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**National Pollutant Discharge Elimination System
Waste Discharge Permit No. WA-0000922**

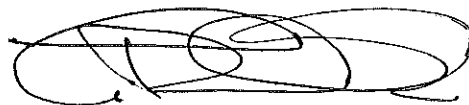
State of Washington
Department of Ecology
Industrial Section
PO Box 47706
Olympia, WA 98504-7600

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.

Port Townsend Paper Corporation
100 Mill Road
Port Townsend, Washington 98368

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

Facility Location: 100 Mill Road Port Townsend, WA 98368	<u>Receiving Water:</u> Port Townsend Bay (Glen Cove)
Treatment Type: Primary and Secondary Treatment	SIC Code: 2611 Pulp Mill, 2621 Paper Mill NAICS Code: 322121
Industry Type: Unbleached Kraft Pulp and Paper Mill	Categorical Industry: Pulp, Paper, and Paperboard



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Industrial Section Manager
Waste 2 Resources Program

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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
S3.A	Discharge Monitoring Report	Monthly/ Annually	November 15, 2013
S3.E	Reporting Permit Violations	As necessary	
S3.F	Other Reporting	As necessary	
S4.A	Operations and Maintenance Manual Update	As necessary	
S4.A	Treatment System Operating Plan	1/permit cycle	April 1, 2014
S4.A	Treatment System Operating Plan Update	As necessary	
S4.B	Reporting Bypasses	As necessary	
S5.C	Solids Management Plan	1/permit cycle	April 1, 2014
S5.C	Modification to Solids Management Plan	As necessary	
S6	Initiate sludge removal from ASB	1/permit cycle	April 1, 2014
	Complete sludge removal to acceptable sludge inventory	1/permit cycle	April 1, 2015
	Complete removal of the geobags	1/permit cycle	October 1, 2014
	Assessment of the ASB outlet weir and ASB curtains	1/permit cycle	April 1, 2014
	Complete repairs on the ASB outlet weir and ASB curtains	1/permit cycle	October 1, 2014
S7	Design Criteria Exceedance Notification	As necessary	

Permit Section	Submittal	Frequency	First Submittal Date
S8	Spill Plan	1/permit cycle, updates submitted as necessary	October 1, 2014
S9.1	Receiving Water and Effluent Study Sampling and Quality Assurance Plan	1/permit cycle	October 1, 2014
S9.10	Receiving Water Study Results	As necessary	Six months after last sampling event
S10.1	Ground Water Impact Study Sampling and Quality Assurance Plan	1/permit cycle	July 1, 2015
S10.2	Ground Water Impact Study Results	As necessary	Within 1 year of S10.1 approval date
S11.A	Sediment Baseline Sampling and Analysis Plan	1/permit cycle	January 31, 2014
S11.B	Sediment Chemistry Analyses	1/permit cycle	180 days after sampling event
S12.B.	Outfall Evaluation Report	Once every three years	Within 60 days of the inspection date and no later than May 30, 2014
S14	Acute Toxicity Effluent Test Results - Last Summer	1/permit cycle	Within 60 days of Sample Date and no later than November 1, 2016
S14	Acute Toxicity Effluent Test Results - Last Winter	1/permit cycle	Within 60 days of Sample Date and no later than June 1, 2017
S15	Chronic Toxicity Effluent Test Results – Last Summer	1/permit cycle	Within 60 days of Sample Date and no later than November 1, 2016

Permit Section	Submittal	Frequency	First Submittal Date
S15	Chronic Toxicity Effluent Test Results – Last Winter	1/permit cycle	Within 60 days of Sample Date and no later than June 1, 2017
S16	Treatment System Engineering Report	1/permit cycle	October 1, 2014
S16.3	Treatment System Engineering Report – Quarterly Progress Report	Quarterly until October 1, 2017	July 1, 2015
S17.2	Stormwater Pollution Prevention Plan	1/permit cycle	October 1, 2014
S17.4	Stormwater Inspection Results	Annually (by September 1 st)	September 1, 2015
S18.B	Mixing Zone Update Report	1/permit cycle	April 1, 2014
S19	Application for Permit Renewal or Modification for Facility Changes	1/permit cycle or as necessary	October 1, 2017 and 180 days prior to commencement of any new or increased discharge
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	
G13	Payment of Fees	As assessed	
G21	Compliance Schedules	As required	

Special Conditions

S1. Discharge Limits

S1.A. Wastewater Discharges

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

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

Beginning on the effective date of this permit, the Permittee is authorized to discharge treated process wastewater (including treated stormwater), power turbine condenser cooling water, sea water chest overflow, and sanitary wastewater to Port Townsend Bay from the permitted locations (Outfalls 001, 002, 003, and 005, respectively) subject to complying with the following limits:

Effluent Limits: Outfall # 001 (process wastewater)		
Latitude 48.08826 Longitude -122.79466		
Parameter	Average Monthly^a	Maximum Daily^b
Biochemical Oxygen Demand (5-day) (BOD ₅)	4,578 pounds/day (lbs/day)	8850 lbs/day
Total Suspended Solids (TSS)	8,243 lbs/day	16,212 lbs/day
	Minimum	Maximum
pH ^c	6.0 standard units	9.0 standard units
a	Average monthly effluent limit means the highest allowable average of daily discharges over a calendar month. To calculate the discharge value to compare to the limit, you add the value of each daily discharge measured during a calendar month and divide this sum by the total number of daily discharges measured.	
b	Maximum daily effluent limit is the highest allowable daily discharge. The daily discharge is the average discharge of a pollutant measured during a calendar day. For pollutants with limits expressed in units of mass, calculate the daily discharge as the total mass of the pollutant discharged over the day. This does not apply to pH or temperature.	
c	When pH is continuously monitored, excursions between 5.0 and 6.0 or 9.0 and 10.0 are not be considered violations if no single excursion exceeds 60 minutes in length and total excursions do not exceed 7 hours and 30 minutes per month. Any excursions below 5.0 and above 10.0 at any time are violations.	

Effluent Limits: Outfall # 002 (non-contact cooling water)	
Latitude 48.09289 Longitude 122.79504	
Parameter	Maximum Daily^a
Temperature	77 °F (25 °C)
a	Hourly average. The temperature alarm level shall be maintained at 70 °F (21.1 °C). Immediate corrective action shall be taken in response to an alarm.

Effluent Limits: Outfall # 003 (sea chest overflow)	
Latitude 48.09233 Longitude 122.79598	
The only discharge permitted from Outfall 003 is excess uncontaminated seawater from the salt water chest overflow. No permit limits associated with this wastewater stream at this time.	

Effluent Limits: Internal Outfall # 005 (sanitary wastewater)		
Latitude 48.08826 Longitude 122.79466		
Parameter	Average Monthly^a	Average Weekly^b
BOD ₅	30 mg/L	45 mg/L
TSS	30 mg/L	45 mg/L
Parameter	Monthly Geometric Mean^c	Weekly Geometric Mean^c
Fecal Coliform	200/ 100 mL	400/ 100 mL
Parameter	Average Monthly Removal	
Removal of influent BOD ₅ and TSS	85% ^d	
Parameter	Minimum	Maximum
Total Residual Chlorine	0.1 mg/L	5.0 mg/L
pH	6.0 standard units	9.0 standard units
a	Average monthly concentration limit means the highest allowable average of concentrations measured over a calendar month. To calculate the average concentration to compare to the limit, you add the value of each concentration measured during a calendar month and divide this sum by the total number of concentration samples collected.	
b	Average weekly discharge limitation means the highest allowable average of daily discharges' over a	

Effluent Limits: Internal Outfall # 005 (sanitary wastewater)	
Latitude 48.08826 Longitude 122.79466	
	calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week. See footnote c for fecal coliform calculations.
c	Ecology provides directions to calculate the monthly and the 7-day geometric mean in publication No. 04-10-020, Information Manual for Treatment Plant Operators available at: http://www.ecy.wa.gov/pubs/0410020.pdf
d	Average Monthly Removal means the 30-day average influent concentration (AIC) minus the 30-day average effluent concentration (AEC) divided by the AIC: $(AIC-AEC)/AIC$

S1.B. Mixing Zone Authorization

Mixing Zone for Outfall 001

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

Chronic Mixing Zone

The mixing zone is a circle with radius of 245 feet (74.7 meters) measured from the center of each of the diffuser ports. The mixing zone extends from the diffuser ports to the top of the water surface. The concentration of pollutants at the edge of the chronic zone must meet chronic aquatic life criteria and human health criteria.

