| | |
|---|---|
| Issuance Date: | October 15, 2014 |
| Effective Date: | November 1, 2014 |
| Expiration Date: | October 31, 2019 |
| 1st Modification Date: | April 24, 2015 |
| 2nd Modification Date: | July 17, 2019 |

# National Pollutant Discharge Elimination System
# Waste Discharge Permit No. WA0000124

State of Washington
Department of Ecology
Industrial Section
PO Box 47600
Olympia, WA. 98504-7600

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.

Nippon Dynawave Packaging Company, LLC
P.O. Box 188
Longview, Washington 98632

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

**Facility Location**:

3401 Industrial Way
Longview, Washington 98632

**Treatment Type**:

Industrial – Primary Clarification, Aeration, Secondary Clarification

Sanitary – Secondary Treatment via Anaerobic Digestion/Overflow Lagoon and Disinfection

**Industry Type**:

Bleached Kraft Pulp and Paper Mill

**Receiving Water**:

Columbia River
Consolidated Diking Improvement District Ditch #3

**SIC Code**:

26 (Pulp and Allied Products)

**NAICS Code**:

322 (Pulp and Paper Mills)

**Categorical Industry**:

Pulp and Paper Mills

for James DeMay, P.E.
Industrial Section Manager
Washington State Department of Ecology

# Table of Contents

# Summary of Permit Report Submittals

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

| Permit Section | Submittal | Frequency | First Submittal Date |
|---|---|---|---|
| S3.A | Discharge Monitoring Report (DMR) | Monthly | December 15, 2014 |
| S3.A | Discharge Monitoring Report (DMR) | Quarterly | January 15, 2015 |
| S3.A | Discharge Monitoring Report (DMR) – Sludge | Annual | January 15, 2016 |
| S3.A | Discharge Monitoring Report (DMR) – Priority Pollutants – Single Sample Data | Annual | January 15, 2016 |
| S3.A | Discharge Monitoring Report (DMR) – TCDD – Secondary Wastewater Treatment Plant Effluent | Semi-Annual | July 15, 2015 |
| S3.A | Discharge Monitoring Report (DMR) – Chlorinated Organics – Bleach Plant Effluent | 1/permit cycle | January 15, 2019 |
| S3.F | Reporting Permit Violations | As necessary | |
| S3.G | Other Reporting | As necessary | |
| S4.A | Treatment System Operating Plan Update | 1/permit cycle, update as necessary | November 1, 2016 |
| S4.B | Reporting Bypasses | As necessary | |
| S6 | Non-Routine Discharges | As necessary | |
| S7 | Spill Plan | 1/permit cycle, updates submitted as necessary | November 1, 2016 |
| S8 | Stormwater Pollution Prevention Plan | 1/permit cycle | April 30, 2015 |
| S9 | Best Management Practices Report | Annually | July 31, 2015 |
| S10.C | Solid Waste Control Plan | 1/permit cycle, updates submitted as necessary | November 1, 2018 |
| S11 | Wastewater Treatment System Efficiency Study | 1/permit cycle | November 1, 2018 |
| S12 | Water Supply Plant Discharge AKART Analysis | Once | November 1, 2017 |
| S13.B | CWIS Information and Compliance Report | Once, if necessary | November 1, 2018 |
| S15.A | Sediment Sampling and Analysis Plan | 1/permit cycle | November 1, 2017 |

| Permit Section | Submittal | Frequency | First Submittal Date |
|---|---|---|---|
| S15.B | Sediment Data Report | 1/permit cycle | Within 12 months of Ecology approval of sediment sampling and analysis plan, no later than November 1, 2018 |
| S16 | Outfall Evaluation | 1/permit cycle | Within 90 days of conducting the outfall evaluation, but no later than November 1, 2018 |
| S17 | Acute Toxicity Effluent Test Results – Submit with Permit Renewal Application | 1/permit cycle | November 1, 2018 |
| S18 | Chronic Toxicity Effluent Test Results with Permit Renewal Application | 1/permit cycle | November 1, 2018 |
| S19 | Annual Stormwater Report | Annual | May 15, 2015 |
| S20 | Application for Permit Renewal | 1/permit cycle | November 1, 2018 |
| G1 | Notice of Change in Authorization | As necessary | |
| G4 | Permit Application for or Notice for Substantive Changes to the Discharge | As necessary | |
| G5 | Engineering Report for Construction or Modification Activities | As necessary | |
| G7 | Notice of Permit Transfer | As necessary | |
| G10 | Duty to Provide Information | As necessary | |
| G13 | Payment of Fees | As assessed | |
| G21 | Compliance Schedules | As necessary | |

# Special Conditions

## S1. Discharge Limits

### S1.A. Wastewater and Stormwater Discharge Limits

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 stormwater and treated wastewater to the Columbia River and stormwater to Consolidated Diking Improvement District Ditch #3, at the permitted locations subject to complying with the limits below.

The non-stormwater discharges identified in Special Conditions S5.D of Ecology's *Industrial Stormwater General Permit* (2012) are conditionally authorized provided the detailed requirements are met.

Additionally, the following non-stormwater discharges are authorized to the Consolidated Diking Improvement District Ditch #3: pavement wash water, non-contact cooling water overflow, emergency fire control water, uncontaminated air conditioning or compressor condensate, and other non-stormwater discharges identified in a permit application approved by Ecology.

After **May 1, 2015**, Nippon Dynawave Packaging Company, LLC is prohibited from discharging vehicle/equipment wash water without meeting the best management practices prescribed in Ecology publication 95-056 or equivalent.

| **Effluent Limits: Outfall 001/002<br>Latitude 46.130833 Longitude 122.990556** | | |
|---|---|---|
| **Parameter** | **Average Monthly [a]** | **Maximum Daily [b]** |
| Biochemical Oxygen Demand (5-day) ($BOD_5$) [c] | 26,921 pounds/day (lbs/day) | 50,249 pounds/day (lbs/day) |
| Total Suspended Solids (TSS) [c] | 43,599 lbs/day | 83,103 lbs/day |
| Adsorbable Organic Halides (AOX) [c] | 1,562 lbs/day | 2,385 lbs/day |
| | **Average Annual** | **Maximum Daily [b]** |
| 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) [d] | 0.26 mg/day | 0.38 mg/day |

| Effluent Limits: Outfall 001/002<br>Latitude 46.130833 Longitude 122.990556 | | |
|---|---|---|
| | **Minimum** | **Maximum** |
| pH [e] | 5.0 standard units | 9.0 standard units |

| | |
|---|---|
| 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 maximum discharge of a pollutant measured during a calendar day. For pollutants with limits expressed in units of mass, calculate the daily discharge as the total mass of the pollutant discharged over the day. This does not apply to pH or temperature. |
| c | Calculated using the following formula: Concentration (in mg/L) X Flow (in MGD) X Conversion Factor (8.34) = lbs/day |
| d | 2, 3, 7, 8-TCDD effluent limits shall be demonstrated if the 2, 3, 7, 8-TCDD concentration in the secondary effluent is 5 parts per quadrillion (ppq) or less, or non-detect at a detection limit (DL) of 5 ppq or less.<br>In the event that the sample is non-detect at a detection limit greater than 5 ppq but less than 10 ppq due to sample matrix effects, the Permittee must submit a matrix-specific DL and a quantitation limit (QL) to Ecology with appropriate laboratory documentation.<br>In the event that the sample is non-detect at a DL greater than 10 ppq due to matrix effects, the Permittee must re-initiate sample collection and analyze for permit compliance as defined above. The original sample(s) must be discarded. |
| e | Excursions between 4.0 and 5.0, or 9.0 and 10.0 shall not be considered violations provided no single excursion exceeds 60 minutes in duration and total excursions do not exceed 7 hour 30 minutes per month. Any excursions below 4.0 and above 10.0 are violations. The instantaneous minimum and maximum shall be reported monthly. |

| Effluent Limits: Bleach Plant Discharge Monitoring Point<br>Wastewater Treatment Plant | | |
|---|---|---|
| **Parameter** | **Average Monthly [a]** | **Maximum Daily [b]** |
| Chloroform [cdef] | 10.4 lbs/day | 17.4 lbs/day |
| 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) | N/A | <ML[g] (10 pg/L) |

| Effluent Limits: Bleach Plant Discharge Monitoring Point<br>Wastewater Treatment Plant | | |
|---|---|---|
| 2,3,7,8-tetrachlorodibenzofuran (TCDF) | N/A | 31.9 pg/L |
| Trichlorosyringol | N/A | <ML[g] (2.5 µg/L) |
| 3,4,5-trichlorocatechol | N/A | <ML[g] (5.0 µg/L) |
| 3,4,6-trichlorocatechol | N/A | <ML[g] (5.0 µg/L) |
| 3,4,5-trichloroguaiacol | N/A | <ML[g] (2.5 µg/L) |
| 3,4,6-trichloroguaiacol | N/A | <ML[g] (2.5 µg/L) |
| 4,5,6-trichloroguaiacol | N/A | <ML[g] (2.5 µg/L) |
| 2,4,5-trichlorophenol | N/A | <ML[g] (2.5 µg/L) |
| 2,4,6-trichlorophenol | N/A | <ML[g] (2.5 µg/L) |
| Tetrachlorocatechol | N/A | <ML[g] (5.0 µg/L) |
| Tetrachloroguaiacol | N/A | <ML[g] (5.0 µg/L) |
| 2,3,4,6-tetrachlorophenol | N/A | <ML[g] (2.5 µg/L) |
| Pentachlorophenol | N/A | <ML[g] (5.0 µg/L) |

| | |
|---|---|
| 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 maximum discharge of a pollutant measured during a calendar day. For pollutants with limits expressed in units of mass, calculate the daily discharge as the total mass of the pollutant discharged over the day. This does not apply to pH or temperature. |
| c | *Certification in lieu of monitoring for chloroform* has been granted to Nippon Dynawave Packaging Company, LLC by Ecology. Compliance with effluent limit for chloroform is determined through operating parameters Kappa Factor, Chlorine Dioxide Application Rate, and pH of D1 Stage. The Permittee must comply with the provisions presented in 40 CFR 430.02 with regards to *Certification in Lieu of Monitoring for Chloroform*. An exceedance of the operating parameters is not a violation of the permit terms unless subsequent chloroform |

