

Issuance Date: February 07, 2018  
Effective Date: March 1, 2018  
Expiration Date: February 28, 2023

**National Pollutant Discharge Elimination System  
Waste Discharge Permit No. WA0000086**

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.

Millennium Bulk Terminals Longview, LLC  
4029 Industrial Way  
Longview Washington 98632

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

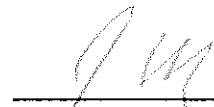
**Facility Location:**  
4029 Industrial Way  
Longview Washington 98632

**Treatment Type:**  
Industrial – Sedimentation, Chemical  
Precipitation, Gravity Thickening,  
Flocculation  
Stormwater – Sedimentation and Filtration

**Receiving Water:**  
Columbia River and Consolidated Diking  
Improvement District Ditches Nos. 10 and 14

**SIC Code:**  
4491 (Port and Harbor Operations)  
4226 (Special Warehousing and Storage)

**NAICS Code:**  
488310 (Port and Harbor Operations)  
488320 (Marine Cargo Handling – Stevedoring  
and Other Marine Cargo Handling Services)

  
James DeMay, P.E.  
Industrial Section Manager  
Waste 2 Resources Program

FINAL

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## Summary of Permit Report Submittals

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

Permit Section	Submittal	Frequency	First Submittal Date
S1.E.	Notify Ecology of planned start date of remediation water processing/treating	1/permit cycle	
S1.E.	Remediation Water AKART Study Plan	1/permit cycle	Within 6 months of planned start date of remediation water processing/treating
S1.E.	Records of Remediation Water Evaluated for Treatment and Treated at WWTP	As necessary	
S1.F.	Notification of Overflow at Outfall 006	As necessary in Monthly overall DMR comments	
S1.G.	Notification of New Tenants	As necessary	
S3.A.	Discharge Monitoring Report (Monthly DMR)	Monthly	April 15, 2018
S3.A.	Discharge Monitoring Report (Quarterly DMR)	Quarterly	July 15, 2018
S3.A.	Effluent Characterization Data (Annual/Single Sample DMR)	Annually	January 15, 2019
S3.F.	Reporting Permit Violations	As necessary	
S4.A.	Updated Operations and Maintenance Manual	1/permit cycle, other updates as necessary	September 1, 2018
S4.A.	Updated Treatment System Operating Plan	1/permit cycle, other updates as necessary	September 1, 2018
S4.B.	Reporting Bypasses	As necessary	
S5.C.	Updated Solid Waste Control Plan	1/permit cycle	September 1, 2022

<b>Permit Section</b>	<b>Submittal</b>	<b>Frequency</b>	<b>First Submittal Date</b>
S6.	Application for Permit Renewal	1/permit cycle	September 1, 2022
S8.	Non-Routine and Unanticipated Discharges	As necessary	
S9.A.	Updated Spill Plan	1/permit cycle, other updates as necessary	September 1, 2018
S10.A.	Updated Stormwater Pollution Prevention Plan	1/permit cycle	September 1, 2018
S11.	Outfall Evaluation Report	1/permit cycle	June 1, 2020
S12.A.	Acute Toxicity: Testing When There is No Permit Limit	1/permit cycle (sampling last summer and last winter of permit term)	September 1, 2022
S13.A.	Chronic Toxicity: Characterization Written Report, Quarterly Testing	Quarterly	Within 45 days of sampling but no later than August 15, 2018
S13.D.	Chronic Toxicity: Compliance Monitoring Report, Quarterly Testing	Quarterly If necessary (testing to be started in 3 <sup>rd</sup> Quarter 2019)	Within 45 days of sampling but no later than November 15, 2019
S13.E.	Chronic Toxicity: Response to Noncompliance Reporting	As necessary	
S13.E.	Chronic Toxicity: TI/TRE Plan	As necessary	
S13.F.	Chronic Toxicity: Testing When There is No Permit Limit	1/permit cycle (sampling last summer and last winter of permit term)	September 1, 2022
G1.	Notice of Change in Authorization	As necessary	

<b>Permit Section</b>	<b>Submittal</b>	<b>Frequency</b>	<b>First Submittal Date</b>
G4.	Permit Application for Substantive Changes to the Discharge	As necessary	
G5.	Engineering Report for Construction or Modification Activities	As necessary	
G7.	Notice of Permit Transfer	As necessary	
G10.	Duty to Provide Information	As necessary	
G18.	Notice of Discharge of Toxic Pollutants	As necessary	
G20.	Compliance Schedules	As necessary	

## Special Conditions

### S1. Discharge Limits

This permit only authorizes discharges and activities as described in the NPDES permit application. It does not authorize discharges from the construction or operation of a coal export facility. All discharges and activities authorized by this permit must be consistent with the terms and conditions of this permit.

#### S1.A. Commingled Process Wastewater and Stormwater at Outfall 002A (without Remediation Water)

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

Beginning on the effective date of this permit, the Permittee is authorized to discharge treated process wastewater and stormwater (without remediation water as defined in S1.E.) from Outfall 002A to the Columbia River subject to complying with the following limits:

<b>Effluent Limits: Outfall 002A (without Remediation Water)</b> <b>Latitude 46.13728 Longitude 123.007694</b>		
<b>Parameter</b>	<b>Average Monthly <sup>a</sup></b>	<b>Maximum Daily <sup>b</sup></b>
Total Suspended Solids (TSS)	--	30 milligrams/liter (mg/L)
Oil and Grease	10 mg/L	15 mg/L
	<b>Minimum</b>	<b>Maximum</b>
pH <sup>c</sup>	6.0 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 average discharge of a pollutant measured during a calendar day. For pollutants with limits expressed in units of mass, calculate the daily discharge as the total mass of the pollutant discharged over the day. This does not apply to pH or temperature.	
c	When pH is continuously monitored, excursions between 5.0 and 6.0, or 9.0 and 10.0 are not considered violations if no single excursion exceeds 60 minutes in length and total excursions do not exceed 7 hours and 26 minutes per month. Any excursions below 5.0 and above 10.0 at any time are violations.	



**S1.B. Commingled Process Wastewater and Stormwater at Outfall 002A including Remediation Water**

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

Beginning on the effective date of this permit, the Permittee is authorized to discharge treated process wastewater and stormwater) including remediation water as defined in S1.E.) from Outfall 002A to the Columbia River subject to complying with the following limits:

<b>Effluent Limits: Outfall 002A (with Remediation Water)</b> <b>Latitude 46.13728 Longitude 123.007694</b>		
<b>Parameter</b>	<b>Average Monthly <sup>a</sup></b>	<b>Maximum Daily <sup>b</sup></b>
Total Suspended Solids (TSS)	--	30 mg/L
Oil and Grease	10 mg/L	15 mg/L
Fluoride	32 mg/L	76 mg/L
Cyanide, Free (WAD)	--	0.110 mg/L
Benzo(a)pyrene (B(a)P)	--	0.50 micrograms/liter (µg/L)
	<b>Minimum</b>	<b>Maximum</b>
pH <sup>c</sup>	6.0 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 average discharge of a pollutant measured during a calendar day. For pollutants with limits expressed in units of mass, calculate the daily discharge as the total mass of the pollutant discharged over the day. This does not apply to pH or temperature.	
c	When pH is continuously monitored, excursions between 5.0 and 6.0, or 9.0 and 10.0 are not considered violations if no single excursion exceeds 60 minutes in length and total excursions do not exceed 7 hours and 26 minutes per month. Any excursions below 5.0 and above 10.0 at any time are violations.	

**S1.C. Stormwater at Outfall 003C**

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

Beginning on the effective date of this permit, the Permittee is authorized to discharge treated stormwater from Outfall 003C to CDID Ditch No.10 subject to complying with the following limits:

<b>Effluent Limits: Outfall 003C</b>		
<b>Latitude 46.14711 Longitude 123.002936</b>		
<b>Parameter</b>	<b>Average Monthly <sup>a</sup></b>	<b>Maximum Daily <sup>b</sup></b>
Total Suspended Solids (TSS)	--	30 mg/L
Oil and Grease	--	10 mg/L
	<b>Minimum</b>	<b>Maximum</b>
pH	6.5 standard units	8.5 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 average discharge of a pollutant measured during a calendar day. For pollutants with limits expressed in units of mass, calculate the daily discharge as the total mass of the pollutant discharged over the day. This does not apply to pH or temperature.	

**S1.D. Stormwater Benchmarks, Prohibitions, and Monitoring Requirements at Outfall 003C**

1. Authorized Stormwater

Beginning on the effective date of this permit, the Permittee is authorized to discharge stormwater from Outfall 003C to waters of the state. All discharges and activities authorized by this permit must be consistent with the terms and conditions of this permit.

Discharges must not cause or contribute to a violation of Surface Water Quality Standards (Chapter 173-201A WAC), Ground Water Quality Standards (Chapter 173-200 WAC), or Sediment Management Standards (Chapter 173-204 WAC). Discharges that are not in compliance with these standards are prohibited.