Acute Mixing Zone

The acute mixing zone is a circle with radius of 24.5 feet (7.5 meters) measured from the center of each of the diffuser ports. The mixing zone extends from the diffuser ports to the top of the water surface. The concentration of pollutants at the edge of the acute zone must meet acute aquatic life criteria.

Available Dilution (dilution factor)	
Acute Aquatic Life Criteria	64
Chronic Aquatic Life Criteria	77
Human Health Criteria - Carcinogen	77
Human Health Criteria - Non-carcinogen	77

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) Outfall 001 Effluent^b			
Flow (influent ^a)	million gallons/day (mgd)	Daily	Metered
	mgd	Monthly	Calculated ^j
Biochemical Oxygen Demand (BOD ₅) (influent ^a)	milligrams/liter (mg/L)	1/week ^c	Composite (24 hour time proportional) ^d
	pounds/day (lbs/day)	Monthly	Calculated ^j
Total Suspended Solids (TSS) (influent ^a)	mg/L	1/week ^c	Composite (24 hour time proportional) ^d
	lbs/day	Monthly	Calculated ^j
BOD ₅	mg/L	2/Week ^{c, o}	Composite (24 hour time proportional) ^d
	lbs/day	Monthly	Calculated ^j
			Maximum Day
TSS	mg/L	3/Week ^{c, o}	Composite (24 hour time proportional) ^d
	lbs/ day	Monthly	Calculated ^j
			Maximum Day
pH ^{g, h}	Standard Units	Continuous ^e	Metered
	Standard Units	Monthly	Recorded - Maximum and Minimum ^g
	Minutes	Daily	Duration pH between 5.0 and 6.0 and 9.0 and 10.0 ^h
Monthly			
Temperature ^l	°F	Continuous ^e	Recorded
		Daily	Recorded Maximum
Dissolved Oxygen (DO)	mg/L	Continuous ^e	Recorded
		Monthly	Recorded – Maximum and Minimum

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
Oil and Grease (HEM)	mg/L	Quarterly until December 2014	Grab ⁱ
(2) Outfall 002 Effluent ^b			
Temperature ^l	°F	Continuous ^c	Recorded
		Daily	Recorded Maximum Hourly Average
(3) Outfall 005 Effluent ^b			
Flow	gpd	Daily	Metered
	gpd	Monthly	Calculated ^j
BOD ₅ (Influent ^a)	mg/L	1/week ^c	Grab ^{i, q}
		Monthly	Calculated ^j
BOD ₅ (Effluent ^b)	mg/L	1/week ^c	Grab ^{i, q}
		Monthly	Calculated ^j
			Average Weekly
BOD ₅	Percent Removal ^f	Monthly	Calculated ^j
TSS (Influent ^a)	mg/L	1/week ^c	Grab ^{i, q}
		Monthly	Calculated ^j
TSS (Effluent ^b)	mg/L	1/week ^c	Grab ^{i, q}
		Monthly	Calculated ^j
			Average Weekly
TSS	Percent Removal ^f	Monthly	Calculated ^j
Fecal Coliform ⁿ (Effluent ^b)	#/100 ml	1/week ^c	Grab ⁱ
		Monthly	Calculated Monthly Geometric Mean
			Calculated Weekly Geometric Mean
Total Chlorine Residual	mg/L	1/Day	Grab ⁱ

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
		Monthly	Recorded - Maximum and Minimum ^g
pH ^g	Standard Units	1/Day	Grab ⁱ
	Standard Units	Monthly	Recorded - Maximum and Minimum ^g
(4) Effluent Characterization ^b – Outfall 001			
See Appendix A to identify the specific pollutants in the pollutant groups listed below			
Total Ammonia (as N)	µg/L	Annually	24-Hour composite ^d
Oil and Grease (HEM)	mg/L	Annually after December 2014	Grab ⁱ
Priority Pollutants (PP) – Total Metals, Cyanide ^k , and Total Phenols	µg/L; ng/L for mercury	Annually	24-Hour composite ^d Grab for mercury ⁱ
PP – Volatile Organic Compounds	µg/L	Annually	Grab ⁱ
PP – Acid-extractable Compounds	µg/L	Annually	24-Hour composite ^d
PP – Base-neutral Compounds	µg/L	Annually	24-Hour composite ^d
PP - Dioxin	pg/L	Annually	24-Hour composite ^d
PP – Pesticides/PCBs	µg/L	Annually ^p , when used on-site	24-Hour composite ^d
PP- Pesticides/PCBs	µg/L	Once in the fourth year of the permit	24-Hour composite ^d
(5) Production			

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
Production Rate	Air-Dry Tons (ADT)/day	1/Day – recorded but not reported	Recorded
	ADT/day	Monthly	Calculated ^j
(6) Receiving Water Study			
Ambient Water Quality Testing	As required by Special Condition S9	As described in Special Condition S9 ^r	As required by Special Condition S9
(7) Ground Water Impact Study			
Aerated Stabilization Basin (ASB) Testing	As required by Special Condition S10	As required by Special Condition S10 ^r	As required by Special Condition S10
(8) Sediment Study			
Sediment Sampling	As required by Special Condition S11	Once/permit term as described in Special Condition S11 ^r	As required by Special Condition S11
(9) Whole Effluent Toxicity Testing^b – Outfall 001			
Acute Toxicity Testing	As required by Special Condition S14	Two times/permit term as described in Special Condition S14 ^r	24 hour composite ^d
Chronic Toxicity Testing	As required by Special Condition S15	Two times/permit term as described in Special Condition S15 ^r	24 hour composite ^d
(10) ASB Sludge			
ASB Sludge Removal	pounds of sludge dredged from ASB /day	1/Day – Recorded but not reported	Recorded
		Monthly	Calculated
	pounds of sludge recycled to ASB	1/Day – Recorded but not reported	Recorded

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
	influent/day	Monthly	Calculated
	pounds of sludge from ASB disposed of /day (and disposal site)	1/Day – Recorded but not reported	Recorded
		Monthly	Calculated
Footnotes:			
a	Wastewater Influent means the raw sewage flow; sample at the headworks of the treatment plant excluding any side-stream returns from inside the plant.		
b	Final Effluent means wastewater exiting, or that has exited, the last treatment process or operation.		
c	1/week, 2/week or 3/week means one (1), two (2) or three (3) samples during each calendar week, respectively, and at least 3 days between 2/week samples and 2 days between 3/week samples.		
d	24-hour composite means a series of individual samples collected over a 24-hour period into a single container, and analyzed as one sample.		
e	Continuous means uninterrupted except for brief lengths of time for calibration, power failure, or unanticipated equipment repair or maintenance. When continuous monitoring is not possible, the Permittee must sample every four hours for temperature and once every hour for pH.		
f	$\% \text{ removal} = \frac{(\text{Influent concentration (mg/L)} - \text{Effluent concentration (mg/L)})}{\text{Influent concentration (mg/L)}} \times 100$ Calculate the percent (%) removal of BOD ₅ and TSS using the above equation.		
g	The Permittee must report the instantaneous maximum and minimum pH and total chlorine residual monthly. Do not average pH or total chlorine residual values.		
h	The Permittee must record and report the: <ul style="list-style-type: none"> • Number of minutes the pH value measured between 5.0 and 6.0 and between 9.0 and 10.0 for each day. • Total minutes for the month. If multiple excursions occur during the day, note the duration for each excursion. If		