| Effluent Limits: Bleach Plant Discharge Monitoring Point<br>Wastewater Treatment Plant | |
|---|---|
| | monitoring indicates a violation of the chloroform limit. Monitoring requirements can be found in Special Condition S2.A. |
| d | Kappa Factor ≤ 0.4 (Maximum daily limit)<br>Kappa factor is defined as the ratio of available chlorine (total equivalent chlorine, as percent on oven dry pulp) to the kappa number of the pulp. Kappa number is the lignin content of the pulp, as measured by modified permanganate test corrected to 50 percent consumption of the chemical. |
| e | ClO2 application rate ≤ 60 lbs/ton (Maximum daily limit)<br>Chlorine dioxide (ClO2) application rate is defined as the mass of ClO2 applied in all stages of the bleach line per mass of unbleached pulp. |
| f | pH of D1 stage ≤ 5.7 Standard Units (Daily average)<br>pH of D1 stage is considered an exceedance if the daily average pH is greater than 5.7 for two consecutive days. |
| g | Minimum Level (ML) is the level at which the analytical system gives recognizable signals and an acceptable calibration point. |

| Effluent Limits: Outfall 005<br>Sanitary Wastewater Treatment Plant Discharge to Outfall 001 | | |
|---|---|---|
| **Parameter** | **Average Monthly [a]** | **Average Weekly [b]** |
| Biochemical Oxygen Demand (5-day) ($BOD_5$) | 30 milligrams/liter (mg/L)<br>40 lbs/day | 45 milligrams/liter (mg/L)<br>60 lbs/day |
| Total Suspended Solids (TSS) | 30 mg/L<br>61 lbs/day | 45 mg/L<br>92 lbs/day |
| | **Minimum** | **Maximum** |
| pH (to be met at all times) | 6.0 standard units | 8.5 standard units |
| Total Residual Chlorine, following chlorination | 0.3 mg/L | 5.0 mg/L |
| | **Monthly Geometric Mean Limit** | **Maximum Daily** |
| Fecal Coliform Bacteria [c] | 200 #/100 milliliter (mL) | 400 #/100 mL |
| | **Monthly Average** | |

| Effluent Limits: Outfall 005<br>Sanitary Wastewater Treatment Plant Discharge to Outfall 001 | |
|---|---|
| Removal of $BOD_5$ [d] | 65% |

| | |
|---|---|
| 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 maximum discharge of a pollutant measured during a calendar day. For pollutants with limits expressed in units of mass, calculate the daily discharge as the total mass of the pollutant discharged over the day. This does not apply to pH or temperature. |
| c | Ecology provides directions to calculate the monthly and the 7-day geometric mean in publication No. 04-10-020, Information Manual for Treatment Plant Operators available at: http://www.ecy.wa.gov/pubs/0410020.pdf |
| d | Monthly average removal is the 30-day average influent concentration (AIC) minus the 30-day average effluent concentration (AEC) divided by the AIC. Ecology provides additional directions to calculate the monthly average removal in publication No. 04-10-020, Information Manual for Treatment Plant Operators available at: http://www.ecy.wa.gov/pubs/0410020.pdf |

### S1.B. Discharge Benchmarks

Benchmark values are not numeric effluent limitations. Discharges that fail to meet benchmark values are not automatically considered permit violations or violations of water quality standards; however, if the Permittee fails to meet discharge benchmarks that trigger a corrective action and does not comply with the specific corrective action requirements, it would be a permit violation. Stormwater sampling protocol can be found in Special Condition S2.B.

Each time that sampling results are above a benchmark value or outside the benchmark range for pH, the Permittee must take corrective actions in accordance with Special Condition S8 of Ecology's *Industrial Stormwater General Permit* (2012). An annual stormwater report summarizing corrective actions taken is required by Special Condition S19.

| Stormwater Discharge Benchmarks: 001/002 Ditch, Raw Water Ditch, RW Office | |
|---|---|
| **001/002 Ditch (Outfall 006)** | **Latitude 46.1308 Longitude 122.9906** |
| **Raw Water Ditch (Outfall 010)** | **Latitude 46.1280 Longitude 122.9847** |
| **RW Office (Outfall 011)** | **Latitude 46.1433 Longitude 122.9806** |
| **Parameter** | **Average Quarterly [a]** |
| Turbidity | 25 NTU |
| Copper, Total | 14 µg/L |

| Stormwater Discharge Benchmarks: 001/002 Ditch, Raw Water Ditch, RW Office | | |
|---|---|---|
| **001/002 Ditch (Outfall 006)** | **Latitude 46.1308 Longitude 122.9906** | |
| **Raw Water Ditch (Outfall 010)** | **Latitude 46.1280 Longitude 122.9847** | |
| **RW Office (Outfall 011)** | **Latitude 46.1433 Longitude 122.9806** | |
| Zinc, Total | 117 µg/L | |
| Chemical Oxygen Demand (COD) | 120 mg/L | |
| Total Suspended Solids (TSS) | 100 mg/L | |
| | **Minimum** | **Maximum** |
| pH | 5.0 standard units | 9.0 standard units |
| **Parameter** | **Value** | |
| Oil Sheen | No Visible Oil Sheen (Zero) | |

a Permittees sampling more than once per quarter shall average the sample results for each parameter (except pH and "visible oil sheen") and compare the average value to the benchmark to determine if the discharge has exceeded a benchmark value.

**S1.C. Mixing Zone Authorization**

1. Mixing Zone for Outfall 001

   The following paragraphs define the maximum boundaries of the mixing zones:

   a. Chronic mixing zone

      The mixing zone is a circle with radius of 228 feet measured from the center of each discharge port. The mixing zone extends from the discharge ports to the top of the water surface. The concentration of pollutants at the edge of the chronic zone must meet chronic aquatic life criteria and human health criteria.

   b. Acute mixing zone

      The acute mixing zone is a circle with radius of 22.8 feet measured from the center of each discharge port. The mixing zone extends from the discharge ports to the top of the water surface. The concentration of pollutants at the edge of the acute zone must meet acute aquatic life criteria.

| Available Dilution (dilution factor) | |
|---|---|
| Acute Aquatic Life Criteria | 16 |
| Chronic Aquatic Life Criteria | 104.5 |
| Human Health Criteria - Carcinogen | 104.5 |
| Human Health Criteria - Non-carcinogen | 104.5 |

2. Mixing Zone for Outfall 002

   The following paragraphs define the maximum boundaries of the mixing zones:

   a. Chronic mixing zone

      The mixing zone is a circle with radius of 221 feet measured from the center of each discharge port. The mixing zone extends from the discharge ports to the top of the water surface. The concentration of pollutants at the edge of the chronic zone must meet chronic aquatic life criteria and human health criteria.

   b. Acute mixing zone

      The acute mixing zone is a circle with radius of 22.1 feet measured from the center of each discharge port. The mixing zone extends from the discharge ports to the top of the water surface. The concentration of pollutants at the edge of the acute zone must meet acute aquatic life criteria.

| Available Dilution (dilution factor) | |
|---|---|
| Acute Aquatic Life Criteria | 27.8 |
| Chronic Aquatic Life Criteria | 97.5 |
| Human Health Criteria - Carcinogen | 97.5 |
| Human Health Criteria - Non-carcinogen | 97.5 |

**S1.D. Stormwater Discharges to Weyerhaeuser NR Company**

The Permittee is authorized to discharge stormwater to Weyerhaeuser NR Company's stormwater system. Stormwater from the Permittee's chip handling operations discharges to Weyerhaeuser NR Company's stormwater pond and Outfall 004B. Stormwater from the Permittee's administrative building discharges to Weyerhaeuser NR Company's Outfall 004B.

Stormwater discharges to Weyerhaeuser NR Company's stormwater system must comply with Special Conditions S7 and S8 of this permit and the following conditions:

1. The discharge of process wastewater is prohibited. Stormwater that commingles with process wastewater is considered process wastewater.
2. The discharge of synthetic, natural or processed oil or oil-containing products as identified by an oil sheen is prohibited.
3. The Permittee must reasonably manage stormwater to minimize the discharge of trash and floating debris.

**S1.E. Water Supply Plant Discharge to Outfall 001/002**

The Permittee is authorized to discharge filter plant backwash and TSS from the existing raw water treatment system to the Columbia River.

Special Condition S12 of this permit requires the Permittee to conduct and submit an All Known, Available, and Reasonable methods of prevention, control and Treatment (AKART) analysis for the discharge.

**S1.F. Bleach Re-Packaging Plant (Hasa, Inc.)**

The Permittee is authorized to receive, for biological treatment, process wastewater discharges from bleach re-packaging plant located at 3400 Industrial Way, Longview, Washington. Such discharges are subject to the terms and conditions of the bleach re-packaging plant's State Waste Discharge Permit No. ST0006225.

**S1.G. Chlor-Alkali Plant (Eagle US 2 facility owned and operated by Axiall LLC)**

The Permittee is authorized to receive, for biological treatment, process wastewater and stormwater discharges from the chlor-alkali plant on the site. Such discharges are subject to the terms and conditions of the chlor-alkali plant's State Waste Discharge Permit No. ST0006199.

The Permittee is authorized to receive sanitary wastewater form the chlor-alkali plant. The sanitary wastewater must be sent to the Permittee's sanitary wastewater treatment system.

**S1.H. Puget Sound Energy Mint Farm Generating Station**

The Permittee is authorized to receive process wastewater discharges from Puget Sound Energy Mint Farm Generation Station. Such discharges are subject to the terms and conditions of Mint Farm Generation Station's NPDES Permit No. WA0039641.

**S1.I. Hydrogen Peroxide Plant (Solvay Chemicals, Inc.)**

The Permittee is authorized to receive, for biological treatment, process wastewater discharges from the hydrogen peroxide plant located at 3500 Industrial Way, Longview, Washington. Such discharges are subject to the terms and conditions of the hydrogen peroxide plant's State Waste Discharge Permit No. ST0006070.

The Permittee is authorized to receive sanitary wastewater from the hydrogen peroxide plant. The sanitary wastewater must be sent to the Permittee's sanitary wastewater treatment system.