2. General Prohibitions

The Permittee must manage all stormwater discharges to prevent the discharge of crude, synthetic or processed oil, or oil-containing products as identified by an oil sheen.

3. Monitoring Requirements

Beginning on the first full calendar quarter after the permit becomes effective, the Permittee must monitor stormwater from Outfall 003C as follows:

**Monitoring at Outfall 003C**

<b>Parameter</b>	<b>Benchmark Value</b>	<b>Monitoring Frequency<sup>a,b</sup></b>	<b>Sample Type</b>
Total Copper	14 µg/L	Quarterly	Grab
Total Zinc	117 µg/L	Quarterly	Grab
Hardness	--	Annually	Grab
Visual monitoring as described below.			

<sup>a</sup> The Permittee may petition Ecology to reduce or suspend monitoring for one or more of these parameters upon consistent attainment of benchmark values. Consistent attainment is defined as eight consecutive quarters where the reported values are equal to or less than benchmark values.

<sup>b</sup> Quarters are defined as :

First Quarter – January, February, and March

Second Quarter – April, May, and June

Third Quarter – July, August, and September

Fourth Quarter – October, November, and December

If there is no discharge during an entire quarter, the Permittee must submit a discharge monitoring report to Ecology stating that no discharge occurred.

The Permittee must sample the stormwater discharges from Outfall 003C during the first fall storm event each year. “First fall storm event” means the first time after October 1<sup>st</sup> of each year that precipitation occurs and results in a stormwater discharge from a facility.

The Permittee must collect samples within the first 12 hours of stormwater discharge events. If it is not possible to collect a sample within the first 12 hours of a stormwater discharge event, the Permittee must collect the sample as soon as practicable after the first 12 hours, and keep documentation with the sampling records explaining why they could not collect samples within the first 12 hours.

The Permittee is not required to sample outside of regular environmental staff business hours (Monday-Friday from 8:00 am – 5:00 pm), during unsafe conditions, or during quarters when there is no discharge.

For each stormwater sample taken, the Permittee must record the following information and retain it on-site for Ecology review for each stormwater sample taken.

- a. Sample date.
- b. Sample time.
- c. A notation describing if the Permittee collected the sample within the first 12 hours of stormwater discharge events.
- d. An explanation of why a sample could not be collected within the first 12 hours of a stormwater discharge event, if it was not possible.
- e. Sample location (using SWPPP identifying number).
- f. Method of sampling, and method of sample preservation, if applicable.
- g. Individual who performed the sampling.

If a stormwater sample was not collected from the site during a given reporting period, the Permittee must submit a report indicating “no sample collected” or “no discharge during the quarter,” as applicable.

The Permittee must conduct and document visual inspections of Outfall 003C each month. The inspections must be conducted by qualified personnel.

Each inspection must include visual observations made at the stormwater sampling locations and areas where the stormwater is discharged off-site. The inspection must include observations for the presence of floating materials, visible sheen, discoloration, turbidity, odor, or presence of illicit discharges. The inspection must include an assessment of all BMPs that have been implemented, the effectiveness of the BMPs, and whether any maintenance or changes in BMPs are needed.

If an illicit discharge is discovered, the Permittee must notify Ecology within 7 days. The Permittee must eliminate the illicit discharge within 30 days.

The Permittee must record the results of each inspection including:

- a. Time and date of the inspection.
- b. Locations inspected.
- c. Any observations of non-compliance and the remedial actions the Permittee plans to take.
- d. Name, title, and signature of the person conducting the inspection.

The Permittee must submit the results of quarterly stormwater monitoring and monthly visual inspections to Ecology by the due dates below:

Reporting Period	Months	Quarterly Results
1 <sup>st</sup> Quarter	January, February, and March	April 15
2 <sup>nd</sup> Quarter	April, May, and June	July 15
3 <sup>rd</sup> Quarter	July, August, and September	October 15
4 <sup>th</sup> Quarter	October, November, and December	January 15

4. Response to Monitoring Results Above Benchmark Values

Each time that sampling results are above a benchmark value or outside the benchmark range for pH, The Permittee must take the following actions:

- a. Conduct an inspection of the drainage area for the affected outfall to investigate the cause of the benchmark exceedance as promptly as possible, but no later than **one week** after receipt of sampling results.
- b. Identify the possible sources of stormwater contamination from industrial activity that are causing or contributing to the elevated levels of the benchmark parameter.
- c. Review the SWPPP and ensure that it fully complies with the stormwater pollution prevention requirements of Permit Condition S10. and contains the correct best management practices (BMPs) from the *Stormwater Management Manual for Western Washington*.
- d. Evaluate whether any improvements or changes to existing BMPs or additional operational source control, structural source control, or treatment BMPs are warranted to reduce stormwater contamination below the benchmark value.

Any elevated benchmark parameter levels demonstrated to be attributable to vegetative or naturally-occurring conditions do not require additional BMPs.

- e. Implement changes to existing BMPs or additional BMPs identified as needed in the investigation within 90 days of the benchmark exceedance for operational source control BMPs and within 6 months of the benchmark exceedance for structural source control BMPs. Submit an engineering report to Ecology in accordance with Chapter 173-240 WAC within 6 months of the benchmark exceedance for treatment BMPs. Implement changes to treatment BMPs or construct new treatment BMPs on the schedule in the engineering report approved by Ecology.

The Permittee may petition Ecology to extend these deadlines on a case-by-case basis.

Ecology may waive the requirement for additional controls and/or BMPs based on a technical demonstration by the Permittee that implementation of additional controls is not feasible or not necessary to prevent discharges that may cause or contribute to a violation of a water quality standard.

- f. Include a brief summary of inspection results and remedial actions taken with the monitoring report for the time period in which sample results were above benchmark values.

The Permittee must:

- Collect samples that are representative of the flow and characteristics of the discharge.
- Visually monitor the discharge at the time of sample collection. Visual monitoring must include observations of the presence of floating materials, visible sheen, discoloration, turbidity, odor, etc. in the stormwater discharge.
- Submit monitoring data and visual monitoring observations with the monthly discharge monitoring report (DMR).

#### **S1.E. Remediation Water**

Remediation water is contaminated groundwater from the upper shallow water-bearing zone of the east and west groundwater areas and stormwater that comingles with contaminated groundwater and/or contaminated soils. Contaminated groundwater and contaminated soils are groundwater or soils that have come in contact with the legacy pollutants - fluoride, cyanide, or B(a)P and are above site MTCA levels.

##### **1. Remediation Treatment and BMPs**

The Permittee must capture all remediation water generated at the site. The remediation water must be stored and evaluated for treatment. Each batch of remediation water must be tested for fluoride.

- If the fluoride results are at or above 45 mg/L, the remediation water must be routed to the thickener tanks at Facility 77 and batch-processed through Facility 71 for treatment. The effluent from Facility 71 must be conveyed through Facility 77, treated at Facility 73, and discharged through Outfall 002A.
- If the fluoride results are below 45 mg/L, the remediation must be conveyed through Facility 77, treated at Facility 73, and discharged through Outfall 002A.

The Permittee must maintain an up-to-date log book of estimated volumes, dates, and fluoride test results for all remediation waters evaluated for treatment. This information must be submitted with the corresponding monthly discharge monitoring report.

The Permittee must update their Stormwater Pollution Prevention Plan (Permit Condition S10.) to include Best Management Practices (BMPs) consistent with Ecology's 2012 *Stormwater Management Manual for Western Washington*, as amended in 2014, to remove and/or reduce sediment and suspended solids in any remediation water generated during the site cleanup.

The Permittee must notify Ecology when it first begins treating remediation water at Facility 71. The Permittee must sample the influent to Facility 71 once a week and analyze the sample for TSS, fluoride, free cyanide, and B(a)P. The Permittee must maintain records of volumes and dates for all remediation water treated in the Permittee's wastewater treatment system. This information and the sample test results must be submitted with the next monthly discharge monitoring report following receipt of the monitoring data.

2. Remediation Water AKART Study

The Permittee must prepare and submit an AKART study plan to evaluate the treatment of remediation water at Facility 71. The study plan must be submitted to Ecology for review and approval within 6 months of the planned start date of remediation water processing/treating. The Permittee must notify Ecology of the planned start date of remediation water processing/treating. The study plan must include a proposed schedule for sampling and report submittal.

The study plan must include, at a minimum three, 24-hour time-based composite samples of influent and effluent per batch of remediation water for 3 separate batches (i.e., 9 samples total). "Batch" is when the Facility 71 clarifier is full and the Permittee starts batch treatment of remediation water at Facility 71. There must be at least one day between each sample collection. Each sample must be analyzed for TSS, fluoride, free cyanide, and B(a)P. The timing of sample collection must be such that each of the effluent samples corresponds to the influent sample and the resultant analytical results can be effectively used to estimate removal efficiencies across Facility 71.

