SM5220-D		10 mg/L
Chloride		SM4500-Cl B/C/D/E and SM4110 B		Sample and limit dependent
Chlorine, Total Residual		SM4500 Cl G		50.0
Cobalt, Total	7440-48-4	200.8	0.05	0.25
Color		SM2120 B/C/E		10 color units
Dissolved oxygen		SM4500-OC/OG		0.2 mg/L
E.coli		SM 9221B, 9221F, 9223B	N/A	Specified in method - sample aliquot dependent
Enterococci		SM 9230B, 9230C, 9230D	N/A	Specified in method - sample aliquot dependent
Flow		Calibrated device		
Fluoride	16984-48-8	SM4500-F E	25	100
Hardness, Total		SM2340B		200 as CaCO ₃
Iron, Total	7439-89-6	200.7	12.5	50
Magnesium, Total	7439-95-4	200.7	10	50
Manganese, Total	7439-96-5	200.8	0.1	0.5
Molybdenum, Total	7439-98-7	200.8	0.1	0.5
Nitrate + Nitrite Nitrogen (as N)		SM4500-NO ₃ - E/F/H		100
Nitrogen, Total Kjeldahl (as N)		SM4500-N _{org} B/C and SM4500NH ₃ - B/C/D/EF/G/H		300

Pollutant	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L Unless specified	Quantitation Level (QL)² µg/L Unless specified
NWTPH Dx ⁴		Ecology NWTPH Dx	250	250
NWTPH Gx ⁵		Ecology NWTPH Gx	250	250
Phosphorus, Total (as P)		SM 4500 PB followed by SM4500-PE/PF	3	10
Salinity		SM2520-B		3 practical salinity units or scale (PSU or PSS)
Settleable Solids		SM2540 -F		Sample and limit dependent
Soluble Reactive Phosphorus (as P)		SM4500-P E/F/G	3	10
Sulfate (as mg/L SO ₄)		SM4110-B		0.2 mg/L
Sulfide (as mg/L S)		SM4500- S ² F/D/E/G		0.2 mg/L
Sulfite (as mg/L SO ₃)		SM4500-SO3B		2 mg/L
Temperature (max. 7-day avg.)		Analog recorder or Use micro- recording devices known as thermistors		0.2° C
Tin, Total	7440-31-5	200.8	0.3	1.5
Titanium, Total	7440-32-6	200.8	0.5	2.5
Total Coliform		SM 9221B, 9222B, 9223B	N/A	Specified in method - sample aliquot dependent
Total Organic Carbon		SM5310-B/C/D		1 mg/L

Pollutant	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L Unless specified	Quantitation Level (QL)² µg/L Unless specified
Total dissolved solids		SM2540 C		20 mg/L

**Priority Pollutants
 Metals, Cyanide & Total Phenols**

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L Unless specified	Quantitation Level (QL)² µg/L Unless specified
Antimony, Total	114	7440-36-0	200.8	0.3	1.0
Arsenic, Total	115	7440-38-2	200.8	0.1	0.5
Beryllium, Total	117	7440-41-7	200.8	0.1	0.5
Cadmium, Total	118	7440-43-9	200.8	0.05	0.25
Chromium (hex) dissolved	119	18540-29-9	SM3500-Cr C	0.3	1.2
Chromium, Total	119	7440-47-3	200.8	0.2	1.0
Copper, Total	120	7440-50-8	200.8	0.4	2.0
Lead, Total	122	7439-92-1	200.8	0.1	0.5
Mercury, Total	123	7439-97-6	1631E	0.0002	0.0005
Nickel, Total	124	7440-02-0	200.8	0.1	0.5
Selenium, Total	125	7782-49-2	200.8	1.0	1.0
Silver, Total	126	7440-22-4	200.8	0.04	0.2
Thallium, Total	127	7440-28-0	200.8	0.09	0.36
Zinc, Total	128	7440-66-6	200.8	0.5	2.5

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) ¹ µg/L Unless specified	Quantitation Level (QL) ² µg/L Unless specified
Cyanide, Total	121	57-12-5	335.4	5	10
Cyanide, Weak Acid Dissociable	121		SM4500-CN I	5	10
Cyanide, Free Amenable to Chlorination (Available Cyanide)	121		SM4500-CN G	5	10
Phenols, Total	65		EPA 420.1		50