**S1.J. Precipitated Calcium Carbonate Plant (Specialty Minerals, Inc. – Longview)**

The Permittee is authorized to receive, for biological treatment, process wastewater and stormwater discharges from the precipitated calcium carbonate (PCC) plant located at 3515 Industrial Way, Longview, Washington. Such discharges are subject to the terms and conditions of the PCC plant's State Waste Discharge Permit No. ST0006068.

The Permittee is authorized to receive sanitary wastewater from the PCC plant. The sanitary wastewater must be sent to the Permittee's sanitary wastewater treatment system.

### S1.K. Locomotive Maintenance Shop (Columbia and Cowlitz Railway, LLC)

The Permittee is authorized to receive, for biological treatment, process wastewater discharges from the locomotive maintenance shop located at 3401 Industrial Way, Longview, Washington. Such discharges are currently permitted under State Waste Discharge Permit No. ST0045520.

### S1.L. Thermo-Mechanical Pulping, De-Inking, and Printing, Writing, and Packaging Paper Manufacturing (North Pacific Paper Company, LLC)

The Permittee is authorized to receive, for biological treatment, process wastewater discharges from the thermo-mechanical pulp mill and de-ink facility (NORPAC) located at 3001 Industrial Way, Longview, Washington. Such discharges are subject to the terms and conditions of NORPAC's NPDES Permit No. WA0991016.

The Permittee is authorized to receive sanitary wastewater from NORPAC. The sanitary wastewater must be sent to the Permittee's sanitary wastewater treatment system.

### S1.M. Lumber and Wood Products (Weyerhaeuser NR Company)

The Permittee is authorized to receive, for biological treatment, process wastewater discharges from the lumber and wood products facility (Weyerhaeuser) located at 1999 Industrial Way, Longview, Washington. Such discharges are subject to the terms and conditions of Weyerhaeuser's NPDES Permit No. WA0991014.

The Permittee is authorized to receive sanitary wastewater from Weyerhaeuser. The sanitary wastewater must be sent to the Permittee's sanitary wastewater treatment system.

## S2. Monitoring Requirements

### S2.A. Monitoring Schedule

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

The Permittee must conduct and document monthly visual inspections of stormwater outfalls 001/002 Ditch (Outfall 006), Raw Water Ditch (Outfall 010), and RW Office (Outfall 011). Inspection requirements are detailed in Special Condition S8.B.

| Parameter | Units & Speciation | Minimum Sampling Frequency | Sample Type |
|---|---|---|---|
| **(1) Final Effluent [a] – Outfall 001,/ Outfall 002** | | | |
| See Special Condition S3.A for Reporting and Recording Requirements | | | |
| Flow | million gallons/day (mgd) | Continuous [b]<br>Report Summary Values Only | Metered/Recorded<br>Report Maximum and Monthly Average |

| Parameter | Units & Speciation | Minimum Sampling Frequency | Sample Type |
|---|---|---|---|
| pH [c] | standard units | Continuous [b] | Metered/Recorded Report Monthly Instantaneous Maximum and Minimum |
| Temperature [d] | degrees Celsius (°C) | Continuous [b] Report Summary Values Only | Metered/Recorded Report Maximum and Monthly Average |
| **(2) Secondary Treatment Wastewater Effluent [e] – Outfalls 001/002** | | | |
| See Special Condition S3.A. for Reporting and Recording Requirements | | | |
| $BOD_5$ | mg/L | Weekly | 24-Hour Composite [f] |
| | lbs/day | Monthly | Calculated |
| TSS | mg/L | 3X per Week | 24-Hour Composite [f] |
| | lbs/day | Monthly | Calculated |
| Adsorbable Organic Halides (AOX) | mg/L | Monthly [g] | 24-Hour Composite [f] |
| | lbs/day | Monthly | Calculated |
| 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) | pg/L | Semiannual | 24-Hour Composite [f] |
| **(3) Bleach Plant Effluent** | | | |
| See Special Condition S3.A for Reporting and Recording Requirements | | | |
| Chloroform [h] | mg/L | As Needed | 24-Hour Composite [f] |
| Kappa Factor [h] | N/A | Continuous | Metered/Recorded – Reported |
| ClO2 Application Rate [h] | lb/ton | Continuous | Metered/Recorded – Reported |
| pH of D1 Stage [h] | standard units | Continuous | Metered/Recorded – Reported |
| 2,3,7,8-TCDD | pg/L | Quarterly | 24-Hour Composite [f] |
| 2,3,7,8-tetrachlorodibenzofuran (TCDF) | pg/L | Quarterly | 24-Hour Composite [f] |
| Trichlorosyringol | µg/L | 1/Permit Cycle | 24-Hour Composite [f] |
| 3,4,5-trichlorocatechol | µg/L | 1/Permit Cycle | 24-Hour Composite [f] |
| 3,4,6-trichlorocatechol | µg/L | 1/Permit Cycle | 24-Hour Composite [f] |
| 3,4,5-trichloroguaiacol | µg/L | 1/Permit Cycle | 24-Hour Composite [f] |
| 3,4,6-trichloroguaiacol | µg/L | 1/Permit Cycle | 24-Hour Composite [f] |
| 4,5,6-trichloroguaiacol | µg/L | 1/Permit Cycle | 24-Hour Composite [f] |
| 2,4,5-trichlorophenol | µg/L | 1/Permit Cycle | 24-Hour Composite [f] |
| 2,4,6-trichlorophenol | µg/L | 1/Permit Cycle | 24-Hour Composite [f] |

| Parameter | Units & Speciation | Minimum Sampling Frequency | Sample Type |
|---|---|---|---|
| Tetrachlorocatechol | µg/L | 1/Permit Cycle | 24-Hour Composite [f] |
| Tetrachloroguaiacol | µg/L | 1/Permit Cycle | 24-Hour Composite [f] |
| 2,3,4,6-tetrachlorophenol | µg/L | 1/Permit Cycle | 24-Hour Composite [f] |
| Pentachlorophenol | µg/L | 1/Permit Cycle | 24-Hour Composite [f] |
| **(4) Sanitary Wastewater Influent** | | | |
| $BOD_5$ | mg/L | Monthly [g] | Grab [i] |
| **(5) Sanitary Wastewater Effluent – Outfall 005** | | | |
| Special Condition S3.A for Reporting and Recording Requirements | | | |
| Flow | MGD | Continuous [b] | Metered/Recorded Report Daily Maximum and Monthly Average |
| $BOD_5$ [j] | mg/L | 2/Month | Grab [i] |
| | lbs/day | Monthly [g] | Calculated |
| TSS | mg/L | Monthly [g] | Grab [i] |
| | lbs/day | Monthly [g] | Calculated |
| pH | standard units | 5/Week | Grab [i] |
| Total Residual Chlorine, following chlorination | mg/L | 5/Week | Grab [i] |
| Fecal Coliform [k] | # /100 mL | Monthly [g] | Grab [i] |
| Removal Efficiency $BOD_5$ | % Removal | Monthly [g] | Calculated |
| **(6) Stormwater Discharges – 001/002 Ditch (Outfall 006), Raw Water Ditch (Outfall 010), RW Office (Outfall 011)** | | | |
| See Special Condition S3.A for Reporting and Recording Requirements | | | |
| Turbidity [n] | NTU | Quarterly [m] | Grab [i] |
| Copper, Total [n] | µg/L | Quarterly [m] | Grab [i] |
| Zinc, Total [n] | µg/L | Quarterly [m] | Grab [i] |
| COD [n] | mg/L | Quarterly [m] | Grab [i] |
| TSS [n] | mg/L | Quarterly [m] | Grab [i] |
| pH [n] | standard units | Quarterly [m] | Grab [i] |
| Oil Sheen [n] | Yes (1) / No (0) | Quarterly [m] | Visual Observation |
| **(7) Effluent Characterization – Final Effluent [a] – Priority Pollutant Scan – Outfall 001, Outfall 002** | | | |
| Special Condition S3.A for Reporting and Recording Requirements | | | |
| Cyanide | µg/L | Once per year | Grab [i] |
| Total Phenolic Compounds | µg/L | Once per year | Grab [i] |

| Parameter | Units & Speciation | Minimum Sampling Frequency | Sample Type |
|---|---|---|---|
| Priority Pollutants (PP) – Total Metals | µg/L; ng/L for mercury | Once per year | 24-Hour Composite [f] Grab [i] for mercury |
| PP – Volatile Organic Compounds | µg/L | Once per year | Grab [i] |
| PP – Acid-extractable Compounds | µg/L | Once per year | 24-Hour Composite [f] |
| PP – Base-neutral Compounds | µg/L | Once per year | 24-Hour Composite [f] |
| PP – Dioxin | pg/L | Once per year | 24-Hour Composite [f] |
| PP – Pesticides/PCBs | µg/L | Once per year | 24-Hour Composite [f] |
| **(8) Production** | | | |
| See Special Condition S3.A for Reporting and Recording Requirements | | | |
| Kraft Pulp Production – Brownstock into the Bleach Plant | ADT/Day | 1/Day – Recorded but not reported | Metered/Recorded – Report monthly average |
| Bleached Kraft Pulp to NORPAC – Stock to Production | ADT/Day | 1/Day – Recorded but not reported | Metered/Recorded – Report monthly average |
| Paperboard Production – At the Reel | OMT/Day | 1/Day – Recorded but not reported | Metered/Recorded – Report monthly average |
| Market Pulp (Wet Lap) Production – Stock to Production | ADT/Day | 1/Day – Recorded but not reported | Metered/Recorded – Report monthly average |
| **(9) Whole Effluent Toxicity Testing – Final Effluent [a] – Outfall 001, Outfall 002** | | | |
| Acute Toxicity Testing | As Required by S17 | | |
| Chronic Toxicity Testing | As Required by S18 | | |
| **(10) Sediment Study** | | | |
| See Special Condition S15 | | | |
| **(13) Wastewater Treatment Solids – Combined Primary and Secondary Solids** | | | |
| 2,3,7,8-TCDD | ng/Kg | Once per year | Grab [i] |
| 2,3,7,8-TCDF | ng/Kg | Once per year | Grab [i] |

