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**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
and STATE WASTE DISCHARGE PERMIT No. WA0024651**

State of Washington
DEPARTMENT OF ECOLOGY
Northwest Regional Office
3190 – 160th Avenue SE
Bellevue, WA 98008-5452

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 OF SEATTLE
Seattle-Tacoma International Airport
P.O. Box 68727
Seattle, Washington 98168

Facility Location:

Seattle-Tacoma International Airport
Seattle, Washington

Industry Type:

Air Transportation - Airport

Waterbody I.D. No.:

- (i) WA-PS-0270
- (ii) WA-09-2000
- (iii) WA-09-2005

Receiving Water:

- (i) Puget Sound (Industrial Wastewater)
- (ii) Des Moines Creek (Stormwater)
- (iii) Miller Creek (Stormwater)
- (iv) City of SeaTac Storm Sewer, tributary to
Gilliam Creek and the Green River (Stormwater)
- (v) Walker Creek (Stormwater)
- (vi) Northwest Ponds (Stormwater)
- (vii) Lake Reba (Stormwater)

Part I – Industrial Wastewater/Stormwater
Puget Sound - Marine Discharge Location:

<u>East End Diffuser</u>	<u>West End Diffuser</u>
Latitude: 47.403056 N	47.403056 N
Longitude: -122.336944 W	-122.337778 W

Midway Sewer District Connection

Latitude: 47.411667 N
Longitude: -122.319444 W

King County Sewer (Under separate King County Permit)

– See Part II for Runway Stormwater Discharge Locations

– See Part III for Construction-related Stormwater
Discharge Locations

and possible groundwater discharges on the airport
property.

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

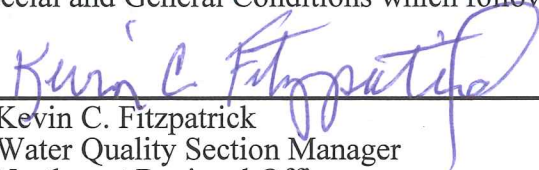

Kevin C. Fitzpatrick
Water Quality Section Manager
Northwest Regional Office
Washington State Department of Ecology

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SUMMARY OF PERMIT REPORT REQUIRED SUBMITTALS

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

Part I – IWTP (Industrial Wastewater)			
Permit Section	Submittal	Frequency	First Submittal Date
S2.A1	Priority Pollutants for Permit Application	2/permit cycle	June 30, 2020
S2.A2	Priority Pollutants for Permit Application	1/permit cycle	June 30, 2020
S2.F	Annual Sanitary Sewer Monitoring Summary Report	1/year	October 1, 2016
S3.A	Discharge Monitoring Report	Monthly	February 28, 2016
S6	Application for Permit Renewal	1/permit cycle	June 30, 2020
S10	Spill Plan	1/permit cycle	June 30, 2020
S12	Acute Toxicity Effluent Summary Report	1/permit cycle	June 30, 2020
S13	Chronic Toxicity Effluent Summary Report	1/permit cycle	June 30, 2020

Part II (Non-construction Stormwater Runoff)			
Permit Section	Submittal	Frequency	First Submittal Date
2S2.A	Priority Pollutants for Permit Application	2/permit cycle	June 30, 2020
2S3.A	Discharge Monitoring Report	Quarterly	April 28, 2016
2S7.A	Acute Toxicity Effluent Test Results with Permit Renewal Application	1/permit cycle	June 30, 2020
2S7.G	The Acute Toxicity Summary Report (for all existing outfalls)	2/permit cycle	June 30, 2020
2S8.C	Sub-lethal Toxicity Effluent Characterization	1/permit cycle	June 30, 2020
S9	In-Situ Toxicity Characterization Summary Report	1/permit cycle	June 30, 2020

Part III (Construction Stormwater Runoff)			
Permit Section	Submittal	Frequency	First Submittal Date
3S3.A	Discharge Monitoring Report	Monthly	February 28, 2016

GENERAL CONDITION COMMON TO PARTS I, II & III			
G1.B	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	
G20	Reporting Anticipated Noncompliance	As necessary	
G21	Reporting Other Information	As necessary	

PART I. INDUSTRIAL WASTEWATER

The Industrial Wastewater Section includes two separate wastewater sources, one discharges into the Industrial Wastewater System (IWS) at the airport, the other discharges directly to the Midway Sewer District sewage system.

- *IWS flow* is runoff collected from the North and South Service Basins which mainly consists of stormwater runoff from terminal air cargo, deicing areas, hangars, and maintenance areas. The industrial wastewater runoff may result from any process or activity of industry that includes, but is not limited to, water used for industrial processes such as pipe integrity pressure testing; vehicle and aircraft wash water; stormwater contaminated with fuel, lubricants, fire-fighting foam, cleaning agents, aircraft and ground water from ground water well construction and monitoring; and leachate from solid waste decant facilities. In addition, construction stormwater, if treatable by the IWTP, may be discharged to the IWS. Due to the nature of activities, the water collected has variable levels of spilled fuel, de-icing/frost chemicals, and wash water and other minor process water sources. These flows are collected in a drain system and conveyed to the STIA industrial waste treatment plant and storage lagoons. This wastewater is treated, segregated and discharged or stored in the lagoons. High strength glycol contaminated wastewater is discharged to the King County POTW system; wastewater that meets the S1.A permit limits can be discharged directly to Puget Sound subject to the mixing zone restrictions listed in S1.B.
- *Midway Sewer Discharge* is process wastewater generated by the various sources listed in S1.C that are discharged directly to the POTW sewer system and ultimately to the Midway sewage treatment plant for treatment.

SPECIAL CONDITIONS

S1. DISCHARGE LIMITS

All discharges and activities authorized by this permit must be consistent with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a level in excess of that identified and authorized by this permit, or at locations not identified by this permit is a violation of the terms and conditions of this permit.

A. *Industrial Wastewater System (IWS) Flow*

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge at specified discharge permitted location subject to complying with the following limits:

TABLE S1-1. IWS Flow EFFLUENT LIMITS		
OUTFALL 001 DISCHARGE TO PUGET SOUND		
Parameter	Monthly Average	Maximum Daily ^a
Biochemical Oxygen Demand (BOD ₅) November through March	45 mg/L	2665 lbs/day
Biochemical Oxygen Demand (BOD ₅) April through October	25 mg/L	1480 lbs/day
Total Suspended Solids (TSS)	21 mg/L	33 mg/L
Oil and Grease as NWTPH-Dx	8 mg/L	15 mg/L
pH ^b	Daily minimum is equal to or greater than 6, and the daily maximum is less than 9.	
Footnotes:		
^a The monthly average effluent limits is based on the arithmetic mean of the samples taken during a calendar month.		
^b Indicates the range of permitted values. When pH is continuously monitored, excursions between 5.0 and 6.0, or 9.0 and 10.0 shall not be considered violations provided 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 are violations. The instantaneous maximum and minimum pH must be reported monthly		

B. *Mixing Zone Descriptions for IWS Flow to Outfall 001*

The maximum boundaries of the mixing zones are defined as follows:

Chronic Mixing Zone:

WAC 173-201A-400(7)(b)(i) specifies mixing zones must not extend in any horizontal direction from the discharge ports for a distance greater than 200 feet plus the depth of water over the discharge ports as measured during mean lower low water (MLLW). Given a MLLW water depth of 148 feet (45.1 meters) for the Permittee's outfall, the horizontal distance therefore is 348 feet (106.1 meters). The mixing zone is a circle with a radius of **348 feet (106.1 meters)** measured from the center of each discharge port. The mixing zone extends from the seabed to the top of the water surface. Chronic aquatic life criteria and human health criteria must be met at the edge of the chronic zone. The dilution factor associated with the chronic mixing zone is 202:1.

Acute Mixing Zone:

WAC 173-201A-400(8)(b) specifies that in estuarine waters a zone where acute criteria may be exceeded must not extend beyond 10% of the distance established for the maximum or chronic zone as measured independently from the discharge ports. The acute mixing zone is a circle with a radius of **34.8 feet (10.6 meters)** measured from the center of each discharge port. The mixing zone extends from the seabed to the top of the water surface. Acute aquatic life criteria must be met at the edge of the acute zone. The dilution factor associated with the acute mixing zones is 72:1.

Available Dilution	
Acute Aquatic Life Criteria	72
Chronic Aquatic Life Criteria	202
Human Health Criteria – Carcinogen	202
Human Health Criteria – Non-carcinogen	202

C. Midway Sewer Discharges

During the period beginning on the effective date and lasting through the expiration date of this permit, the Permittee is authorized to discharge following process wastewater to the **Midway Sewer District** sanitary sewer system subject to the following limits:

TABLE S1-2: EFFLUENT LIMITS for Midway Sewer Discharge		
Parameter	Average Monthly ^a	Maximum Daily ^b
Flow – GPD		
Boiler Blowdown - MBBD	1,000	15,000
Cooling Tower Blowdown - MTBD	18,000	250,000
Equipment Wash Rack Blowdown - EWBD	20,000	20,000
Bus Maintenance Facility Bus Wash & Chassis Blowdown - BWBD	4380	17,260
Oil and Grease –		
Equipment Wash Rack Blowdown, Bus Maintenance Facility Bus Wash & Chassis Blowdown	N/A	100 mg/L
pH – Equipment Wash Rack, Bus Maintenance Facility Bus Wash & Chassis Blowdown	Daily minimum is equal to or greater than 6, and the daily maximum is less than 9 standard units.	
^a Daily flows averaged over a month.		
^b The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limits expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day.		