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
	submitting electronic DMRs, include this additional information in the parameter notes.		
i	Grab means an individual sample collected over a fifteen (15) minute, or less, period.		
j	Calculated values are determined using the results of the respective sample(s). Flow and production values are calculated by summing the daily measured values during the month and dividing by the number of days in the month. Average concentration values are calculated by summing the concentration values measured during the month and dividing the total by the number of samples analyzed for that parameter during the month. Pollutant loading rates are calculated using the following formula: Concentration (in mg/L) X Flow (in MGD) X Conversion Factor (8.34) = lbs/day		
k	Cyanide must be analyzed using the weak acid dissociable method.		
l	Continuous monitoring instruments must achieve an accuracy of 0.2 degrees C and the Permittee must verify accuracy annually. If measuring temperature continuously, the Permittee must determine and report a daily maximum from half-hour measurements in a 24-hour period.		
m	Take effluent samples for the BOD ₅ analysis before or after the disinfection process. If taken after, dechlorinate and reseed the sample.		
n	Report a numerical value for fecal coliforms following the procedures in Ecology's <i>Information Manual for Wastewater Treatment Plant Operators</i> , Publication Number 04-10-020 available at: http://www.ecy.wa.gov/programs/wq/permits/guidance.html . Do not report a result as too numerous to count (TNTC).		
o	The monitoring frequency for this parameter has been reduced as a result of consistent performance well below the permit limits. If two limit violations for a particular parameter occur in a 12 consecutive month period, the reduced monitoring frequency is no longer allowed for that parameter and the Permittee must revert to sampling the effluent five (5) times per week for BOD ₅ or daily for TSS. Any changes in sampling frequency must be noted in the monthly report cover letter for the month in which the change occurs.		
p	For every year except the 4 th year of the permit, the PCBs and pesticides listed in Appendix A are not required to be tested for unless they are used at the facility.		
q	A 24-hour composite sample may be collected instead of a grab sample for the Outfall 005 BOD and TSS analysis. When a composite sample is collected it must be identified as such in the appropriate DMR.		
r	The results for samples collected and analyzed for special studies will be submitted with the report for that special study.		

S2.B. Sampling and Analytical Procedures

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

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

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

The Permittee must:

1. Select and use appropriate flow measurement, field measurement, and continuous monitoring devices and methods consistent with accepted scientific practices.
2. Install, calibrate, and maintain these devices to ensure the accuracy of the measurements is consistent with the accepted industry standard and the manufacturer's recommendation for that type of device.
3. Calibrate continuous monitoring instruments at least 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:
http://www.ecy.wa.gov/programs/eap/qa/docs/ECY_EAP_SOP_Cont_Temp_Mon_Ambient_v1_0EAP080.pdf
Calibration as specified in this document is not required if the Permittee uses recording devices certified by the manufacturer.

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

S2.D. Laboratory Accreditation

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

S2.E. Request for Reduction in Monitoring

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

The Permittee must:

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

S3. Reporting and Recording Requirements

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

S3.A. Reporting

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

1. Summarize, report, and submit monitoring data obtained during each monitoring period on the electronic Discharge Monitoring Report (DMR) form provided by Ecology within WAWebDMR. Include data for each of the parameters tabulated in Special Conditions S2.A.1 through S2.A.5, S2.A.10, 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. The Permittee must also

submit an electronic PDF copy of the laboratory report using WA WebDMR for any sample that is sent to a contract laboratory for analysis. The contract laboratory report must include information on the chain of custody, QA/QC results, and documentation of accreditation for that parameter.

The sample results for the special studies required by Special Conditions S2.A.6 through S2.A.9 must be included with the associated report submittal.

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

If unable to submit electronically (for example, if you do not have an internet connection), the Permittee must contact Ecology to request a waiver and obtain instructions on how to submit a paper copy DMR.

The Permittee may submit DMRs on the paper form provided by Ecology until 12/31/2013. Paper form submittals must be submitted to the following address:

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

2. Enter the “no discharge” reporting code for an entire DMR, for a specific monitoring point, or for a specific parameter as appropriate, if the Permittee did not discharge wastewater or a specific pollutant during a given monitoring period.
3. Report single analytical values below detection as “less than the detection level (DL)” by entering < followed by the numeric value of the detection level (e.g. < 2.0) on the DMR. If the method used did not meet the minimum DL and quantitation level (QL) identified in the permit, report the actual QL and DL in the comments or in the location provided.
4. 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 OR S2.
5. Calculate average values (unless otherwise specified in the permit) using:
 - a. The reported numeric value for all parameters measured between the agency-required detection value and the agency-required quantitation value.
 - b. One-half the detection value (for values reported below detection) if the lab detected the parameter in another sample 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 from the same monitoring point for the reporting period.
6. Report single-sample grouped parameters (for example priority pollutants, PAHs, pulp and paper chlorophenolics, TTOs) on the WAWebDMR form and include: sample date, concentration detected, detection limit (DL) (as necessary), and laboratory quantitation level (QL) (as necessary). The Permittee must also submit an electronic PDF copy of the laboratory report using WAWebDMR.

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

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

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

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

8. 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, within 90 days of each sampling event or by March 31st for the previous calendar year (whichever comes first). The annual sampling period is the calendar year.
9. Submit reports required by S9.10, S10.2, S11.B, S12, S14, S15 and S16 to Ecology online using Ecology's electronic WAWebDMR submittal forms (electronic DMRs) as required above. Send paper reports to Ecology at:

Industrial Section
PO Box 47600
Olympia, WA 98504-7600

S3.B. 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.C. 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.D. 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. This requirement relates only to the parameters and locations specified in Condition S1 and only to monitoring using test procedures approved under 40 CFR Part 136 or another method required for an industry specific waste stream under 40 CFR Subchapters N or O.

S3.E. Reporting Permit Violations

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

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

a. Immediate reporting

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

- Failures of the disinfection system.

- Sanitary collection system overflows discharging to marine surface waters.
- Sanitary plant bypasses discharging to marine surface waters.

Southwest Regional Office 360-407-6300
Department of Health 360-236-3330 (business hours)
Shellfish Program 360-789-8962 (after business hours)

b. Twenty-four-hour reporting

The Permittee must report the following occurrences of noncompliance by telephone, to Ecology at (360) 407-6300, within 24 hours from the time the Permittee becomes aware of any of the following circumstances:

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

c. Report within five days

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

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

d. Waiver of written reports

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

e. All other permit violation reporting

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

f. Report Submittal

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

S3.F. 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 WAC 173-303-145. You can obtain further instructions at the following website:
<http://www.ecy.wa.gov/programs/spills/other/reportaspill.htm>.

b. Failure to submit relevant or correct facts

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

S3.G. Maintaining a Copy of this Permit

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

S4. Operation and Maintenance

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

The Permittee must schedule any facility maintenance, which might require interruption of wastewater treatment and significantly degrade effluent quality, during non-critical water quality periods and carry this maintenance out in a manner approved by Ecology.

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

a. O&M manual submittal and requirements

The Permittee must:

1. Maintain and follow an Operations and Maintenance (O&M) Manual for the wastewater treatment plant that reflects the current operations of the plant.
2. Review and update the O&M Manual when changes occur at the facility that significantly affect the volume or character of wastewater processed by the wastewater treatment plant. .
3. Submit to Ecology for review substantial changes or updates to the O&M Manual whenever it incorporates them into the manual. The Permittee must submit a paper copy and an electronic copy (preferably as a PDF).
4. Keep the approved O&M Manual at the permitted facility.

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 or failure.
2. Procedures to maintain treatment efficiency including during scheduled maintenance operations at the wastewater treatment plant.

c. Treatment system operating plan

For the purposes of this permit, a Treatment System Operating Plan (TSOP) is a concise summary of specifically defined elements of the O&M Manual.

The Permittee must submit an updated Treatment System Operating Plan to Ecology no later than April 1, 2014. The Permittee must update and submit this plan, as necessary, to include requirements for any major modifications of either the ASB or domestic wastewater treatment systems.

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

1. Baseline operating conditions, which describe the operating parameters and procedures, used to meet the effluent limits specified in Permit Condition S1.

2. The plan must describe the operating procedures and conditions needed to maintain treatment efficiency at less than design loading conditions.
3. In the event of an upset, due to plant maintenance activities, severe stormwater events, start ups or shut downs, or other causes, the plan must describe the operating procedures and conditions employed to mitigate the upset.
4. A description of any regularly scheduled maintenance or repair activities at the facility which would significantly affect the volume or character of the wastes discharged to the wastewater treatment system and a plan for treating/controlling the discharge of maintenance-related materials (such as cleaners, degreasers, solvents, etc.).
5. Standard operating procedures for monitoring the sludge depth in the ASB on a routine basis and removal of excess sludge when necessary.
6. Sludge management procedures for industrial wastewater treatment system and the sanitary wastewater treatment system, including, but not limited to, management of sludge accumulation in the ASB and sludge recycling procedures to ensure proper treatment operation for both treatment systems.
7. Procedures for minimization of odors associated with the wastewater treatment systems.