| | |
|---|---|
| a | Final Effluent is defined as the effluent stream after the treated effluent from the wastewater treatment system, sump E, Clean Water sump, and non-contact cooling water are combined. |
| b | Continuous means uninterrupted except for brief lengths of time for calibration, power failure, or unanticipated equipment repair or maintenance. The Permittee must sample once every four hours for temperature and hourly for pH, when continuous monitoring is not possible. |
| c | The Permittee must report the: |

| Parameter | Units & Speciation | Minimum Sampling Frequency | Sample Type |
|---|---|---|---|
| | • Number of minutes the pH value measured between 4.0 and 5.0 and between 9.0 and 10.0 for each day.<br>• Total minutes for the month.<br>• Monthly instantaneous maximum and minimum pH. Do not average pH values. | | |
| d | Permittee must determine and report a daily maximum from half-hour measurements in a 24-hour period. Continuous monitoring instruments must achieve an accuracy of 0.2 degrees C and the Permittee must verify accuracy annually. | | |
| e | Secondary Treatment Wastewater Effluent is defined as the treated effluent from the wastewater treatment system prior to combination with any other streams. | | |
| f | 24-hour composite means a series of individual samples collected over a 24-hour period into a single container, and analyzed as one sample. | | |
| g | Monthly means once every calendar month during alternate weeks. | | |
| h | *Certification in lieu of monitoring for chloroform* has been granted to Nippon Dynawave Packaging Company, LLC by Ecology. Compliance with effluent limit for chloroform is determined through operating parameters Kappa Factor, Chlorine Dioxide Application Rate, and pH of D1 Stage. The Permittee must comply with the provisions presented in 40 CFR 430.02 with regards to *Certification in Lieu of Monitoring for Chloroform*. Monitoring for chloroform is not required unless operating parameters are exceeded. | | |
| i | Grab means an individual sample collected over a fifteen (15) minute, or less, period. | | |
| j | Take effluent samples for the $BOD_5$ analysis before or after the disinfection process. If taken after, dechlorinate and reseed the sample. | | |
| k | Report a numerical value for fecal coliforms following the procedures in Ecology's *Information Manual for Wastewater Treatment Plant Operators*, Publication Number 04-10-020 available at: http://www.ecy.wa.gov/programs/wq/permits/guidance.html. Do not report a result as too numerous to count (TNTC). | | |
| l | Sample analysis must be performed by a laboratory and method accredited by Ecology. Sample analysis sent to laboratories outside of Washington State may be approved by Ecology on a case-by-case basis. | | |
| m | Quarterly sampling periods are January through March, April through June, July through September, and October through December. Sampling must be conducted according to Special Condition S2.B. | | |
| n | The Permittee may suspend sampling for one or more parameters based on consistent attainment of benchmark values (Special Condition S2.E). | | |

## S2.B. Sampling and Analytical Procedures

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

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

Stormwater Sampling

Sampling of stormwater at each designated location, must occur in accordance with Special Condition S4 of Ecology's *Industrial Stormwater General Permit* (2012).

## S2.C. Flow Measurement, Field Measurement, and Continuous Monitoring Devices

The Permittee must:

1. Select and use appropriate flow measurement, field measurement, and continuous monitoring devices and methods consistent with accepted scientific practices.
2. Install, calibrate, and maintain these devices to ensure the accuracy of the measurements is consistent with the accepted industry standard, the manufacturer's recommendation for that type of device.
3. Calibrate continuous monitoring instruments other than flow meters weekly unless it can demonstrate a longer period is sufficient based on monitoring records. The Permittee:
    a. May calibrate apparatus for continuous monitoring of dissolved oxygen by air calibration.
    b. Must calibrate continuous pH measurement instruments using a grab sample analyzed in the lab with a pH meter calibrated with standard buffers and analyzed within 15 minutes of sampling; or using manufacturer's accepted practices.
    c. Must calibrate continuous chlorine measurement instruments, used for compliance with the NPDES permit, using a grab sample analyzed in the laboratory within 15 minutes of sampling.
4. Calibrate micro-recording temperature devices, known as thermistors, using protocols from Ecology's Quality Assurance Project Plan Development Tool.

(*Standard Operating Procedures for Continuous Temperature Monitoring of Fresh Water Rivers and Streams Version 1.0 10/26/2011*). This document is available online at:
http://www.ecy.wa.gov/programs/eap/qa/docs/ECY_EAP_SOP_Cont_Temp_Mon_Ambient_v1_0EAP080.pdf
Calibration as specified in this document is not required if the Permittee uses recording devices certified by the manufacturer.

5. Use field measurement devices as directed by the manufacturer and do not use reagents beyond their expiration dates.
6. Calibrate these devices at the frequency recommended by the manufacturer.
7. Inspect flow-monitoring devices at a minimum frequency of at least once per year.
8. Maintain calibration records for at least three years.

**S2.D. Laboratory Accreditation**

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

**S2.E. Request for Reduction in Monitoring**

1. Effluent limit monitoring reductions

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

   The Permittee must:

   a. Provide a written request.
   b. Clearly state the parameters for which it is requesting reduced monitoring.
   c. Clearly state the justification for the reduction.

2. Benchmark monitoring reductions

   a. The Permittee may suspend sampling for one or more parameters (other than "visible oil sheen") based on consistent attainment of benchmark values when:

      i. Eight consecutive quarterly samples, collected after the effective date of this permit, demonstrate a reported value equal to or less than the benchmark value; or for pH, within the range of 5.0 – 9.0.

      ii. For purposes of tallying "consecutive quarterly samples":

1. Do not include any quarters in which the Permittee did not collect a sample, but should have (e.g., discharge(s) occurred during normal working hours, and during safe conditions; but no sample was collected during the entire quarter). If this occurs, the tally of consecutive quarterly samples is reset to zero.
2. Do not include any quarters in which the Permittee did not collect a sample because there was no *discharge* during the quarter (or the discharges during the quarter occurred outside of normal working hours or during unsafe conditions). These quarters are not included in the calculation of eight consecutive quarters, but do not cause the tally to be reset; i.e., they are skipped over.
3. Permittees who suspended sampling based on consistent attainment of benchmarks prior to July 1, 2012 must resume/continue sampling until a total of eight consecutive quarterly samples demonstrate consistent attainment.

iii. Permittees monitoring more than once per quarter shall average all of the monitoring results for each parameter (except pH and "visible oil sheen") and compare the average value to the *benchmark* value.

iv. A Permittee who has a *significant process change* shall not use previous sampling results to demonstrate consistent attainment.

v. Suspension of sampling based on consistent attainment does not apply to pollutant parameters subject to numeric effluent limits based on federal effluent limitation guidelines or Section 303 (d) of the *Clean Water Act*.

## 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 (DMRs)

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

1. Summarize, report, and submit monitoring data obtained during each monitoring period on the electronic discharge monitoring report (DMR) form provided by Ecology within the Water Quality Permitting Portal. Include data for each of the parameters tabulated in Special Condition S2 and as required by the form.

Report a value for each day sampling occurred (unless specifically exempted in the permit) and for the summary values (when applicable) included on the electronic form.

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

**The Permittee may submit DMRs on the paper form provided by Ecology until 2/28/2015.**

2. Enter the "no discharge" reporting code for an entire DMR, for a specific monitoring point, or for a specific parameter as appropriate, if the Permittee did not discharge wastewater, stormwater, or a specific pollutant during a given monitoring period.
3. Report single analytical values below detection as "less than the detection level (DL)" by entering < followed by the numeric value of the detection level (e.g. < 2.0) on the DMR. If the method used did not meet the minimum DL and quantitation level (QL) identified in the permit, report the actual QL and DL in the comments or in the location provided.
4. 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.
5. Calculate average values (unless otherwise specified in the permit) using:
    a. The reported numeric value for all parameters measured between the agency-required detection value and the agency-required quantitation value.
    b. One-half the detection value (for values reported below detection) if the lab detected the parameter in another sample for the reporting period.
    c. Zero (for values reported below detection) if the lab did not detect the parameter in another sample for the reporting period.
6. Report single-sample grouped parameters (for example priority pollutants, PAHs, pulp and paper chlorophenolics, TTOs) on the WQWebDMR form and include: sample date, concentration detected, detection limit (DL) (as necessary), and laboratory quantitation level (QL) (as necessary). The Permittee must also submit an electronic PDF copy of the laboratory report using WQWebDMR.

    If the Permittee has obtained a waiver from electronic reporting or if submitting prior to the compliance date, the Permittee must submit a paper copy of the laboratory report providing the following information: date sampled, sample location, date of analysis, parameter name, CAS number, analytical method/number, detection limit (DL), laboratory quantitation level (QL), reporting units, and concentration detected.

The contract laboratory reports must also include information on chain of custody, QA/QC results, and documentation of accreditation for the parameter.

7. Ensure that DMRs are electronically submitted no later than the dates specified below, unless otherwise specified in this permit.

   Until the compliance date identified in S3.A.1 or if the Permittee has obtained a waiver, it must ensure that paper forms are postmarked or received by Ecology no later than the dates specified below, unless otherwise specified in this permit.

8. If submitting paper DMRs, ensure that DMR forms are postmarked or received by Ecology no later than the dates specified below, unless otherwise specified in this permit.

9. Submit DMRs for parameters with the monitoring frequencies specified in S2 (monthly, quarterly, annual, etc.) at the reporting schedule identified below. The Permittee must:

   a. Submit **monthly DMRs** by the 15th day of the following month.

   b. Submit **quarterly DMRs**, unless otherwise specified in the permit, by the 15th day of the second month following the monitoring period. Quarterly sampling periods are January through March, April through June, July through September, and October through December. The first quarterly sampling period is from November 2014 through December 2014.

   c. Submit **annual DMRs (priority pollutant scans, sludge)**, unless otherwise specified in the permit, by January 15 for the previous calendar year. The annual sampling period is the calendar year.

   d. Submit **semiannual DMRs**, unless otherwise specified in the permit, by July 15 and January 15 of each year. Semiannual sampling periods are January through June, and July through December.

   e. Submit **a 1/permit cycle DMR (chlorinated organics)**, by January 15, 2019. The 1/permit term sampling period is January 2018 through December 2018. In place of a separate DMR, these monitoring results may be submitted by attachment to the 2018 annual DMR.

