

Issuance Date: August 16, 2019
Effective Date: September 1, 2019
Expiration Date: August 31, 2024

**National Pollutant Discharge Elimination System
Waste Discharge Permit No. WA0991012**

State of Washington
DEPARTMENT OF ECOLOGY
Industrial Section
P.O. 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.

Eagle US 2 LLC
dba Axiall Corporation, a Westlake Company
P.O. Box 865
Longview, Washington 98632

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

Facility Location: 3541 Industrial Way Longview, Washington 98632	Receiving Water: Columbia River
Treatment System Receiving Discharge: Nippon Dynawave Packaging Company, LLC	SIC Code: 2812 – Alkalies and Chlorine
Industry Type: Inorganic Chemicals Manufacturing, Chlorine Production	NAICS Code: 325180 – Other Basic Inorganic Chemical Manufacturing
	Categorical Industry: Chlorine Production, Chlor-Alkali Subcategory

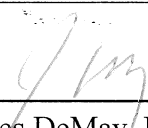

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Summary of Permit Report Submittals

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

Permit Section	Submittal	Frequency	First Submittal Date
S2.E.	Reduced Monitoring Frequency Request	As necessary	
S2.F.	Alternative Monitoring Request and Updates	As necessary	March 1, 2020 (if desired)
S3.A	Discharge Monitoring Report (DMR)	Monthly	October 15, 2019
S3.A	DMR - Chloroform	Annually	January 15, 2020
S3.A	DMR - Priority Pollutant Data - Single Sample Data	1/permit cycle	September 1, 2023
S3.F	Reporting Permit Violations	As necessary	
S4.A	Operations and Maintenance Manual	1/permit cycle	March 1, 2020
S4.A	Operations and Maintenance Manual Update or Review Confirmation Letter	Annually	January 15, 2021
S4.B	Reporting Bypasses	As necessary	
S5.C	Solid Waste Control Plan	1/permit cycle, updates submitted as necessary	September 1, 2020
S5.C	Update of the Solid Waste Control Plan	1/permit cycle	September 1, 2023
S6	Application for Permit Renewal	1/permit cycle	September 1, 2023
S7	Non-Routine and Unanticipated Discharges	As necessary	
S8	Spill Plan	1/permit cycle, updates submitted as necessary	September 1, 2020
S9	Stormwater Pollution Prevention Plan	1/permit cycle	September 1, 2020
S12	Slug Discharge Control Plan	1/permit cycle, updates submitted as necessary	September 1, 2020
S13	Annual Stormwater Report	Annually	May 15, 2020
G1	Notice of Change in Authorization	As necessary	
G4	Permit Application for Substantive Changes to the Discharge	As necessary	
G5	Engineering Report for Construction or Modification Activities	As necessary	
G7	Notice of Permit Transfer	As necessary	
G10	Duty to Provide Information	As necessary	
G21	Compliance Schedules	As necessary	

Special Conditions

S1. Discharge Limits

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

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

S1.A. Process Wastewater Discharges to Nippon Dynawave Industrial Wastewater Treatment System

Beginning on the effective date of this permit, the Permittee is authorized to discharge process wastewater and comingled stormwater to the Nippon Dynawave Industrial Wastewater Treatment System at the permitted location subject to complying with the following limits:

Effluent Limits: Outfall 001E		
Latitude 46.129838 - Longitude 122.987925		
Parameter	Maximum Daily ^a	
Chlorine, Total Residual ^b	100 mg/L	
Oxidation-Reduction Potential ^b	See Special Condition S2.F.	
Parameter	Minimum	Maximum
pH	5.0 standard units	12.0 standard units
a	Maximum daily effluent limit is the highest allowable daily discharge. The daily discharge is the maximum discharge of a pollutant measured during a calendar day.	
b	The Permittee must comply with the continuous monitoring set-points for Oxidation-Reduction Potential and pH above at which wastewater will be auto-diverted back to the wastewater treatment tanks for additional treatment prior to discharge. The established set-points must ensure continuous compliance with the Total Residual Chlorine limit.	

a. Corrective Action – Oxidation-Reduction Potential Set-Point Exceedances

The Permittee may establish oxidation-reduction potential (ORP) and pH set-points as specified in Special Condition S2.F in lieu of monitoring for Total Residual Chlorine (TRC). The auto-diversion system must be operated and maintained in accordance with Special Condition S4 to ensure continuous compliance with the TRC limit.

Failure of the auto-diversion system is not necessarily a violation of the TRC limit. Immediately upon discovery of the failed auto-diversion system, the Permittee must collect a sample of the discharge and monitor for TRC to demonstrate compliance with the established daily maximum limit. The Permittee must include all TRC sample results from the reporting period in the Discharge Monitoring Report (DMR). If multiple TRC samples are collected during a single day, the Permittee must report the maximum result.

The Permittee must include the following information with the DMR for each ORP set-point exceedance during a specified reporting period:

1. Approximate time that the discharge continued after the ORP set-point exceedance.
2. Time of TRC sample collection.
3. Actions taken to reduce the length of discharge following the ORP set-point exceedance.
4. Actions taken or planned to prevent future ORP set-point exceedances.

S1.B. Stormwater Discharges

Benchmark values are not numeric effluent limitations. Discharges that fail to meet benchmark values are not automatically considered permit violations or violations of water quality standards; however, if the Permittee fails to conduct the required corrective action after a benchmark has been exceeded, it would be a permit violation. Stormwater sampling protocol can be found in Special Condition S2.B.

Each time a sampling result is above a benchmark value or outside the benchmark range for pH, the Permittee must take the corrective action specified by Special Condition S1.B.a., b., or c. below. Corrective actions must be included in the DMR that includes the benchmark exceedance(s). The Permittee must submit an annual stormwater report summarizing corrective actions taken in accordance with Special Condition S13.

Beginning on the effective date of this permit, the Permittee is authorized to discharge stormwater to the Columbia River via Nippon Dynawave's 001/002 Ditch at the permitted location subject to complying with the following benchmarks and associated corrective actions.

The Permittee must comply with the terms and conditions included in Special Condition S10.