Acid Compounds

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) ¹ µg/L Unless specified	Quantitation Level (QL) ² µg/L Unless specified
2-Chlorophenol	24	95-57-8	625.1	3.3	9.9
2,4-Dichlorophenol	31	120-83-2	625.1	2.7	8.1
2,4-Dimethylphenol	34	105-67-9	625.1	2.7	8.1
4,6-dinitro-o-cresol (2-methyl-4,6,-dinitrophenol)	60	534-52-1	625.1/1625B	24	72
2,4 dinitrophenol	59	51-28-5	625.1	42	126
2-Nitrophenol	57	88-75-5	625.1	3.6	10.8
4-Nitrophenol	58	100-02-7	625.1	2.4	7.2
Parachlorometa cresol (4-chloro-3-methylphenol)	22	59-50-7	625.1	3.0	9.0
Pentachlorophenol	64	87-86-5	625.1	3.6	10.8

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) ¹ µg/L Unless specified	Quantitation Level (QL) ² µg/L Unless specified
Phenol	65	108-95-2	625.1	1.5	4.5
2,4,6-Trichlorophenol	21	88-06-2	625.1	2.7	8.1

Volatile Compounds

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) ¹ µg/L Unless specified	Quantitation Level (QL) ² µg/L Unless specified
Acrolein	2	107-02-8	624.1	5	10
Acrylonitrile	3	107-13-1	624.1	1.0	2.0
Benzene	4	71-43-2	624.1	4.4	13.2
Bromoform	47	75-25-2	624.1	4.7	14.1
Carbon tetrachloride	6	56-23-5	624.1/601 or SM6230B	2.8	8.4
Chlorobenzene	7	108-90-7	624.1	6.0	18.0
Chloroethane	16	75-00-3	624/601	1.0	2.0
2-Chloroethylvinyl Ether	19	110-75-8	624.1	1.0	2.0
Chloroform	23	67-66-3	624.1 or SM6210B	1.6	4.8
Dibromochloromethane (chlorodibromomethane)	51	124-48-1	624.1	3.1	9.3
1,2-Dichlorobenzene	25	95-50-1	624.1	1.9	7.6
1,3-Dichlorobenzene	26	541-73-1	624.1	1.9	7.6
1,4-Dichlorobenzene	27	106-46-7	624.1	4.4	17.6

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L Unless specified	Quantitation Level (QL)² µg/L Unless specified
Dichlorobromomethane	48	75-27-4	624.1	2.2	6.6
1,1-Dichloroethane	13	75-34-3	624.1	4.7	14.1
1,2-Dichloroethane	10	107-06-2	624.1	2.8	8.4
1,1-Dichloroethylene	29	75-35-4	624.1	2.8	8.4
1,2-Dichloropropane	32	78-87-5	624.1	6.0	18.0
1,3-dichloropropene (mixed isomers) (1,2-dichloropropylene) ⁶	33	542-75-6	624.1	5.0	15.0
Ethylbenzene	38	100-41-4	624.1	7.2	21.6
Methyl bromide (Bromomethane)	46	74-83-9	624/601	5.0	10.0
Methyl chloride (Chloromethane)	45	74-87-3	624.1	1.0	2.0
Methylene chloride	44	75-09-2	624.1	2.8	8.4
1,1,2,2-Tetrachloroethane	15	79-34-5	624.1	6.9	20.7
Tetrachloroethylene	85	127-18-4	624.1	4.1	12.3
Toluene	86	108-88-3	624.1	6.0	18.0
1,2-Trans-Dichloroethylene (Ethylene dichloride)	30	156-60-5	624.1	1.6	4.8

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) ¹ µg/L Unless specified	Quantitation Level (QL) ² µg/L Unless specified
1,1,1-Trichloroethane	11	71-55-6	624.1	3.8	11.4
1,1,2-Trichloroethane	14	79-00-5	624.1	5.0	15.0
Trichloroethylene	87	79-01-6	624.1	1.9	5.7
Vinyl chloride	88	75-01-4	624/SM6200 B	1.0	2.0