## S3.B. Permit Submittals and Schedules

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

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

Water Quality Permit Coordinator
Department of Ecology
Industrial Section
PO Box 47600
Olympia, WA. 98504-7600

**S3.C. Records Retention**

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

**S3.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 thirty (30) days of sampling.

**a. Immediate Reporting**

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

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

| | |
|---|---|
| Southwest Regional Office | (360) 407-6300 |
| Department of Health | (800) 524-0323 (Business Hours) |
| Drinking Water Program | (877) 481-4901 (After Business Hours) |

**b. Twenty-Four-Hour Reporting**

The Permittee must report the following occurrences of noncompliance by telephone, to Ecology at the telephone numbers listed above, within 24 hours from the time the Permittee becomes aware of any of the following circumstances:

1. Any noncompliance that may endanger health or the environment, unless previously reported under immediate reporting requirements.
2. Any unanticipated bypass that causes an exceedance of any effluent limit in the permit (See Part S4.B., "Bypass Procedures").
3. Any upset that causes an exceedance of an effluent limit in the permit (See G.15, "Upset").
4. Any violation of a maximum daily or instantaneous maximum discharge limit for any of the pollutants in Section S1.A of this permit.
5. Any wastewater not treated in accordance with the terms and conditions of this permit, whether or not such wastewater endangers health or the environment or exceeds effluent limitation in the permit.

**c. Report within Five Days**

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

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

**d. Waiver of Written Reports**

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

**e. All Other Permit Violation Reporting**

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

**f. Report Submittal**

The Permittee must submit reports to the address listed in S3.

## S3.G. Other Reporting

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

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

**b. Failure to Submit Relevant or Correct Facts**

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

## S3.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.

## S3.I. Spill Notification

The Permittee must notify Weyerhaeuser NR Company immediately (as soon as discovered) of all discharges that could cause discharge limit violations at the stormwater outfalls, such as process spills or unauthorized discharges at the chip storage area or the administrative building.

## S4. Operation and Maintenance

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

The Permittee must schedule any facility maintenance, which might require interruption of wastewater treatment and degrade effluent quality, during non-critical water quality periods and carry this maintenance out in accordance to the operations and maintenance manual and the treatment system operating plan approved by Ecology.

### S4.A. Treatment System Operating Plan (TSOP)

The Permittee must submit an updated Treatment System Operating Plan to Ecology by **November 1, 2016**. The Permittee must update and submit this plan, as necessary, to include requirements for any major modifications of the treatment system. The TSOP must include the following:

1. A baseline operating condition, which describes the operating parameters and procedures, used to meet the effluent limits of S1 at the production levels used in developing these limits.
2. In the event of production rates, which are below the baseline levels used to establish these limits, the plan must describe the operating procedures and conditions needed to maintain design treatment efficiency. The monitoring and reporting must be described in the plan.
3. In the event of an upset, due to plant maintenance activities, severe stormwater events, startups or shut downs, or other causes, the plan must describe the operating procedures and conditions employed to mitigate the upset. The monitoring and reporting must be described in the plan.
4. A description of any regularly scheduled maintenance or repair activities at the facility which would affect the volume or character of the wastes discharged to the wastewater treatment system and a plan for monitoring and treating/controlling the discharge of maintenance-related materials (such as cleaners, degreasers, solvents, etc.).
5. A list including quantities and chemical composition of any maintenance related substances (such as cleaners, degreasers, solvents, etc.…) that will be discharged.
6. A plan for monitoring and treating and/or controlling the discharge of maintenance-related materials.

## S4.B. Bypass Procedures

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

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

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

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

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

   This permit authorizes such bypass only if:

   a. Bypass is unavoidable to prevent loss of life, personal injury, or sever property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.

   b. No feasible alternatives to the bypass exist, such as:

      - The use of auxiliary treatment facilities.
      - Retention of untreated wastes.
      - Stopping production.
      - Maintenance during normal periods of equipment downtime, but not if the Permittee should have installed adequate backup equipment in the exercise of reasonable engineering judgment to prevent a bypass.
      - Transport of untreated wastes to another treatment facility.

   c. The Permittee has properly notified Ecology of the bypass as required in Special Condition S3.E. of this permit.

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

   a. The Permittee must notify Ecology at least thirty (30) days before the planned date of bypass. The notice must contain:

      - A description of the bypass and its cause.
      - An analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing.

- A cost-effectiveness analysis of alternatives including comparative resource damage assessment.
- The minimum and maximum duration of bypass under each alternative.
- A recommendation as to the preferred alternative for conducting the bypass.
- The projected date of bypass initiation.
- A statement of compliance with SEPA, if applicable.
- A request for modification of water quality standards as provided for in WAC 173-201A-410, if an exceedance of any water quality standard is anticipated.
- Details of the steps taken or planned to reduce, eliminate, and prevent 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 preparation of the engineering report or facilities plan and plans and specifications and must include these to the extent practical. In cases where the Permittee determines the probable need to bypass early, the Permittee must continue to analyze conditions up to and including the construction period in an effort to minimize or eliminate the bypass.

c. Ecology will consider the following prior to issuing an administrative order for this type of bypass:

- If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
- If feasible alternatives to the bypass exist, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
- If the Permittee planned and scheduled the bypass to minimize adverse effects to the public and the environment.

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

## S5. Certified Operator

This permitted sanitary wastewater treatment facility must be operated by an operator certified by the state of Washington for at least a Class I plant. The operator must be in responsible charge of the day-to-day operation of the sanitary wastewater treatment plant. An operator certified for at least a Class I plant must be in charge during all regularly scheduled shifts.

## S6. Non-Routine Discharges

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

## S7. Spill Control Plan

### S7.A. Spill Control Plan Submittals and Requirements

The Permittee must:

1. Submit to Ecology an update to the existing spill control plan by **November 1, 2016**. The Permittee must submit a paper copy and an electronic copy (preferably as a PDF).
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.

### S7.B. Spill Control Plan Components

The spill control plan must include the following:

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

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

## S8. Stormwater Pollution Prevention Plan (SWPPP)

### S8.A. SWPPP Submittal and Requirements

The Permittee must prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the requirements defined in Special Condition S3 of Ecology's *Industrial Stormwater General Permit* (2012) with the following exception. The Permittee is not required to complete a *Spill Prevention and Emergency Cleanup Plan* because a *Spill Control Plan* is already a requirement in Special Condition S7 of this permit. The SWPPP must be submitted to Ecology for review by **April 30, 2015** and updated as necessary.

### S8.B. Inspections

1. The Permittee shall conduct and document visual inspections of the site each month.
2. Each inspection shall include:
    i. Observations made at stormwater sampling locations and any others areas where stormwater is discharged off-site or to a waters of the state.
    ii. Observations for the presence of floating materials, visible oil sheen, discoloration, turbidity, or odor in the stormwater.
    iii. Observations for the presence of illicit discharges such as domestic wastewater, noncontact cooling water, or process wastewater.
        i. If an illicit discharge is discovered, the Permittee shall notify Ecology within seven days.

ii. The Permittee shall eliminate the illicit discharge within 30 days.

iv. A verification that the descriptions of potential pollutant sources identified in the SWPPP are accurate.

v. A verification that the site map in the SWPPP reflects current conditions.

vi. An assessment of all BMPs that have been implemented, noting all of the following:

i. Effectiveness of BMPs inspected.

ii. Locations of BMPs that need maintenance.

iii. Reason maintenance is needed and a schedule for maintenance.

iv. Locations where additional of different BMPs are needed and the rationale for the additional or different BMPs.

vii. The Permittee shall record the results of each inspection in an inspection report or checklist and keep the records on-site, as part of the SWPPP, for Ecology review. The Permittee shall ensure each inspection report documents the observations, verifications and assessments required in Special Condition S8.B.2 and includes:

i. Time and date of the inspection.

ii. Locations inspected.

iii. Statements that, in the judgement of 1) the person conduction the site inspection, and 2) the person described in General Condition G2., the site is either in compliance or out of compliance with the SWPPP and this permit.

iv. A summary report and a schedule of implementation of the remedial actions that the Permittee plans to take if the site inspection indicates that the site is out of compliance.

The remedial actions taken must meet the requirements of the SWPPP and the permit.

v. Name, title, and signature of the person conducting site inspection; and the following statement: “I certify that this report is true, accurate, and complete, to the best of my knowledge and belief.”

vi. The Permittee shall report non-compliance identified during an inspection in accordance with the requirements of Special Condition S3.F.

## S9. Best Management Practices Plan

The Permittee is subject to the Best Management Practice (BMP) requirements for spent pulping liquor, soap, and turpentine as defined in 40 CFR Part 430.03. This requires the Permittee to implement a BMP Plan to prevent spills and leaks of spent pulping liquors, turpentine, and soap which may reach the wastewater treatment system and adversely impact the system's performance.

The plan is to focus on prevention measures as a first priority to insure to the extent possible that leaks or spills do not occur. In the event that a significant leak or spill does occur, the plan will provide, where necessary, for containment and diversions of the regulated substance to protect the integrity of the wastewater treatment system. Permittee must complete a review and evaluation of the existing BMP Plan every five years after the first BMP Plan is prepared. The Permittee must maintain on its premise a complete copy of the current BMP Plan and records and must make such BMP Plan and records available to Ecology upon request.

An annual BMP report must be submitted to Ecology in accordance with 40 CFR 430.03(i)(4) by **July 31st** of each year.

## S10. Solid Wastes

### S10.A. Solid Waste Handling

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

### S10.B. Leachate

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

### S10.C. Solid Waste Control Plan

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 **November 1, 2018**. The Permittee must submit a paper copy and an electronic copy (preferably as a PDF).

## S11. Wastewater Treatment System Efficiency Study

The Permittee must prepare and submit a treatment system efficiency study to Ecology for review by **November 1, 2018**. The treatment system efficiency study is meant to evaluate the adequacy of the industrial wastewater treatment system and to ensure that efficient operation is maintained. The following must be included in the study, if applicable:

- Schematic of the treatment units and characterization of the wastewater streams treated by the system.
- Unit sizing and depth.
- Current and design flow rates (peak hourly, maximum monthly, and average day).
- Detention times.
- Solids loading rates.
- Overflow rates.
- Mixed liquor suspended solids (MLSS).
- Food-to-mass ratio (F/M ratio).
- Recycle rates.
- Anticipated relevant operational changes (production increases, modifications to process units, etc.).