S2. MONITORING REQUIREMENTS

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

A. Monitoring Schedule for Discharges to Puget Sound from Industrial Wastewater Treatment Plant (IWTP) via Outfall 001

1. The Permittee must monitor the treated contaminated stormwater effluent from IWTP according to the following schedule:

TABLE S2-1: IWTP Monitoring Schedule			
Parameter	Units	Minimum Sampling Frequency ^a	Sample Type
Flow	MGD	Daily	Continuous
Biochemical Oxygen Demand (BOD ₅)	mg/L	1/day	Composite ^c
pH ^b	Standard Units	Daily	Continuous
Total Suspended Solids (TSS)	mg/L	1/week	Composite ^c
Propylene Glycol	mg/L	1/week	Composite ^c
Oil & Grease ^d as NWTPH Dx	mg/L	1/week	Grab
Permit Renewal Application Requirements – Final Treated Effluent			
Priority Pollutants ^e	As listed below	Once during wet season (November - March) & Once during dry season (April – October).	As listed below
Cyanide	µg/L		Grab
Total Phenolic Compounds	µg/L		Grab
Priority Pollutants (PP) – Total Metals	µg/L; ng/L for mercury		24-hour composite ^c Grab for mercury
PP – Volatile Organic Compounds	µg/L		Grab
PP – Acid-extractable Compounds	µg/L		24-hour composite ^c
PP – Base-neutral Compounds	µg/L		24-hour composite ^c
PP - Dioxin	pg/L		24-hour composite ^c
PP – Pesticides/PCBs	µg/L		24-hour composite ^c
^a If no discharge occurs in a given month that results in no discharge during the month, sampling is not required and it must clearly be stated in the DMR. The DMR must also indicate the total contaminated stormwater processed during the calendar month with the number of processing days.			
^b Should the automatic pH recording system fails, the Permittee shall manually check pH at least once every four hours during discharge.			
^c Samples must represent the discharge and must be taken only during the days that discharge is taking place. Manual composite may be used instead of automatic 24-hour compositor. Manual composite sample must be a combination of at least four grab samples of fixed volume collected at equal time intervals.			
^d Oil and grease shall be measured by Ecology Method NWTPH-DX.			
^e See Appendix A to identify the specific pollutants in the priority pollutant groups listed. The Permittee must take samples twice per year, once during wet season and once during dry season in year 3 of the permit cycle, and submit the report to Ecology 180 days prior to permit expiration in conjunction with permit application.			
^f Propylene Glycol tested using EPA method SW 8015 which is modified to determine glycol constituents. Monitoring must be during Deicing and Anti-icing months, November through March.			

2. The Permittee must monitor the individual discharges of boiler blowdown, cooling tower blowdown, bus maintenance facility bus wash and chassis blowdown, and equipment wash rack blowdown (when put in service) to the Midway Sewer District's Publicly Owned Treatment Works (POTW) and report individually for each discharge point according to the following schedule:

TABLE S2-2: Monitoring Schedule for Process Wastewater Discharge to the MIDWAY SEWER System				
Monitoring Locations and Coordinates				
Description		Latitude	Longitude	
Boiler Blowdown		47.443333	-122.300833	
Cooling Tower Blowdown		47.441389	-122.2975	
Bus maintenance Facility Bus Wash & Chassis Blowdown		47.426944	-122.300833	
Equipment Wash Rack Blowdown (future discharge, sampling point will be specified once made operable.)		TBD	TBD	
Monitoring Locations	Parameter	Units	Minimum Sampling Frequency^b	Sample Type
<ul style="list-style-type: none"> Boiler Blowdown Cooling Tower Blowdown Equipment Wash Rack Blowdown Bus maintenance Facility Bus Wash & Chassis Blowdown 	Flow	GPD	Daily	Continuous
<ul style="list-style-type: none"> Equipment Wash Rack Blowdown Bus maintenance Facility Bus Wash & Chassis Blowdown 	BOD ₅	mg/L	1/month	Composite ^e
<ul style="list-style-type: none"> Equipment Wash Rack Blowdown Bus maintenance Facility Bus Wash & Chassis Blowdown 	TSS	mg/L	1/month	Composite ^e
<ul style="list-style-type: none"> Equipment Wash Rack Blowdown Bus maintenance Facility Bus Wash & Chassis Blowdown 	pH	Standard Units	1/month	Grab
<ul style="list-style-type: none"> Equipment Wash Rack Blowdown Bus maintenance Facility Bus Wash & Chassis Blowdown 	Oil & Grease as NWTPH-DX ^d	mg/L	1/month	Grab
<ul style="list-style-type: none"> Equipment Wash Rack Blowdown Bus maintenance Facility Bus Wash & Chassis Blowdown 	Total Priority Pollutants (PP) and Heavy Metals ^f	µg/L; ng/L for mercury	Once/Permit Cycle	24-Hour composite ^e Grab for mercury
^a Not used				
^b If no discharge occurs in a given month that results in no discharge during the month, sampling is not required and it must clearly be stated in the DMR. The DMR must also indicate the total contaminated stormwater processed during the calendar month with the number of processing days.				

TABLE S2-2: Monitoring Schedule for Process Wastewater Discharge to the MIDWAY SEWER System	
^d	Oil and grease shall be measured by Ecology Method NWTPH-DX.
^e	Samples must represent the discharge and must be taken only during the days that discharge is taking place. Manual composite may be used instead of automatic 24-hour compositor. Manual composite sample must be a combination of at least four grab samples of fixed volume collected at equal time.
^f	See Appendix A to identify the specific pollutants in the priority pollutant and Heavy Metals group. Sampling must be done during summer prior to new NPDES permit application submittal.

B. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit must be representative of 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 to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by the Department of Ecology (Ecology).

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 **per manufacturer's recommendation** 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 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_0_EAP080.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.
8. Maintain calibration records for at least three years.

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.

E. Deicing/Anti-icing Fluids Usage

The Permittee must report all deicing and anti-icing events of either aircraft or runways no later than June 1st of each year, and must include the volumes of each type of deicing and anti-icing material used each day by each airline and the Permittee. Anti-icing means measures taken to prevent ice accumulation on the surface of the aircraft, airfield, or runway. Deicing means removing ice from the surface of the aircraft, airfield, or runway.

F. Annual Sanitary Sewer Monitoring Summary Report

On or before October 1st of each year, the Permittee must submit a report to Ecology summarizing the results of the sanitary sewer monitoring during the preceding 12-month period from July 1 through June 30.

The report must summarize monitoring data, the Port's conclusions, if any, as to what is being learned from the data, and any modifications to operations or practices to improve compliance with the permit. The report must be submitted electronically as required in S3.A.8.

S3. REPORTING AND RECORD KEEPING REQUIREMENTS

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

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 Condition S2 and as required by the form. Report a value for each day sampling occurred (unless specifically exempted in the permit) and for the summary values (when applicable) included on the electronic form.

To find out more information and to sign up for 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 obtain a paper copy DMR.

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 *Permit Writer’s Manual*, Table VI-5, Methods, detection and quantitation levels recommended for effluent characterization and effluent monitoring.
5. Calculate average values (unless otherwise specified in the permit) using:
 - a. The reported numeric value for all parameters measured between the agency-required detection value and the agency-required quantitation value.
 - b. One-half the detection value (for values reported below detection) if the lab detected the parameter in another sample for the reporting period.
 - c. Zero (for values reported below detection) if the lab did not detect the parameter in another sample for the reporting period.
6. Report single-sample grouped parameters (for example priority pollutants, PAHs, pulp and paper chlorophenolics, TTOs) on the 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. Submit DMRs for parameters with the monitoring frequencies specified in S2 (monthly, quarterly, annual, etc.) at the reporting schedule identified below. The Permittee must submit the **monthly** DMRs by the 28th of the following month.

8. Submit reports to Ecology online using Ecology's electronic WAWebDMR submittal **forms** (electronic DMRs) as required above. Send paper reports to Ecology at:

Water Quality Permit Coordinator
Department of Ecology
Northwest Regional Office
3190 160th Avenue SE
Bellevue, WA 98008-5452

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. This period of retention must be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director.

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.

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.

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.

F. Immediate Noncompliance Notification

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

- Collection system overflows discharging to marine surface waters.
- Plant bypasses discharging to marine surface waters.

Northwest Regional Office

425-649-7000

Department of Health, Shellfish Program

360-236-3330 (business hours)

360-789-8962 (after business hours)

G. Twenty-four-hour Noncompliance Notification

The Permittee must report the following occurrences of noncompliance by telephone, to Ecology at 425-649-7000, within 24 hours from the time the Permittee becomes aware of any of the following circumstances:

- a. Any noncompliance that may endanger health or the environment, unless previously reported under subpart 1, above;
- b. Any unanticipated **bypass** that exceeds any effluent limitation in the permit (See Part S5.B., “Bypass Procedures”);
- c. Any **upset** that exceeds any effluent limitation in the permit (See G.15, “Upset”);
- d. Any violation of a maximum daily or instantaneous maximum discharge limitation for any of the pollutants in Section S1.A. of this permit; or
- e. Any overflow prior to the treatment works, whether or not such overflow endangers health or the environment or exceeds any effluent limitation in the permit.

H. Report Within Five Days

The Permittee must also provide a written submission within five (5) days of the time that the Permittee becomes aware of any event required to be reported under subparts 1 or 2, above. The written submission must contain:

- a. A description of the noncompliance and its cause.
- b. The period of noncompliance, including exact dates and times.
- c. The estimated time noncompliance is expected to continue if it has not been corrected.
- d. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
- e. If the noncompliance involves an overflow prior to the treatment works, an estimate of the quantity (in gallons) of untreated overflow.

I. Waiver of Written Reports

Ecology may waive the written report required in subpart 3 above on a case-by-case basis upon request if a timely oral report has been received.

J. 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.

K. 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 inspector.

L. Other Reporting

Spills of oil or hazardous materials

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

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.

S4. COMPLIANCE WITH STANDARDS

Permittees must comply with Washington State Surface Water Quality Standards (Chapter 173-201A WAC), Sediment Management Standards (Chapter 173-204 WAC), Ground Water Quality Standards (Chapter 173-200 WAC), and Human Health-based Criteria in the national Toxics Rule (Federal Register, Vol. 57, No. 246, December 22, 1992, pages 60848-60923). Compliance with standards applies to all discharges.

Compliance with surface water quality standards means that discharges from this facility will not cause or contribute to a violation of water quality standards in the receiving water.