Base/Neutral Compounds (Compounds in **Bold** are Ecology PBTS)

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) ¹ µg/L Unless specified	Quantitation Level (QL) ² µg/L Unless specified
Acenaphthene	1	83-32-9	625.1	1.9	5.7
Acenaphthylene	77	208-96-8	625.1	3.5	10.5
Anthracene	78	120-12-7	625.1	1.9	5.7
Benzidine	5	92-87-5	625.1	44	132
Benzyl butyl phthalate	67	85-68-7	625.1	2.5	7.5
Benzo(a)anthracene	72	56-55-3	625.1	7.8	23.4
Benzo(b)fluoranthene (3,4-benzofluoranthene) ⁷	74	205-99-2	610/625.1	4.8	14.4
Benzo(j)fluoranthene⁷		205-82-3	625	0.5	1.0
Benzo(k)fluoranthene (11,12-benzofluoranthene) ⁷	75	207-08-9	610/625.1	2.5	7.5
Benzo(r,s,t)pentaphene		189-55-9	625	1.3	5.0

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) ¹ µg/L Unless specified	Quantitation Level (QL) ² µg/L Unless specified
Benzo(a)pyrene	73	50-32-8	610/625.1	2.5	7.5
Benzo(ghi)Perylene	79	191-24-2	610/625.1	4.1	12.3
Bis(2-chloroethoxy)methane	43	111-91-1	625.1	5.3	15.9
Bis(2-chloroethyl)ether	18	111-44-4	611/625.1	5.7	17.1
Bis(2-chloro-1-methylethyl)Ether (Bis(2-chloroisopropyl)ether) ¹⁰	42	108-60-1	625.1	5.7	17.1
Bis(2-ethylhexyl)phthalate	66	117-81-7	625.1	2.5	7.5
4-Bromophenyl phenyl ether	41	101-55-3	625.1	1.9	5.7
2-Chloronaphthalene	20	91-58-7	625.1	1.9	5.7
4-Chlorophenyl phenyl ether	40	7005-72-3	625.1	4.2	12.6
Chrysene	76	218-01-9	610/625.1	2.5	7.5
Dibenzo (a,h)acridine		226-36-8	610M/625M	2.5	10.0
Dibenzo (a,j)acridine		224-42-0	610M/625M	2.5	10.0
Dibenzo(a-h)anthracene (1,2,5,6-dibenzanthracene)	82	53-70-3	625.1	2.5	7.5
Dibenzo(a,e)pyrene		192-65-4	610M/625M	2.5	10.0

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) ¹ µg/L Unless specified	Quantitation Level (QL) ² µg/L Unless specified
Dibenzo(a,h)pyrene		189-64-0	625M	2.5	10.0
3,3-Dichlorobenzidine	28	91-94-1	605/625.1	16.5	49.5
Diethyl phthalate	70	84-66-2	625.1	1.9	5.7
Dimethyl phthalate	71	131-11-3	625.1	1.6	4.8
Di-n-butyl phthalate	68	84-74-2	625.1	2.5	7.5
2,4-dinitrotoluene	35	121-14-2	609/625.1	5.7	17.1
2,6-dinitrotoluene	36	606-20-2	609/625.1	1.9	5.7
Di-n-octyl phthalate	69	117-84-0	625.1	2.5	7.5
1,2-Diphenylhydrazine (as Azobenzene)	37	122-66-7	1625B	5.0	20
Fluoranthene	39	206-44-0	625.1	2.2	6.6
Fluorene	80	86-73-7	625.1	1.9	5.7
Hexachlorobenzene	9	118-74-1	612/625.1	1.9	5.7
Hexachlorobutadiene	52	87-68-3	625.1	0.9	2.7
Hexachlorocyclopentadiene	53	77-47-4	1625B/625	2.0	4.0
Hexachloroethane	12	67-72-1	625.1	1.6	4.8
Indeno(1,2,3-cd)Pyrene	83	193-39-5	610/625.1	3.7	11.1
Isophorone	54	78-59-1	625.1	2.2	6.6
3-Methylcholanthrene		56-49-5	625	2.0	8.0