The study must also include an analysis for each treatment unit of the current treatment and removal efficiencies for COD, BOD, and TSS. The removal efficiencies should be determined form influent and effluent sampling conducted during four (4) separate 24-hour composite sampling periods.

Two of the sampling periods must be conducted when the effluent plant is primarily processing dry weather flow; the other two periods must be conducted when the effluent plant is primarily processing wet weather flow. Minor precipitation events during dry weather sampling are not expected to impact the data significantly but should be recorded if they occur. Each of the two dry weather and wet weather sampling intervals must be spaced at least one month apart.

Samples must be collected when the wastewater treatment system is in relatively steady state (no peak flows, upsets, or maintenance turnarounds). The sampling should be timed so that influent sampling events correspond with effluent sampling events in order to effectively estimate removal efficiencies across the system.

## S12. Water Supply Plant Discharge AKART Analysis

The Permittee must submit to Ecology an analysis of all known, available, and reasonable methods of prevention, control and treatment (AKART) for treatment of the filter backwash and sediment discharges from the water supply plant located at the facility by **November 1, 2017**.

The analysis must evaluate the cost of removal of TSS on a per pound basis for each chosen technology. If any technology is eliminated format he cost analysis, the Permittee must provide a detailed justification for its elimination.

The water quality impacts must be assessed in the technologies analyzed to ensure the discharge meets the Washington State water quality criteria.

If the analysis recommends that the currently employed technology at the water supply plant does not meet AKART, the Permittee must also include a proposed schedule for implementation of the recommended alternative. Ecology will review the analysis and determine AKART for filter backwash management. If Ecology determines that changes to the current system are necessary to provide AKART, a schedule of compliance to plan, design, and implement the necessary modifications will be authorized by administrative order or permit modification.

The Permittee may include a best technology available analysis for the cooling water intake within this submittal. The analysis should include the information prescribed in Special Condition S13 for Ecology review and approval. In the event that the Permittee provides sufficient information to Ecology to make a BPJ, best technology available determination, the submittal of a "Cooling water intake report" will not be required.

## S13. Cooling Water Intake Structure

Pursuant to Section 316(b) of the Clean Water Act, the Permittee must comply with the following requirements to minimize adverse impact by the facility's cooling water intake structure (CWIS).

### S13.A. Operations and Maintenance

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

The Permittee must report any significant impingement or entrainment events to Ecology within 24 hours consistent with the requirements in Special Condition S3.F(b).

### S13.B. Information and Compliance Report

The Permittee must prepare an information and compliance report for the CWIS and submit it to Ecology by **November 1, 2018**. The information and compliance report must be consistent with 40 CFR 122.21(r)(2) and (3) and applicable provisions of paragraphs (4), (5), (6), (7), and (8).

The facility may propose a site-specific alternative for complying with the BTA requirement pursuant to Section 316(b), or propose one of the designated technologies prescribed in 40 CFR Section 125.94(c) to meet the impingement mortality requirement.

### S13.C. Endangered Species Act

Nothing in this permit authorizes take for the purposes of a facility's compliance with the Endangered Species Act per 40 CFR 125.98.

## S14. Reserved

## S15. Sediment Monitoring

### S15.A. Sediment Sampling and Analysis Plan

The Permittee must submit to Ecology for review and approval a sediment sampling and analysis plan for sediment monitoring by **November 1, 2017**. The Permittee must submit two paper copies and an electronic copy (preferably as a PDF). The purpose of the plan is to characterize sediment (the nature and extent of chemical contamination and biological toxicity) quality in the vicinity of the Permittee's outfall 001/002 discharge. The Permittee must follow the guidance provided in the *Sediment Source Control Standards User Manual, Appendix B: Sediment Sampling and Analysis Plan* (Ecology, 2008).

### S15.B. Sediment Data Report

Following Ecology approval of the sediment sampling and analysis plan, the Permittee must collect sediments between August 15th and September 15th. The Permittee must submit to Ecology a Sediment Data Report containing the results of the sediment sampling and analysis no later than **12 months after Ecology approval of sediment sampling and analysis plan, no later than November 1, 2018**. The Permittee must submit two paper copies and an electronic copy (preferably as a PDF). The sediment data report must conform to the approved sediment sampling and analysis plan.

In addition to a Sediment Data Report, the sediment chemical and biological data must be submitted to Ecology's EIM database (http://www.ecy.wa.gov/eim/). Ecology's MyEIM tools must be used to confirm the accuracy of the submitted data (http://www.ecy.wa.gov/eim/MyEIM.htm).

## S16. Outfall Evaluation

The Permittee must inspect the submerged portion of the outfall line and diffuser to document its integrity and continued function. If conditions allow for a photographic verification, the Permittee must include such verification in the report. The Permittee must submit the evaluation report to Ecology **within 90 days of outfall evaluation completion, no later than November 1, 2018**.

The inspector must at minimum, when applicable:

- Assess the physical condition of the outfall pipe, diffuser, and associated couplings.
- Determine the extent of sediment accumulation in the vicinity of the diffuser.
- Ensure diffuser ports are free of obstructions and are allowing uniform flow.
- Confirm physical location (latitude/longitude) and depth (at MLLW) of the diffuser section of the outfall.
- Assess physical condition of anchors used to secure the submarine line.

# S17. Acute Toxicity

## S17.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 winter and once in the last summer prior to submission of the application for permit renewal.
2. Submit the results to Ecology by **November 1, 2018**.
3. Conduct acute toxicity testing on a series of at least five concentrations of effluent, including 100% effluent and a control.
4. Use each of the following species and protocols for each acute toxicity test:

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

## S17.B. Sampling and Reporting Requirements

1. The Permittee must submit all reports for toxicity testing accordance with the most recent version of Ecology Publication No. WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. Reports must contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data in electronic format for entry into Ecology's database, then the Permittee must send the data in electronic format for entry into Ecology's database, then the Permittee must send the data to Ecology along with the test report, bench sheets, and reference toxicant results.
2. The Permittee must collect grab 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 test must meet quality assurance criteria and test conditions specified in the most recent versions of the EPA methods listed in Subsection C and the Ecology Publication No. WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If Ecology determines any test results to be invalid or anomalous, the Permittee must repeat the testing with freshly collected effluent.

5. The laboratory must use control water and dilution water meeting the requirements of the EPA methods listed in Section A or pristine natural water of sufficient quality for good control performance.
6. The Permittee must conduct whole effluent toxicity tests on an unmodified sample of final effluent.

## S18. Chronic Toxicity

### S18.A. Testing when there is no Permit Limit for Chronic Toxicity

The Permittee 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. Submit the results to Ecology by **November 1, 2018**.
3. Conduct chronic toxicity testing on a series of at least five concentrations of effluent and a control. This series of dilutions must include the acute critical effluent concentration (ACEC). The ACEC equals 6.3% effluent. The series of dilutions should also contain the CCEC of 1.0% effluent.
4. 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.
5. Perform chronic toxicity tests with all of the following species and the most recent version of the following protocols:

| Freshwater Chronic Test | Species | Method |
|---|---|---|
| Fathead minnow survival and growth | *Pimephales promelas* | EPA-821-R-02-013 |
| Water flea survival and reproduction | *Ceriodaphnia dubia* | EPA-821-R-02-013 |

### S18.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*. Reports must contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data in electronic format for entry into Ecology's database, then the Permittee must send the data to Ecology along with the test report, bench sheets, and reference toxicant results.
2. The Permittee must collect grab 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 test must meet quality assurance criteria and test conditions specified in the most recent versions of the EPA methods listed in Section C. and the Ecology Publication no. WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If Ecology determines any test results to be invalid or anomalous, the Permittee must repeat the testing with freshly collected effluent.
5. The laboratory must use control water and dilution water meeting the requirements of the EPA methods listed in Subsection C or pristine natural water of sufficient quality for good control performance.
6. The Permittee must conduct whole effluent toxicity tests on an unmodified sample of final effluent.

## S19. Annual Stormwater Report

The Permittee must complete an annual stormwater report no later than **May 15th of each year**. The report must meet the requirements of Special Condition S9.B of Ecology's Industrial Stormwater General Permit (2012). Copies of the annual stormwater reports must be kept on-site for 3 years and available for Ecology review.

## S20. Application for Permit Renewal or Modification for Facility Changes

The Permittee must submit an application for renewal of this permit by **November 1, 2018**. The Permittee must submit a paper copy and an electronic copy (preferably as a PDF).

The Permittee must also submit a new application or supplement at least one hundred eighty (180) days prior to commencement of discharges 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.

## S21. Dangerous Wastes – Permit by Rule Requirements

The Permittee is authorized to treat dangerous wastes, generated on or off-site, at the wastewater treatment facility under the permit by rule provisions of Chapter WAC 173-303-802(5). This authorization is limited to the onsite and off-site waste streams identified on the permit application and application amendments as approved by Ecology.

# General Conditions

## G1. Signatory Requirements

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

   a. In the case of corporations, by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

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

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

2. All reports required by this permit and other information requested by Ecology must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

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

   b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

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

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

## G2. Right of Inspection and Entry

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

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

## G3. Permit Actions

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

1. The following are causes for terminating this permit during its term, or for denying a permit renewal application:
   a. Violation of any permit term or condition.
   b. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.
   c. A material change in quantity or type of waste disposal.

d. A determination that the permitted activity endangers human health or the environment, or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination.

e. A change in any condition that requires either a temporary or permanent reduction, or elimination of any discharge or sludge use or disposal practice controlled by the permit.

f. Nonpayment of fees assessed pursuant to RCW 90.48.465.

g. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.

2. The following are causes for modification but not revocation and reissuance except when the Permittee requests or agrees:

a. A material change in the condition of the waters of the state.

b. New information not available at the time of permit issuance that would have justified the application of different permit conditions.

c. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.

d. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.

e. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR Part 122.62.

f. Ecology has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.

g. Incorporation of an approved local pretreatment program into a municipality's permit.