S5. OPERATION AND MAINTENANCE

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

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

A. Operations and Maintenance (O&M) Manual

1. O&M manual submittal and requirements

The Permittee must:

- a) Update the O&M manual that meets the requirements of 173-240-150 WAC as necessary to reflect current practices and operations.
- b) Submit to Ecology substantial changes or updates to the O&M manual. The Permittee must submit a paper copy and an electronic copy (preferably as a PDF). As an alternative to submittal, post the updated manual on the internet and notify Ecology of substantial changes.
- c) Keep the approved O&M manual at the permitted facility.
- d) Follow the instructions and procedures of this manual.

2. O&M manual components

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

- a) Elements for IWTP lagoon discharge, storage, and flow management to optimize use of the three large storage ponds to prevent overflows and meet permit conditions, and comply with requirement for sanitary sewer discharge.
- b) Emergency procedures for plant shutdown and cleanup in the event of a wastewater system upset or failure.
- c) A review of system components which if failed could pollute surface water or could impact human health. Provide a procedure for a routine schedule of checking the function of these components.
- d) Wastewater system maintenance procedures that contribute to the generation of process wastewater.
- e) Any directions to maintenance staff when cleaning, or maintaining other equipment or performing other tasks which are necessary to protect the operation of the wastewater system (for example, defining maximum allowable discharge rate for draining a tank, blocking all floor drains before beginning the overhaul of a stationary engine.)
- f) Wastewater sampling protocols and procedures for compliance with the sampling and reporting requirements in the wastewater discharge permit.
- g) Minimum staffing adequate to operate and maintain the treatment processes and carry out compliance monitoring required by the permit.
- h) Treatment plant process control monitoring schedule.
- i) Operations and maintenance for pump stations owned and operated by the Permittee.

B. Bypass Procedures

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

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

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

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

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

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

This permit authorizes such 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.

C. Duty to Mitigate

The Permittee is required to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

S6. APPLICATION FOR PERMIT RENEWAL

The Permittee must submit an application for renewal of this permit by June 30, 2020. 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.

S7. FACILITY LOADING

A. Design Criteria

Flows or waste loadings of the following design criteria for the permitted treatment facility must not be exceeded:

Daily Peak Flow @ Maximum Overflow Rate of 4.1 GPM/SF of Dissolved Air Flotation Surface Area	7.1 MGD
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S8. SOLID WASTE DISPOSAL

A. Solid Waste Handling

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

B. Leachate

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

S9. NON-ROUTINE AND UNANTICIPATED DISCHARGES

1. Beginning on the effective date of this permit, the Permittee is authorized to discharge non-routine wastewater on a case-by-case basis if approved by Ecology. Prior to any such discharge, the Permittee must contact Ecology and at a minimum provide the following information:
 - a. The proposed discharge location.
 - b. The nature of the activity that will generate the discharge.
 - c. Any alternatives to the discharge, such as reuse, storage, or recycling of the water.
 - d. The total volume of water it expects to discharge.
 - e. The results of the chemical analysis of the water.

- f. The date of proposed discharge.
- g. The expected rate of discharge discharged, in gallons per minute.
- 2. The Permittee must analyze the water for all constituents limited for the discharge and report them as required by subpart 1.e, above. All discharges must comply with the effluent limits as established in Special Condition S1 of this permit, water quality standards, and any other limits imposed by Ecology.
- 3. The Permittee must limit the discharge rate, as referenced in subpart 1.g, above, so it will not cause erosion of ditches or structural damage to culverts and their entrances or exits.
- 4. The discharge cannot proceed until Ecology has reviewed the information provided and has authorized the discharge by letter to the Permittee or by an Administrative Order. Once approved and if the proposed discharge is to a municipal storm drain, the Permittee must obtain prior approval from the municipality and notify it when it plans to discharge.

S10. SPILL CONTROL PLAN

A. Spill Control Plan Submittals and Requirements

The Permittee must:

- 1. Submit to Ecology a spill control plan/ or an update of the existing spill plan for the prevention, containment, and control of spills or unplanned releases of pollutants by June 30, 2020. 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.

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.

S11. ENGINEERING DOCUMENTS

STORMWATER REUSE SYSTEM AT STIA

The Permittee shall prepare and submit two copies of an Engineering Report prepared in accordance with Chapter 173-240 WAC prior to using or modifying existing treatment facilities or constructing new treatment facilities for the purposes of Industrial Wastewater System (IWS) water reuse. The Engineering Report shall analyze and identify methods for adequate and reliable treatment of IWS water to ensure that the water is appropriate for the proposed reuse purposes. Engineering reports must be submitted at least one hundred eighty (180) days prior to the planned start of IWS water reuse unless a shorter time is approved by Ecology. Facilities must be constructed and operated in accordance with the approved engineering report.

An engineering report is not required for the following authorized activities. The permit authorizes the use of treated IWS water that meets the effluent limits in S1 for dust suppression, irrigation, and other construction related areas within the airport grounds where the Permittee maintains complete control over the use of the water inside of controlled access area of the airport.

S12. ACUTE TOXICITY

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

The Permittee must:

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

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

4. Reports of individual characterization or compliance test results must be submitted to Ecology within sixty (60) days after each sample date.
5. The Acute Toxicity Summary Report must be submitted to Ecology with the permit renewal application (by June 30, 2020).

B. Sampling and Reporting Requirements

1. The Permittee must submit all reports for toxicity testing in accordance with the most recent version of Ecology Publication No. WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. Reports must contain toxicity data, bench sheets, and reference toxicant results for test methods. In addition, the Permittee must submit toxicity test data in electronic format (CETIS export file preferred) for entry into Ecology's database.
2. The Permittee must collect 24-hour composite effluent samples or grab samples for toxicity testing. The Permittee must cool the samples to 0 - 6 degrees Celsius during collection and send them to the lab immediately upon completion. The lab must begin the toxicity testing as soon as possible but no later than 36 hours after sampling was completed.
3. The laboratory must conduct water quality measurements on all samples and test solutions for toxicity testing, as specified in the most recent version of Ecology Publication No. WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*.
4. All toxicity tests must meet quality assurance criteria and test conditions specified in the most recent versions of the EPA methods listed in Subsection 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.
7. The Permittee may sample receiving water at the same time as the effluent and instruct the lab to measure the hardness of both and increase the hardness of the effluent sample to match the hardness of the receiving water sample prior to beginning the toxicity test. Otherwise, the Permittee must conduct whole effluent toxicity tests on an unmodified sample of final effluent.
8. The Permittee may choose to conduct a full dilution series test during compliance testing in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the acute critical effluent concentration (ACEC). The ACEC equals 1.39% effluent.
9. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing must comply with the acute statistical power standard of 29% as defined in WAC 173-205-020. If the test does not meet the power standard, the Permittee must repeat the test on a fresh sample with an increased number of replicates to increase the power.

S13. CHRONIC TOXICITY

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

The Permittee must:

1. Conduct chronic toxicity testing on final effluent once in the last winter and once in the last summer prior to submission of the application for permit renewal.
2. 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 1.39% effluent. The series of dilutions should also contain the CCEC of 0.5% effluent.
3. Compare the ACEC to the control using hypothesis testing at the 0.05 level of significance as described in Appendix H, EPA/600/4-89/001.
4. Reports of individual characterization or compliance test results must be submitted to Ecology within sixty (60) days after each sample date.
5. The Chronic Toxicity Summary Report must be submitted to Ecology with the permit renewal application (by June 30, 2020).
6. 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

B. Sampling and Reporting Requirements

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

4. All toxicity tests must meet quality assurance criteria and test conditions specified in the most recent versions of the EPA methods listed in Section 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.
7. The Permittee may sample receiving water at the same time as the effluent and instruct the lab to measure the hardness of both and increase the hardness of the effluent sample to match the hardness of the receiving water sample prior to beginning the toxicity test. Otherwise, the Permittee must conduct whole effluent toxicity tests on an unmodified sample of final effluent.
8. The Permittee may choose to conduct a full dilution series test during compliance testing in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the CCEC and the ACEC. The CCEC and the ACEC may either substitute for the effluent concentrations that are closest to them in the dilution series or be extra effluent concentrations. The CCEC equals 0.5% effluent. The ACEC equals 1.39% effluent.
9. All whole effluent toxicity tests that involve hypothesis testing must comply with the chronic statistical power standard of 39% as defined in WAC 173-205-020. If the test does not meet the power standard, the Permittee must repeat the test on a fresh sample with an increased number of replicates to increase the power.

PART 2. INDUSTRIAL STORMWATER

Part 2 of the permit covers stormwater associated with approximately 1200 acres of the stormwater drainage system. Stormwater runoff is from roads, runways, taxiways, airfield, rooftops, cargo operations, flight kitchens, and other areas associated with airport industrial activities. Stormwater runoff is treated using ponds, grass swales, and other passive stormwater treatment methods in accordance with 2S6. Stormwater Pollution Prevention Plan. Treated stormwater discharges to freshwater streams, wetlands, and ponds around the airport.

2S1. DISCHARGE LIMITS & MONITORING SCHEDULE

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, or at locations not identified by this permit is a violation of the terms and conditions of this permit. The Permittee must conduct regular monitoring of authorized outfalls as described below for direct discharges of stormwater to surface water. Samples must be collected immediately after applicable BMP(s). Monitoring must consist of visual monitoring and stormwater sampling as prescribed.

In the event that stormwater associated with construction activities is discharged through one or more of the outfalls listed in Table II-S1A (1 and 2), any such discharges must comply with the effluent limitations and monitoring requirements identified in Part 2 and Part 3 of this permit.

A. Final Effluent Limits for Industrial Stormwater

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge stormwater associated with industrial activities to waters of the state.

The Permittee shall monitor all discharges at the permitted outfall locations in Table 2S1-1 as authorized by this permit and as presented by Table 2S1-1, 2 and 3. Samples shall be at the point of discharge.