Effluent Benchmarks: Outfall 002E		
Latitude 46.130833 - Longitude 122.991103		
Parameter	Average Monthly (intermittent) ^a	
Copper	7.6 micrograms per liter (µg/L)	
Lead	25.4 µg/L	
Zinc	55.8 µg/L	
Turbidity	42 Nephelometric Turbidity Units (NTU)	
Biochemical Oxygen Demand, five-day (BOD ₅)	13.1 milligrams per liter (mg/L)	
Oil and Grease	15.4 mg/L	
Parameter	Minimum	Maximum
pH	6.0 standard units	9.0 standard units
a	Average monthly (intermittent) 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.	

a. Level One Corrective Actions – Operational Source Control BMPs

Permittees that exceed any applicable benchmark shall complete a Level 1 Corrective Action within 14 days of receipt of sampling results for each parameter exceeded in accordance with the following:

1. Conduct an inspection to investigate the cause.
2. Review the SWPPP and ensure that it fully complies with Special Condition S9 and contains the correct BMPs.
3. Make appropriate revisions to the SWPPP to include additional Operational Source Control BMPs with the goal of achieving the applicable benchmark value(s) in future discharges.

b. Level Two Corrective Actions – Structural Source Control BMPs

Permittees that exceed an applicable benchmark value for any three months during a calendar year shall complete a Level 2 Corrective Action in accordance with the following:

1. Review the SWPPP and ensure that it fully complies with Special Condition S9.

2. Make appropriate revisions to the SWPPP to include additional Structural Source Control BMPs with the goal of achieving the applicable benchmark value(s) in future discharges.
3. Installation of structural source control BMPs must be installed as soon as possible, but no later than August 31st of the following year. The facility may request an extension if August 31st is not achievable.
4. Ecology may waive the requirement for additional Structural Source Control BMPs if they are demonstrated to be not feasible or unnecessary to prevent discharges that may cause or contribute to a violation of a water quality standard.
5. While a time extension is in effect and during the calendar year, benchmark exceedances for the same parameter do not count towards additional Level 2 or 3 Corrective Actions.

c. Level Three Corrective Actions – Treatment BMPs

Permittees that exceed an applicable benchmark for any six months during a calendar year shall complete a Level 3 Corrective Action in accordance with the following:

1. Review the SWPPP and ensure that it fully complies with Special Condition S9.
2. Make appropriate revisions to the SWPPP to include additional Treatment BMPs with the goal of achieving the applicable benchmark value(s) in future discharges. Revisions shall include additional operational and/or structural source control BMPs if necessary for proper performance and maintenance of Treatment BMPs.
3. Before installing the treatment BMPs that require the site-specific design or sizing of structures, equipment, or processes to collect, convey, treat, reclaim, or dispose of industrial stormwater, the Permittee shall submit an engineering report to Ecology for review and approval.
4. The engineering report shall be submitted no later than May 15th of the following year, unless otherwise specified by an Order.
5. The installation of the new Treatment BMP must be completed by September 30th the following year, unless otherwise specified by an Order.
6. Ecology may waive the requirement for Treatment BMPs if they are demonstrated to be not feasible or unnecessary to prevent discharges that may cause or contribute to a violation of a water quality standard.
7. While a time extension is in effect and during the following calendar year, benchmark exceedances for the same parameter do not count towards additional Level 2 or 3 Corrective Actions.

S1.C. Clean Water Sump Discharges

Beginning on the effective date of this permit, the Permittee is authorized to discharge stormwater and wastewater from the Clean Water Sump to the Columbia River via Nippon Dynawave’s Outfall 001/002 at the permitted location subject to complying with the following limits:

Effluent Limits: Outfall 003E (via Nippon Dynawave’s Outfall 001/002) Latitude 46.130902 - Longitude 122.988575		
Parameter	Minimum	Maximum
pH	6.0 standard units	9.0 standard units
Flow rate to Caustic Sump ^a	252 gallons per minute (gpm) ^b	N/A
a	Discharges from the Clean Water Sump to Nippon Dynawave’s Outfall 001/002 are prohibited during normal flow conditions. Flow rates from the Clean Water Sump to the Caustic Sump of less than 252 gpm are considered normal flow conditions.	
b	This limit only applies while stormwater is being discharged from Outfall 003E.	

In addition to the effluent limits above, the Permittee must comply with the following conditions:

1. The discharge of process wastewater streams not identified in the permit application are prohibited.
2. The discharge of dangerous waste is prohibited.

S1.D. Mixing Zone Authorization (via Nippon Dynawave’s Outfall 001/002)

The paragraphs below define the maximum boundaries of the mixing zones.

1. Chronic Mixing Zone

Nippon Dynawave Outfall 001

The chronic mixing zone is a circle limited to a radius of 228 feet (69.5 meters)_measured from the center of each discharge port. The mixing zone extends from the discharge ports 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.

Nippon Dynawave Outfall 002

The chronic mixing zone is a circle limited to a radius of 221 feet (67.4 meters)_measured from the center of each discharge port. The mixing zone extends from the discharge ports 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.

2. Acute Mixing Zone

Nippon Dynawave Outfall 001

The acute mixing zone is a circle limited to a radius of 22.8 feet (6.95 meters) measured from the center of each discharge port. The mixing zone extends from the discharge ports to the top of the water column. The concentration of pollutants at the edge of the acute zone must meet acute aquatic life criteria.

Nippon Dynawave Outfall 002

The acute mixing zone is a circle limited to a radius of 22.1 feet (6.74 meters) measured from the center of each discharge port. The mixing zone extends from the discharge ports to the top of the water column. The concentration of pollutants at the edge of the acute zone must meet acute aquatic life criteria.

Criteria	Available Dilution (Dilution Factor) – Outfall 001	Available Dilution (Dilution Factor) – Outfall 002
Acute Aquatic Life	16.0	27.8
Chronic Aquatic Life	104.5	97.5
Human Health - Carcinogen	104.5	97.5
Human Health - Non-carcinogen	104.5	97.5

S1.E. Sanitary Wastewater Discharge

Beginning on the effective date of this permit, the Permittee is authorized to discharge sanitary wastewater to Nippon Dynawave Packaging Company, LLC’s sanitary wastewater treatment plant (Nippon Dynawave Sanitary Treatment Plant). The Permittee must comply with the terms and conditions included in Special Condition S10.

S2. Monitoring Requirements

S2.A. Monitoring Schedule

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

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
(1) Process Wastewater to Nippon Dynawave Industrial Treatment Plant (Outfall 001E)			
Flow	Gallons per day (gpd)	Continuous ^a	Metered/recorded Report Daily Maximum and Monthly Average

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
pH ^c	standard units	Continuous ^a	Metered/recorded Report Daily Instantaneous Minimum and Maximum
Total Suspended Solids (TSS)	Milligrams per liter (mg/L)	Daily	Composite Sample (24 hour) ^b
Chlorine, Total Residual ^f	mg/L	Daily, unless alternative monitoring is approved in accordance with Special Condition S2.F.	Grab ^d
Oxidation-Reduction Potential (ORP) ^f	millivolts (mV)	Continuous ^a	Metered/recorded Report Daily Instantaneous Minimum and Maximum
Chloroform ^h	Micrograms per liter (µg/L)	Once per year	Grab ^d
(2) Process Wastewater Characterization – Process Wastewater to Nippon Dynawave Industrial Treatment System (Outfall 001E)			
See Appendix A to identify the specific pollutants in the priority pollutant groups listed below.			
Cyanide	µg/L	Once/permit cycle	Grab ^d
Total Phenolic Compounds	µg/L	Once/permit cycle	Grab ^d
Priority Pollutants (PP) – Total Metals	µg/L; nanograms per liter (ng/L) for mercury	Once/permit cycle	Composite Sample (24 hour) ^b Grab ^d for mercury
PP – Volatile Organic Compounds	µg/L	Once/permit cycle	Grab ^d
PP – Acid-extractable Compounds	µg/L	Once/permit cycle	Composite Sample (24 hour) ^b
PP – Base-neutral Compounds	µg/L	Once/permit cycle	Composite Sample (24 hour) ^b
PP – Dioxin	Picograms per liter (pg/L)	Once/permit cycle	Composite Sample (24 hour) ^b
PP – Pesticides/PCBs	µg/L	Once/permit cycle	Composite Sample (24 hour) ^b
(3) Stormwater Discharge (Outfall 002E)			
Copper	µg/L	Monthly ^e	Grab ^d
Lead	µg/L	Monthly ^e	Grab ^d
Zinc	µg/L	Monthly ^e	Grab ^d