**S1.F. Overflows at Outfall 006**

Beginning on the effective date of this permit, the Permittee is authorized to discharge stormwater from the Outfall 006 sump to CDID No. 14 only during extreme rainfall events when the hydraulic capacity of the sump's pump is exceeded.

The Permittee must notify Ecology of any discharges under this subsection by providing a notice with the monthly DMR.

The discharge shall not violate Chapter 173-201A WAC, *Water Quality Standards for Surface Waters of the State of Washington*.

### **S1.G. New Tenants**

The Permittee must notify Ecology at least 60 days prior to signing a lease agreement with a new tenant that will have a process water discharge or a stormwater discharge associated with industrial activity. Millennium must provide the following information in the notification:

1. Name of tenant.
2. A description of tenant's business.
3. The proposed location of the tenant on Millennium's site.
4. A description of the tenant's proposed discharge(s) including sources, characteristics, and estimated volumes.
5. How the discharge(s) will be treated.
6. Information about how the discharge(s) will be permitted.

If the tenant's discharge(s) will be conveyed to the Permittee's wastewater treatment system for treatment or through the Permittee's outfall, the Permittee must submit a revised NPDES permit application identifying this as an additional source. Ecology may require the Permittee to submit an engineering analysis that evaluates the impact of the new wastestream on the Permittee's wastewater treatment system and outfall.

Millennium is prohibited from taking on a new tenant and their additional wastewater stream(s) until Ecology approves the revised NPDES permit application and makes a decision on whether a permit modification is required.

### **S1.H. Mixing Zone Authorization**

#### **Mixing Zone for Outfall 002A**

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

#### **Chronic Mixing Zone**

The width of the chronic mixing zone is limited to a distance of 416 feet (127 meters). The length of the chronic mixing zone extends 100 feet (30 meters) upstream and 316 feet (96 meters) downstream of the outfall. The mixing zone extends from the bottom to the top of the water column. The concentration of pollutants at the edge of the chronic zone must meet chronic aquatic life criteria and human health criteria.

#### **Acute Mixing Zone**

The width of the acute mixing zone is limited to a distance of 41.6 feet (12.7 meters) in any horizontal direction from the outfall. The length of the acute mixing zone extends 10 feet (3 meters) upstream and 31.6 feet (9.6 meters) downstream of the outfall. The mixing zone extends from the bottom to the top of the water column. The concentration of pollutants at the edge of the acute zone must meet acute aquatic life criteria.



Available Dilution (Dilution Factor)	
Acute Aquatic Life Criteria	19
Chronic Aquatic Life Criteria	77
Human Health Criteria – Carcinogen	74
Human Health Criteria - Non-carcinogen	74

## S2. Monitoring Requirements

### S2.A. Monitoring Schedule

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

Parameter	Units	Minimum Sampling Frequency	Sample Type
<b>(1) Outfall 002A Commingled Process Wastewater and Stormwater without Remediation Water <sup>a</sup> (Monitoring Point 002A)</b>			
Flow	Million Gallons per day (MGD)	Continuous <sup>i</sup>	Metered
		Monthly Average and Daily Maximum	Calculated
TSS	mg/L	1/week <sup>c</sup>	24-hr composite <sup>d</sup>
Oil and grease	mg/L	1/week <sup>c</sup>	Grab <sup>e</sup>
Fluoride	mg/L	Monthly <sup>f</sup>	24-hr composite <sup>d</sup>
Cyanide, Free (WAD) <sup>g</sup>	µg/L	Monthly <sup>f</sup>	Grab <sup>e</sup>
B(a)P	mg/L	Monthly <sup>f</sup>	24-hr composite <sup>d</sup>
Temperature <sup>h</sup>	Degrees Centigrade (°C)	Continuous <sup>i</sup>	Measurement

Parameter	Units	Minimum Sampling Frequency	Sample Type
<b>(1) Outfall 002A Commingled Process Wastewater and Stormwater without Remediation Water <sup>a</sup> (Monitoring Point 002A)</b>			
pH	Standard Units	Continuous <sup>i</sup>	Measurement
		Daily	Recorded – Instantaneous and Minimum <sup>j</sup>
Precipitation	Inches	Daily	Measurement
<b>(2) Outfall 002A Commingled Process Wastewater and Stormwater with Remediation Water <sup>k</sup> (Monitoring Point 002R)</b>			
Flow	Million Gallons per day (MGD)	Continuous <sup>i</sup>	Metered
		Monthly Average and Daily Maximum	Calculated
TSS	mg/L	1/week <sup>c</sup>	24-hr composite <sup>d</sup>
Oil and grease	mg/L	1/week <sup>c</sup>	Grab <sup>e</sup>
Fluoride	mg/L	3/week <sup>c</sup>	24-hr composite <sup>d</sup>
Cyanide, Free (WAD) <sup>g</sup>	µg/L	3/week <sup>c</sup>	Grab <sup>e</sup>
B(a)P	mg/L	3/week <sup>c</sup>	24-hr composite <sup>d</sup>
Temperature <sup>h</sup>	Degrees Centigrade(°C)	Continuous <sup>i</sup>	Measurement
pH	Standard Units	Continuous <sup>i</sup>	Measurement
		Daily	Recorded – Instantaneous and Minimum <sup>j</sup>
Precipitation	Inches	Daily	Measurement

<b>(3) Outfall 002A Whole Effluent Toxicity Testing – Final Wastewater Effluent</b>			
Acute Toxicity Testing	N/A	Two times per permit term as specified in Special Condition S12.A.	24-hr composite <sup>d</sup> or Grab <sup>e</sup>
Chronic Toxicity Testing	N/A	Effluent characterization – quarterly for one year as specified in S13.A. Quarterly testing if required in S13.C.	24-hr composite <sup>d</sup> or Grab <sup>e</sup>
<b>(4) Outfall 002A Effluent Characterization and Permit Renewal Application Requirements</b>			
See Appendix A to identify the specific pollutants in the pollutant groups listed below.			
Conventional and Non-conventional Pollutants	mg/L or µg/L	Annually <sup>m</sup>	Grab <sup>e</sup>
Priority Pollutants (PP) – Total Metals, Cyanide, and Total Phenols	µg/L	Annually <sup>m</sup>	Grab <sup>e</sup>
PP – Volatile Organic Compounds	µg/L	Annually <sup>m</sup>	Grab <sup>e</sup>
PP – Acid-extractable Compounds	µg/L	Annually <sup>m</sup>	Grab <sup>e</sup>
PP – Base-neutral Compounds	µg/L	Annually <sup>m</sup>	Grab <sup>e</sup>
PP-Pesticides/PCBs <sup>n</sup>	µg/L	Annually <sup>m</sup>	Grab <sup>e</sup>
<b>(5) Influent to Facility 71<sup>k</sup> (Monitoring Point 71IN)</b>			
Flow	gpm	Continuous <sup>i</sup>	Metered
		Monthly Average and Daily Maximum	Calculated

<b>(6) Outfall 002B Effluent<sup>k</sup></b>			
TSS	mg/L	1/week <sup>c</sup>	24-hr composite <sup>d</sup>
Fluoride	mg/L	1/week <sup>c</sup>	24-hr composite <sup>d</sup>
Cyanide, Free (WAD) <sup>g</sup>	µg/L	1/week <sup>c</sup>	Grab <sup>e</sup>
B(a)P	mg/L	1/week <sup>c</sup>	24-hr composite <sup>d</sup>
<b>(7) Outfall 003C Stormwater</b>			
TSS	mg/L	Quarterly <sup>l</sup>	Grab <sup>e</sup>
Oil and grease	mg/L	Quarterly <sup>l</sup>	Grab <sup>e</sup>
pH	Standard units	Quarterly <sup>l</sup>	Grab <sup>e</sup>
Copper	µg/L	Quarterly <sup>l</sup>	Grab <sup>e</sup>
Zinc	µg/L	Quarterly <sup>l</sup>	Grab <sup>e</sup>
Hardness	--	Annually <sup>m</sup>	Grab <sup>e</sup>
<b>(8) Outfall 003C Stormwater Characterization and Permit Renewal Application Requirements</b>			
See Appendix A to identify the specific pollutants in the pollutant groups listed below.			
Conventional and Non-conventional Pollutants	mg/L or µg/L	Annually <sup>m</sup>	Grab <sup>e</sup>
Priority Pollutants (PP) – Total Metals, Cyanide, and Total Phenols	µg/L	Annually <sup>m</sup>	Grab <sup>e</sup>
PP – Volatile Organic Compounds	µg/L	Annually <sup>m</sup>	Grab <sup>e</sup>
PP – Acid-extractable Compounds	µg/L	Annually <sup>m</sup>	Grab <sup>e</sup>