Table 2S1-1: Existing and Proposed Outfalls Locations and Outfalls		
OUTFALL #	OUTFALL LOCATIONS	RECEIVING WATER
SDE4/S1	Latitude: 47.433056 N Longitude: -122.301944 W	Des Moines Creek (East Branch) (DME)
SDD06A	Latitude: 47.426389 N Longitude: -122.30556 W	Des Moines Creek (East Branch) (DME)
SDN1	Latitude: 47.466944 N Longitude: -122.306111 W	Lake Reba RB
SDS3/5	Latitude: 47.43 N Longitude: -122.311667 W	Northwest Pond NP
SDS4	Latitude: 47.42778 N Longitude: -122.30722 W	Northwest Pond NP
SDS6/7	Latitude: 47.437222 N Longitude: -122.31806 W	Northwest Pond NP
SDN2/3/4	Latitude: 47.468056 N Longitude: -122.313056 W	Lake Reba RB
SDN3A	Latitude: 47.463333 N Longitude: -122.321944 W	Miller Creek MC
SDW1A	Latitude: 47.46 N Longitude: -122.32167 W	Miller Creek MC
SDW1B	Latitude: 47.452778 N Longitude: -122.32028 W	Miller Creek MC
SDW2	Latitude: 47.448333 N Longitude: -122.32028 W	Walker Creek WC
Future Outfalls to be Activated		
SDD05A	Latitude: 47.43 N Longitude: -122.30333 W	Des Moines Creek (East Branch)
SDD05B	Latitude: 47.432778 N Longitude: -122.30222 W	Des Moines Creek (East Branch)

Table 2S1-2: Effluent Limits for Industrial Stormwater Common To All Outfalls.

PARAMETER	DAILY MAXIMUM LIMITS - All Outfalls	SAMPLING FREQUENCY ¹		SAMPLING TYPE
		SDE4/S1, SDD05A, SDD05B	All Other Outfalls	
Turbidity ³	25 NTU	2/Qtr	1/Qtr	Grab
pH ⁴	Between 6.5 - 8.5 S.U.	2/Qtr	1/Qtr	Grab
pH	6.3 to 9.0 S.U. for outfalls SDN3A, SDW1A, SDW1B and SDW2	2/Qtr	1/Qtr	Grab
Oil and Grease (by NWT PH-Dx)	15 mg/L	2/Qtr	1/Qtr	Grab
Oil and Grease	No Visible Sheen	2/Qtr	1/Qtr	Visual
Ammonia ⁵	14.7 mg/L	2/Qtr	1/Qtr	Comp ²
Nitrate/Nitrite as N ⁵	0.68 mg/L	2/Qtr	1/Qtr	Comp ²
Priority Pollutants ⁶	Report	2/year in year 3 of the permit		Comp ²

Table 2S1-3: Site Specific Effluent Limits for Industrial Stormwater

PARAMETER	DAILY MAXIMUM LIMITS - Outfalls by Receiving Water						SAMPLING FREQUENCY ¹		SAMPLING TYPE
	Des Moines Creek - East Branch	Lake Reba	Northwest Ponds		Miller Creek	Walker Creek	SDE4/S1, SDD05A, SDD05B	All Other Outfalls	
			SDE4/S1, SDD06A, SDD05A, SDD05B	SDN1, SDN2/3/4					
Total Copper (µg/L)	25.6	28.5	32.2	32.2	59.2	47.9	2/Qtr	1/Qtr	Comp ²
Total Zinc (µg/L)	117	117	117	71.4	117	117	2/Qtr	1/Qtr	Comp ²

¹ Sampling frequency for new outfalls SDD05A and SDD05B (upon activation) is 2 storms/quarter, the second sample is required for a discharge at least 24 hours after the first. Sampling frequency for outfall SDE4/S1) is 2 storms/quarter for period (October – June) and 1 storm/quarter for period (July – September).

² Flow-weighted composite

³ Turbidity effluent limits are at the end of the pipe. When this limit is exceeded, Permittee may conduct in-stream sampling (i.e., upstream and downstream) to assess turbidity and evaluate its compliance with water quality criteria.

⁴ pH as low as 6.3 and as high as 9.0 shall not be considered a violation if results of concurrent sampling at the point of complete mix within the receiving water indicates pH range of 6.5 - 8.5 S.U.

⁵ Required only if urea is applied. If urea is not applied, Permittee must certify it.

⁶ See Appendix A to identify the specific pollutants in the priority pollutant groups listed. The Permittee must take samples twice per year, once during wet season and once during dry season in year 3 of the permit cycle, and submit the report to Ecology 180 days prior to permit expiration in conjunction with permit application.

2S2. MONITORING REQUIREMENTS

A. Priority Pollutant Monitoring for Permit Application

The Permittee must sample treated stormwater once during wet season in year 3 of the permit cycle, and submit the report to Ecology by June 30, 2020. Samples must be collected from one outfall of each receiving water body.

Priority Pollutants ^b Monitoring for Permit Renewal Application Treated Stormwater			
Parameter or group	unit	Once during wet season (November - March)	Sample Type
Cyanide	µg/L		Grab
Total Phenolic Compounds	µg/L		Grab
Priority Pollutants (PP) – Total Metals	µg/L; ng/L for mercury		24-hour composite ^a Grab for mercury
PP – Volatile Organic Compounds	µg/L		Grab
PP – Acid-extractable Compounds	µg/L		24-hour composite ^a
PP – Base-neutral Compounds	µg/L		24-hour composite ^a
PP - Dioxin	pg/L		24-hour composite ^a
PP – Pesticides/PCBs	µg/L	Once during dry season (April – October)	24-hour composite ^a
^a Samples must represent the discharge and must be taken only during the days that discharge is taking place. Manual composite may be used instead of automatic 24-hour compositor. Manual composite sample must be a combination of at least four grab samples of fixed volume collected at equal time intervals.			
^b See Appendix A to identify the specific pollutants in the priority pollutant groups listed.			

B. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit must be representative of 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 to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by Ecology.

The Permittee must report monitoring results for each quarter. The results of quarterly sampling and analysis must be submitted to Ecology. If there are no qualifying storms during the reporting period, the Permittee must report “No Discharge” on the DMR form.

Stormwater must be sampled according to the instructions below. If the Permittee is unable to sample according to any of these criteria, the Permittee must submit an explanation with the monitoring report that includes the variance and the reason why. Sampling of stormwater must be conducted as follows:

1. Sample type must be as specified in Table 2-S1A(2) and taken in accordance with the Ecology-approved procedure manual for stormwater monitoring.
2. All samples must be taken at the sampling point specified in the permit, or as close to the point of discharge as reasonably practical.
3. The storm event sampled must be at least 0.1 inches of rain in a 24-hour period.
4. The storm event sampled must be preceded by at least 24 hours less than 0.1 inches of precipitation or no discharge.
5. Samples must be representative of discharge.

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 per manufacturer's recommendation 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 with a pH meter calibrated with standard buffers and analyzed within 15 minutes of sampling or calibrate with standard buffers.
 - 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_OEA_P080.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. Maintain calibration records for at least three years.

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.

E. Prohibited Discharges

Industrial wastewater, domestic wastewater, and noncontact cooling water discharges to surface water are prohibited. Prohibited industrial wastewater discharges include, but are not limited to, truck wash water, tire bath wastewater, wheel wash water, equipment wash water, petroleum products, and chemical wastes. This permit does not authorize illicit discharges, including spills of oil or hazardous substances, nor does it relieve entities from obligations under state and federal laws and regulations pertaining to those discharges.

F. Conditionally Approved Non-stormwater Discharges

The categories and sources of non-stormwater discharges identified in condition S1.E.1 below are not considered illicit discharges and are conditionally approved, provided the discharge is otherwise consistent with the terms and conditions of this permit, AND the non-stormwater discharges are in compliance with the non-stormwater conditions in S1.E.2.

1. Conditionally approved non-stormwater discharges include:
 - a. Discharges from firefighting activities.
 - b. Fire protection system flushing, testing, and maintenance.
 - c. Discharges of potable water, including water line flushing, provided that water line flushing must be dechlorinated prior to discharge.
 - d. Uncontaminated air conditioning or compressor condensate.
 - e. Irrigation drainage.
 - f. Uncontaminated ground water or spring water.
 - g. Discharges associated with dewatering of foundations, footing drains, or utility vaults where flows are not contaminated with process materials such as solvents.
 - h. Incidental windblown mist from cooling towers that collects on rooftops or areas adjacent to the cooling tower. This does not include intentional discharges from cooling towers such as piped cooling tower blowdown or drains.
2. Non-stormwater discharges identified in Section S1.E.1, above, are conditionally approved provided the Stormwater Pollution Prevention Plan required in S6 includes the following for each non-stormwater discharge, and the non-stormwater discharge is in compliance with all applicable discharge limitations in Part II, Section S1, including compliance with state water quality standards. The SWPPP shall:

- a. Identify each non-stormwater source, including the location of where it is likely to be discharged into the stormwater collection system.
- b. Characterize the non-stormwater source, including estimated flows or flow volume, and likely pollutants which may be present.
- c. Non-stormwater discharges which include mist from cooling towers must be evaluated to determine the potential for the discharge to be contaminated by chemicals used or which may be present in the cooling tower mist.
- d. Evaluate and implement available and reasonable source control best management practices to reduce or eliminate the discharge.
- e. Evaluate, and if necessary to comply with state water quality standards, design and implement appropriate best management practices for each non-stormwater source derived from information gathered in items b through c, above, to control pollutants and or flow volumes.
- f. Discharges associated with firefighting activities are exempt from the provisions of S1.E.2.
- g. Discharges of uncontaminated ground or spring water are exempt from the provisions of S1.E.2.

G. Annual Stormwater Monitoring Summary Report

On or before October 1st of each year, the Permittee must submit a report to Ecology summarizing the results of the monitoring during the preceding 12-month period from July 1 through June 30.

The report must summarize monitoring data, the Port's conclusions, if any, as to what is being learned from the data, and any modifications to operations or practices to improve compliance with the permit. The report must be submitted electronically as required in S3.A.8.

H. 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.

2S3. REPORTING AND RECORD KEEPING REQUIREMENTS

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

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 Condition S2 and as required by the form. Report a value for each day sampling occurred (unless specifically exempted in the permit) and for the summary values (when applicable) included on the electronic form.