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
Chloride	mg/L	Monthly ^e	Grab ^d
Total Dissolved Solids	mg/L	Monthly ^e	Grab ^d
E. coli	#/100 mL	Monthly ^e	Grab ^d
Turbidity	Nephelometric Turbidity Units (NTU)	Monthly ^e	Grab ^d
Biochemical Oxygen Demand, five-day (BOD ₅)	mg/L	Monthly ^e	Grab ^d
Oil and Grease	mg/L	Monthly ^e	Grab ^d
pH ^c	standard units	Monthly ^e	Grab ^d
(4) Clean Water Sump Discharge (Outfall 003E)			
Flow from Clean Water Sump to Caustic Sump	gpm	Continuous during each defined event ^{g, i}	Metered/Recorded Report Daily Instantaneous Maximum
Event Duration	minutes	Once per Defined Event ^g	Metered/Recorded Report Once per Defined Event
Event Volume	gallons	Once per Defined Event ^g	Metered/Recorded Report Once per Defined Event
Mercury	ng/L	Monthly ^e	Grab ^d
TSS	mg/L	Monthly ^e	Grab ^d
Chlorine, Total Residual ^f	mg/L	Once per Defined Event ^g	Grab ^d
ORP	mV	Continuous during each defined event ^{g, i}	Metered/Recorded Report Daily Instantaneous Minimum and Maximum
pH ^c	standard units	Continuous during each defined event ^{g, i}	Metered/Recorded Report Daily Instantaneous Minimum and Maximum
Temperature	degrees Celsius (°C)	Once per Defined Event ^g	Grab ^d
a	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 daily when continuous monitoring is not possible.		
b	24-hour composite means a series of individual samples collected over a 24-hour period into a single container, and analyzed as one sample.		

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
c	The Permittee must report the instantaneous maximum and minimum pH monthly. Do not average pH values.		
d	Grab means an individual sample collected over a fifteen (15) minute, or less, period.		
e	Monthly means once every calendar month.		
f	The Permittee may request alternative monitoring for oxidation-reduction potential (ORP) in lieu of daily monitoring for total residual chlorine. The alternative monitoring request must follow the procedures included in Special Condition S2.F.		
g	Defined event means each discharge from the Clean Water Sump, beginning when the valve to Nippon Dynawave's E-sump discharge line is manually opened and ending when the valve to Nippon Dynawave's E-sump discharge line is manually closed.		
h	Chloroform must be sampled once during each calendar year from the batch discharge of the chlorinated wastewater stream.		
i	Continuous during each defined event means uninterrupted during each defined event 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 monitor once per defined event when continuous monitoring is not possible.		

S2.B. Sampling and Analytical Procedures

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

Sampling and analytical methods used to meet the monitoring requirements specified in this permit must conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 (or as applicable in 40 CFR subchapters N [Parts 400–471] or O [Parts 501-503]) unless otherwise specified in this permit.

Ecology may only specify alternative methods for parameters without limits and for those parameters without an EPA approved test method in 40 CFR Part 136.

Sampling of stormwater at each designated location must occur in accordance with Special Condition S4 of Ecology's *Industrial Stormwater General Permit* (2015).

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

The Permittee must:

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

2. Install, calibrate, and maintain these devices to ensure the accuracy of the measurements is consistent with the accepted industry standard, the manufacturer's recommendation, and approved O&M manual procedures for the device and the wastestream.
3. Calibrate continuous monitoring instruments weekly unless it can demonstrate a longer period is sufficient based on monitoring records. The Permittee:
 - a. May calibrate apparatus for continuous monitoring of dissolved oxygen by air calibration.
 - b. Must calibrate continuous pH measurement instruments using a grab sample analyzed in the lab with a pH meter calibrated with standard buffers and analyzed within 15 minutes of sampling.
 - c. Must calibrate continuous chlorine measurement instruments using a grab sample analyzed in the laboratory within 15 minutes of sampling.
4. Calibrate micro-recording temperature devices, known as thermistors, using protocols from Ecology's Quality Assurance Project Plan Development Tool (*Standard Operating Procedures for Continuous Temperature Monitoring of Fresh Water Rivers and Streams Version 1.0 10/26/2011*). This document is available online at
<https://fortress.wa.gov/ecy/publications/documents/1803205.pdf>
Calibration as specified in this document is not required if the Permittee uses recording devices certified by the manufacturer.
5. Use field measurement devices as directed by the manufacturer and do not use reagents beyond their expiration dates.
6. Establish a calibration frequency for each device or instrument in the O&M manual that conforms to the frequency recommended by the manufacturer.
7. Calibrate flow-monitoring devices at a minimum frequency of at least one calibration per year.
8. Maintain calibration records for at least three years.

S2.D. Laboratory Accreditation

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

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

S2.F. Alternative Monitoring – Total Residual Chlorine

The Permittee may request alternative monitoring for oxidation-reduction potential (ORP) in lieu of total residual chlorine (TRC) monitoring. Alternative monitoring approved during the previous permit cycle will remain in effect until March 1, 2020.

The Permittee must submit the following to Ecology for review and approval:

1. ORP and pH set-points for the auto-diversion system to ensure continuous compliance with the TRC limit.
2. Methods used to determine the set-points for ORP and pH.

Any changes to the approved set-points or the auto-diversion system must be submitted to Ecology for review and approval no later than 30 days prior to the planned change. The Permittee must conduct TRC monitoring upon Ecology request and during the specified events defined in Special Condition S1.A.a.

Upon Ecology request, the Permittee must review and confirm that the set-points for ORP and pH are ensuring continuous compliance with the TRC limit.

Ecology may revoke the alternative monitoring allowance if any of the following occur:

1. Auto-diversion system failures occur frequently or for extended periods of time.
2. TRC results are above the permitted limit at the approved set-points.
3. Errors with the continuous pH and ORP probes occur frequently or for extended periods of time.
4. Other evidence is received indicating that the discharge is not in compliance with the permitted TRC limit.

Ecology will notify the Permittee in writing of the revocation of the alternative monitoring allowance and provide information on the determination to revoke the allowance.