<b>(8) Outfall 003C Stormwater Characterization and Permit Renewal Application Requirements</b>			
PP – Base-neutral Compounds	µg/L	Annually <sup>m</sup>	Grab <sup>e</sup>
PP-Pesticides/PCBs <sup>n</sup>	µg/L	Annually <sup>m</sup>	Grab <sup>e</sup>
a	These monitoring frequencies apply when Millennium is not treating remediation water.		
b	Calculated values are determined using the results of the respective samples. Flow values are calculated by summing the daily measured values during the month and dividing by the number of days in the month. Average concentration values are calculated by summing the concentration values measured during the month/quarter and dividing by the total by the number of samples analyzed for that parameter during the month/quarter.		
c	1/week means one sample during each calendar week. 3/week means three samples each calendar week with at least one day between each sample.		
d	24-hour composite means a series of individual samples collected over a 24-hour period into a single container, and analyzed as one sample.		
e	Grab means an individual sample collected over a fifteen (15) minute, or less, period.		
f	Monthly means once every calendar month during alternate weeks. Samples must be collected at least a week apart.		
g	The method for cyanide analysis shall be Weak Acid Dissociable as specified in Appendix A.		
h	Temperature grab sampling must occur when the effluent is at or near its daily maximum temperature, which usually occurs in the late afternoon. If measuring temperature continuously, the 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.		
i	Continuous means uninterrupted except for brief lengths of time for calibration, power failure, or unanticipated equipment repair or maintenance. The time interval for the associated data logger must be no greater than 30 minutes. The Permittee must sample at least once every four hours for flow and temperature and hourly for pH when continuous monitoring is not possible.		
j	The Permittee must report the instantaneous maximum and minimum pH monthly. Do not average pH values.		

<b>(8) Outfall 003C Stormwater Characterization and Permit Renewal Application Requirements</b>	
k	These monitoring frequencies apply when remediation water (as defined in S1.E.) is treated in Facility 71 and/or discharged from Facility 73 through Outfall 002A.
l	Quarterly sampling periods are January through March, April through June, July through September, and October through December. The Permittee must begin quarterly monitoring for the quarter beginning on April 1, 2018, and submit results by July 15, 2018.
m	Annually means once every calendar year. The priority pollutant data collected annually may be used to satisfy permit renewal requirements.
n	The Pesticides and PCBs listed in Appendix A are not required to be tested for unless they are used at the facility.

**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.

After a portion of the composite sample for Outfall 002A and the composite sample for Outfall 002B is removed for the Permittee’s analysis, the remainder of each sample, 2 quarts or 2000 ml (minimum), must be retained until 3:00 PM of the following day. The samples must be kept refrigerated at approximately 4 degrees Celsius (°C) in the dark during collection and storage. On days when the discharge occurs over a period of time too short to collect sufficient sample for testing and retainage, hourly grab samples can be used to provide sufficient volume for testing and retainage.

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

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

The Permittee must:

1. Select and use appropriate flow measurement, field measurement, and continuous monitoring devices and methods consistent with accepted scientific practices.

2. Install, calibrate, and maintain these devices to ensure the accuracy of the measurements is consistent with the accepted industry standard, the manufacturer's recommendation, and approved O&M manual procedures for the device and the wastestream.
3. Calibrate continuous monitoring instruments weekly unless they can demonstrate that a longer period is sufficient based on monitoring records.  
The Permittee:
  - a. 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.
  - b. Must calibrate continuous chlorine measurement instruments using a grab sample analyzed in the laboratory within 15 minutes of sampling.
4. Use field measurement devices as directed by the manufacturer and do not use reagents beyond their expiration dates.
5. Establish a calibration frequency for each device or instrument in the O&M manual that conforms to the frequency recommended by the manufacturer.
6. Calibrate flow-monitoring devices at a minimum frequency of at least one calibration per year.
7. 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. The permittee must obtain accreditation for conductivity and pH if it must receive accreditation or registration for other parameters.

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

The Permittee may request a reduction of the sampling frequency after 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.

### **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 (unless otherwise specified). The Permittee must:

1. Summarize, report, and submit monitoring data obtained during each monitoring period on the electronic discharge monitoring report (DMR) form provided by Ecology within the Water Quality Permitting Portal. Include data for each of the parameters tabulated in Special Condition S2, and as required by the form. Report a value for each day sampling occurred (unless specifically exempted in the permit) and for the summary values (when applicable) included on the electronic form.

To find out more information and to sign up for the Water Quality Permitting Portal go to <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Water-quality-permits-database/>.

2. Enter the “No Discharge” reporting code for an entire DMR, for a specific monitoring point, or for a specific parameter as appropriate, if the Permittee did not discharge wastewater or a specific pollutant during a given monitoring period.
3. Report single analytical values below detection as “less than the detection level (DL)” by entering < followed by the numeric value of the detection level (e.g. < 2.0) on the DMR. If the method used did not meet the minimum DL and quantitation level (QL) identified in Appendix A, 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 and calculated total values (unless otherwise specified in the permit) using:
  - a. The reported numeric value for all parameters measured between the agency-required detection value and the agency-required quantitation value.
  - b. One-half the detection value (for values reported below detection) if the lab detected the parameter in another sample from the same monitoring point for the reporting period.
  - c. Zero (for values reported below detection) if the lab did not detect the parameter in another sample for the reporting period.



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

7. Ensure that DMRs are electronically submitted no later than the dates specified below, unless otherwise specified in this permit.
8. Submit DMRs for parameters with the monitoring frequencies specified in S2 (monthly, quarterly, annual, etc.) at the reporting schedule identified below. The Permittee must:
  - a. Submit **monthly** DMRs by the 15<sup>th</sup> day of the following month.
  - b. Submit **quarterly DMRs**, unless otherwise specified in the permit, by the 15<sup>th</sup> day of the month following the monitoring period. Quarterly sampling periods are January through March, April through June, July through September, and October through December. The Permittee must submit the first quarterly DMR on July 15, 2018 for the quarter beginning on April 1, 2018.
  - c. Submit **Annual/Single Sample DMRs**, unless otherwise specified in the permit, by January 15 for the previous calendar year. The annual sampling period is the calendar year.
  - d. Submit permit renewal application monitoring data in WQWebDMR as required in Special Condition S2. by September 1, 2022.

### **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:

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

- 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,	800-521-0323 (business hours)
Drinking Water Program	877-481-4901 (after business hours)

The Permittee must also notify the Ecology Industrial Section permit Manager by telephone for any of the above situations. Outside normal working hours, a voice mail notification to the Industrial Section permit manager or their designated backup will meet this requirement.

**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 overflow prior to the treatment works, whether or not such overflow endangers health or the environment or exceeds any effluent limit in the permit. This requirement does not include industrial process wastewater overflows to impermeable surfaces which are collected and routed to the treatment works.

**c. Report within Five Days**

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

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

**d. Waiver of Written Reports**

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

**e. All Other Permit Violation Reporting**

The Permittee must report all permit violations, which do not require immediate 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.

**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 online at <https://ecology.wa.gov/About-us/Get-involved/Report-an-environmental-issue/Report-a-spill/>.

**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.

**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 according to the approved O&M manual or as otherwise approved by Ecology.

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

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

The Permittee must:

1. Update the O&M Manual for Facility 71 and Facility 73 that meets the requirements of 173-240-150 WAC and submit it to Ecology for approval by September 1, 2018.
2. Review the O&M Manual at least annually and update the plan as needed.
3. Submit to Ecology for review and comment any substantial changes or updates to the O&M Manual whenever it incorporates them into the manual.
4. Keep the approved O&M Manual at the permitted facility.
5. Follow the instructions and procedures of this manual and any modifications to the manual.

**b. O&M manual components**

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

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

**c. Treatment system operating plan**

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

The Permittee must submit an updated Treatment System Operating Plan to Ecology by September 1, 2018. The Permittee must update and submit this plan, as necessary, to include requirements for any major modifications of the treatment system.

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

1. A baseline operating condition, which describes the operating parameters and procedures at the facility and typical influent concentrations expected at the WWTP.
2. 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.
3. 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.).

#### **S4.B. Bypass Procedures**

A bypass is the intentional diversion of waste streams from any portion of a treatment facility. This permit prohibits all bypasses except when the bypass is for essential maintenance, as authorized in Special Condition S4.B.1, or is approved by Ecology as an anticipated bypass following the procedures in S4.B.2.

Storm events that exceed the hydraulic design criteria of stormwater treatment systems may bypass the treatment system when Ecology has determined the system meets AKART requirements provided the bypass does not cause an exceedance of water quality criteria in the receiving water.

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

This permit authorizes a bypass for essential maintenance of the treatment system when necessary to ensure efficient operation of the system. The Permittee may bypass the treatment system for essential maintenance only if doing so does not cause violations of effluent limits. The Permittee is not required to notify Ecology when bypassing for essential maintenance. However, the Permittee must comply with the monitoring requirements specified in Special Condition S2.B.