S4.B. Bypass Procedures

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

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

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

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

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

This permit authorizes such a bypass only if:

- a. Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. “Severe property damage” means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.
 - b. No feasible alternatives to the bypass exist, such as:
 - The use of auxiliary treatment facilities.
 - Retention of untreated wastes.
 - Stopping production.
 - Maintenance during normal periods of equipment downtime, but not if the Permittee should have installed adequate backup equipment in the exercise of reasonable engineering judgment to prevent a bypass.
 - Transport of untreated wastes to another treatment facility or preventative maintenance), or transport of untreated wastes to another treatment facility.
 - c. The Permittee has properly notified Ecology of the bypass as required in Special Condition S3.E of this permit.
3. If bypass is anticipated and has the potential to result in noncompliance of this permit.
- a. The Permittee must notify Ecology at least thirty (30) days before the planned date of bypass. The notice must contain:
 - A description of the bypass and its cause.
 - An analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing.
 - A cost-effectiveness analysis of alternatives including comparative resource damage assessment.
 - The minimum and maximum duration of bypass under each alternative.
 - A recommendation as to the preferred alternative for conducting the bypass.
 - The projected date of bypass initiation.
 - A statement of compliance with SEPA.
 - A request for modification of water quality standards as provided for in WAC 173-201A-410, if an exceedance of any water quality standard is anticipated.
 - Details of the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.
 - b. For probable construction bypasses, the Permittee must notify Ecology of the need to bypass as early in the planning process as possible. The Permittee must consider the analysis required above during preparation of the engineering report or facilities plan and plans and specifications and must include these to the extent practical. In cases where the Permittee

determines the probable need to bypass early, the Permittee must continue to analyze conditions up to and including the construction period in an effort to minimize or eliminate the bypass.

- c. Ecology will consider the following prior to issuing an administrative order for this type of bypass:
- If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
 - If feasible alternatives to bypass exist, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
 - If the Permittee planned and scheduled the bypass to minimize adverse effects on the public and the environment.

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

S5. Solids Management

S5.A. Solids Handling

The Permittee must handle and dispose of all solid 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 solids 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. Solids Management Plan

The Permittee must submit an update of the solids management plan by April 1, 2014. The updated plan must include the following information, at a minimum:

1. Any necessary updates to the information in the current solids management plan (previously the solid waste control plan),
2. Management procedures for the geobags associated with the *PTPC ASB Operation and Sludge Management Trial* conducted between July 2009 and March 2010,
3. Procedures for management of the sludge that is removed from the ASB, and

4. Procedures for proper characterization of the sludge once it has been removed from the ASB.
5. Chip and Hog Fuel Unloading Facilities and Procedures: Fugitive Emission and Spillage Control Plan

The Permittee must submit a paper copy and an electronic copy (preferably as a PDF).

The Permittee must submit all proposed revisions or modifications to the solid waste control plan to Ecology for review and approval at least 30 days prior to implementation. The Permittee must comply with the approved solid waste control plan and any modifications once approved.

S6. Compliance Schedule

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

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

	Tasks	Date Due
1.	Initiate sludge removal from Run 4 of the ASB in accordance with the following documents: “ <i>Draft Long Term Sludge Management Plan</i> ” dated September 10, 2010, “ <i>PTPC ASB Sludge Removal and Handling System Project Description and Conceptual Drawings</i> ” dated June 15, 2011 and the conditions of approval letter to Ms. Annika Wallendahl dated July 22, 2011. ^a	April 1, 2014
2.	Remove a sufficient amount of sludge to establish an “acceptable ASB sludge inventory” as specified in the “ <i>Draft PTPC Long-Term Sludge Management Plan</i> ” dated September 10, 2010.	April 1, 2015
3.	Complete removal of the geobags associated with the PTPC ASB Operation and Sludge Management Trial conducted between July 2009 and March 2010. Submit a letter certifying that the geobags have been removed and identify the path of disposal of the geobags.	October 1, 2014
4.	Submit an assessment of the ASB outlet weir structure and ASB curtains. Both have noted	April 1, 2014

	Tasks	Date Due
	deficiencies that allow short circuiting of the wastewater. The assessment must include corrective action that will be taken to address the deficiencies.	
5.	Complete repairs on the ASB curtains and outlet weir as necessary to prevent short circuiting of the wastewater effluent through the ASB and to ensure proper operation of the outlet trough.	October 1, 2014

- a. If the Shoreline Management Plan for Jefferson County has not been approved by Ecology by January 31, 2014, the Permittee may submit a copy of the application(s) that has been submitted to Jefferson County and any other required entities for the permit(s) necessary to initiate sludge removal from the lagoon instead of initiating sludge removal by April 1, 2014. The Permittee will be required to initiate sludge removal once the required permits have been obtained or within three months of Ecology's approval of Jefferson County's Shoreline Management Plan, whichever is sooner.

S7. Facility Loading

S7.A. Design Criteria

The Permittee shall notify the Department if the ASB flow or waste loading exceed the following design criteria for the permitted treatment facility:

Monthly Average Flow	14.5 MGD
Average BOD ₅ Influent Loading	27,000 lb/day

S8. Spill Control Plan

S8.A. Spill Control Plan Submittals and Requirements

The Permittee must:

1. Submit to Ecology an update to the existing spill control plan by October 1, 2014. The Permittee must submit a paper copy and an electronic copy (preferably as a PDF).
2. Review the plan at least annually and update the spill plan as needed.
3. Send changes to the plan to Ecology.
4. Follow the plan and any supplements throughout the term of the permit.

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.

S9. Receiving Water Study

The Permittee must collect receiving water information necessary to determine if the effluent has a reasonable potential to cause a violation of the water quality standards. If reasonable potential exists, Ecology will use the results of the study to calculate effluent limits.

The Permittee must:

1. Submit a sampling and quality assurance plan for Ecology review and approval no later than October 1, 2014. The Permittee must submit a paper copy and an electronic copy (preferably as a PDF).
2. Conduct all sampling and analysis in accordance with the guidelines given in *Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies*, Ecology Publication 04-03-030. This document is available at: <https://fortress.wa.gov/ecy/publications/SummaryPages/0403030.html>
3. Locate the receiving water sampling locations as close to the discharge as possible but outside the zone of influence of the effluent.
4. Use sampling station accuracy requirements of ± 20 meters.
5. Time the sampling as close as possible to the critical period.
6. Follow the clean sampling techniques (Method 1669: *Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels*, EPA Publication No. 821-R-95-034, April 1995).
7. Collect at least ten receiving water samples and analyze the samples for temperature, dissolved oxygen, turbidity, ammonia, pH, and salinity.
8. In addition, analyze the samples for both the total and dissolved fractions for the following metals: antimony, arsenic, zinc, copper, lead, silver, cadmium, nickel, mercury, manganese, and chromium (hexavalent).
9. Conduct all chemical analysis using the methods and the detection levels identified in Appendix A.

10. Submit the results of the study to Ecology no later than six months after the last sampling event associated with the study. The Permittee must submit a paper copy and an electronic copy (preferably as a PDF).
11. The Receiving Water Data Report must also include electronic copies of the chemical data formatted according to Ecology's Environmental Information (EIM) System templates available at the link below.
<http://www.ecy.wa.gov/eim/MyEIM.htm>

Any subsequent sampling and analysis must also meet these requirements. The Permittee may conduct a cooperative receiving water study with other NPDES Permittees discharging in the same vicinity.

S10. Ground Water Impact Study

The Permittee is not permitted to directly discharge any wastewater to the ground, but there is a potential for wastewater to seep from the wastewater lagoon. To determine whether there is a potential for seepage to violate the Ground Water Quality Standards, the Permittee must:

1. Prepare and submit to the Department for review and approval a ground water impact study plan by **July 1, 2015**. The ground water impact study plan must include the following:
 1. As-built drawings and liner specifications for the ASB liner, if available,
 2. A sampling plan to determine the concentrations of the constituents listed in the Ground Water Quality Standards (WAC 173-200-040), in the wastewater in the ASB. Random composite grab samples will be acceptable for sampling the pond, and
 3. A hydrogeologic study.