S3. Reporting and Recording Requirements

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

S3.A. Discharge Monitoring Reports

The first monitoring period begins on the effective date of the permit (unless otherwise specified). The Permittee must:

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

To find out more information and to sign up for the Water Quality Permitting Portal go to <http://ecyapwq/wqwebportal/>

2. Ensure that DMRs are electronically submitted no later than the dates specified below, unless otherwise specified in this permit.
3. Submit DMRs for parameters with the monitoring frequencies specified in S2 (monthly, quarterly, annual, etc.) at the reporting schedule identified below. The Permittee must:
 - a. Submit **monthly** DMRs by the 15th day of the following month.
 - b. Submit **annual** DMRs, unless otherwise specified in the permit, by January 15 for the previous calendar year. The annual sampling period is the calendar year.
 - c. Submit permit renewal application monitoring data in WQWebDMR as required in Special Condition S2 by September 1, 2023.
4. 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.
5. Report single analytical values below detection as “less than the detection level (DL)” by entering < followed by the numeric value of the detection level (e.g. < 2.0) on the DMR. If the method used did not meet the minimum DL and quantitation level (QL) identified in the permit, report the actual QL and DL in the comments or in the location provided.

6. Report single analytical values between the detection level (DL) and the quantitation level (QL) by entering the estimated value, the code for estimated value/below quantitation limit (j) and any additional information in the comments. Submit a copy of the laboratory report as an attachment using WQWebDMR.
7. Report the test method used for analysis in the comments if the laboratory used an alternative method not specified in the permit and as allowed in Appendix A.
8. Calculate average values and calculated total values (unless otherwise specified in the permit) using:
 - a. The reported numeric value for all parameters measured between the detection value and the quantitation value for the sample analysis.
 - b. One-half the detection value (for values reported below detection) if the lab detected the parameter in another sample from the same monitoring point for the reporting period.
 - c. Zero (for values reported below detection) if the lab did not detect the parameter in another sample for the reporting period.
9. Report single-sample grouped parameters (for example: priority pollutants, PAHs, pulp and paper chlorophenolics, TTOs) on the WQWebDMR form and include: sample date, concentration detected, detection limit (DL) (as necessary), and laboratory quantitation level (QL) (as necessary).

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

S3.B. Permit Submittals and Schedules

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

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

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

S3.C. Records Retention

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

S3.D. Recording of Results

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

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

S3.E. Additional Monitoring by the Permittee

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

S3.F. Reporting Permit Violations

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

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

a. Immediate Reporting

The Permittee must report any noncompliance that may endanger health or the environment immediately to the Department of Ecology's Regional Office 24-hour number listed below:

Southwest Regional Office: 360-407-6300

b. Twenty-Four-Hour Reporting

The Permittee must report the following occurrences of noncompliance by telephone, to Ecology at the telephone number 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 Special Condition S1.A. or S1.C. 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.

S3.I. Dangerous Waste Discharge Notification

The Permittee must notify the privately-owned treatment plant and Ecology in writing of the intent to discharge into the privately-owned treatment plant any substance designated as a dangerous waste in accordance with the provisions of WAC 173-303-070. It must make this notification at least 90 days prior to the date that it proposes to initiate the discharge.

The Permittee must not discharge this substance until authorized by Ecology and the privately-owned treatment plant. It must also comply with the notification requirements of Special Condition S7 and General Condition G4.

S3.J. Spill Notification

The Permittee must notify the privately-owned treatment plant immediately (as soon as discovered) of all discharges that could cause problems to the privately-owned treatment plant, such as process spills and unauthorized discharges (including slug discharges).

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 that meets the requirements of 173-240-150 WAC and submit it to Ecology for approval by March 1, 2020.
2. Review the O&M Manual at least annually and confirm this review by letter to Ecology by January 15 of each year.
3. Submit to Ecology for review and approval substantial changes or updates to the O&M Manual.
4. Keep the approved O&M Manual at the permitted facility.
5. Follow the instructions and procedures of this manual.

b. O&M Manual Components

In addition to the requirements of WAC 173-240-150, the O&M Manual must include:

1. Emergency procedures for plant shutdown and cleanup in the event of a wastewater system upset, spill, failure, or demand by the privately owned treatment works.
2. A review of system components which if failed could pollute surface water or could impact human health. Provide a procedure for a routine schedule of checking the function of these components.
3. Wastewater system maintenance procedures that contribute to the generation of process wastewater.

4. Any directions to maintenance staff when cleaning, or maintaining other equipment or performing other tasks which are necessary to protect the operation of the wastewater system (for example, defining maximum allowable discharge rate for draining a tank, blocking all floor drains before beginning the overhaul of a stationary engine).
5. Wastewater sampling protocols and procedures for compliance with the sampling and reporting requirements in the wastewater discharge permit.
6. Minimum staffing adequate to operate and maintain the treatment processes and carry out compliance monitoring required by the permit.
7. Treatment plant process control monitoring schedule.
8. Auto-diversion system operation and maintenance procedures, including the following, at a minimum:
 - a. Methods for identifying failures of the auto-diversion system.
 - b. Procedures for responding to auto-diversion system failures, including immediate TRC sampling and terminating the discharge, if necessary.
 - c. Any routine maintenance necessary to ensure the auto-diversion system continues to operate properly.
9. Clean Water Sump discharge operating procedures, including the following, at a minimum:
 - a. Methods for determining the flow rate from the Clean Water Sump to the Caustic Sump.
 - b. Procedures for commencing and terminating discharges through Nippon Dynawave's Outfall 001/002 when flows in the Clean Water Sump exceed the specified flow rate.
 - c. Best Management Practices (BMPs) necessary to reduce or prevent the discharge of pollutants, including, but not limited to, copper, zinc, turbidity, and process wastewater spills.
 - d. Methods for identifying spills of unauthorized process wastewater to the Clean Water Sump.

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.

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

This permit allows bypasses for essential maintenance of the treatment system when necessary to ensure efficient operation of the system.

The Permittee may bypass the treatment system for essential maintenance only if doing so does not cause violations of effluent limits. The Permittee is not required to notify Ecology when bypassing for essential maintenance. However the Permittee must comply with the monitoring requirements specified in Special Condition S2.A.

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 recurrence of the bypass.
- b. For probable construction bypasses, the Permittee must notify Ecology of the need to bypass as early in the planning process as possible. The Permittee must consider the analysis required above during the project planning and design process.

The project-specific engineering report as well as the plans and specifications must include details of probable construction bypasses to the extent practical. In cases where the Permittee determines the probable need to bypass early, the Permittee must continue to analyze conditions up to and including the construction period in an effort to minimize or eliminate the bypass.

- c. Ecology will determine if the Permittee has met the conditions of Special Condition S4.B.2 a and b and consider the following prior to issuing a determination letter, an administrative order, or a permit modification as appropriate for an anticipated bypass:

- If the Permittee planned and scheduled the bypass to minimize adverse effects on the public and the environment.
- If the bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. “Severe property damage” means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- If feasible alternatives to the bypass exist, such as:
 - The use of auxiliary treatment facilities.
 - Retention of untreated wastes.
 - Stopping production.
 - Maintenance during normal periods of equipment downtime, but not if the Permittee should have installed adequate backup equipment in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance.
 - Transport of untreated wastes to another treatment facility.