2. Anticipated bypasses for non-essential maintenance.

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

- a. If a bypass is for non-essential maintenance, the Permittee must notify Ecology, if possible, at least ten (10) days before the planned date of bypass. The notice must contain:
  - A description of the bypass and the reason the bypass is necessary.
  - An analysis of all known alternatives which would eliminate, reduce, or mitigate the potential impacts from the proposed bypass.
  - A cost-effectiveness analysis of alternatives.
  - The minimum and maximum duration of bypass under each alternative.
  - A recommendation as to the preferred alternative for conducting the bypass.
  - The projected date of bypass initiation.
  - A statement of compliance with SEPA.
  - A request for modification of water quality standards as provided for in WAC 173-201A-410, if an exceedance of any water quality standard is anticipated.
  - Details of the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.
- b. For probable construction bypasses, the Permittee must notify Ecology of the need to bypass as early in the planning process as possible. The Permittee must consider the analysis required above during the project planning and design process. The project-specific engineering report as well as the plans and specifications must include details of probable construction bypasses to the extent practical. In cases where the Permittee determines the probable need to bypass early, the Permittee must continue to analyze conditions up to and including the construction period in an effort to minimize or eliminate the bypass.
- c. Ecology will determine if the Permittee has met the conditions of Special Condition S4.B.2.a. and b. and consider the following prior to issuing a determination letter, an administrative order, or a permit modification as appropriate for an anticipated bypass:
  - If the Permittee planned and scheduled the bypass to minimize adverse effects on the public and the environment.
  - If the bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. “Severe property damage” means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not include economic loss caused by delays in production.

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

## **S5. Solid Wastes**

### **S5.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.

### **S5.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.

### **S5.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. The Permittee must comply with the solid waste control plan and any modifications to the plan. The Permittee must submit an update of the solid waste control plan with the permit renewal application by September 1, 2022.

## **S6. Application for Permit Renewal or Modification for Facility Changes**

The Permittee must submit an application for permit renewal by September 1, 2022.

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



## S7. Facility Loading

### S7.A. Design Criteria

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

Parameter	Design Quantity
Maximum Design Flow at Facility 71 <sup>a</sup>	0.12 MGD
Maximum Design Flow at Facility 73 <sup>b</sup>	8.6 MGD

<sup>a</sup> As measured at the influent to Facility 71

<sup>b</sup> As measured at Outfall 002A

### S7.B. Stormwater Treatment Design Criteria

Storm events that exceed the hydraulic design criteria of stormwater treatment systems may bypass the treatment system when Ecology has determined the system meets AKART requirements. Ecology does not consider these storm events as exceedances of the established design criteria.

## S8. Non-Routine and Unanticipated Wastewater

1. Beginning on the effective date of this permit, the Permittee is authorized to discharge non-routine wastewater or unanticipated wastewater not listed on the permit application, on a case-by-case basis if approved by Ecology. Prior to any such discharge, the Permittee must contact Ecology and **at a minimum** provide the following information:
  - a. The proposed discharge location.
  - b. The nature of the activity that will generate the discharge.
  - c. Any alternatives to the discharge, such as reuse, storage, or recycling of the water.
  - d. The total volume of water it expects to discharge.
  - e. The results of the chemical analysis of the water.
  - f. The date of proposed discharge.
  - g. The expected rate of discharge discharged, in gallons per minute.
2. The Permittee must analyze the water for all constituents normally monitored for the discharge. The analysis must also include hardness, any metals that are limited by water quality standards, and any other 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 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.

## **S9. Spill Control Plan**

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

The Permittee must:

1. Submit an update of the existing spill control plan to Ecology by September 1, 2018.
2. Review the spill control plan at least annually and update the plan as needed.
3. Send any changes to the plan to Ecology.
4. Follow the plan and any modifications and supplements to the plan.

### **S9.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 plan 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.

## **S10. Stormwater Pollution Prevention Plan (SWPPP)**

### **S10.A. SWPPP Update**

The Permittee must update its Stormwater Pollution Prevention Plan (SWPPP) in accordance with the guidance document entitled *Guidance Manual for Preparing/Updating a Stormwater Pollution Prevention Plan for Industrial Facilities* (Ecology Publication No. 04-10-030). The BMPs in the SWPPP must be consistent with Ecology's 2012 *Stormwater Management Manual for Western Washington*, as amended in 2014.

The SWPPP must be submitted to Ecology for review and approval by September 1, 2018. The Permittee must implement the SWPPP update and any modifications to the plan and abide by the timeframes in the plan.

The updated plan must:

- Identify any new sources of pollutants to stormwater.
- Update the BMPs.
- Include the dates (month/year) when BMPs were implemented or action items were completed or a schedule for BMPs or action items not yet implemented or completed.

#### **S10.B. SWPPP Modifications**

The Permittee must modify the SWPPP whenever there is a change in design, construction, operation or maintenance, which causes the SWPPP to be less effective in controlling pollutants. Whenever the description of potential pollutant sources or the pollution prevention measures and controls identified in the SWPPP are inadequate, the SWPPP must be modified, as appropriate, within two (2) months of such determination. These modification requirements apply to new tenants not covered under their own NPDES permit.

The proposed modifications to the SWPPP must be submitted to Ecology at least 30 days in advance of implementing the proposed changes in the plan unless Ecology approves immediate implementation. The Permittee must implement any modifications to the SWPPP in a timely manner.

The Permittee may incorporate applicable portions of plans prepared for other purposes. Plans or portions of plans incorporated into a SWPPP become enforceable requirements of this permit.

#### **S10.C. SWPPP Inspections**

The Permittee must conduct two inspections per year – one during the wet season (October 1 – April 30) and the other during the dry season (May 1 – September 30).

1. The wet season inspection must be conducted during a rainfall event by personnel trained by Millennium in the requirements of the SWPPP to verify that the description of potential pollutant sources required under this permit are accurate; that the site map required in the SWPPP has been updated or otherwise modified to reflect current conditions; and that the controls to reduce pollutants in stormwater discharges associated with industrial activity identified in the SWPPP are being implemented and are adequate. The wet weather inspection must include observations of the presence of floating materials, suspended solids, oil sheen, discolorations, turbidity, odor, etc. in the stormwater discharges.
2. Personnel trained by Millennium in the requirements of the SWPPP must conduct the dry season inspection.

The dry season inspections must determine the presence of unpermitted non-stormwater discharges such as domestic wastewater, non-contact cooling water, or process wastewater (including leachate) to the stormwater drainage system. If an unpermitted, non-stormwater discharge is discovered, the Permittee must immediately notify Ecology.

#### **S10.D. SWPPP Evaluation**

The Permittee must evaluate whether measures to reduce pollutant loadings identified in the SWPPP are adequate and properly implemented in accordance with the terms of the permit or whether additional controls are needed. A record must be maintained summarizing the results of inspections and must include a certification, in accordance with G4., of this permit, that the facility is in compliance with the plan and in compliance with this permit. The record must identify any incidents of noncompliance.

### **S11. Outfall Evaluation**

The Permittee must inspect the submerged portion of the Outfall 002A discharge pipe and diffuser to document its integrity and continued function, once per permit cycle, but no later than March 1, 2020. If conditions allow for a photographic verification, the Permittee must include such verification in the report. The Permittee must submit the inspection report to Ecology through the Water Quality Permitting Portal – Permit Submittals application within 90 days of the inspection but no later than June 1, 2020. The Permittee must submit hard-copies of any video files to Ecology as required by Permit Condition S3.B. The Portal does not support submittal of video files.

The inspector must at minimum:

- 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 the submarine line.
- Assess physical condition of anchors used to secure the submarine line.

### **S12. Acute Toxicity**

#### **S12.A. Testing when there is No Permit Limit for Acute Toxicity**

The Permittee must:

1. Conduct acute toxicity testing on the final effluent from Outfall 002A once in the last summer and once in the last winter prior to submission of the application for permit renewal.

2. Conduct acute toxicity testing on a series of at least five concentrations of effluent, including 100% effluent and a control.
3. 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	<i>Pimephales promelas</i>	EPA-821-R-02-012
Daphnid 48-hour static test	<i>Ceriodaphnia dubia</i> , <i>Daphnia pulex</i> , or <i>Daphnia magna</i>	EPA-821-R-02-012

4. Submit the results to Ecology with the permit renewal application by September 1, 2022.

**S12.B. Sampling and Reporting Requirements**

1. The Permittee must submit all reports for toxicity testing in accordance with the most recent version of Ecology Publication No. WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. Reports must contain toxicity data, bench sheets, and reference toxicant results for test methods. In addition, the Permittee must submit toxicity test data in electronic format (CETIS export file preferred) for entry into Ecology’s database.
2. The Permittee must collect 24-hr composite effluent samples or 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 tests must meet quality assurance criteria and test conditions specified in the most recent versions of the EPA methods listed in Subsection 12.A. and the Ecology Publication No. WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If Ecology determines any test results to be invalid or anomalous, the Permittee must repeat the testing with freshly collected effluent.
5. The laboratory must use control water and dilution water meeting the requirements of the EPA methods listed in Section S12.A. or pristine natural water of sufficient quality for good control performance.
6. The Permittee must conduct whole effluent toxicity tests on an unmodified sample of final effluent.
7. The Permittee may choose to conduct a full dilution series test during compliance testing in order to determine dose response.