To find out more information and to sign up for WAWebDMR go to:

<http://www.ecy.wa.gov/programs/wq/permits/paris/webdmr.html>

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 for the reporting period.
 - c. Zero (for values reported below detection) if the lab did not detect the parameter in another sample for the reporting period.
6. Report single-sample grouped parameters (for example priority pollutants, PAHs, pulp and paper chlorophenolics, TTOs) on the 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.

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

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

8. Submit DMRs for parameters with the monitoring frequencies specified in S1 (monthly, quarterly, annual, etc.) at the reporting schedule identified below. The Permittee must:
 - a. Submit **quarterly** DMRs by the 28th day of the following month.
9. Submit reports to Ecology online using Ecology's electronic WAWebDMR submittal forms (electronic DMRs) as required above. Send paper reports to Ecology at:

Water Quality Permit Coordinator
Department of Ecology
Northwest Regional Office
3190 160th Avenue SE
Bellevue, WA 98008-5452

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. This period of retention must be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director.

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.

D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by Special Condition S1 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 S1.

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.

3. Immediate Noncompliance Notification

Any discharge of untreated stormwater below the approved design storm criteria for the stormwater management facility must be reported immediately to the Department of Ecology's Regional Office 24-hour number 425-649-7000.

4. Twenty-four-hour noncompliance notification

The Permittee must report the following occurrences of noncompliance by telephone, to Ecology at 425-649-7000, within 24 hours from the time the Permittee becomes aware of any of the following circumstances:

- a. Any noncompliance that may endanger health or the environment, unless previously reported under subpart 3, above;
- b. Any unanticipated **bypass** that exceeds any effluent limitation in the permit (See Part S5.B., "Bypass Procedures");
- c. Any **upset** that exceeds any effluent limitation in the permit (See G.15, "Upset");
- d. Any violation of a maximum daily or instantaneous maximum discharge limitation for any of the pollutants in Section S1.A. of this permit; or
- e. Any overflow prior to the treatment works, whether or not such overflow endangers health or the environment or exceeds any effluent limitation in the permit.

5. Report within five days

The Permittee must also provide a written submission within five (5) days of the time that the Permittee becomes aware of any event required to be reported under subparts 3 or 4, above. The written submission must contain:

- a. A description of the noncompliance and its cause.
- b. The period of noncompliance, including exact dates and times.
- c. The estimated time noncompliance is expected to continue if it has not been corrected.
- d. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
- e. If the noncompliance involves an overflow prior to the treatment works, an estimate of the quantity (in gallons) of untreated overflow.

6. Waiver of written reports

Ecology may waive the written report required in subpart 5 above on a case-by-case basis upon request if a timely oral report has been received.

7. 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. Other Reporting

a. Spills of oil or hazardous materials

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

b. Failure to submit relevant or correct facts

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

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 inspector.

2S4. COMPLIANCE WITH STANDARDS

Permittees must comply with Washington State Surface Water Quality Standards (Chapter 173-201A WAC), Sediment Management Standards (Chapter 173-204 WAC), Ground Water Quality Standards (Chapter 173-200 WAC), and Human Health-based Criteria in the national Toxics Rule (Federal Register, Vol. 57, No. 246, December 22, 1992, pages 60848-60923). Compliance with standards applies to all discharges. Compliance with surface water quality standards means that stormwater discharges from the Permittee's sites will not cause or contribute to a violation of water quality standards in the receiving water.

Stormwater treatment systems and facilities must be fully functional for all storms meeting water quality design storm and the water quality design flow rate. A stormwater treatment system failure due to excessive storm exceeding the water quality design storm will not be considered a permit violation provided the failure is solely due to severe storm and not as a result of and due to improper or lack of maintenance.

2S5. 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 includes adequate laboratory controls and appropriate quality assurance

procedures. This provision requires the operation of backup or auxiliary facilities or similar systems, which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

The airport's unique operational and stormwater BMP requirements may conflict with Ecology *Stormwater Management Manual for Western Washington* (SWMWW). The Permittee may reduce the inspection frequency based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records, the Permittee may substitute written statements to document a specific less frequent inspection schedule.

A. Operations and Maintenance Manual

The Permittee must:

- a) Update the O&M manual that meets the requirements of 173-240-150 WAC as necessary to reflect current practices and operations.
- b) Submit to Ecology substantial changes or updates to the O&M manual. The Permittee must submit a paper copy and an electronic copy (preferably as a PDF). As an alternative to submittal, post the updated manual on the internet and notify Ecology of substantial changes.
- c) Keep the approved O&M manual at the permitted facility.
- d) Follow the instructions and procedures of this manual.

The airport's unique operational and stormwater BMP requirements may conflict with Ecology *Stormwater Management Manual for Western Washington* (SWMWW). The Permittee may reduce the inspection frequency based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records, the Permittee may substitute written statements to document a specific less frequent inspection schedule.

B. Bypass Procedures

Bypass, which is the intentional diversion of waste streams from any portion of a treatment facility, is prohibited for stormwater events below the approved designed storm criteria for the stormwater management. Ecology may take enforcement action against a Permittee for bypass unless one of the following circumstances (1, 2, 3, or 4) is applicable:

1. Bypass of stormwater is consistent with the design criteria and part of an approved management practice in the applicable Stormwater Management Manual.
2. Bypass for essential maintenance without the potential to cause violation of permit limits or conditions. Bypass is authorized for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health.

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

This bypass is permitted 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. A severe storm event overwhelms properly designed and maintained stormwater management systems and there are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment downtime (but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment facility.
 - c. Ecology is properly notified of the bypass as required in Condition S2.E of this permit.
4. A planned action that would cause bypass of stormwater and has the potential to result in noncompliance of this permit during a storm event.

The Permittee must notify Ecology at least thirty (30) days before the planned date of bypass. The notice must contain: (1) a description of the bypass and its cause; (2) an analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing; (3) a cost-effectiveness analysis of alternatives including comparative resource damage assessment; (4) the minimum and maximum duration of bypass under each alternative; (5) a recommendation as to the preferred alternative for conducting the bypass; (6) the projected date of bypass initiation; (7) a statement of compliance with SEPA; (8) 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; and (9) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.

For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. The analysis required above must be considered during preparation of the engineering report or facilities plan and plans and specifications and must be included to the extent practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

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

- a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
- b. If there are feasible alternatives to bypass, 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.
- c. If the bypass is planned and scheduled 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. The public must be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by Ecology under RCW 90.48.120.

C. Duty to Mitigate

The Permittee is required to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

2S6. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

The facility covered under this permit must have a Stormwater Pollution Prevention Plan (SWPPP) specifically developed for the facility. The SWPPP must be consistent with permit requirements, fully implemented as directed by permit conditions, and updated as necessary to maintain compliance with permit conditions. The Permittee must update the SWPPP as required by permit conditions. An updated version of the SWPPP must be sent to the local libraries, i.e., Burien and Des Moines, and SeaTac libraries, or be available via internet.

A. General Requirements

The Permittee must retain the SWPPP on-site or within reasonable access to the site and make it immediately available, upon request, to Ecology. Ecology may request a written copy or update of a previously submitted SWPPP. The Permittee must submit its SWPPP to Ecology within two (2) weeks of receiving the request or at a later date if approved by Ecology. If discharge is to a municipal storm sewer system, the municipal operator of the storm sewer system must also have access to the SWPPP. The responsible party as identified in General Condition G20, Signatory Requirements, must sign the SWPPP and all of its modifications.

1. Illicit discharges

The SWPPP must include measures to identify and eliminate the discharge of industrial wastewater, domestic wastewater, noncontact cooling water, and other illicit discharges, to stormwater drainage systems, or to surface waters of the state of Washington.

2. **Enhanced/additional best management practices (BMPs)**

The Permittee must provide a schedule in the SWPPP for implementation of any additional or enhanced BMPs that are necessary because of a notice from Ecology, facility changes, or self-inspection. Unless otherwise authorized by Ecology in writing, a schedule for implementation (plan) must be completed and entered into the SWPPP within thirty (30) days of a notice/determination of necessary improvements, or in accordance with an approved compliance schedule. BMPs identified in the plan must be implemented with due diligence. Unless otherwise authorized by Ecology in writing, noncapital BMPs must be completed within two (2) weeks after completing the plan and capital BMPs within six (6) months.

Enhanced/additional BMPs must comply with the Special Condition S6.A.4

Complying with this provision does not limit the potential liability for enforcement action where the Permittee has failed to implement required BMPs or where stormwater discharges violate water quality standards. Ecology may issue a notice to the Permittee when the SWPPP does not meet one or more of the minimum requirements of Special Condition S6 or when it is not adequate to assure compliance with standards. The Permittee must modify the SWPPP and the BMPs to correct the deficiencies identified in the notice.

Ecology may require additional BMPs based on the current SWMM where the Permittee exceeds effluent limits values for required sampling of certain outfalls.

The Permittee must modify the SWPPP whenever there is a change in design, construction, operation, or maintenance of any BMP which cause(s) the SWPPP to be less effective in controlling the pollutants.

This permit requires the Permittee to conduct visual monitoring, and this monitoring may identify BMPs that are inadequate or pollutant sources that are not identified or poorly described in the SWPPP. When visual monitoring identifies inadequacies in the SWPPP, due to the actual discharge of or potential to discharge a significant amount of any pollutant, the SWPPP must be modified and BMPs adjusted to correct the deficiency.

3. **Applicability of the current editions of the Stormwater Management Manual (SWMM)**

The *Stormwater Management Manual for Western Washington* dated August 2012, as amended in December 2014, is the applicable SWMM for all facilities not included in the Permittee's Ecology-approved Comprehensive Stormwater Management Plan (CSMP). New facilities, not included in CSMP, must apply the minimum technical requirements and BMPs appropriate for their facility as found in the August 2012 SWMM or other Ecology-equivalent manuals that are available when selecting BMPs for their facility. For Permittee's existing facilities, the Permittee is not required to redo its SWPPP and BMPs to incorporate changes to BMPs that were designed and implemented according to an earlier version of the SWMM. However, for existing facilities not included in the CSMP, the Permittee must apply the applicable technical standards and BMPs as found in the most recent published edition of the SWMM, or other equivalent Ecology-approved

manuals, that are available when updating their SWPPP to accommodate changes at their facility or when additional BMPs are required to maintain compliance with permit conditions. Facilities not included in the CSMP undergoing new development or redevelopment will apply the applicable minimum requirements of the appropriate, most current SWMM available when beginning final design of the project to the development site.