3. The following are causes for modification or alternatively revocation and reissuance:

a. When cause exists for termination for reasons listed in 1.a through 1.g of this section, and Ecology determines that modification or revocation and reissuance is appropriate.

b. When Ecology has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer (General Condition G7) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new Permittee.

## G4. Reporting Planned Changes

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

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

## G5. Plan Review Required

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

## G6. Compliance with Other Laws and Statutes

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

## G7. Transfer of this Permit

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

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

c. Ecology does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under this subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

## G8. Reduced Production for Compliance

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

## G9. Removed Substances

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

## G10. Duty to Provide Information

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

## G11. Other Requirements of 40 CFR

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

## G12. Additional Monitoring

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

## G13. Payment of Fees

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

## G14. Penalties for Violating Permit Conditions

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

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

## G15. Upset

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

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

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

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

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

## G16. Property Rights

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

## G17. Duty to Comply

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

## G18. Toxic Pollutants

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

## G19. Penalties for Tampering

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

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

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

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

## G21. Compliance Schedules

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

# Appendix A

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

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

- Another permit condition specifies other methods, detection levels, or quantitation levels.
- The method used produces measurable results in the sample and EPA has listed it as an EPA-approved method in 40 CFR Part 136.

If the Permittee uses an alternative method, not specified in the permit and as allowed above, it must report the test method, DL, and QL on the discharge monitoring report or in the required report.

If the Permittee is unable to obtain the required DL and QL in its effluent due to matrix effects, the Permittee must submit a matrix-specific detection limit (MDL) and a quantitation limit (QL) to Ecology with appropriate laboratory documentation.

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

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

## *CONVENTIONAL PARAMETERS*

| **Pollutant & CAS No.** ***(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 |
| Soluble Biochemical Oxygen Demand | SM5210-B [3] | | 2 mg/L |
| Chemical Oxygen Demand | SM5220-D | | 10 mg/L |

| **Pollutant & CAS No. *(if available)*** | **Recommended Analytical Protocol** | **Detection (DL)[1] *µg/L unless specified*** | **Quantitation Level (QL) [2] *µg/L unless specified*** |
|---|---|---|---|
| Total Organic Carbon | SM5310-B/C/D | | 1 mg/L |
| Total Suspended Solids | SM2540-D | | 5 mg/L |
| Total Ammonia (as N) | SM4500-NH3-B and C/D/E/G/H | | 20 |
| Flow | Calibrated device | | |
| Dissolved oxygen | SM4500-OC/OG | | 0.2 mg/L |
| Temperature (max. 7-day avg.) | Analog recorder or Use micro-recording devices known as thermistors | | 0.2º C |
| pH | SM4500-$H^+$ B | N/A | N/A |

## *NONCONVENTIONAL PARAMETERS*

| **Pollutant & CAS No. (if available)** | **Recommended Analytical Protocol** | **Detection (DL)[1] µg/L unless specified** | **Quantitation Level (QL)[2] µg/L unless specified** |
|---|---|---|---|
| Total Alkalinity | SM2320-B | | 5 mg/L as CaCO3 |
| Chlorine, Total Residual | SM4500 Cl G | | 50.0 |
| Color | SM2120 B/C/E | | 10 color units |
| Fecal Coliform | SM 9221E,9222 | N/A | Specified in method - sample aliquot dependent |
| Escherichia coli (E. coli) | | | |
| Klebsiella | | | |

| Pollutant & CAS No. (if available) | Recommended Analytical Protocol | Detection (DL)[1] µg/L unless specified | Quantitation Level (QL)[2] µg/L unless specified |
|---|---|---|---|
| Fluoride (16984-48-8) | SM4500-F E | 25 | 100 |
| Nitrate + Nitrite Nitrogen (as N) | SM4500-NO3- E/F/H | | 100 |
| Nitrogen, Total Kjeldahl (as N) | SM4500-$N_{org}$B/C and SM4500$NH_3$-B/C/D/EF/G/H | | 300 |
| Soluble Reactive Phosphorus (as P) | SM4500- PE/PF | 3 | 10 |
| Phosphorus, Total (as P) | SM 4500 PB followed by SM4500-PE/PF | 3 | 10 |
| Oil and Grease (HEM) | 1664 A or B | 1,400 | 5,000 |
| Salinity | SM2520-B | | 3 practical salinity units or scale (PSU or PSS) |
| Settleable Solids | SM2540 -F | | 100 (or 0.1 mL/L) |
| Sulfate (as mg/L $SO_4$) | SM4110-B | | 200 |
| Sulfide (as mg/L S) | SM4500-$S^2$F/D/E/G | | 200 |
| Sulfite (as mg/L $SO_3$) | SM4500-SO3B | | 2000 |
| Total Coliform | SM 9221B, 9222B, 9223B | N/A | Specified in method - sample aliquot dependent |
| Total dissolved solids | SM2540 C | | 20 mg/L |
| Total Hardness | SM2340B | | 200 as CaCO3 |
| Aluminum, Total (7429-90-5) | 200.8 | 2.0 | 10 |

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

## *PRIORITY POLLUTANTS*

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

| **Pollutant & CAS No.** ***(if available)*** | **Recommended Analytical Protocol** | **Detection (DL)[1]** ***µg/L unless specified*** | **Quantitation Level (QL)[2]** ***µg/L unless specified*** |
|---|---|---|---|
| Phenols, Total | EPA 420.1 | | 50 |
| **ACID COMPOUNDS** | | | |
| 2-Chlorophenol (95-57-8) | 625 | 1.0 | 2.0 |
| 2,4-Dichlorophenol (120-83-2) | 625 | 0.5 | 1.0 |
| 2,4-Dimethylphenol (105-67-9) | 625 | 0.5 | 1.0 |
| 4,6-dinitro-o-cresol (534-52-1)<br>(2-methyl-4,6,-dinitrophenol) | 625/1625B | 1.0 | 2.0 |
| 2,4 dinitrophenol (51-28-5) | 625 | 1.0 | 2.0 |
| 2-Nitrophenol (88-75-5) | 625 | 0.5 | 1.0 |
| 4-nitrophenol (100-02-7) | 625 | 0.5 | 1.0 |
| Parachlorometa cresol (59-50-7)<br>(4-chloro-3-methylphenol) | 625 | 1.0 | 2.0 |
| Pentachlorophenol (87-86-5) | 625 | 0.5 | 1.0 |
| Phenol (108-95-2) | 625 | 2.0 | 4.0 |
| 2,4,6-Trichlorophenol (88-06-2) | 625 | 2.0 | 4.0 |
| **VOLATILE COMPOUNDS** | | | |
| Acrolein (107-02-8) | 624 | 5 | 10 |
| Acrylonitrile (107-13-1) | 624 | 1.0 | 2.0 |
| Benzene (71-43-2) | 624 | 1.0 | 2.0 |

| **Pollutant & CAS No.** ***(if available)*** | **Recommended Analytical Protocol** | **Detection (DL)[1]** ***µg/L unless specified*** | **Quantitation Level (QL)[2]** ***µg/L unless specified*** |
|---|---|---|---|
| Bromoform (75-25-2) | 624 | 1.0 | 2.0 |
| Carbon tetrachloride (56-23-5) | 624/601 or SM6230B | 1.0 | 2.0 |
| Chlorobenzene (108-90-7) | 624 | 1.0 | 2.0 |
| Chloroethane (75-00-3) | 624/601 | 1.0 | 2.0 |
| 2-Chloroethylvinyl Ether (110-75-8) | 624 | 1.0 | 2.0 |
| Chloroform (67-66-3) | 624 or SM6210B | 1.0 | 2.0 |
| Dibromochloromethane (124-48-1) | 624 | 1.0 | 2.0 |
| 1,2-Dichlorobenzene (95-50-1) | 624 | 1.9 | 7.6 |
| 1,3-Dichlorobenzene (541-73-1) | 624 | 1.9 | 7.6 |
| 1,4-Dichlorobenzene (106-46-7) | 624 | 4.4 | 17.6 |
| Dichlorobromomethane (75-27-4) | 624 | 1.0 | 2.0 |
| 1,1-Dichloroethane (75-34-3) | 624 | 1.0 | 2.0 |
| 1,2-Dichloroethane (107-06-2) | 624 | 1.0 | 2.0 |
| 1,1-Dichloroethylene (75-35-4) | 624 | 1.0 | 2.0 |
| 1,2-Dichloropropane (78-87-5) | 624 | 1.0 | 2.0 |
| 1,3-dichloropropene (mixed isomers) (1,2- | 624 | 1.0 | 2.0 |

| **Pollutant & CAS No.** ***(if available)*** | **Recommended Analytical Protocol** | **Detection (DL)[1]** ***µg/L unless specified*** | **Quantitation Level (QL)[2]** ***µg/L unless specified*** |
|---|---|---|---|
| dichloropropylene) (542-75-6) [6] | | | |
| Ethylbenzene (100-41-4) | 624 | 1.0 | 2.0 |
| Methyl bromide (74-83-9) (Bromomethane) | 624/601 | 5.0 | 10.0 |
| Methyl chloride (74-87-3) (Chloromethane) | 624 | 1.0 | 2.0 |
| Methylene chloride (75-09-2) | 624 | 5.0 | 10.0 |
| 1,1,2,2-Tetrachloroethane (79-34-5) | 624 | 1.9 | 2.0 |
| Tetrachloroethylene (127-18-4) | 624 | 1.0 | 2.0 |
| Toluene (108-88-3) | 624 | 1.0 | 2.0 |
| 1,2-Trans-Dichloroethylene (156-60-5) (Ethylene dichloride) | 624 | 1.0 | 2.0 |
| 1,1,1-Trichloroethane (71-55-6) | 624 | 1.0 | 2.0 |
| 1,1,2-Trichloroethane (79-00-5) | 624 | 1.0 | 2.0 |
| Trichloroethylene (79-01-6) | 624 | 1.0 | 2.0 |
| Vinyl chloride (75-01-4) | 624/SM6200B | 1.0 | 2.0 |
| **BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)** | | | |
| Acenaphthene (83-32-9) | 625 | 0.2 | 0.4 |
| Acenaphthylene (208-96-8) | 625 | 0.3 | 0.6 |
| Anthracene (120-12-7) | 625 | 0.3 | 0.6 |