In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the acute critical effluent concentration (ACEC). The ACEC equals 5.0% effluent.

8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing must comply with the acute statistical power standard of 29% as defined in WAC 173-205-020. If the test does not meet the power standard, the Permittee must repeat the test on a fresh sample with an increased number of replicates to increase the power.

## S13. Chronic Toxicity

### S13.A. Effluent Characterization

The Permittee must:

1. Conduct chronic toxicity testing on the final effluent from Outfall 002A quarterly for one year starting in 2<sup>nd</sup> Quarter 2018. Quarters mean January through March, April through June, July through September, and October through December. If no discharge occurs during the required quarter, the Permittee must notify Ecology by the end of the quarter and conduct sampling on the next representative discharge that occurs in the following quarter.
2. Submit a written report to Ecology within 45 days of each sampling event. The first report is due no later than August 15, 2018. Each subsequent report is due on November 15, February 15, and May 15 of each year. Further instructions on testing conditions and test report content are in Section G. below.
3. Conduct chronic toxicity testing during effluent characterization 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 5.0% effluent. The series of dilutions should also contain the CCEC of 1.3% effluent.
4. Conduct the following chronic toxicity tests on each sample:

Freshwater Chronic Test	Species	Method
Fathead minnow survival and growth	<i>Pimephales promelas</i>	EPA-821-R-02-013
Water flea survival and reproduction	<i>Ceriodaphnia dubia</i>	EPA-821-R-02-013
Alga	<i>Pseudokirchneriella subcapitata</i> (formerly <i>Selenastrum capriocornutum</i> )	EPA-821-R-02-013

5. The effluent limit for chronic toxicity listed in Section B below applies if after one year of effluent characterization any test shows a significant difference between the control and the ACEC at the 0.05 level of significance using hypothesis testing (Appendix H, EPA/600/4-89/001).

If the limit applies, then the Permittee must immediately follow the instructions in Sections B, C, D, E, and G. If the limit does not apply, then the Permittee must follow the instructions in Sections F and G.

### **S13.B. Effluent Limit for Chronic Toxicity**

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

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

The CCEC means the maximum concentration of effluent during critical conditions at the boundary of the mixing zone, defined in Section S1.H. of this permit. The CCEC equals 1.3% effluent.

### **S13.C. Compliance with the Effluent Limit for Chronic Toxicity**

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

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

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

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

### **S13.D. Compliance Testing for Chronic Toxicity**

The Permittee must:

1. Perform the chronic toxicity tests using the CCEC, the ACEC, and a control, or with a full dilution series.
2. Conduct quarterly chronic toxicity testing on the final effluent if characterization determines that the effluent limit for chronic toxicity applies. Testing must begin within 3rd Quarter 2019.

If no discharge occurs during the required month, the Permittee must notify Ecology by the end of the month and conduct sampling on the next representative discharge that occurs in the following month.

3. Submit a quarterly written report to Ecology within 45 days of sampling and starting no later than November 15, 2019. Each subsequent monthly report is due on February 15, May 15, and August 15 of each year. Further instructions on testing conditions and test report content are in Section G below.
4. Perform compliance tests using the following species on a rotating basis and the most recent version of the following protocols:

Freshwater Chronic Test	Species	Method
Fathead minnow survival and growth	<i>Pimephales promelas</i>	EPA-821-R-02-013
Water flea survival and reproduction	<i>Ceriodaphnia dubia</i>	EPA-821-R-02-013
Alga	<i>Pseudokirchneriella subcapitata</i> (formerly <i>Selenastrum capricornutum</i> )	EPA-821-R-02-013

**S13.E. Response to Noncompliance with the Effluent Limit for Chronic Toxicity**

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

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

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



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

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

If Ecology determines that the test result was anomalous, the one additional test result will replace the anomalous test result for the purpose of determining compliance with the chronic toxicity limit.

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

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

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

### **S13.F. 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. 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 5% effluent. The series of dilutions should also contain the CCEC of 1.3% effluent.
3. Compare the ACEC to the control using hypothesis testing at the 0.05 level of significance as described in Appendix H, EPA/600/4-89/001.
4. Submit the results to Ecology with the permit renewal application with the permit renewal application by September 1, 2022.

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	<i>Pimephales promelas</i>	EPA-821-R-02-013
Water flea survival and reproduction	<i>Ceriodaphnia dubia</i>	EPA-821-R-02-013
Alga	<i>Pseudokirchneriella subcapitata</i> (formerly <i>Selenastrum capricornutum</i> )	EPA-821-R-02-013

**S13.G. Sampling and Reporting Requirements**

1. The Permittee must submit all reports for toxicity testing in accordance with the most recent version of Ecology Publication No. WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. Reports must contain toxicity data, bench sheets, and reference toxicant results for test methods. In addition, the Permittee must submit toxicity test data in electronic format (CETIS export file preferred) for entry into Ecology’s database.
2. The Permittee must collect 24-hr composite effluent samples or 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 tests must meet quality assurance criteria and test conditions specified in the most recent versions of the EPA methods listed in Section S13.A. and the Ecology Publication No. WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If Ecology determines any test results to be invalid or anomalous, the Permittee must repeat the testing with freshly collected effluent.
5. The laboratory must use control water and dilution water meeting the requirements of the EPA methods listed in Subsection S13.A. or pristine natural water of sufficient quality for good control performance.
6. The Permittee must conduct whole effluent toxicity tests on an unmodified sample of final effluent.
7. The Permittee may choose to conduct a full dilution series test during compliance testing in order to determine dose response.

In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the CCEC and the ACEC. The CCEC and the ACEC may either substitute for the effluent concentrations that are closest to them in the dilution series or be extra effluent concentrations. The CCEC equals 1.3% effluent. The ACEC equals 5.0% effluent.

8. All whole effluent toxicity tests that involve hypothesis testing must comply with the chronic statistical power standard of 39% as defined in WAC 173-205-020. If the test does not meet this power standard, the Permittee must repeat the test on a fresh sample with an increased number of replicates to increase the power.

## General Conditions

### G1. Signatory Requirements

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

Applications for permits for domestic wastewater facilities that are either owned or operated by, or under contract to, a public entity 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.E.
4. The Permittee complied with any remedial measures required under S3.E 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** **(December 2016)**

### ***List of Pollutants with Analytical Methods, Detection Limits and Quantitation Levels***

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

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

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

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

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

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

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

<b>APPENDIX A (December 2016)</b>				
<b>Conventional Pollutants</b>	<b>CAS Number (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL) <sup>1</sup> µg/L unless specified</b>	<b>Quantitation Level (QL) <sup>2</sup> µg/L unless specified</b>
Biochemical Oxygen Demand		SM5210-B		2 mg/L
Biochemical Oxygen Demand, Soluble		SM5210-B <sup>3</sup>		2 mg/L
Fecal Coliform		SM 9221E,9222	N/A	Specified in method - sample aliquot dependent
Oil and Grease (HEM) (Hexane Extractable Material)		1664 A or B	1,400	5,000
pH		SM4500-H <sup>+</sup> B	N/A	N/A
Total Suspended Solids		SM2540-D		5 mg/L

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Alkalinity, Total		SM2320-B		5 mg/L as CaCO <sub>3</sub>
Aluminum, Total	7429-90-5	200.8	2.0	10
Ammonia, Total (as N)		SM4500-NH <sub>3</sub> -B and C/D/E/G/H		20
Barium Total	7440-39-3	200.8	0.5	2.0
BTEX (benzene + toluene + ethylbenzene + m,o,p xylenes)		EPA SW 846 8021/8260	1	2
Boron, Total	7440-42-8	200.8	2.0	10.0

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Chemical Oxygen Demand		SM5220-D		10 mg/L
Chloride		SM4500-Cl B/C/D/E and SM4110 B		Sample and limit dependent
Chlorine, Total Residual		SM4500 Cl G		50.0
Cobalt, Total	7440-48-4	200.8	0.05	0.25
Color		SM2120 B/C/E		10 color units
Dissolved oxygen		SM4500-OC/OG		0.2 mg/L
Flow		Calibrated device		
Fluoride	16984-48-8	SM4500-F E	25	100
Hardness, Total		SM2340B		200 as CaCO <sub>3</sub>
Iron, Total	7439-89-6	200.7	12.5	50
Magnesium, Total	7439-95-4	200.7	10	50
Manganese, Total	7439-96-5	200.8	0.1	0.5
Molybdenum, Total	7439-98-7	200.8	0.1	0.5
Nitrate + Nitrite Nitrogen (as N)		SM4500-NO <sub>3</sub> -E/F/H		100
Nitrogen, Total Kjeldahl (as N)		SM4500-N <sub>org</sub> B/C and SM4500NH <sub>3</sub> -B/C/D/EF/G/H		300
NWTPH Dx <sup>4</sup>		Ecology NWTPH Dx	250	250
NWTPH Gx <sup>5</sup>		Ecology NWTPH Gx	250	250