Guidance for preparation of hydrogeologic studies and monitoring plans is provided in the *Implementation Guidance for the Ground Water Quality Standards* (Pub. #96-02, April 1996, revised October 2005 - <https://fortress.wa.gov/ecy/publications/summarypages/9602.html>). Existing information on hydrogeologic conditions can be used if it has been obtained within the last five years and is in accordance with the guidance.

2. Prepare and submit to Ecology for review and approval a report detailing the results of the ground water impact study within one year of approval of the ground water impact study plan required in S10.1 above.

S11. Sediment Monitoring

S11.A. Sediment Sampling and Analysis Plan

The Permittee must submit to Ecology for review and approval a sediment sampling and analysis plan for sediment monitoring by January 31, 2014. The purpose of the plan is to recharacterize sediment quality in the vicinity of Outfall 001.

The Permittee must follow the guidance provided in the current *Sediment Sampling and Analysis Plan* (Appendix B of Ecology's *Sediment Source Control Standards User Manual*).

The submittal must consist of two paper copies and one electronic copy (preferably as a PDF) of the sediment sampling and analysis plan.

S11.B. Sediment Data Report

The Permittee must collect sediments during the first stable period (between August 15th and September 15th) following Ecology's approval of the sediment sampling and analysis plan. The Permittee must submit to Ecology a Sediment Data Report containing the results of the sediment sampling and analysis no later than 180 days after completion of sampling. The Permittee must submit two paper copies and an electronic copy (preferably as a PDF). The sediment data report must conform to the approved sediment sampling and analysis plan.

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

S12. Outfall Evaluation

S12.A. Outfall Evaluation

The Permittee must inspect the submerged portion of the outfall line and diffuser to document its integrity and continued function on a regular basis. The first inspection must be performed no later than April 1, 2014 and then once every three years after that. If conditions allow for a photographic verification, the Permittee must include such verification in the report.

The inspector must at minimum:

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

S12.B Outfall Evaluation Report

The Permittee must submit the inspection report to Ecology within 60 days of the inspection date and no later than May 30, 2014. The report must include the following:

- The Survey Report from the inspector, including photographic verification if conditions allow,

- An estimate of the hydraulic capacity of the outfall line, taking into account the amount of sediment accumulation in the line, and
- A determination if repairs or other actions are necessary to maintain the integrity and continued function of the outfall line and diffuser, based on the results of the inspection.

S13. Certified Operator

This permitted facility must be operated by an operator certified by the state of Washington for at least a Class II plant (activated sludge less than 1 MGD). This operator must be routinely on-site and in responsible charge of the overall operation of the wastewater treatment plant and operation of the wastewater treatment plant. When the plant is operated on more than one daily shift, the operator-in-charge of each shift must be certified at a level not lower than one level below the classification of the plant.

The Permittee must comply with the above operator certification requirements in accordance with the provisions of Chapter 70.95B RCW and Chapter 173-230 WAC by within 180 days of the effective date of this permit.

S14. Acute Toxicity

S14.A. Testing when there is no Permit Limit for Acute Toxicity

The Permittee must:

1. Conduct acute toxicity testing on final effluent once in the last summer prior to submission of the application for permit renewal and once in the last winter prior to submission of the application for permit renewal.
2. Submit the results to Ecology within sixty (60) days of the sample date and no later than November 1, 2016 for the last summer sample and no later than June 1, 2017 for the last winter sample.
3. Conduct acute toxicity testing on a series of at least five concentrations of effluent, including 100% effluent and a control.
4. Use each of the following species and protocols for each acute toxicity test:

Acute Toxicity Tests	Species	Method
Silverside minnow 96-hour static-renewal test	<i>Menidia beryllina</i>	EPA-821-R-02-012
Mysid shrimp 48-hour static test	<i>Americamysis bahia</i>	EPA-821-R-02-012

S14.B. Sampling and Reporting Requirements

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

S15. Chronic Toxicity

S15.A. Testing when there is no Permit Limit for Chronic Toxicity

The Permittee must:

1. Conduct chronic toxicity testing on final effluent once in the last winter prior to submission of the application for permit renewal and once in the last winter and once in the last summer prior to submission of the application for permit renewal.
2. Submit the results to Ecology within sixty (60) days of the sample date and no later than November 1, 2016 for the last summer sample and no later than June 1, 2017 for the last winter sample.
3. Conduct chronic toxicity testing on a series of at least five concentrations of effluent and a control. This series of dilutions must include the acute critical effluent concentration (ACEC). The ACEC equals 1.6% effluent. The series

of dilutions should also contain the chronic critical effluent concentration (CCEC) of 1.3% effluent.

4. Compare the ACEC to the control using hypothesis testing at the 0.05 level of significance as described in Appendix H, EPA/600/4-89/001.
5. Perform chronic toxicity tests with all of the following species and the most recent version of the following protocols:

Saltwater Chronic Test	Species	Method
Topsmelt survival and growth	<i>Atherinops affinis</i>	EPA/600/R-95/136
Mysid shrimp survival and growth	<i>Americamysis bahia</i> (formerly <i>Mysidopsis bahia</i>)	EPA-821-R-02-014
Oyster/ Mussel Survival and development	<i>Crassostrea gigas</i> / <i>Mytilus</i> sp.	EPA/600/R-95/136

The laboratory must conduct the Pacific oyster and mussel tests in accordance with EPA/600/R-95/136 and the bivalve development test conditions in the most recent version of Ecology Publication No. WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. The laboratory must use whichever one of the two species that will give a valid result in each particular test.

S15.B. Sampling and Reporting Requirements

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

4. All toxicity tests must meet quality assurance criteria and test conditions specified in the most recent versions of the EPA methods listed in Section C. and the Ecology Publication no. WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If Ecology determines any test results to be invalid or anomalous, the Permittee must repeat the testing with freshly collected effluent.
5. The laboratory must use control water and dilution water meeting the requirements of the EPA methods listed in Subsection C. or pristine natural water of sufficient quality for good control performance.
6. The Permittee must conduct whole effluent toxicity tests on an unmodified sample of final effluent.

S16. Treatment System Engineering Report

The Permittee shall:

1. Prepare and submit an industrial wastewater treatment system study plan for review and approval by **October 1, 2014**. The study plan must include the following:
 - a. A sampling and quality assurance plan to evaluate the treatment efficiency of the primary clarifier and the ASB. The quality assurance plan should follow the guidelines given in *Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies*, Ecology Publication 04-03-030. A minimum of six (6) samples must be collected from the influent and the effluent of the primary clarifier and the ASB at sufficient intervals to address seasonal variations. The samples must be analyzed for the following pollutants:
 - i. BOD, TSS, DO, pH, and temperature for all of the wastewater streams.
 - ii. Hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide for the influent and effluent of the ASB only.
 - b. A sampling and quality assurance plan to characterize the “hard piped” condensate wastewater stream. A minimum of six (6) samples must be collected from the “hard piped” condensate stream before it merges with the primary clarifier effluent. The samples must be analyzed for BOD, DO, pH, temperature, hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide.
 - c. A plan to establish the optimal operational conditions (DO, temperature, pH, sludge recycling, piping configurations, etc) of the ASB to ensure that the hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide are minimally emitted to the air from the ASB.
2. Initiate the sampling required by the approved industrial wastewater treatment plant study within 90 days of Ecology’s approval of the plan.

3. A Quarterly Progress Report for the Odor Minimization Study must be submitted beginning **July 1, 2015** and every quarter after that until the study is completed. Progress Reports must include the following information:
 - Samples collected during the quarter.
 - Operating conditions of the ASB during the quarter and any adjustments made to those conditions.
 - Any other odor minimization activities performed during the quarter
 - Observed changes or effects from the changes associated with the odor minimization study.
 - Odor minimization study activities anticipated during the following quarter.
 - Successful changes to the operating conditions that are under consideration for implementation or that have been implemented as part of the routine operation and maintenance activities.
4. Prepare and submit two copies of an approvable **engineering report** in accordance with chapter 173-240 WAC to Ecology for review and approval one year prior to the expiration of the permit. The Permittee must submit a paper copy and an electronic copy (preferably as a PDF). The following information must be included in the engineer report:
 - a. A schematic of the treatment units and characterization of the wastewater streams treated by the wastewater treatment system.
 - b. The last 2 years of flow data through the primary and secondary treatment units for all wastewater streams (process wastewater, “hard piped” condensates, etc.) including recycled streams, if any. Flow data shall be presented in terms of average daily flow and average daily flow of the maximum month. If flow-monitoring data is not available for wastewater streams, then an estimate shall be provided with the method used for estimation.
 - c. Design data and sizing calculations for each unit in the wastewater treatment system as follows.
 - i. Information for the aerated stabilization basin (ASB) should include the following information:
 1. Current and design flow rates (peak hourly, maximum month, and average day),
 2. Unit size, unit depth, and aeration capacity,
 3. Current and design hydraulic residence time,
 4. Current and design BOD and TSS loading rates,
 5. Current sludge depth throughout the basin and associated reduction in residence time, and
 6. Current loading rates for hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide.