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) ¹ µg/L Unless specified	Quantitation Level (QL) ² µg/L Unless specified
Naphthalene	55	91-20-3	625.1	1.6	4.8
Nitrobenzene	56	98-95-3	625.1	1.9	5.7
N-Nitrosodimethylamine	61	62-75-9	607/625	2.0	4.0
N-Nitrosodi-n-propylamine	63	621-64-7	607/625	0.5	1.0
N-Nitrosodiphenylamine	62	86-30-6	625	1.0	2.0
Perylene		198-55-0	625	1.9	7.6
Phenanthrene	81	85-01-8	625.1	5.4	16.2
Pyrene	84	129-00-0	625.1	1.9	5.7
1,2,4-Trichlorobenzene	8	120-82-1	625.1	1.9	5.7

Dioxin

Priority Pollutant	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) ¹ µg/L Unless specified	Quantitation Level (QL) ² µg/L Unless specified
2,3,7,8-Tetra-Chlorodibenzo-P-Dioxin (2,3,7,8 TCDD)	129	1746-01-6	1613B	1.3 pg/L	5 pg/L

Pesticides/PCBS

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) ¹ µg/L Unless specified	Quantitation Level (QL) ² µg/L Unless specified
Aldrin	89	309-00-2	608.3	4.0 ng/L	12 ng/L
alpha-BHC	102	319-84-6	608.3	3.0 ng/L	9.0 ng/L
beta-BHC	103	319-85-7	608.3	6.0 ng/L	18 ng/L
gamma-BHC (Lindane)	104	58-89-9	608.3	4.0 ng/L	12 ng/L
delta-BHC	105	319-86-8	608.3	9.0 ng/L	27 ng/L
Chlordane ⁸	91	57-74-9	608.3	14 ng/L	42 ng/L
4,4'-DDT	92	50-29-3	608.3	12 ng/L	36 ng/L
4,4'-DDE	93	72-55-9	608.3	4.0 ng/L	12 ng/L
4,4' DDD	94	72-54-8	608.3	11ng/L	33 ng/L
Dieldrin	90	60-57-1	608.3	2.0 ng/L	6.0 ng/L
alpha-Endosulfan	95	959-98-8	608.3	14 ng/L	42 ng/L
beta-Endosulfan	96	33213-65-9	608.3	4.0 ng/L	12 ng/L
Endosulfan Sulfate	97	1031-07-8	608.3	66 ng/L	198 ng/L
Endrin	98	72-20-8	608.3	6.0 ng/L	18 ng/L
Endrin Aldehyde	99	7421-93-4	608.3	23 ng/L	70 ng/L
Heptachlor	100	76-44-8	608.3	3.0 ng/L	9.0 ng/L
Heptachlor Epoxide	101	1024-57-3	608.3	83 ng/L	249 ng/L
PCB-1242 ⁹	106	53469-21-9	608.3	0.065	0.195
PCB-1254	107	11097-69-1	608.3	0.065	0.195
PCB-1221	108	11104-28-2	608.3	0.065	0.195
PCB-1232	109	11141-16-5	608.3	0.065	0.195
PCB-1248	110	12672-29-6	608.3	0.065	0.195
PCB-1260	111	11096-82-5	608.3	0.065	0.195

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L Unless specified	Quantitation Level (QL)² µg/L Unless specified
PCB-1016 ⁹	112	12674-11-2	608.3	0.065	0.195
Toxaphene	113	8001-35-2	608.3	240 ng/L	720 ng/L

Pulp & Paper Pollutants (40CFR Part 430)

Pollutant	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L Unless specified	Quantitation Level (QL)² µg/L Unless specified
Adsorbable Organic Halides (AOX)		EPA 1650		20
2,3,7,8-Tetrachlorodibenz o-p-dioxin (TCDD) (this is also priority pollutant and is listed above)	1746-01-6	EPA 1613	1.3 pg/L	5 pg/L
2,3,7,8-Tetrachlorodibenz ofuran (TCDF)	51207-31-9	EPA 1613	1.3 pg/L	5 pg/L
Trichlorosyringol		EPA 1653		2.5
3,4,5-Trichlorocatechol		EPA 1653		5.0
3,4,6-Trichlorocatechol		EPA 1653		5.0
3,4,5-Trichloroguaiacol		EPA 1653		2.5
3,4,6-Trichloroguaiacol		EPA 1653		2.5
4,5,6-Trichloroguaiacol		EPA 1653		2.5