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Phosphorus, Total (as P)		SM 4500 PB followed by SM4500-PE/PF	3	10
Salinity		SM2520-B		3 practical salinity units or scale (PSU or PSS)
Settleable Solids		SM2540 -F		Sample and limit dependent
Soluble Reactive Phosphorus (as P)		SM4500-P E/F/G	3	10
Sulfate (as mg/L SO <sub>4</sub> )		SM4110-B		0.2 mg/L
Sulfide (as mg/L S)		SM4500- S <sup>2</sup> F/D/E/G		0.2 mg/L
Sulfite (as mg/L SO <sub>3</sub> )		SM4500-SO3B		2 mg/L
Temperature (max. 7-day avg.)		Analog recorder or Use micro- recording devices known as thermistors		0.2° C
Tin, Total	7440-31-5	200.8	0.3	1.5
Titanium, Total	7440-32-6	200.8	0.5	2.5
Total Coliform		SM 9221B, 9222B, 9223B	N/A	Specified in method - sample aliquot dependent
Total Organic Carbon		SM5310-B/C/D		1 mg/L
Total dissolved solids		SM2540 C		20 mg/L

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Turbidity		EPA 180.1 or Meter		0.5 NTU

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<b>Metals, Cyanide &amp; Total Phenols</b>					
Antimony, Total	114	7440-36-0	200.8	0.3	1.0
Arsenic, Total	115	7440-38-2	200.8	0.1	0.5
Beryllium, Total	117	7440-41-7	200.8	0.1	0.5
Cadmium, Total	118	7440-43-9	200.8	0.05	0.25
Chromium (hex) dissolved	119	18540-29-9	SM3500-Cr C	0.3	1.2
Chromium, Total	119	7440-47-3	200.8	0.2	1.0
Copper, Total	120	7440-50-8	200.8	0.4	2.0
Lead, Total	122	7439-92-1	200.8	0.1	0.5
Mercury, Total	123	7439-97-6	1631E	0.0002	0.0005
Nickel, Total	124	7440-02-0	200.8	0.1	0.5
Selenium, Total	125	7782-49-2	200.8	1.0	1.0
Silver, Total	126	7440-22-4	200.8	0.04	0.2
Thallium, Total	127	7440-28-0	200.8	0.09	0.36

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<b>Metals, Cyanide &amp; Total Phenols</b>					
Zinc, Total	128	7440-66-6	200.8	0.5	2.5
Cyanide, Total	121	57-12-5	335.4	5	10
Cyanide, Weak Acid Dissociable	121		SM4500-CN I	5	10
Cyanide, Free Amenable to Chlorination (Available Cyanide)	121		SM4500-CN G	5	10
Phenols, Total	65		EPA 420.1		50

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<b>Acid Compounds</b>					
2-Chlorophenol	24	95-57-8	625	1.0	2.0
2,4-Dichlorophenol	31	120-83-2	625	0.5	1.0
2,4-Dimethylphenol	34	105-67-9	625	0.5	1.0
4,6-dinitro-o-cresol (2-methyl-4,6,-dinitrophenol)	60	534-52-1	625/1625B	2.0	4.0
2,4 dinitrophenol	59	51-28-5	625	1.5	3.0
2-Nitrophenol	57	88-75-5	625	0.5	1.0



<b>Appendix A (December 2016)</b>					
<b>Priority Pollutants</b>	<b>PP #</b>	<b>CAS Number (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL) <sup>1</sup> µg/L unless specified</b>	<b>Quantitation Level (QL) <sup>2</sup> µg/L unless specified</b>
<b>Acid Compounds</b>					
4-Nitrophenol	58	100-02-7	625	1.0	2.0
Parachlorometa cresol (4-chloro-3-methylphenol)	22	59-50-7	625	1.0	2.0
Pentachlorophenol	64	87-86-5	625	0.5	1.0
Phenol	65	108-95-2	625	2.0	4.0
2,4,6-Trichlorophenol	21	88-06-2	625	2.0	4.0
<b>Appendix A (December 2016)</b>					
<b>Priority Pollutants</b>	<b>PP #</b>	<b>CAS Number (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL) <sup>1</sup> µg/L unless specified</b>	<b>Quantitation Level (QL) <sup>2</sup> µg/L unless specified</b>
<b>Volatile Compounds</b>					
Acrolein	2	107-02-8	624	5	10
Acrylonitrile	3	107-13-1	624	1.0	2.0
Benzene	4	71-43-2	624	1.0	2.0
Bromoform	47	75-25-2	624	1.0	2.0
Carbon tetrachloride	6	56-23-5	624/601 or SM6230B	1.0	2.0
Chlorobenzene	7	108-90-7	624	1.0	2.0
Chloroethane	16	75-00-3	624/601	1.0	2.0
2-Chloroethylvinyl Ether	19	110-75-8	624	1.0	2.0

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<b>Volatile Compounds</b>					
Chloroform	23	67-66-3	624 or SM6210B	1.0	2.0
Dibromochloromethane (chlordibromomethane)	51	124-48-1	624	1.0	2.0
1,2-Dichlorobenzene	25	95-50-1	624	1.9	7.6
1,3-Dichlorobenzene	26	541-73-1	624	1.9	7.6
1,4-Dichlorobenzene	27	106-46-7	624	4.4	17.6
Dichlorobromomethane	48	75-27-4	624	1.0	2.0
1,1-Dichloroethane	13	75-34-3	624	1.0	2.0
1,2-Dichloroethane	10	107-06-2	624	1.0	2.0
1,1-Dichloroethylene	29	75-35-4	624	1.0	2.0
1,2-Dichloropropane	32	78-87-5	624	1.0	2.0
1,3-dichloropropene (mixed isomers) (1,2-dichloropropylene) <sup>6</sup>	33	542-75-6	624	1.0	2.0
Ethylbenzene	38	100-41-4	624	1.0	2.0
Methyl bromide (Bromomethane)	46	74-83-9	624/601	5.0	10.0
Methyl chloride (Chloromethane)	45	74-87-3	624	1.0	2.0
Methylene chloride	44	75-09-2	624	5.0	10.0
1,1,2,2-Tetrachloroethane	15	79-34-5	624	1.9	2.0

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<b>Volatile Compounds</b>					
Tetrachloroethylene	85	127-18-4	624	1.0	2.0
Toluene	86	108-88-3	624	1.0	2.0
1,2-Trans-Dichloroethylene (Ethylene dichloride)	30	156-60-5	624	1.0	2.0
1,1,1-Trichloroethane	11	71-55-6	624	1.0	2.0
1,1,2-Trichloroethane	14	79-00-5	624	1.0	2.0
Trichloroethylene	87	79-01-6	624	1.0	2.0
Vinyl chloride	88	75-01-4	624/SM6200B	1.0	2.0
<b>Priority Pollutants</b>	<b>PP #</b>	<b>CAS Number (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL) <sup>1</sup> µg/L unless specified</b>	<b>Quantitation Level (QL) <sup>2</sup> µg/L unless specified</b>
<b>Base/Neutral Compounds (compounds in bold are Ecology PBTs)</b>					
Acenaphthene	1	83-32-9	625	0.2	0.4
Acenaphthylene	77	208-96-8	625	0.3	0.6
Anthracene	78	120-12-7	625	0.3	0.6
Benzidine	5	92-87-5	625	20	40
Benzyl butyl phthalate	67	85-68-7	625	0.3	0.6
Benzo(a)anthracene	72	56-55-3	625	0.3	0.6
Benzo(b)fluoranthene (3,4-benzofluoranthene) <sup>7</sup>	74	205-99-2	610/625	0.8	1.6