- ii. Information for the primary clarifier should include the following information, if applicable:
 - 1. Current and design flow rates (peak hourly, maximum month, and average day), and
 - 2. Current and design solids loading rates.
- d. An analysis of current treatment and removal efficiencies for the design criteria parameters (BOD and TSS) for each treatment unit based on the sampling required by the industrial wastewater treatment plant study plan.
- e. An analysis of current treatment and removal efficiencies for hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide. This analysis must include a discussion on how the pollutants were treated or removed (i.e. destroyed by biological treatment in the ASB, released to the air, or discharged in the effluent).
- f. A discussion regarding the minimization of odors from the ASB. This discussion must include the following, at a minimum:
 - i. Identification of potential odor causing components of the ASB and the current operational and maintenance procedures associated with odor management at the ASB,
 - ii. Current and future ASB sludge management practices, and
 - iii. An analysis of the operating conditions and management procedures required at the ASB to minimize the emissions of hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide to the air from the ASB.
- g. The analysis must also address anticipated changes proposed for the Permittee's operations during the next permit term on the wastewater treatment system capacity. The report shall include a discussion of any production increases, modifications to process units, etc. that could potentially cause an increase in hydraulic and/or organic loading to the wastewater treatment facility.
- h. An analysis of the sludge accumulation in the ASB and the associated impacts to the treatment capacity of the ASB. The analysis must establish a maximum sludge depth that will maintain the design treatment capacity of the system and ensure aerobic conditions throughout the ASB.

S17. Stormwater Analysis Plan (SWAP)

- 1. All stormwater runoff must be routed to the process wastewater treatment system and discharged through Outfall 001. Any stormwater runoff from the facility site must be reported within 24 hours and a plan for corrective action submitted within 30 days.

2. The Permittee must update the Stormwater Analysis Plan (SWAP). The updated SWAP must be submitted to Ecology for review and approval no later than **October 1, 2014**. At a minimum, the SWPPP must include the following information:
 - a. A site map that identifies:
 - i. The scale or the relative distances between significant structures and drainage systems.
 - ii. Significant features.
 - iii. Stormwater drainage and discharge structures.
 - iv. Paved areas and buildings.
 - v. Surface water locations (including wetlands and drainage ditches).
 - vi. Areas of existing and potential soil erosion (in a significant amount).
 - vii. Lands and waters adjacent to the site that may be helpful in identifying discharge points or drainage routes.
 - b. Best Management Practices (BMPs): The SWAP must describe all BMPs used to prevent stormwater runoff from leaving the site and discharging directly to any surface waters.
 - c. Preventive Maintenance: The SWAP shall include BMPs to inspect and maintain the stormwater drainage system and other controls that could fail and result in the discharge of untreated stormwater to surface water.
3. The Permittee must conduct at least one stormwater inspections per year during the wet season (October 1 – April 30).

The Permittee must conduct the wet season inspection during a rainfall event and must include an assessment of the stormwater collection system to determine if any maintenance is necessary for proper operation of the system and to determine if the stormwater is being properly collected. Any observations of stormwater being discharged off-site without treatment must be noted and corrective action measures must be identified to prohibit future discharges of untreated stormwater. The results of the inspection for that year must be submitted to Ecology by September 1st.
4. The SWAP must be modified whenever there is a change in design, construction, operation, or maintenance at the facility that significantly changes the flow of stormwater on the site so that is no longer collected by the stormwater collection system. The Permittee must provide for implementation of any modifications to the SWPPP in a timely manner.

S18. Mixing Study Update

S18.A. General Requirements

The Permittee must

1. Determine the degree of mixing during critical conditions, as defined in WAC 173-201A-020 Definitions - “Critical Condition,” or as close to critical conditions as reasonably possible.

2. Conduct the study in accordance with the Guidance for Conducting Mixing Zone Analyses (Ecology, 2008).
3. If validation/calibration of the model is necessary, the validation/calibration must be conducted in accordance with the Guidance mentioned above, in particular, Subsection 5.2 “Quantify Dilution”.
4. Apply the resultant dilution ratios for acute and chronic boundaries in accordance with directions found in Ecology’s *Permit Writer’s Manual* (2010), Chapter VI and Appendix 6. You can obtain a copy of the manual at: <http://www.ecy.wa.gov/pubs/92109.pdf>.

S18.B. Reporting Requirements

The Permittee must:

1. Include the results of the effluent mixing study in the Effluent Mixing Report and submit it to Ecology for approval no later than April 1, 2014. The Permittee must submit a paper copy and an electronic copy (preferably as a PDF).
2. Submit to Ecology any available information it has regarding background physical conditions or background concentrations of chemical substances in the receiving water (for which there are criteria in chapter 173-201A WAC) as part of the Effluent Mixing Report.
3. Locate the outfall and mixing zone boundaries with GPS coordinates and identify the accuracy of station locations in the report.

If the results of the mixing study, toxicity tests, and chemical analysis indicate that the concentration of any pollutant(s) exceeds or has a reasonable potential to exceed the state water quality standards, chapter 173-201A WAC, Ecology may issue an administrative order to require a reduction of pollutants or modify this permit to impose effluent limits to meet the water quality standards.

S18.C. Protocols

The Permittee must determine the dilution ratio using protocols outlined in the following references, approved modifications thereof, or by another method approved by Ecology:

1. Akar, P.J. and G.H. Jirka, Cormix2: An Expert System for Hydrodynamic Mixing Zone Analysis of Conventional and Toxic Multiport Diffuser Discharges, USEPA Environmental Research Laboratory, Athens, GA, Draft, July 1990.
2. Baumgartner, D.J., W.E. Frick, P.J.W. Roberts, and C.A. Bodeen, *Dilution Models for Effluent Discharges*, USEPA, Pacific Ecosystems Branch, Newport, OR, 1993.
3. Doneker, R.L. and G.H. Jirka, Cormix1: An Expert System for Hydrodynamic Mixing Zone Analysis of Conventional and Toxic Submerged

Single Port Discharges, USEPA, Environmental Research Laboratory, Athens, GA, EPA/600-3-90/012, 1990.

4. Ecology, *Permit Writer's Manual*, Water Quality Program, Department of Ecology, Olympia, WA 98504, revised November 2010, including most current addenda.
5. Ecology, *Guidance for Conducting Mixing Zone Analyses, Permit Writer's Manual*, (Appendix 6.1), Water Quality Program, Department of Ecology, Olympia, WA 98504, October 1996.
6. Kilpatrick, F.A., and E.D. Cobb, *Measurement of Discharge Using Tracers, Chapter A16, Techniques of Water-Resources Investigations of the USGS*, Book 3, Application of Hydraulics, USGS, U.S. Department of the Interior, Reston, VA, 1985.
7. Wilson, J.F., E.D. Cobb, and F.A. Kilpatrick, *Fluorometric Procedures for Dye Tracing, Chapter A12. Techniques of Water-Resources Investigations of the USGS*, Book 3, Application of Hydraulics, USGS, U.S. Department of the Interior, Reston, VA, 1986.

S19. Application for Permit Renewal or Modification for Facility Changes

The Permittee must submit an application for renewal of this permit no later than October 1, 2017. The Permittee must submit a paper copy and an electronic copy (preferably as a PDF).

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

General Conditions

G1. Signatory Requirements

1. All applications, reports, or information submitted to Ecology must be signed and certified.
 - a. In the case of corporations, by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or
 - The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment

recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

- In the case of a partnership, by a general partner.
- In the case of sole proprietorship, by the proprietor.
- In the case of a municipal, state, or other public facility, by either a principal executive officer or ranking elected official.