Pollutant	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L Unless specified	Quantitation Level (QL)² µg/L Unless specified
2,4,5- Trichlorophenol		EPA 1653		2.5
2,4,6- Trichlorophenol		EPA 1653		2.5
Tetrachlorocatechol		EPA 1653		5.0
Tetrachloroguaiacol		EPA 1653		5.0
2,3,4,6- Tetrachlorophenol		EPA 1653		2.5
Pentachlorophenol (this is also priority pollutant and is listed above)		EPA 1653		5.0

Nonconventionals – Dioxin & Furan Congeners

Pollutant	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L Unless specified	Quantitation Level (QL)² µg/L Unless specified
2,3,7,8- Tetrachlorodibenzo-p- dioxin (TCDD) (this is a priority pollutant and is also listed above)	1746-01-6	EPA 1613	1.3 pg/L	5 pg/L
Total TCDD	41903-57- 5			
2,3,7,8- Tetrachlorodibenzofuran (TCDF)	51207-31- 9		1.3 pg/L	5 pg/L
Total-TCDF	55722-27- 5			

Pollutant	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L Unless specified	Quantitation Level (QL)² µg/L Unless specified
1,2,3,7,8- Pentachlorodibenzo-p- dioxin (PeCDD)	40321-76- 4			
Total-PeCDD	36088-22- 9			
1,2,3,7,8- Pentachlorodibenzofuran (PeCDF)	57117-41- 6			
2,3,4,7,8-PeCDF	57117-31- 4			
Total-PeCDF	30402-15- 4			
1,2,3,4,7,8- Hexachlorodibenzo-p- dioxin (HxCDD)	39227-28- 6			
1,2,3,6,7,8-HxCDD	57653-85- 7			
1,2,3,7,8,9-HxCDD	19408-74- 3			
Total-HxCDD	34465-46- 8			
1,2,3,4,7,8- Hexachlorodibenzofuran (HxCDF)	70648-26- 9			
1,2,3,6,7,8-HxCDF	57117-44- 9			
1,2,3,7,8,9-HxCDF	72918-21- 9			
2,3,4,6,7,8-HxCDF	60851-34- 5			
Total-HxCDF	55684-94- 1			

Pollutant	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L Unless specified	Quantitation Level (QL)² µg/L Unless specified
1,2,3,4,6,7,8- Heptachlorodibenzo-p- dioxin (HpCDD)	35822-46- 9			
Total-HpCDD	37871-00- 4			
1,2,3,4,6,7,8- Heptachlorodibenzofuran (HpCDF)	67562-39- 4			
1,2,3,4,7,8,9-HpCDF	55673-89- 7			
Total-HpCDF	38998-75- 3			
Octachlorodibenzo-p- dioxin (OCDD)	3268-87-9			
Octachlorodibenzofuran (OCDF)	39001-02- 0			

Analytical Methods

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 $(1, 2, \text{ or } 5) \times 10^n$, 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 μm (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.
4. **Northwest Total Petroleum Hydrocarbons Diesel Extended Range OR NWTPH Dx** – [Analytical Methods for Petroleum Hydrocarbons](https://apps.ecology.wa.gov/publications/SummaryPages/97602.html)
<https://apps.ecology.wa.gov/publications/SummaryPages/97602.html>
5. **Northwest Total Petroleum Hydrocarbons Gasoline Extended Range OR NWTPH Gx** – [Analytical Methods for Petroleum Hydrocarbons](https://apps.ecology.wa.gov/publications/SummaryPages/97602.html)
<https://apps.ecology.wa.gov/publications/SummaryPages/97602.html>
6. **1, 3-dichloropropylene (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 14/42 ng/L.
9. **PCB 1016 & PCB 1242** – You may report these two PCB compounds as one parameter called PCB 1016/1242.
10. **Bis(2-Chloro-1-Methylethyl) Ether** – This compound was previously listed as Bis(2-Chloroisopropyl) Ether (39638-32-9)