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<b>Base/Neutral Compounds (compounds in bold are Ecology PBTs)</b>					
<b>Benzo(j)fluoranthene</b> <sup>7</sup>		<b>205-82-3</b>	625	0.5	1.0
Benzo(k)fluoranthene (11,12-benzofluoranthene) <sup>7</sup>	75	207-08-9	610/625	0.8	1.6
<b>Benzo(r,s,t)pentaphene</b>		<b>189-55-9</b>	625	1.3	5.0
Benzo(a)pyrene	73	50-32-8	610/625	0.5	1.0
Benzo(ghi)Perylene	79	191-24-2	610/625	0.5	1.0
Bis(2-chloroethoxy)methane	43	111-91-1	625	5.3	21.2
Bis(2-chloroethyl)ether	18	111-44-4	611/625	0.3	1.0
Bis(2-chloroisopropyl)ether	42	39638-32-9	625	0.5	1.0
Bis(2-ethylhexyl)phthalate	66	117-81-7	625	0.3	1.0
4-Bromophenyl phenyl ether	41	101-55-3	625	0.3	0.5
2-Chloronaphthalene	20	91-58-7	625	0.3	0.6
4-Chlorophenyl phenyl ether	40	7005-72-3	625	0.3	0.5
Chrysene	76	218-01-9	610/625	0.3	0.6
<b>Dibenzo (a,h)acridine</b>		<b>226-36-8</b>	610M/625M	2.5	10.0
<b>Dibenzo (a,j)acridine</b>		<b>224-42-0</b>	610M/625M	2.5	10.0
Dibenzo(a-h)anthracene (1,2,5,6-dibenzanthracene)	82	53-70-3	625	0.8	1.6
<b>Dibenzo(a,e)pyrene</b>		192-65-4	610M/625M	2.5	10.0
<b>Dibenzo(a,h)pyrene</b>		189-64-0	625M	2.5	10.0

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<b>Base/Neutral Compounds (compounds in bold are Ecology PBTs)</b>					
3,3-Dichlorobenzidine	28	91-94-1	605/625	2.0	14.0
Diethyl phthalate	70	84-66-2	625	1.9	7.6
Dimethyl phthalate	71	131-11-3	625	1.6	6.4
Di-n-butyl phthalate	68	84-74-2	625	0.5	1.0
2,4-dinitrotoluene	35	121-14-2	609/625	1.0	2.0
2,6-dinitrotoluene	36	606-20-2	609/625	1.0	2.0
Di-n-octyl phthalate	69	117-84-0	625	0.3	0.6
1,2-Diphenylhydrazine ( <i>as Azobenzene</i> )	37	122-66-7	1625B	5.0	20
Fluoranthene	39	206-44-0	625	0.3	0.6
Fluorene	80	86-73-7	625	0.3	0.6
Hexachlorobenzene	9	118-74-1	612/625	0.3	0.6
Hexachlorobutadiene	52	87-68-3	625	0.5	1.0
Hexachlorocyclopentadiene	53	77-47-4	1625B/625	2.0	4.0
Hexachloroethane	12	67-72-1	625	0.5	1.0
Indeno(1,2,3-cd)Pyrene	83	193-39-5	610/625	0.5	1.0
Isophorone	54	78-59-1	625	0.5	1.0
<b>3-Methyl cholanthrene</b>		<b>56-49-5</b>	625	2.0	8.0
Naphthalene	55	91-20-3	625	0.4	0.75
Nitrobenzene	56	98-95-3	625	0.5	1.0

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<b>Base/Neutral Compounds (compounds in bold are Ecology PBTs)</b>					
N-Nitrosodimethylamine	61	62-75-9	607/625	2.0	4.0
N-Nitrosodi-n-propylamine	63	621-64-7	607/625	0.5	1.0
N-Nitrosodiphenylamine	62	86-30-6	625	1.0	2.0
<b>Perylene</b>		<b>198-55-0</b>	625	1.9	7.6
Phenanthrene	81	85-01-8	625	0.3	0.6
Pyrene	84	129-00-0	625	0.3	0.6
1,2,4-Trichlorobenzene	8	120-82-1	625	0.3	0.6
<b>Priority Pollutants</b>	<b>PP #</b>	<b>CAS Number (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL) <sup>1</sup> µg/L unless specified</b>	<b>Quantitation Level (QL) <sup>2</sup> µg/L unless specified</b>
<b>Dioxin</b>					
2,3,7,8-Tetra-Chlorodibenzo-P-Dioxin (2,3,7,8 TCDD)	129	1746-01-6	1613B	1.3 pg/L	5 pg/L
<b>Priority Pollutants</b>	<b>PP #</b>	<b>CAS Number (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL) <sup>1</sup> µg/L unless specified</b>	<b>Quantitation Level (QL) <sup>2</sup> µg/L unless specified</b>
<b>Pesticides/PCBs</b>					
Aldrin	89	309-00-2	608	0.025	0.05
alpha-BHC	102	319-84-6	608	0.025	0.05
beta-BHC	103	319-85-7	608	0.025	0.05

<b>APPENDIX A (December 2016)</b>					
<b>Priority Pollutants</b>	<b>PP #</b>	<b>CAS Number (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL) <sup>1</sup> µg/L unless specified</b>	<b>Quantitation Level (QL) <sup>2</sup> µg/L unless specified</b>
<b>Pesticides/PCBs</b>					
gamma-BHC (Lindane)	104	58-89-9	608	0.025	0.05
delta-BHC	105	319-86-8	608	0.025	0.05
Chlordane <sup>8</sup>	91	57-74-9	608	0.025	0.05
4,4'-DDT	92	50-29-3	608	0.025	0.05
4,4'-DDE	93	72-55-9	608	0.025	0.05
4,4' DDD	94	72-54-8	608	0.025	0.05
Dieldrin	90	60-57-1	608	0.025	0.05
alpha-Endosulfan	95	959-98-8	608	0.025	0.05
beta-Endosulfan	96	33213-65-9	608	0.025	0.05
Endosulfan Sulfate	97	1031-07-8	608	0.025	0.05
Endrin	98	72-20-8	608	0.025	0.05
Endrin Aldehyde	99	7421-93-4	608	0.025	0.05
Heptachlor	100	76-44-8	608	0.025	0.05
Heptachlor Epoxide	101	1024-57-3	608	0.025	0.05
PCB-1242 <sup>9</sup>	106	53469-21-9	608 – Modified	0.05	0.2
PCB-1254	107	11097-69-1	608 – Modified	0.05	0.2
PCB-1221	108	11104-28-2	608 – Modified	0.05	0.2
PCB-1232	109	11141-16-5	608 – Modified	0.05	0.2
PCB-1248	110	12672-29-6	608 – Modified	0.05	0.2

APPENDIX A (December 2016)					
Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) <sup>1</sup> µg/L unless specified	Quantitation Level (QL) <sup>2</sup> µg/L unless specified
<b>Pesticides/PCBs</b>					
PCB-1260	111	11096-82-5	608 – Modified	0.05	0.2
PCB-1016 <sup>9</sup>	112	12674-11-2	608 – Modified	0.05	0.2
Toxaphene	113	8001-35-2	608	0.24	0.5

1. Detection level (DL) or detection limit means the minimum concentration of an analyte (substance) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero as determined by the procedure given in 40 CFR part 136, Appendix B.
2. Quantitation Level (QL) also known as Minimum Level of Quantitation (ML) – The lowest level at which the entire analytical system must give a recognizable signal and acceptable calibration point for the analyte. It is equivalent to the concentration of the lowest calibration standard, assuming that the lab has used all method-specified sample weights, volumes, and cleanup procedures. The QL is calculated by multiplying the MDL by 3.18 and rounding the result to the number nearest to (1, 2, or 5) x 10<sup>n</sup>, where n is an integer. (64 FR 30417). ALSO GIVEN AS:  
The smallest detectable concentration of analyte greater than the Detection Limit (DL) where the accuracy (precision & bias) achieves the objectives of the intended purpose. (Report of the Federal Advisory Committee on Detection and Quantitation Approaches and Uses in Clean Water Act Programs Submitted to the US Environmental Protection Agency December 2007).
3. Soluble Biochemical Oxygen Demand method note: First, filter the sample through a Millipore Nylon filter (or equivalent) - pore size of 0.45-0.50 um (prep all filters by filtering 250 ml of laboratory grade deionized water through the filter and discard). Then, analyze sample as per method 5210-B.
4. NWTPH Dx - Northwest Total Petroleum Hydrocarbons Diesel Extended Range – see <https://fortress.wa.gov/ecy/publications/documents/97602.pdf>.
5. NWTPH Gx - Northwest Total Petroleum Hydrocarbons Gasoline Extended Range – see <https://fortress.wa.gov/ecy/publications/documents/97602.pdf>.
6. 1, 3-dichloroproylene (mixed isomers) - You may report this parameter as two separate parameters: cis-1, 3-dichloropropene (10061-01-5) and trans-1, 3-dichloropropene (10061-02-6).
7. Total Benzofluoranthenes - Because Benzo(b)fluoranthene, Benzo(j)fluoranthene and Benzo(k)fluoranthene co-elute you may report these three isomers as total benzofluoranthenes.
8. Chlordane - You may report alpha-chlordane (5103-71-9) and gamma-chlordane (5103-74-2) in place of chlordane (57-74-9). If you report alpha and gamma-chlordane, the DL/PQLs that apply are 0.025/0.050.
9. PCB 1016 & PCB 1242 - You may report these two PCB compounds as one parameter called PCB 1016/1242.