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

2. All reports required by this permit and other information requested by Ecology must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described above and submitted to Ecology.
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)
3. Changes to authorization. If an authorization under paragraph G1.2, above, is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph G1.2, above, must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. Certification. Any person signing a document under this section must make the following certification:

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

G2. Right of Inspection and Entry

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

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

G3. Permit Actions

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

1. The following are causes for terminating this permit during its term, or for denying a permit renewal application:
 - a. Violation of any permit term or condition.
 - b. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.
 - c. A material change in quantity or type of waste disposal.
 - d. A determination that the permitted activity endangers human health or the environment, or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination.
 - e. A change in any condition that requires either a temporary or permanent reduction, or elimination of any discharge or sludge use or disposal practice controlled by the permit.
 - f. Nonpayment of fees assessed pursuant to RCW 90.48.465.
 - g. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.
2. The following are causes for modification but not revocation and reissuance except when the Permittee requests or agrees:
 - a. A material change in the condition of the waters of the state.
 - b. New information not available at the time of permit issuance that would have justified the application of different permit conditions.

- c. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.
 - d. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.
 - e. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR Part 122.62.
 - f. Ecology has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.
 - g. Incorporation of an approved local pretreatment program into a municipality's permit.
3. The following are causes for modification or alternatively revocation and reissuance:
- a. When cause exists for termination for reasons listed in 1.a through 1.g of this section, and Ecology determines that modification or revocation and reissuance is appropriate.
 - b. When Ecology has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer (General Condition G7) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new Permittee.

G4. Reporting Planned Changes

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

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

G5. Plan Review Required

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications must be submitted to Ecology for approval in accordance with chapter 173-240 WAC. Engineering reports, plans, and specifications

must be submitted at least one hundred eighty (180) days prior to the planned start of construction unless a shorter time is approved by Ecology. Facilities must be constructed and operated in accordance with the approved plans.

G6. Compliance with other Laws and Statutes

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

G7. Transfer of this Permit

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

1. Transfers by Modification

Except as provided in paragraph (2) below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR 122.62(b)(2), or a minor modification made under 40 CFR 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

2. Automatic Transfers

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

- a. The Permittee notifies Ecology at least thirty (30) days in advance of the proposed transfer date.
- b. The notice includes a written agreement between the existing and new Permittees containing a specific date transfer of permit responsibility, coverage, and liability between them.
- c. Ecology does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under this subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

G8. Reduced Production for Compliance

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

G9. Removed Substances

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

G10. Duty to Provide Information

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

G11. Other Requirements of 40 CFR

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

G12. Additional Monitoring

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

G13. Payment of fees

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

G14. Penalties for Violating Permit Conditions

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

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

G15. Upset

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

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

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

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

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

G16. Property Rights

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

G17. Duty to Comply

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

G18. Toxic Pollutants

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

G19. Penalties for Tampering

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

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

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

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

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

G21. Compliance Schedules

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

Appendix A

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

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

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

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

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

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

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

CONVENTIONAL PARAMETERS

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
Biochemical Oxygen Demand	SM5210-B		2 mg/L
Soluble Biochemical Oxygen Demand	SM5210-B ³		2 mg/L
Chemical Oxygen Demand	SM5220-D		10 mg/L
Total Organic Carbon	SM5310-B/C/D		1 mg/L
Total Suspended Solids	SM2540-D		5 mg/L
Total Ammonia (as N)	SM4500-NH3-B and C/D/E/G/H		20
Flow	Calibrated device		
Dissolved oxygen	SM4500-OC/OG		0.2 mg/L
Temperature (max. 7-day avg.)	Analog recorder or Use		0.2° C

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
	micro-recording devices known as thermistors		
pH	SM4500-H ⁺ B	N/A	N/A

NONCONVENTIONAL PARAMETERS

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
Total Alkalinity	SM2320-B		5 mg/L as CaCO ₃
Chlorine, Total Residual	SM4500 Cl G		50.0
Color	SM2120 B/C/E		10 color units
Fecal Coliform	SM 9221E,9222	N/A	Specified in method - sample aliquot dependent
Fluoride (16984-48-8)	SM4500-F E	25	100
Nitrate + Nitrite Nitrogen (as N)	SM4500-NO ₃ - E/F/H		100
Nitrogen, Total Kjeldahl (as N)	SM4500-N _{org} -B/C and SM4500NH ₃ -B/C/D/EF/G/H		300
Soluble Reactive Phosphorus (as P)	SM4500- PE/PF	3	10
Phosphorus, Total (as P)	SM 4500 PB followed by SM4500-PE/PF	3	10
Oil and Grease (HEM)	1664 A or B	1,400	5,000
Salinity	SM2520-B		3 practical salinity units or scale (PSU or PSS)
Settleable Solids	SM2540 -F		100
Sulfate (as mg/L SO ₄)	SM4110-B		200
Sulfide (as mg/L S)	SM4500-S ² F/D/E/G		200
Sulfite (as mg/L SO ₃)	SM4500-SO ₃ B		2000
Total Coliform	SM 9221B, 9222B, 9223B	N/A	Specified in method - sample aliquot dependent
Total dissolved solids	SM2540 C		20 mg/L
Total Hardness	SM2340B		200 as CaCO ₃

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
Aluminum, Total (7429-90-5)	200.8	2.0	10
Barium Total (7440-39-3)	200.8	0.5	2.0
BTEX (benzene +toluene + ethylbenzene + m,o,p xylenes)	EPA SW 846 8021/8260	1	2
Boron Total (7440-42-8)	200.8	2.0	10.0
Cobalt, Total (7440-48-4)	200.8	0.05	0.25
Iron, Total (7439-89-6)	200.7	12.5	50
Magnesium, Total (7439-95-4)	200.7	10	50
Molybdenum, Total (7439-98-7)	200.8	0.1	0.5
Manganese, Total (7439-96-5)	200.8	0.1	0.5
NWTPH Dx ⁴	Ecology NWTPH Dx	250	250
NWTPH Gx ⁵	Ecology NWTPH Gx	250	250
Tin, Total (7440-31-5)	200.8	0.3	1.5
Titanium, Total (7440-32-6)	200.8	0.5	2.5

PRIORITY POLLUTANTS

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

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
Cyanide, Free Amenable to Chlorination (Available Cyanide)	SM4500-CN G	5	10
Phenols, Total	EPA 420.1		50

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

PRIORITY POLLUTANTS (continued)

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
VOLATILE COMPOUNDS			
Acrolein (107-02-8)	624	5	10
Acrylonitrile (107-13-1)	624	1.0	2.0
Benzene (71-43-2)	624	1.0	2.0
Bromoform (75-25-2)	624	1.0	2.0
Carbon tetrachloride (56-23-5)	624/601 or SM6230B	1.0	2.0
Chlorobenzene (108-90-7)	624	1.0	2.0
Chloroethane (75-00-3)	624/601	1.0	2.0

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
VOLATILE COMPOUNDS			
2-Chloroethylvinyl Ether (110-75-8)	624	1.0	2.0
Chloroform (67-66-3)	624 or SM6210B	1.0	2.0
Dibromochloromethane (124-48-1)	624	1.0	2.0
1,2-Dichlorobenzene (95-50-1)	624	1.9	7.6
1,3-Dichlorobenzene (541-73-1)	624	1.9	7.6
1,4-Dichlorobenzene (106-46-7)	624	4.4	17.6
Dichlorobromomethane (75-27-4)	624	1.0	2.0
1,1-Dichloroethane (75-34-3)	624	1.0	2.0
1,2-Dichloroethane (107-06-2)	624	1.0	2.0
1,1-Dichloroethylene (75-35-4)	624	1.0	2.0
1,2-Dichloropropane (78-87-5)	624	1.0	2.0
1,3-dichloropropene (mixed isomers) (1,2-dichloropropylene) (542-75-6) ⁶	624	1.0	2.0
Ethylbenzene (100-41-4)	624	1.0	2.0
Methyl bromide (74-83-9) (Bromomethane)	624/601	5.0	10.0
Methyl chloride (74-87-3) (Chloromethane)	624	1.0	2.0
Methylene chloride (75-09-2)	624	5.0	10.0
1,1,2,2-Tetrachloroethane (79-34-5)	624	1.9	2.0
Tetrachloroethylene (127-18-4)	624	1.0	2.0
Toluene (108-88-3)	624	1.0	2.0
1,2-Trans-Dichloroethylene (156-60-5) (Ethylene dichloride)	624	1.0	2.0
1,1,1-Trichloroethane (71-55-6)	624	1.0	2.0
1,1,2-Trichloroethane (79-00-5)	624	1.0	2.0
Trichloroethylene (79-01-6)	624	1.0	2.0
Vinyl chloride (75-01-4)	624/SM6200B	1.0	2.0