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

a. Submittal Requirements

The Permittee must:

1. Submit a solid waste control plan to Ecology by September 1, 2020.
2. Submit to Ecology any proposed revision or modification of the solid waste control plan for review and approval at least 30 days prior to implementation
3. Comply with the plan and any modifications.

4. Submit an update of the solid waste control plan by September 1, 2023.

b. Solid Waste Control Plan Content

The solid waste control plan must:

1. Follow Ecology's guidance for preparing a solid waste control plan (<https://fortress.wa.gov/ecy/publications/documents/0710024.pdf>) and address all solid wastes generated by the permittee.
2. Include at a minimum a description, source, generation rate, and disposal methods of these solid wastes.
3. Not conflict with local or state solid waste regulations.

S6. Application for Permit Renewal or Modification for Facility Changes

The Permittee must submit an application for renewal of this permit by September 1, 2023.

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

S7. Non-Routine and Unanticipated Wastewater

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

3. The Permittee must limit the discharge rate, as referenced in subpart 1.g above, so it will not cause erosion of ditches or structural damage to culverts and their entrances or exits.
4. The discharge cannot proceed until Ecology has reviewed the information provided and has authorized the discharge by letter to the Permittee or by an Administrative Order. Once approved and if the proposed discharge is to a municipal storm drain, the Permittee must obtain prior approval from the municipality and notify it when it plans to discharge.

S8. Spill Control Plan

S8.A. Spill Control Plan Submittals and Requirements

The Permittee must:

1. Submit to Ecology an update of the spill control plan by September 1, 2020.
2. Review the plan at least annually and update the spill plan as needed.
3. Send changes to the plan to Ecology for review.
4. Follow the plan and any supplements throughout the term of the permit.

S8.B. Spill Control Plan Components

The spill control plan must include the following:

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

The Permittee may submit plans and manuals required by 40 CFR Part 112, contingency plans required by Chapter 173-303 WAC, or other plans required by other agencies, which meet the intent of this section. Approval of the Spill Control Plan with respect to this requirement does not constitute approval of the plans and manuals with respect to the underlying requirement.

S9. Stormwater Pollution Prevention Plan (SWPPP)

S9.A. SWPPP Submittals and Requirements

The Permittee must:

1. Prepare and submit to Ecology for review, by September 1, 2020, an update to the SWPPP for the facility.
2. Review the SWPPP and update it as necessary.
3. Follow the current SWPPP and implement all updates to the SWPPP within 30 days of revision.
4. Keep the current SWPPP on the plant site and make it readily available to facility personnel and Ecology upon request.

S9.B. SWPPP Components

The SWPPP must include a site map, a detailed assessment of the facility, and a detailed description of the best management practices (BMPs).

1. The site map must identify:
 - a. The scale or relative distances between significant structures and drainage systems.
 - b. Significant features.
 - c. The stormwater drainage and discharge structures and identify, by name, any other party other than the Permittee that owns any stormwater drainage or discharge structures.
 - d. The stormwater discharge areas for each stormwater discharge outfall, including stormwater runoff from any other party other than the Permittee.
 - e. Each sampling location.
 - f. Paved areas and buildings.
 - g. Areas of pollutant contact (actual or potential) associated with specific industrial activities.
 - h. Surface water locations (including wetlands and drainage ditches).
2. The facility assessment shall include a description of the facility, an inventory of facility activities and equipment that contribute to or have the potential to contribute any pollutants to stormwater, and an inventory of materials that contribute to or have the potential to contribute pollutants to stormwater.
3. Identify the BMPs necessary to provide all known, available, and reasonable methods of prevention, control, and treatment (AKART) of stormwater pollution, ensure the discharge meets the discharge benchmark values set forth in Special Condition S1, and ensure the discharge does not cause or contribute to a violation of the water quality standards. BMPs may include, but are not limited to, source controls, treatment methods, and employee training.

- a. The Permittee shall describe each BMP selected to eliminate or reduce the potential to contaminate stormwater and prevent violations of water quality standards. The SWPPP must explain in detail how and where the selected BMPs will be implemented.
 - b. The Permittee shall include, at a minimum, each of the following mandatory BMPs in the SWPPP and implement the BMPs:
 - i. Good Housekeeping: The SWPPP shall include BMPs that define ongoing maintenance and cleanup, as appropriate, of areas which may contribute pollutants to stormwater discharges. The SWPPP shall include the schedule/frequency for completing each housekeeping task, based upon industrial activity, sampling results, and observations made during inspections.
 - ii. Preventative Maintenance: The SWPPP shall include BMPs to inspect and maintain the stormwater drainage, source controls, treatment systems (if any), and plant equipment and systems that could fail and result in contamination of stormwater. The SWPPP shall include the schedule/frequency for completing each maintenance task.
 - c. Selected BMPs must be included from the Stormwater Management Manual for Western Washington (SWMMWW).

If the selected BMP is not included in the SWMMWW, the Permittee must submit technical information for the selected BMP to Ecology for review and approval.
4. The Permittee shall incorporate and implement the following BMPs to reduce potential fecal coliform contamination in stormwater runoff:
- a. Use all known, available, and reasonable methods to prevent rodents, birds, and other animals from feeding/nesting/roosting at the facility. Nothing in this section shall be construed as allowing violations of any applicable federal, state, or local statutes, ordinances, or regulations including the Migratory Bird Treaty Act.
 - b. Perform at least one annual dry weather inspection of the stormwater system to identify and eliminate sanitary sewer cross-connections.
 - c. Install structural source control BMPs to address on-site activities and sources that could cause bacterial contamination (e.g., dumpsters, compost piles, food waste, and animal products).
 - d. Implement operational source control BMPs to prevent bacterial contamination from any known sources of fecal coliform bacteria (e.g., animal waste).
 - e. Conduct additional bacteria-related sampling and/or BMPs, if ordered by Ecology.

5. Employee Training: The SWPPP shall include BMPs to provide SWPPP training for employees who have duties in areas of industrial activities subject to this permit. At a minimum, the training plan shall include:
 - a. The content of the training.
 - i. An overview of what is in the SWPPP.
 - ii. How employees make a difference in complying with the SWPPP and preventing contamination of stormwater.
 - iii. Spill response procedures, good housekeeping, maintenance requirements, and material management practices.
 - b. How the Permittee will conduct training.
 - c. The frequency/schedule of training. The Permittee shall train employees annually, at a minimum.
 - d. A log of the dates on which specific employees received training.

S9.C. Inspections

The Permittee shall conduct and document visual inspections of the site each month. Each inspection shall include:

1. Observations made at stormwater sampling locations and any other areas where stormwater is discharged off-site or to waters of the state.
2. Observations for the presence of floating materials, visible oil sheen, discoloration, turbidity, or odor in the stormwater.
3. Observations for the presence of illicit discharges such as domestic wastewater, noncontact cooling water, or process wastewater.
 - a. If an illicit discharge is discovered, the Permittee shall notify Ecology in accordance with Special Condition S3.F.
 - b. The permittee shall eliminate the illicit discharge as soon as possible, but no later than 7 days after discovery.
4. A verification that the descriptions of potential pollutant sources identified in the SWPPP are accurate.
5. A verification that the site map in the SWPPP reflects current conditions.
6. An assessment of all BMPs that have been implemented, noting all of the following:
 - a. Effectiveness of BMPs inspected.
 - b. Locations of BMPs that need maintenance.
 - c. Reason maintenance is needed and a schedule for maintenance.
 - d. Locations where additional or different BMPs are needed and the rationale for the additional or different BMPs.