The Permittee shall submit an STIA-specific LID implementation guideline for Ecology review and approval by June 30, 2016. The guideline shall be adopted and effective no later than December 31, 2016. The STIA-specific LID implementation guideline shall apply to all applications¹ submitted on or after January 1, 2017 and shall apply to projects approved prior to January 1, 2017, which have not started construction² by January 1, 2022.

Note:

- ¹ In this context, "application" means, at a minimum, a complete project description, site plan, and, if applicable, SEPA checklist. Permittees may establish additional elements of a completed application.
- ² In this context "started construction" means the site work associated with, and directly related to the approved project has begun. For example: grading the project site to final grade or utility installation. Simply clearing the project site does not constitute the start of construction. Permittees may establish additional requirements related to the start of construction.

4. Other pollution control plans

The Permittee may incorporate, by reference, applicable portions of plans prepared for other purposes at its facility. Plans or portions of plans incorporated into a SWPPP become enforceable requirements of this permit and must meet the availability requirements set forth in Special Condition S6A of Part II of this permit. A Pollution Prevention Plan prepared under the Hazardous Waste Reduction Act, Chapter 70.95C RCW, is an example of such a plan.

B. SWPPP Contents and Requirements

The SWPPP must contain a detailed assessment of the facility and a detailed description of the BMPs being implemented.

1. Facility assessment

The facility assessment must include a description of the facility, a detailed site map, an inventory of facility activities, and equipment that contribute to or have the potential to contribute pollutants to stormwater, and an inventory of materials that contribute to or have the potential to contribute pollutants to stormwater. The assessment must be as complete as possible and must be updated to reflect changes at the facility. The SWPPP must address each potential source of pollutants with best management practices that will eliminate or reduce the potential to contaminate stormwater.

- a. *Facility description:* The facility description will describe the industrial activities conducted at the site; the general layout of the facility, including buildings and storage of raw materials; and the flow of goods and materials through the facility. It should include seasonal variations, including peaks in production and any changes in work based on season or weather (for example, moving work outdoors on dry days).
- b. *Site map:* The site map must be drawn to an identified scale or include relative distances between significant structures and drainage systems. It must provide identifiers (names) of significant features and be of sufficient size and detail to identify the following: The site map will show the stormwater drainage and discharge structures, an outline of the stormwater drainage areas for each stormwater discharge point (including discharges to ground water), paved areas and buildings, areas of pollutant contact (actual or potential), surface water locations (including wetlands and drainage ditches), areas of existing and potential soil erosion and vehicle service areas; lands and waters adjacent to the site must also be depicted where helpful in identifying discharge points or drainage routes.
- c. *Industrial activities:* The inventory of industrial activities will identify all areas associated with industrial activities which have been or may potentially be sources of significant amounts of pollutants, including the following:
 - i) Loading and unloading of dry bulk materials or liquids.
 - ii) Outdoor storage of materials or products.
 - iii) Outdoor manufacturing and processing.
 - iv) Dust or particulate generating processes.
 - v) Roofs or other surfaces exposed to air emissions from a manufacturing building or a process area.
 - (vi) On-site waste treatment, storage, or disposal.
 - (vii) Vehicle and equipment fueling, maintenance, and/or cleaning (includes washing).
- d. *Material list:* The inventory of materials will list all the types of materials handled at the site that potentially may be exposed to precipitation or runoff. The inventory will include a short narrative for each material describing the potential of the pollutant to be present in stormwater discharges. The Permittee will update this narrative when data become available to verify the presence or absence of these pollutants. The inventory will include a narrative description of any potential sources of pollutants from past activities; significant materials that were previously handled, treated, stored, or disposed of in a manner to allow ongoing exposure to stormwater; the method and location of on-site storage or disposal; and a list of significant spills and significant leaks of toxic or hazardous pollutants.

2. **Monitoring plan**

The SWPPP will include a monitoring plan. The plan must identify all the points of discharge to surface water or to a storm drain system. If there is more than one point of discharge, then the plan must include a discussion of representative sampling and how the Permittee has determined which points of discharge will be monitored. The discussion must include an estimate of the volume of discharge from each discharge point, differences in exposure to pollutants, pollutants likely to be in each discharge, and a relative comparison of probable pollutant concentrations. The plan must identify who is responsible for monitoring and how monitoring will be conducted to comply with permit conditions. The monitoring plan will address stormwater sampling requirements and visual inspections. The plan must include the following:

- a. Identification of points of discharge.
- b. A check list for visual monitoring.
- c. Who conducts stormwater sampling.
- d. Where samples will be taken.
- e. Parameters for analysis.
- f. Procedures for sample collection and handling.
- g. Procedures for sending samples to the lab.
- h. Procedures for submitting results to Ecology.

3. **BMPs**

The SWPPP will include a description of the BMPs that are necessary for the facility to eliminate or reduce the potential to contaminate stormwater. BMPs must also be considered to regulate peak flow and volume of stormwater discharge. BMPs must be included to comply with the following requirements:

- a. *Operational source control BMPs:* Operational BMPs are common to all facilities. The categories listed below are a minimum set of BMPs that must be included in the SWPPP.
 - i) Pollution prevention team: The SWPPP will include a BMP that identifies specific individuals by name or by title within the facility who are responsible for developing the SWPPP and assisting the facility manager in its implementation, maintenance, and modification. The activities and responsibilities of the team should address all aspects of the facility's SWPPP.
 - ii) Good housekeeping: The SWPPP will include a BMP(s) that defines ongoing maintenance and cleanup, as appropriate, of areas which may contribute pollutants to stormwater discharges. The SWPPP will include the schedule/frequency for completing each housekeeping task.
 - iii) Preventive maintenance: The SWPPP will include a BMP(s) to inspect and maintain the stormwater drainage and treatment systems (if any), and plant equipment and systems that could fail and result in contamination of stormwater. The SWPPP will include the schedule/frequency for completing each maintenance task.

- iv) Spill prevention and emergency cleanup plan: The SWPPP will include a BMP(s) to identify areas where potential spills can contribute pollutants to stormwater discharges. The BMP(s) must specify material handling procedures, storage requirements, cleanup equipment, and procedures as appropriate. It must be at least equivalent to BMP S1.80 in Ecology's *Stormwater Management Manual for Western Washington* (SWMM Volume IV, Spill Emergencies). The SWPPP may include excerpts of plans prepared for other purposes (for example, Spill Prevention Control and Countermeasure [SPCC] plans under Section 311 of the CWA), where those excerpts meet the intent of this requirement.
 - v) Employee training: The SWPPP will include a BMP(s) to provide SWPPP training for employees who have duties in areas of industrial activity subject to this permit. At a minimum, training must include an overview of what is in the SWPPP and how employees make a difference in complying with the SWPPP and preventing contamination of stormwater. The training must address spill response procedures, good housekeeping, and material management practices. The BMP(s) must provide the content of the training, how training will be conducted, and the frequency/schedule for assuring employees will receive training. Annual training is the minimum acceptable frequency. A log of the dates on which specific employees receive training must be kept and included in the SWPPP.
 - vi) Inspections and record keeping: The SWPPP will identify personnel responsible for inspection of BMPs (i.e., structural and non-structural) and other equipments and plant areas of Part II of this permit. The Permittee must also provide a tracking or follow-up procedure to ensure that appropriate action has been taken in response to monitoring. There must be documentation of visual, and other monitoring reporting and record keeping procedures and schedules as required by the permit.
- b. *Structural source control BMPs*: Structural source control BMPs must be provided to eliminate or minimize the exposure of stormwater to pollutants. Volume IV of Ecology's *Stormwater Management Manual for Western Washington* provides useful information for source control BMPs for different industrial activities. Those BMPs listed as "applicable" are considered the minimum set of required BMPs for an industrial activity. Equivalent BMPs may be selected which result in equal or better quality of stormwater discharge.
 - c. *Treatment BMPs*: Treatment BMPs are required when operational and source control BMPs are not adequate to reduce pollutants below a significant amount and maintain compliance with water quality standards. At a minimum, the SWPPP must include a narrative that describes how the Permittee determined if treatment BMPs are or are not required. When treatment BMPs are required, refer to Ecology's *Stormwater Management Manual for Western Washington*, Volume V, or equivalent manual, for guidance on selecting treatment BMPs.

- d. *Stormwater peak runoff rate and volume control BMPs:* Flow control BMPs are required for new development or redevelopment as defined in Ecology's *Stormwater Management Manual for Western Washington*, Volume I. At a minimum, the SWPPP must include a narrative that describes how the Permittee determined if flow control BMPs are/are not required. Where required, the SWPPP must include appropriate BMPs from Volumes I and III of Ecology's *Stormwater Management Manual for Western Washington* or equivalent manuals.
4. **Erosion and sediment control BMPs:** All facilities must evaluate the risk of soil erosion on their site. At a minimum, the SWPPP must include a narrative that describes if there is reasonable potential for soil erosion at the site. Where reasonable potential exists, the Permittee must include BMPs to prevent or minimize the potential for soil erosion on-site. When required, BMPs must be selected from BMPs in Volumes II and III of Ecology's *Stormwater Management Manual for Western Washington* or equivalent manual.
5. **Other BMPs:** Nothing in Special Condition S6 of Part II of this permit is intended to preclude the application of innovative treatment, source control, reduction or recycle, or operational BMPs beyond those identified in Ecology's *Stormwater Management Manual for Western Washington*. Additional BMPs beyond those identified in Ecology's *Stormwater Management Manual for Western Washington* may be necessary to achieve compliance with standards. However, treatment BMPs that include the addition of chemicals to provide treatment must be approved by Ecology before implementation.
6. **Recommended BMPs:**

Aircraft, ground vehicle and equipment maintenance areas:

Minimize the contamination of stormwater runoff from all areas used for aircraft, ground vehicle and equipment maintenance (including the maintenance conducted on the terminal apron and in dedicated hangers).