| **Pollutant & CAS No.** ***(if available)*** | **Recommended Analytical Protocol** | **Detection (DL)[1]** ***µg/L unless specified*** | **Quantitation Level (QL)[2]** ***µg/L unless specified*** |
|---|---|---|---|
| Benzidine (92-87-5) | 625 | 12 | 24 |
| Benzyl butyl phthalate (85-68-7) | 625 | 0.3 | 0.6 |
| Benzo(*a*)anthracene (56-55-3) | 625 | 0.3 | 0.6 |
| Benzo(b)fluoranthene (3,4-benzofluoranthene) (205-99-2) [7] | 610/625 | 0.8 | 1.6 |
| **Benzo(j)fluoranthene (205-82-3)** [7] | 625 | 0.5 | 1.0 |
| Benzo(k)fluoranthene (11,12-benzofluoranthene) (207-08-9)[7] | 610/625 | 0.8 | 1.6 |
| **Benzo(r,s,t)pentaphene (189-55-9)** | 625 | 0.5 | 1.0 |
| Benzo(*a*)pyrene (50-32-8) | 610/625 | 0.5 | 1.0 |
| Benzo(*ghi*)Perylene (191-24-2) | 610/625 | 0.5 | 1.0 |
| Bis(*2-chloroethoxy)*methane (111-91-1) | 625 | 5.3 | 21.2 |
| Bis(*2-chloroethyl*)ether (111-44-4) | 611/625 | 0.3 | 1.0 |
| Bis(*2-chloroisopropyl*)ether (39638-32-9) | 625 | 0.3 | 0.6 |
| Bis(*2-ethylhexyl*)phthalate (117-81-7) | 625 | 0.1 | 0.5 |
| 4-Bromophenyl phenyl ether (101-55-3) | 625 | 0.2 | 0.4 |

| **Pollutant & CAS No.** ***(if available)*** | **Recommended Analytical Protocol** | **Detection (DL)[1]** ***µg/L unless specified*** | **Quantitation Level (QL)[2]** ***µg/L unless specified*** |
|---|---|---|---|
| 2-Chloronaphthalene (91-58-7) | 625 | 0.3 | 0.6 |
| 4-Chlorophenyl phenyl ether (7005-72-3) | 625 | 0.3 | 0.5 |
| Chrysene (218-01-9) | 610/625 | 0.3 | 0.6 |
| **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 (53-70-3)(1,2,5,6-dibenzanthracene) | 625 | 0.8 | 1.6 |
| Dibenzo(a,e)pyrene (192-65-4) | 610M/625M | 2.5 | 10.0 |
| Dibenzo(a,h)pyrene (189-64-0) | 625M | 2.5 | 10.0 |
| 3,3-Dichlorobenzidine (91-94-1) | 605/625 | 0.5 | 1.0 |
| Diethyl phthalate (84-66-2) | 625 | 1.9 | 7.6 |
| Dimethyl phthalate (131-11-3) | 625 | 1.6 | 6.4 |
| Di-n-butyl phthalate (84-74-2) | 625 | 0.5 | 1.0 |
| 2,4-dinitrotoluene (121-14-2) | 609/625 | 0.2 | 0.4 |
| 2,6-dinitrotoluene (606-20-2) | 609/625 | 0.2 | 0.4 |
| **BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)** | | | |
| Di-n-octyl phthalate (117-84-0) | 625 | 0.3 | 0.6 |

| **Pollutant & CAS No.** ***(if available)*** | **Recommended Analytical Protocol** | **Detection (DL)[1]** ***µg/L unless specified*** | **Quantitation Level (QL)[2]** ***µg/L unless specified*** |
|---|---|---|---|
| 1,2-Diphenylhydrazine (*as Azobenzene*) (122-66-7) | 1625B | 5.0 | 20 |
| Fluoranthene (206-44-0) | 625 | 0.3 | 0.6 |
| Fluorene (86-73-7) | 625 | 0.3 | 0.6 |
| Hexachlorobenzene (118-74-1) | 612/625 | 0.3 | 0.6 |
| Hexachlorobutadiene (87-68-3) | 625 | 0.5 | 1.0 |
| Hexachlorocyclopentadiene (77-47-4) | 1625B/625 | 0.5 | 1.0 |
| Hexachloroethane (67-72-1) | 625 | 0.5 | 1.0 |
| Indeno(*1,2,3-cd*)Pyrene (193-39-5) | 610/625 | 0.5 | 1.0 |
| Isophorone (78-59-1) | 625 | 0.5 | 1.0 |
| **3-Methyl cholanthrene (56-49-5)** | 625 | 2.0 | 8.0 |
| Naphthalene (91-20-3) | 625 | 0.3 | 0.6 |
| Nitrobenzene (98-95-3) | 625 | 0.5 | 1.0 |
| N-Nitrosodimethylamine (62-75-9) | 607/625 | 2.0 | 4.0 |
| N-Nitrosodi-n-propylamine (621-64-7) | 607/625 | 0.5 | 1.0 |
| N-Nitrosodiphenylamine (86-30-6) | 625 | 0.5 | 1.0 |
| **Perylene (198-55-0)** | 625 | 1.9 | 7.6 |

| **Pollutant & CAS No.** ***(if available)*** | **Recommended Analytical Protocol** | **Detection (DL)[1]** ***µg/L unless specified*** | **Quantitation Level (QL)** **[2]** ***µg/L unless specified*** |
|---|---|---|---|
| Phenanthrene (85-01-8) | 625 | 0.3 | 0.6 |
| Pyrene (129-00-0) | 625 | 0.3 | 0.6 |
| 1,2,4-Trichlorobenzene (120-82-1) | 625 | 0.3 | 0.6 |
| **DIOXIN** | | | |
| 2,3,7,8-Tetra-Chlorodibenzo-P-Dioxin (176-40-16) (2,3,7,8 TCDD) | 1613B | 1.3 pg/L | 5 pg/L |
| **PESTICIDES/PCBs** | | | |
| Aldrin (309-00-2) | 608 | 0.025 | 0.05 |
| alpha-BHC (319-84-6) | 608 | 0.025 | 0.05 |
| beta-BHC (319-85-7) | 608 | 0.025 | 0.05 |
| gamma-BHC (58-89-9) | 608 | 0.025 | 0.05 |
| delta-BHC (319-86-8) | 608 | 0.025 | 0.05 |
| Chlordane (57-74-9) **[8]** | 608 | 0.025 | 0.05 |
| 4,4'-DDT (50-29-3) | 608 | 0.025 | 0.05 |
| 4,4'-DDE (72-55-9) | 608 | 0.025 | 0.05[10] |
| 4,4' DDD (72-54-8) | 608 | 0.025 | 0.05 |
| Dieldrin (60-57-1) | 608 | 0.025 | 0.05 |
| alpha-Endosulfan (959-98-8) | 608 | 0.025 | 0.05 |
| beta-Endosulfan (33213-65-9) | 608 | 0.025 | 0.05 |
| Endosulfan Sulfate (1031-07-8) | 608 | 0.025 | 0.05 |

| **Pollutant & CAS No.** ***(if available)*** | **Recommended Analytical Protocol** | **Detection (DL)[1]** ***µg/L unless specified*** | **Quantitation Level (QL)** [2] ***µg/L unless specified*** |
|---|---|---|---|
| Endrin (72-20-8) | 608 | 0.025 | 0.05 |
| Endrin Aldehyde (7421-93-4) | 608 | 0.025 | 0.05 |
| Heptachlor (76-44-8) | 608 | 0.025 | 0.05 |
| Heptachlor Epoxide (1024-57-3) | 608 | 0.025 | 0.05 |
| PCB-1242 (53469-21-9) [9] | 608 | 0.25 | 0.5 |
| PCB-1254 (11097-69-1) | 608 | 0.25 | 0.5 |
| PCB-1221 (11104-28-2) | 608 | 0.25 | 0.5 |
| PCB-1232 (11141-16-5) | 608 | 0.25 | 0.5 |
| PCB-1248 (12672-29-6) | 608 | 0.25 | 0.5 |
| PCB-1260 (11096-82-5) | 608 | 0.13 | 0.5 |
| PCB-1016 (12674-11-2) [9] | 608 | 0.13 | 0.5 |
| Toxaphene (8001-35-2) | 608 | 0.24 | 0.5 |

1. Detection level (DL) - or detection limit means the minimum concentration of an analyte (substance) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero as determined by the procedure given in 40 CFR part 136, Appendix B.

2. Quantitation Level (QL) - also known as Minimum Level of Quantitation (ML) – The lowest level at which the entire analytical system must give a recognizable signal and acceptable calibration point for the analyte. It is equivalent to the concentration of the lowest calibration standard, assuming that the lab has used all method-specified sample weights, volumes, and cleanup procedures. The QL is calculated by multiplying the MDL by 3.18 and rounding the result to the number nearest to (1, 2, or 5) x $10^n$, 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 um (prep all filters by filtering 250 ml of laboratory grade deionized water through the filter and discard). Then, analyze sample as per method 5210-B.

4. NWTPH Dx - Northwest Total Petroleum Hydrocarbons Diesel Extended Range – see http://www.ecy.wa.gov/biblio/97602.html

5. NWTPH Gx - Northwest Total Petroleum Hydrocarbons Gasoline Extended Range – see http://www.ecy.wa.gov/biblio/97602.html

6. 1, 3-dichloroproylene (mixed isomers) - You may report this parameter as two separate parameters: cis-1, 3-dichlorpropropene (10061-01-5) and trans-1, 3-dichloropropene (10061-02-6).

7. Total Benzofluoranthenes - Because Benzo(b)fluoranthene, Benzo(j)fluoranthene and Benzo(k)fluoranthene co-elute you may report these three isomers as total benzofluoranthenes.

8. Chlordane - You may report alpha-chlordane (5103-71-9) and gamma-chlordane (5103-74-2) in place of chlordane (57-74-9). If you report alpha and gamma-chlordane, the DL/PQLs that apply are 0.025/0.050.

9. PCB 1016 & PCB 1242 - You may report these two PCB compounds as one parameter called PCB 1016/1242.