7. The Permittee shall record the results of each inspection in an inspection report or checklist and keep the records on-site, as part of the SWPPP, for Ecology review. The Permittee shall ensure each inspection report documents the observations, verifications, and assessments required in Special Condition S9.C.1 through 6 and includes:
 - a. Time and date of the inspection.
 - b. Locations inspected.
 - c. Statements that, in the judgement of 1) the person conducting the site inspection, and 2) the person described in General Condition G2, the site is either in compliance or out of compliance with the SWPPP and this permit.
 - d. A summary report and a schedule of implementation of the remedial actions that the Permittee plans to take if the site inspection indicates that the site is out of compliance. The remedial actions taken must meet the requirements of the SWPPP and the permit.
 - e. Name, title, and signature of the person conducting the site inspection, and the following statement: "I certify that this report is true, accurate, and complete, to the best of my knowledge and belief."
8. The Permittee shall report non-compliance identified during an inspection in accordance with the requirements of Special Condition S3.F.

S10. Prohibited Discharges

S10.A. Process Wastewater Discharges

The Permittee must comply with these General and Specific Prohibitions for the discharge of process wastewater to the Nippon Dynawave Industrial Treatment Plant.

a. General Prohibitions

The Permittee must not introduce into the privately owned treatment system pollutant(s) which cause Pass Through or Interference.

b. Specific Prohibitions

In addition, the Permittee must not introduce the following into the privately owned treatment system:

1. Pollutants which create a fire or explosion hazard in the privately owned treatment system, including, but not limited to, waste streams with a closed cup flashpoint of less than 60 degrees C (140 degrees F) using the test methods specified in 40 CFR 261.21.
2. Solid or viscous pollutants in amounts, which will cause obstruction to the flow in the privately owned treatment system resulting in interference.

3. Any pollutant (including oxygen-demanding pollutants (BOD₅, etc.), released in a discharge at a flow rate and/or pollutant concentration that will cause interference with the privately owned treatment system.
4. Heat in amounts which will inhibit biological activity in the privately owned treatment system resulting in interference, but in no case heat in such quantities that the temperature at the privately owned treatment system exceeds 40 degrees C (104 degrees F) unless the approval authority, upon request of the privately owned treatment system, approves alternative temperature limits.
5. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through.
6. Pollutants which result in the presence of toxic gases, vapors, or fumes within the privately owned treatment system in a quantity that may cause acute worker health and safety problems.
7. Any trucked or hauled pollutants, except at discharge points designated by the privately owned treatment system.
8. Pollutants that will cause corrosive structural damage to the privately owned treatment system.
9. Sanitary wastewaters.

c. Prohibited Unless Approved

Any of the following discharges are prohibited unless approved by Ecology under extraordinary circumstances (such as a lack of direct discharge alternatives due to combined sewer service or a need to augment sewage flows due to septic conditions):

1. Noncontact cooling water in significant volumes.
2. Storm water and other direct inflow sources.
3. Wastewaters significantly affecting system hydraulic loading, which do not require treatment or would not be afforded a significant degree of treatment by the system.
4. The discharge of dangerous wastes as defined in Chapter 173-303 WAC (Unless specifically authorized in this permit).

S10.B. Sanitary Wastewater Discharges

The Permittee must not introduce process wastewaters into the Nippon Dynawave Sanitary Treatment Plant.

S10.C. Stormwater Discharges

The Permittee must comply with the following discharge prohibitions for all stormwater discharges:

1. Process wastewater, stormwater runoff from process areas, or comingled stormwater and process wastewater.
2. Synthetic, natural or process oil or oil-containing products as identified by an oil sheen.
3. Trash and floating debris.

S11. Dilution Prohibited

The Permittee must not dilute the process wastewater discharge with stormwater or increase the use of potable water, process water, noncontact cooling water, or, in any way, attempt to dilute an effluent as a partial or complete substitute for adequate treatment to achieve compliance with the limits contained in this permit.

S12. Slug Discharge Control Plan

S12.A. Slug Discharge Control Plan Submittal and Requirements

The Permittee must:

1. Submit an update of the Slug Discharge Control Plan to Ecology, by September 1, 2020. The plan and any subsequent revisions become effective 30 days following submission.
2. Review the slug discharge plan and update it as needed.
3. Submit all revisions or updates of this plan to Ecology for review and approval.
4. Keep the current approved plan on the plant site and make it readily available to facility personnel.
5. Follow the approved plan and any approved supplements throughout the term of the permit.
6. Submit an update of the slug discharge control plan, or a certification that it is current by September 1, 2023.

S12.B. Slug Discharge Control Plan Components

The slug discharge control plan must include the following information and procedures relating to the prevention of unauthorized slug discharges; it must include:

1. A description of a reporting system the Permittee will use to immediately notify facility management, the privately owned treatment plant operator, and appropriate state, federal, and local authorities of any slug discharges, and provisions to provide a written follow-up report within five days.
2. A description of operator training, equipment, and facilities (including overall facility plan) for preventing, containing, or treating slug discharges.
3. Procedures to prevent adverse impact from accidental spills including:

- a. Inspection and maintenance of storage areas
 - b. Handling and transfer of materials
 - c. Loading and unloading operations
 - d. Control of plant site run-off
 - e. Worker training
 - f. Building of containment structures or equipment
 - g. Measures for containing toxic organic pollutants (including solvents)
 - h. Measures and equipment for emergency response
4. A list of all raw materials, products, chemicals, and hazardous materials used, processed, or stored at the facility; the normal quantity maintained on the premises for each listed material; and a map showing where they are located.
 5. A description of discharge practices for batch and continuous processes under normal and non-routine circumstances.
 6. A brief description of any unauthorized discharges which occurred during the 36-month period preceding the effective date of this permit and subsequent measures taken by Permittee to prevent or to reduce the possibility of further unauthorized discharges.
 7. An implementation schedule including additional operator training and procurement and installation of equipment or facilities required to properly implement the plan.

S13. Annual Stormwater Report

The Permittee must submit an annual stormwater report to Ecology no later than **May 15th of each year**. The report must include corrective action documentation as required in Special Condition S1.B. If corrective action is not yet completed at the time of submission of the annual report, the Permittee must describe the status of any outstanding corrective action(s).

The Permittee must include the following information with each annual report:

1. Identify the condition triggering the need for corrective action review.
2. Describe the problem(s) and identify the dates they were discovered.
3. Summarize any Level 1, 2, or 3 corrective actions completed during the previous calendar year and include the dates it completed the corrective actions.
4. Describe the status of any Level 2 or 3 corrective actions triggered during the previous calendar year, and identify the date it expects to complete corrective actions.