Implement appropriate control measures, such as the following practices or their equivalents:

- Performing maintenance activities indoors;
- Maintaining an organized inventory of material used in the maintenance areas;
- Draining all parts of fluids prior to disposal;
- Prohibiting the practice of hosing down the apron or hanger floor; Using dry cleanup methods; and
- Collecting the stormwater runoff from the maintenance area and providing treatment or recycling.

Aircraft, ground vehicle and equipment cleaning areas:

- Clearly demarcate these areas on the ground using signage or other appropriate means.
- Minimize the contamination of stormwater runoff from cleaning areas.

Aircraft, ground vehicle and equipment storage areas:

- Store all aircraft, ground vehicles and equipment awaiting maintenance in designated areas only and minimize the contamination of stormwater runoff from these storage areas.
- Implement appropriate control measures, such as the following, including any BMPs (or their equivalents): storing aircraft and ground vehicles indoors; using drip pans for the collection of fluid leaks; and perimeter drains, dikes or berms surrounding the storage areas.

Material storage areas:

- Maintain the vessels of stored materials (e.g., used oils, hydraulic fluids, spent solvents, and waste aircraft fuel) in good condition, to prevent or minimize contamination of stormwater. Also plainly label the vessels (e.g., “used oil,” “Contaminated Jet A,” etc.).
- Minimize contamination of precipitation/runoff from these areas. Implement appropriate control measures, such as the following (or their equivalents): storing materials indoors; storing waste materials in a centralized location; and installing berms/dikes around storage areas.

Airport fuel system and fueling areas:

- Minimize the discharge of fuel to the storm sewer/surface waters resulting from fuel servicing activities or other operations conducted in support of the airport fuel system.
- Implement appropriate control measures, such as the following control measures (or their equivalents): implementing spill and overflow practices (e.g., placing absorptive materials beneath aircraft during fueling operations); using only dry cleanup methods; and collecting stormwater runoff.

Runway deicing operation:

- Minimize contamination of stormwater runoff from runways as a result of deicing operations.
- Evaluate whether over-application of deicing chemicals occurs by analyzing application rates, and adjust as necessary, consistent with considerations of flight safety. Implement appropriate control measures, such as the following options (or their equivalents): metered application of chemicals; pre-wetting dry chemical constituents prior to application; installing a runway ice detection system; implementing anti-icing operations as a preventive measure against ice buildup.

2S7. ACUTE TOXICITY

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

The Permittee must:

1. Conduct acute toxicity testing on final effluent once in the last summer and once in the last winter for representative outfalls (SDS3/5, SDD06A, SDE4/S1, SDN1, SDN2/3/4, SDW1B and SDW2) with submission of the application for permit renewal.
2. Conduct acute toxicity testing on a series of at least five concentrations of effluent, including 100% effluent and a control.
3. Use each of the following species and protocols for each acute toxicity test:

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

4. Submit the results to Ecology with the permit renewal application (by June 30, 2020).

B. Effluent Characterization for New Outfalls (SDD05A & SDD05B)

Upon activation of new outfalls (SDD05A & SDD05B), the Permittee must:

1. Conduct quarterly acute toxicity testing on the final effluent for one year starting within sixty (60) days of outfall activation. Quarters means January through March, April through June, July through September, and October through December. If no discharge occurs during the required quarter, the Permittee must notify Ecology by the end of the quarter and conduct sampling on the next representative discharge that occurs in the following quarter.
2. Submit a quarterly written report to Ecology for one year within 60 days of sampling event.
3. Use a dilution series consisting of a minimum of five concentrations and a control.
4. Conduct the following two acute toxicity tests on each sample:

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

5. The effluent limit for acute toxicity listed in Section B below applies if after one year of effluent characterization:
 - The median survival of any species in 100% effluent is below 80%.
 - Any one test of any species exhibits less than 65% survival in 100% effluent.

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

C. Effluent Limit for Acute Toxicity for New Outfalls

The effluent limit for acute toxicity is:

No acute toxicity detected in a test concentration representing the acute critical effluent concentration (ACEC).

The ACEC means the maximum concentration of effluent during critical conditions at the boundary of the acute mixing zone, where the mixing zone shall be established according to WAC 173-201A-400.

If the Permittee has an effluent limit for acute toxicity and the ACEC is not known, then effluent characterization for acute toxicity shall continue once quarterly until the time an ACEC is known. Effluent characterization shall be continued until an ACEC has been determined and shall be performed using each one of the tests listed in Subsection A of this condition on a rotating basis. When an ACEC has been determined, the Permittee shall immediately complete all applicable requirements in Subsections D, E, F and H of this condition.

If the Permittee demonstrates total compliance per Subsection B during four consecutive quarters of continued effluent characterization the Permittee may submit a request to Ecology to monitor under Subsections G and H of this condition.

D. Compliance With the Effluent Limit for Acute Toxicity

Compliance with the effluent limit for acute toxicity means the results of the testing specified in Section F show no statistically significant difference in survival between the control and the ACEC.

If the test results show a statistically significant difference in survival between the control and the ACEC, the Permittee must then immediately conduct the additional testing described in Section E. The Permittee is in compliance with the requirements of Section B if all of the additional tests required by Section E show no significant difference in survival between the control and ACEC. If any of the additional test results show a significant difference in survival between the control and the ACEC then the Permittee is in violation of its WET limit.

The Permittee must determine the statistical significance by conducting a hypothesis test at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in survival between the control and the ACEC is less than 10%, the Permittee must conduct the hypothesis test at the 0.01 level of significance.

E. Compliance Testing for Acute Toxicity

The Permittee must:

1. Perform the acute toxicity tests with 100% effluent, the ACEC, and a control, or with a full dilution series.
2. Conduct quarterly acute toxicity testing on the final effluent if characterization determines that the effluent limit for acute toxicity applies.

Quarters means January through March, April through June, July through September, and October through December. If no discharge occurs during the

required quarter, the Permittee must notify Ecology by the end of the quarter and conduct sampling on the next representative discharge that occurs in the following quarter.

3. Submit a quarterly written report to Ecology within 60 days of sampling event. Further instructions on testing conditions and test report content are in Section H, below.
4. The Permittee must perform compliance tests using each of the species and protocols listed below on a rotating basis.

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

F. Response to Noncompliance With the Effluent Limit for Acute Toxicity

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

1. Test the next four discharge events using the same test and species as the failed compliance test.
2. Test at least five effluent concentrations and a control to determine appropriate point estimates. One of these effluent concentrations must equal the ACEC. The results of the test at the ACEC will determine compliance with the effluent limit for acute toxicity as described in Section D.
3. Return to the original monitoring frequency in Section E after completion of the additional compliance monitoring.

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

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

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

If Ecology determines that the test result was anomalous, the one additional test result will replace the anomalous test result.

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

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

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

G. Testing When There is No Permit Limit for Acute Toxicity

The Permittee must:

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

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

4. Submit the results to Ecology with the permit renewal application (by June 30, 2020).

H. Sampling and Reporting Requirements

1. The Permittee must submit all reports for toxicity testing in accordance with the most recent version of Ecology Publication No. WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. Reports must contain toxicity data, bench sheets, and reference toxicant results for test methods. In addition, the Permittee must submit toxicity test data in electronic format (CETIS export file preferred) for entry into Ecology's database.
2. The Permittee must collect composite effluent samples or grab samples for toxicity testing. The Permittee must cool the samples to 0 - 6 degrees Celsius during collection and send them to the lab immediately upon completion. The lab must begin the toxicity testing as soon as possible but no later than 36 hours after sampling was completed.

3. The laboratory must conduct water quality measurements on all samples and test solutions for toxicity testing, as specified in the most recent version of Ecology Publication No. WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*.
4. All toxicity tests must meet quality assurance criteria and test conditions specified in the most recent versions of the EPA methods listed in Subsection 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 may sample receiving water at the same time as the effluent and instruct the lab to measure the hardness of both and increase the hardness of the effluent sample to match the hardness of the receiving water sample prior to beginning the toxicity test. Otherwise, the Permittee must conduct whole effluent toxicity tests on an unmodified sample of final effluent.
7. The Permittee may choose to conduct a full dilution series test during compliance testing in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the acute critical effluent concentration (ACEC) if the ACEC has been established per Condition S8.B.
8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing must comply with the acute statistical power standard of 29% as defined in WAC 173-205-020. If the test does not meet the power standard, the Permittee must repeat the test on a fresh sample with an increased number of replicates to increase the power.

2S8. SUB-LETHAL TOXICITY (ALL OUTFALLS)

A. *Stream Sampling and Sub-lethal Toxicity Testing*

The Permittee shall conduct in-stream sub-lethal toxicity testing on ambient samples from Miller Creek, Des Moines Creek, Walker Creek, Northwest Ponds, and Lake Reba taken at accessible sampling stations that are nearby and downstream of the Permittee's stormwater outfalls. These sampling locations shall be specified in a sampling and monitoring plan to be submitted to Ecology for approval no later than sixty (60) days following permit issuance. At least one sample shall be taken during deicing or anti-icing operations.

Sub-lethal toxicity testing on ambient water samples from each station shall be conducted biannually in the **last fall season** and **last spring season prior to submission of the application for permit renewal** during times of stormwater runoff. In addition, in the year prior to submission, another test shall be conducted if possible on ambient water samples collected from each station receiving snowmelt runoff from areas where deicing and anti-icing operations are occurring. Each sampling event must be in accordance with the Permittee's approved sampling and monitoring plan. The sampling and monitoring plan

submitted to Ecology for review may propose substituting acute toxicity testing for rainbow trout embryo testing of ambient samples if no adverse effects have been found in the rainbow trout embryo testing conducted to that time. The acute testing using fathead minnow and a daphnid would trigger resumption of rainbow trout embryo testing at any station having less than 65% survival in 100% sample.