PRIORITY POLLUTANTS (continued)

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)¹ μg/L unless specified	Quantitation Level (QL)² μg/L unless specified
BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)			
Acenaphthene (83-32-9)	625	0.2	0.4
Acenaphthylene (208-96-8)	625	0.3	0.6
Anthracene (120-12-7)	625	0.3	0.6
Benzidine (92-87-5)	625	12	24
Benzyl butyl phthalate (85-68-7)	625	0.3	0.6
Benzo(a)anthracene (56-55-3)	625	0.3	0.6
Benzo(b)fluoranthene (3,4-benzofluoranthene) (205-99-2) ⁷	610/625	0.8	1.6
Benzo(j)fluoranthene (205-82-3)⁷	625	0.5	1.0
Benzo(k)fluoranthene (11,12-benzofluoranthene) (207-08-9) ⁷	610/625	0.8	1.6
Benzo(r,s,t)pentaphene (189-55-9)	625	0.5	1.0
Benzo(a)pyrene (50-32-8)	610/625	0.5	1.0
Benzo(ghi)Perylene (191-24-2)	610/625	0.5	1.0
Bis(2-chloroethoxy)methane (111-91-1)	625	5.3	21.2
Bis(2-chloroethyl)ether (111-44-4)	611/625	0.3	1.0
Bis(2-chloroisopropyl)ether (39638-32-9)	625	0.3	0.6
Bis(2-ethylhexyl)phthalate (117-81-7)	625	0.1	0.5
4-Bromophenyl phenyl ether (101-55-3)	625	0.2	0.4
2-Chloronaphthalene (91-58-7)	625	0.3	0.6
4-Chlorophenyl phenyl ether (7005-72-3)	625	0.3	0.5
Chrysene (218-01-9)	610/625	0.3	0.6
Dibenzo (a,h)acridine (226-36-8)	610M/625M	2.5	10.0
Dibenzo (a,j)acridine (224-42-0)	610M/625M	2.5	10.0
Dibenzo(a-h)anthracene	625	0.8	1.6

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)¹ μg/L unless specified	Quantitation Level (QL)² μg/L unless specified
BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)			
(53-70-3)(1,2,5,6-dibenzanthracene)			
Dibenzo(a,e)pyrene (192-65-4)	610M/625M	2.5	10.0
Dibenzo(a,h)pyrene (189-64-0)	625M	2.5	10.0
3,3-Dichlorobenzidine (91-94-1)	605/625	0.5	1.0
Diethyl phthalate (84-66-2)	625	1.9	7.6
Dimethyl phthalate (131-11-3)	625	1.6	6.4
Di-n-butyl phthalate (84-74-2)	625	0.5	1.0
2,4-dinitrotoluene (121-14-2)	609/625	0.2	0.4
2,6-dinitrotoluene (606-20-2)	609/625	0.2	0.4
Di-n-octyl phthalate (117-84-0)	625	0.3	0.6
1,2-Diphenylhydrazine (<i>as Azobenzene</i>) (122-66-7)	1625B	5.0	20
Fluoranthene (206-44-0)	625	0.3	0.6
Fluorene (86-73-7)	625	0.3	0.6
Hexachlorobenzene (118-74-1)	612/625	0.3	0.6
Hexachlorobutadiene (87-68-3)	625	0.5	1.0
Hexachlorocyclopentadiene (77-47-4)	1625B/625	0.5	1.0
Hexachloroethane (67-72-1)	625	0.5	1.0
Indeno(1,2,3-cd)Pyrene (193-39-5)	610/625	0.5	1.0
Isophorone (78-59-1)	625	0.5	1.0
3-Methyl cholanthrene (56-49-5)	625	2.0	8.0
Naphthalene (91-20-3)	625	0.3	0.6
Nitrobenzene (98-95-3)	625	0.5	1.0
N-Nitrosodimethylamine (62-75-9)	607/625	2.0	4.0
N-Nitrosodi-n-propylamine (621-64-7)	607/625	0.5	1.0
N-Nitrosodiphenylamine (86-30-6)	625	0.5	1.0
Perylene (198-55-0)	625	1.9	7.6
Phenanthrene (85-01-8)	625	0.3	0.6
Pyrene (129-00-0)	625	0.3	0.6
1,2,4-Trichlorobenzene (120-82-1)	625	0.3	0.6

PRIORITY POLLUTANTS (continued)

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
DIOXIN			
2,3,7,8-Tetra-Chlorodibenzo-P-Dioxin (176-40-16) (2,3,7,8 TCDD)	1613B	1.3 pg/L	5 pg/L

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
PESTICIDES/PCBs			
Aldrin (309-00-2)	608	0.025	0.05
alpha-BHC (319-84-6)	608	0.025	0.05
beta-BHC (319-85-7)	608	0.025	0.05
gamma-BHC (58-89-9)	608	0.025	0.05
delta-BHC (319-86-8)	608	0.025	0.05
Chlordane (57-74-9) ⁸	608	0.025	0.05
4,4'-DDT (50-29-3)	608	0.025	0.05
4,4'-DDE (72-55-9)	608	0.025	0.05 ¹⁰
4,4' DDD (72-54-8)	608	0.025	0.05
Dieldrin (60-57-1)	608	0.025	0.05
alpha-Endosulfan (959-98-8)	608	0.025	0.05
beta-Endosulfan (33213-65-9)	608	0.025	0.05
Endosulfan Sulfate (1031-07-8)	608	0.025	0.05
Endrin (72-20-8)	608	0.025	0.05
Endrin Aldehyde (7421-93-4)	608	0.025	0.05
Heptachlor (76-44-8)	608	0.025	0.05
Heptachlor Epoxide (1024-57-3)	608	0.025	0.05
PCB-1242 (53469-21-9) ⁹	608	0.25	0.5
PCB-1254 (11097-69-1)	608	0.25	0.5
PCB-1221 (11104-28-2)	608	0.25	0.5
PCB-1232 (11141-16-5)	608	0.25	0.5
PCB-1248 (12672-29-6)	608	0.25	0.5
PCB-1260 (11096-82-5)	608	0.13	0.5
PCB-1016 (12674-11-2) ⁹	608	0.13	0.5
Toxaphene (8001-35-2)	608	0.24	0.5

1. Detection level (DL) or detection limit means the minimum concentration of an analyte (substance) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero as determined by the procedure given in 40 CFR part 136, Appendix B.
2. Quantitation Level (QL) also known as Minimum Level of Quantitation (ML) – The lowest level at which the entire analytical system must give a recognizable signal and acceptable calibration point for the analyte. It is equivalent to the concentration of the lowest calibration standard, assuming that the lab has used all method-specified sample weights, volumes, and cleanup procedures. The QL is calculated by multiplying the MDL by 3.18 and rounding the result to the number nearest to $(1, 2, \text{ or } 5) \times 10^n$, 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 <http://www.ecy.wa.gov/biblio/97602.html>
5. NWTPH Gx - Northwest Total Petroleum Hydrocarbons Gasoline Extended Range – see <http://www.ecy.wa.gov/biblio/97602.html>
6. 1, 3-dichloroproylene (mixed isomers) -You may report this parameter as two separate parameters: cis-1, 3-dichloropropene (10061-01-5) and trans-1, 3-dichloropropene (10061-02-6).
7. Total Benzofluoranthenes - Because Benzo(b)fluoranthene, Benzo(j)fluoranthene and Benzo(k)fluoranthene co-elute you may report these three isomers as total benzofluoranthenes.
8. Chlordane - You may report alpha-chlordane (5103-71-9) and gamma-chlordane (5103-74-2) in place of chlordane (57-74-9). If you report alpha and gamma-chlordane, the DL/PQLs that apply are 0.025/0.050.
9. PCB 1016 & PCB 1242 - You may report these two PCB compounds as one parameter called PCB 1016/1242.