S14. Dangerous Wastes – Permit by Rule Requirements

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

General Conditions

G1. Signatory Requirements

1. All applications submitted to Ecology must be signed and certified.
 - a. In the case of corporations, by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or
 - The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 - 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.F.
4. The Permittee complied with any remedial measures required under S3.F of this permit.

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

G16. Property Rights

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

G17. Duty to Comply

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

G18. Toxic Pollutants

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

G19. Penalties for Tampering

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

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

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

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

- b. One milligram per liter (1 mg/L) for antimony.
- c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
- d. The level established by the Director in accordance with 40 CFR 122.44(f).

G21. Compliance Schedules

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

Appendix A

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

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

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

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

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

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

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

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.

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

Nonconventional Pollutant	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
Alkalinity, Total		SM2320-B		5 mg/L as CaCO ₃
Aluminum, Total	7429-90-5	200.8	2.0	10
Ammonia, Total (as N)		SM4500-NH ₃ -B and C/D/E/G/H		20
Barium Total	7440-39-3	200.8	0.5	2.0
BTEX (benzene +toluene + ethylbenzene + m,o,p xylenes)		EPA SW 846 8021/8260	1	2

Nonconventional Pollutant	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
Boron, Total	7440-42-8	200.8	2.0	10.0
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 ₃
Iron, Total	7439-89-6	200.7	12.5	50
Magnesium, Total	7439-95-4	200.7	10	50
Manganese, Total	7439-96-5	200.8	0.1	0.5
Molybdenum, Total	7439-98-7	200.8	0.1	0.5
Nitrate + Nitrite Nitrogen (as N)		SM4500-NO ₃ - E/F/H		100

Nonconventional Pollutant	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
Nitrogen, Total Kjeldahl (as N)		SM4500-N _{org} B/C and SM4500NH ₃ - B/C/D/EF/G/H		300
NWTPH Dx ⁴		Ecology NWTPH Dx	250	250
NWTPH Gx ⁵		Ecology NWTPH Gx	250	250
Phosphorus, Total (as P)		SM 4500 PB followed by SM4500-PE/PF	3	10
Salinity		SM2520-B		3 practical salinity units or scale (PSU or PSS)
Settleable Solids		SM2540 -F		Sample and limit dependent
Soluble Reactive Phosphorus (as P)		SM4500-P E/F/G	3	10
Sulfate (as mg/L SO ₄)		SM4110-B		0.2 mg/L
Sulfide (as mg/L S)		SM4500-S ² F/D/E/G		0.2 mg/L
Sulfite (as mg/L SO ₃)		SM4500-SO ₃ B		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

Nonconventional Pollutant	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
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

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ <i>µg/L unless specified</i>	Quantitation Level (QL)² <i>µg/L unless specified</i>
METALS, CYANIDE & TOTAL PHENOLS					
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

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ <i>µg/L unless specified</i>	Quantitation Level (QL)² <i>µg/L unless specified</i>
METALS, CYANIDE & TOTAL PHENOLS					
Lead, Total	122	7439-92-1	200.8	0.1	0.5
Mercury, Total	123	7439-97-6	1631E	0.0002	0.0005
Nickel, Total	124	7440-02-0	200.8	0.1	0.5
Selenium, Total	125	7782-49-2	200.8	1.0	1.0
Silver, Total	126	7440-22-4	200.8	0.04	0.2
Thallium, Total	127	7440-28-0	200.8	0.09	0.36
Zinc, Total	128	7440-66-6	200.8	0.5	2.5
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

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)1 µg/L unless specified	Quantitation Level (QL) 2 µg/L unless specified
ACID COMPOUNDS					
2-Chlorophenol	24	95-57-8	625.1	3.3	9.9
2,4-Dichlorophenol	31	120-83-2	625.1	2.7	8.1
2,4-Dimethylphenol	34	105-67-9	625.1	2.7	8.1
4,6-dinitro-o-cresol (2-methyl-4,6,-dinitrophenol)	60	534-52-1	625.1/1625B	24	72
2,4 dinitrophenol	59	51-28-5	625.1	42	126
2-Nitrophenol	57	88-75-5	625.1	3.6	10.8
4-Nitrophenol	58	100-02-7	625.1	2.4	7.2
Parachlorometa cresol (4-chloro-3-methylphenol)	22	59-50-7	625.1	3.0	9.0
Pentachlorophenol	64	87-86-5	625.1	3.6	10.8
Phenol	65	108-95-2	625.1	1.5	4.5
2,4,6-Trichlorophenol	21	88-06-2	625.1	2.7	8.1

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) ¹ <i>µg/L unless specified</i>	Quantitation Level (QL) ² <i>µg/L unless specified</i>
VOLATILE COMPOUNDS					
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	4.4	13.2
Bromoform	47	75-25-2	624.1	4.7	14.1
Carbon tetrachloride	6	56-23-5	624.1/601 or SM6230B	2.8	8.4
Chlorobenzene	7	108-90-7	624.1	6.0	18.0
Chloroethane	16	75-00-3	624/601	1.0	2.0
2-Chloroethylvinyl Ether	19	110-75-8	624	1.0	2.0
Chloroform	23	67-66-3	624.1 or SM6210B	1.6	4.8
Dibromochloromethane (chlordibromomethane)	51	124-48-1	624.1	3.1	9.3
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

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

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) ¹ <i>µg/L unless specified</i>	Quantitation Level (QL) ² <i>µg/L unless specified</i>
VOLATILE COMPOUNDS					
1,2-Trans-Dichloroethylene (Ethylene dichloride)	30	156-60-5	624.1	1.6	4.8
1,1,1-Trichloroethane	11	71-55-6	624.1	3.8	11.4
1,1,2-Trichloroethane	14	79-00-5	624.1	5.0	15.0
Trichloroethylene	87	79-01-6	624.1	1.9	5.7
Vinyl chloride	88	75-01-4	624/SM6200B	1.0	2.0

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) ¹ <i>µg/L unless specified</i>	Quantitation Level (QL) ² <i>µg/L unless specified</i>
BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)					
Acenaphthene	1	83-32-9	625.1	1.9	5.7
Acenaphthylene	77	208-96-8	625.1	3.5	10.5
Anthracene	78	120-12-7	625.1	1.9	5.7

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) ¹ <i>µg/L unless specified</i>	Quantitation Level (QL) ² <i>µg/L unless specified</i>
BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)					
Benzidine	5	92-87-5	625.1	44	132
Benzyl butyl phthalate	67	85-68-7	625.1	2.5	7.5
Benzo(a)anthracene	72	56-55-3	625.1	7.8	23.4
Benzo(b)fluoranthene (3,4-benzofluoranthene) ⁷	74	205-99-2	610/625.1	4.8	14.4
Benzo(j)fluoranthene⁷		205-82-3	625	0.5	1.0
Benzo(k)fluoranthene (11,12-benzofluoranthene) ⁷	75	207-08-9	610/625.1	2.5	7.5
Benzo(r,s,t)pentaphene		189-55-9	625	1.3	5.0
Benzo(a)pyrene	73	50-32-8	610/625.1	2.5	7.5
Benzo(ghi)Perylene	79	191-24-2	610/625.1	4.1	12.3
Bis(2-chloroethoxy)methane	43	111-91-1	625.1	5.3	15.9
Bis(2-chloroethyl)ether	18	111-44-4	611/625.1	5.7	17.1
Bis(2-chloro-1-methylethyl)Ether (Bis(2-chloroisopropyl)ether) ¹⁰	42	108-60-1	625.1	5.7	17.1
Bis(2-ethylhexyl)phthalate	66	117-81-7	625.1	2.5	7.5

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) ¹ <i>µg/L unless specified</i>	Quantitation Level (QL) ² <i>µg/L unless specified</i>
BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)					
4-Bromophenyl phenyl ether	41	101-55-3	625.1	1.9	5.7
2-Chloronaphthalene	20	91-58-7	625.1	1.9	5.7
4-Chlorophenyl phenyl ether	40	7005-72-3	625.1	4.2	12.6
Chrysene	76	218-01-9	610/625.1	2.5	7.5
Dibenzo (a,h)acridine		226-36-8	610M/625M	2.5	10.0
Dibenzo (a,j)acridine		224-42-0	610M/625M	2.5	10.0
Dibenzo(a-h)anthracene (1,2,5,6-dibenzanthracene)	82	53-70-3	625.1	2.5	7.5
Dibenzo(a,e)pyrene		192-65-4	610M/625M	2.5	10.0
Dibenzo(a,h)pyrene		189-64-0	625M	2.5	10.0
3,3-Dichlorobenzidine	28	91-94-1	605/625.1	16.5	49.5
Diethyl phthalate	70	84-66-2	625.1	1.9	5.7
Dimethyl phthalate	71	131-11-3	625.1	1.6	4.8
Di-n-butyl phthalate	68	84-74-2	625.1	2.5	7.5
2,4-dinitrotoluene	35	121-14-2	609/625.1	5.7	17.1

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) ¹ <i>µg/L unless specified</i>	Quantitation Level (QL) ² <i>µg/L unless specified</i>
BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)					
2,6-dinitrotoluene	36	606-20-2	609/625.1	1.9	5.7
Di-n-octyl phthalate	69	117-84-0	625.1	2.5	7.5
1,2-Diphenylhydrazine (<i>as Azobenzene</i>)	37	122-66-7	1625B	5.0	20
Fluoranthene	39	206-44-0	625.1	2.2	6.6
Fluorene	80	86-73-7	625.1	1.9	5.7
Hexachlorobenzene	9	118-74-1	612/625.1	1.9	5.7
Hexachlorobutadiene	52	87-68-3	625.1	0.9	2.7
Hexachlorocyclopentadiene	53	77-47-4	1625B/625	2.0	4.0
Hexachloroethane	12	67-72-1	625.1	1.6	4.8
Indeno(1,2,3- <i>cd</i>)Pyrene	83	193-39-5	610/625.1	3.7	11.1
Isophorone	54	78-59-1	625.1	2.2	6.6
3-Methyl cholanthrene		56-49-5	625	2.0	8.0
Naphthalene	55	91-20-3	625.1	1.6	4.8
Nitrobenzene	56	98-95-3	625.1	1.9	5.7

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) ¹ <i>µg/L unless specified</i>	Quantitation Level (QL) ² <i>µg/L unless specified</i>
BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)					
N-Nitrosodimethylamine	61	62-75-9	607/625	2.0	4.0
N-Nitrosodi-n-propylamine	63	621-64-7	607/625	0.5	1.0
N-Nitrosodiphenylamine	62	86-30-6	625	1.0	2.0
Perylene		198-55-0	625	1.9	7.6
Phenanthrene	81	85-01-8	625.1	5.4	16.2
Pyrene	84	129-00-0	625.1	1.9	5.7
1,2,4-Trichlorobenzene	8	120-82-1	625.1	1.9	5.7

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) ¹ <i>µg/L unless specified</i>	Quantitation Level (QL) ² <i>µg/L unless specified</i>
DIOXIN					
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

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) ¹ <i>µg/L unless specified</i>	Quantitation Level (QL) ² <i>µg/L unless specified</i>
PESTICIDES/PCBs					
Aldrin	89	309-00-2	608.3	4.0 ng/L	12 ng/L
alpha-BHC	102	319-84-6	608.3	3.0 ng/L	9.0 ng/L
beta-BHC	103	319-85-7	608.3	6.0 ng/L	18 ng/L
gamma-BHC (Lindane)	104	58-89-9	608.3	4.0 ng/L	12 ng/L
delta-BHC	105	319-86-8	608.3	9.0 ng/L	27 ng/L
Chlordane ⁸	91	57-74-9	608.3	14 ng/L	42 ng/L
4,4'-DDT	92	50-29-3	608.3	12 ng/L	36 ng/L
4,4'-DDE	93	72-55-9	608.3	4.0 ng/L	12 ng/L
4,4' DDD	94	72-54-8	608.3	11ng/L	33 ng/L
Dieldrin	90	60-57-1	608.3	2.0 ng/L	6.0 ng/L
alpha-Endosulfan	95	959-98-8	608.3	14 ng/L	42 ng/L
beta-Endosulfan	96	33213-65-9	608.3	4.0 ng/L	12 ng/L
Endosulfan Sulfate	97	1031-07-8	608.3	66 ng/L	198 ng/L
Endrin	98	72-20-8	608.3	6.0 ng/L	18 ng/L

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) ¹ <i>µg/L unless specified</i>	Quantitation Level (QL) ² <i>µg/L unless specified</i>
PESTICIDES/PCBs					
Endrin Aldehyde	99	7421-93-4	608.3	23 ng/L	70 ng/L
Heptachlor	100	76-44-8	608.3	3.0 ng/L	9.0 ng/L
Heptachlor Epoxide	101	1024-57-3	608.3	83 ng/L	249 ng/L
PCB-1242 ⁹	106	53469-21-9	608.3	0.065	0.195
PCB-1254	107	11097-69-1	608.3	0.065	0.195
PCB-1221	108	11104-28-2	608.3	0.065	0.195
PCB-1232	109	11141-16-5	608.3	0.065	0.195
PCB-1248	110	12672-29-6	608.3	0.065	0.195
PCB-1260	111	11096-82-5	608.3	0.065	0.195
PCB-1016 ⁹	112	12674-11-2	608.3	0.065	0.195
Toxaphene	113	8001-35-2	608.3	240 ng/L	720 ng/L

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

ALSO GIVEN AS:

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

3. Soluble Biochemical Oxygen Demand method note: First, filter the sample through a Millipore Nylon filter (or equivalent) - pore size of 0.45-0.50 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 14/42 ng/L.
9. PCB 1016 & PCB 1242 – You may report these two PCB compounds as one parameter called PCB 1016/1242.
10. Bis(2-Chloro-1-Methylethyl) Ether – This compound was previously listed as Bis(2-Chloroisopropyl) Ether (39638-32-9).