The rainbow trout embryo test (E test) from the Environment Canada manual listed below shall be conducted on each sample taken:

Freshwater Sub-lethal Toxicity Test Species	Reference for Method
Rainbow trout (<i>Oncorhynchus mykiss</i>)	Environment Canada, EPS 1/RM/28 Second Edition, 1998.

B. Response to Sub-lethal Toxicity

If the EC₅₀ from any valid test is 100% stream sample or less, the Permittee shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to Ecology within sixty (60) days after the sample date. The TI/RE plan shall be based on WAC 173-205-100(2)(b) and (c), which shall be interpreted to allow the TI/RE plan to include upstream and downstream comparisons to determine if stream water quality in general or a source upstream of the Permittee's stormwater discharges is responsible for the impairment seen in the trout embryo toxicity test. The TI/RE plan shall be implemented in accordance with WAC 173-205-100(3) upon notification from Ecology of plan approval.

C. Sampling and Reporting Requirements

1. All reports for testing results shall be submitted in accordance with the most recent version of Department of Ecology Publication No. WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* in regards to format and content. Reports shall 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. The final report shall be submitted to Ecology with the permit renewal application (by June 30, 2020).
2. **Grab or 24-hour composite** samples shall be taken at a time of stormwater or snowmelt runoff at each ambient sampling station. Each sample shall be taken in three (3) separate containers or be placed into three (3) separate containers immediately after sampling. The sample in one container shall be used for starting the test and the others shall be stored with minimal headspace until needed for test solution renewal. Only one of the sample containers from each station shall be in use at any one time and the sample from any one container shall not be used in test solution renewal for any longer than three (3) days after opening. If a sample is received at the testing lab within one (1) hour after collection, it must have a temperature from 0° to 20°C at receipt by the lab. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sample collection. The lab shall store all samples at 4± 1°C in the dark with minimal headspace from receipt until completion of the test.

3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication No. WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof.
4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the Environment Canada manuals listed in Subsection A of this condition and the Department of Ecology Publication No. WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by Ecology, testing shall be repeated with freshly collected effluent taken at the next stormwater or snow melt event which corresponds to the conditions associated with the original test (e.g., during which deicing and anti-icing activities are being conducted).
5. Testing procedures should follow: Environment Canada, EPS1/RM/28 Second Edition 1998. The test procedure may take advantage of the smaller volume modification described in Canaria, E.C., Elphick, J.R. and Bailey, H.C. 1999. *A simplified procedure for conducting small scale short-term embryo toxicity tests with salmonids*. Environ. Toxicol. 14:301-307.
6. The laboratory must use control water and dilution water meeting the requirements of the Environment Canada method listed in Subsection A or pristine natural water of sufficient quality for good control performance.
7. The toxicity tests shall be run on unmodified samples unless specific modifications have been approved by Ecology.
8. The EC₅₀ shall be calculated using the trimmed Spearman-Kärber procedure. Abbott's correction may be applied to the data before deriving these point estimations. A minimum of five (5) concentrations and a control shall be used in the testing.

2S9. IN-SITU TOXICITY MONITORING STUDY PLAN

No later than sixty days after effective date of issuance of the permit, the Permittee shall prepare and submit to Ecology for review and approval an *in-situ* monitoring plan. The monitoring plan may be combined with the sampling and monitoring plan required under Special Condition S8. Monitoring of toxicity shall include locations within the Miller Creek, Des Moines Creek, and Walker Creek, watersheds at accessible sampling stations that are nearby and downstream of the Permittee's stormwater outfalls. The plan shall be based on most recent experience of qualified professionals. *In-situ* toxicity testing will be conducted biannually in the fall and spring during times of stormwater or snow melt runoff corresponding to the spawning regimes associated with local salmonids species (e.g., Coho salmon and cutthroat trout). A final summary report shall be submitted to Ecology with the permit renewal application. Submit an annual summary report by June 30, 2020.

2S10. SOLID AND LIQUID WASTE DISPOSAL

Disposal of waste materials from maintenance activities, including liquids and solids from cleaning catch basins and other stormwater facilities, must be conducted in accordance with the Minimum Functional Standards for Solid Waste Handling, Chapter 173-304 WAC, and where appropriate, the Dangerous Waste Regulations, Chapter 173-303 WAC.

PART 3. CONSTRUCTION STORMWATER

The Port generates construction stormwater from various construction projects that usually have less than a five-year duration. This section contains effluent limits, monitoring, and storm water pollution prevention planning (SWPPP) elements. The Port customizes SWPPPs for each project. Stormwater outfalls are described by a grid system around the airport perimeter.

3S1. DISCHARGE LIMITS & BENCHMARKS

A. *Final Effluent Limits for Construction Stormwater Runoff Outfalls Discharging Directly Into Their Respective Receiving Waters*

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge stormwater associated with construction activities and construction dewatering water to Des Moines Creek, Miller Creek, Walker Creek, and Gilliam Creek. Lake Reba and Northwest Ponds subject to the following limitations and activities in accordance with the following schedule and requirements as specified here, and in S1.A Table 2 and S2, Monitoring Requirements.

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a concentration in excess of, that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

Permittee shall monitor all dischargers in accordance with S1.A Table 2 below and at the permitted outfall locations as authorized by this permit and as presented by S2, Monitoring Requirements.

Table 2.

EFFLUENT LIMITS	
Parameter	Maximum Daily ^a
Turbidity	Turbidity in the receiving water must not exceed 5 nephelometric turbidity units (NTU) over background turbidity when the background turbidity is 50 NTU or less, or have more than a 10 percent increase in turbidity when the background turbidity is more than 50 NTU. ^b
Turbidity ^c (Batch or Continuous Treatment)	The maximum daily average must not exceed 5 NTU. ^d
Total Petroleum Hydrocarbons	5 mg/L - No visible sheen at any time ^e
pH (Batch or Continuous Treatment)	In the range of 6.5 to 8.5
pH ^f	In the range of 6.5 to 8.5 – With the human-caused variation within the above range of less than 0.2 units.
^a The maximum daily effluent limitation is defined as the highest allowable daily discharge.	
^b In the receiving water here means at the point of complete mix to be determined by the Permittee.	
^c The treatment referred here is for batch or continuous treatment as specified by the DOE-SWMM, DOE Stormwater Treatment Technologies Approved through TAPE or CTAPE. The average daily effluent limitation is based on the arithmetic mean of number of samples taken per day from the continuous discharge, or in case of batch treatment, based on the number of batch discharged per day.	
^d The maximum daily average is defined as maximum value of daily averages taken during a calendar month.	
^e TPH numerical limit must be applied and a sample must be taken only when visible sheen is observed. The numerical limit will not apply when there is no visible sheen observed.	
^f Indicates the range of permitted values. In the receiving water here means at the point of complete mix to be determined by the Permittee.	
Footnotes:	
(1) The method detection level (MDL) for turbidity is 1 NTU using a turbidimeter and Method Number 180.1 from 40 CFR Part 136 or <i>Standard Methods for the Examination of Water and Wastewater</i> , 18 th Edition, 2130.	
(2) The MDL for total petroleum hydrocarbons in 0.1 mg/L using Gas Chromatography and Flame Ionization Detector (FID) and method number Northwest Diesel (WTPH-D) from Washington State Department of Ecology Method WTPH-D. The quantitation level (QL) for TPH-D is 0.5 mg/L (5 x MDL).	

Benchmarks for Discharge to Groundwater from Portable Batch Plant and/or Concrete Crusher Operations

Runoff or waste water discharged to unlined ponds or other designed infiltration systems from portable batch plant and/or concrete crusher operations shall be monitored for Total Dissolved Solids (TDS) and pH at least monthly at the infiltration location. The Permittee must maintain pH and TDS levels as set forth below and incorporate measures in the SWPPP to comply with these benchmarks.

<u>Parameter</u>	<u>Benchmark</u>
pH	Maximum of 9.0 standard units
Total Dissolved Solids	500 mg/L maximum

1. Anytime sampling indicates that pH is 9 or greater at the point of infiltration, the Permittee must:
 - a. Increase monitoring frequency to at least once per week.
 - b. Cease discharge from the area of concrete work until pH levels are less than 9 for two consecutive sampling periods.
 - c. If necessary, adjust or neutralize the high pH water until it is in the range of pH 6.0 to 9.0 using an appropriate treatment BMP such as carbon dioxide (CO₂) sparging or dry ice. The Permittee must notify Ecology before using any form of chemical treatment other than CO₂ sparging or dry ice.
2. Anytime sampling indicates that Total Dissolved Solids exceed 500 mg/L, the Permittee must:
 - a. Increase monitoring frequency to at least once per week.
 - b. Cease discharge from the area of concrete work until TDS levels are less than 500 mg/L for two consecutive sampling periods.

Construction Stormwater Runoff Outfall Locations

Table III S1.A – Construction Stormwater Outfalls		
EXISTING OUTFALL LOCATION 1	RECEIVING WATER	SAMPLING POINT
Latitude: 47° 28' 15" N Longitude: -122° 19' 00" W	Miller Creek #14	At the Point of Discharge
Latitude: 47° 28' 15" N Longitude: -122° 19' 00" W	Miller Creek #14-A	At the Point of Discharge
Latitude: 47° 28' 00" N Longitude: -122° 19' 00" W	Miller Creek #15	At the Point of Discharge
Latitude: 47° 28' 00" N Longitude: -122° 19' 00" W	Miller Creek #15-A	At the Point of Discharge
Latitude: 47° 28' 00" N Longitude: -122° 19' 00" W	Miller Creek #15-B	At the Point of Discharge
Latitude: 47° 28' 00" N Longitude: -122° 19' 15" W	Miller Creek #16	At the Point of Discharge
Latitude: 47° 28' 00" N Longitude: -122° 19' 15" W	Miller Creek #16-A	At the Point of Discharge
Latitude: 47° 27' 45" N Longitude: -122° 19' 15" W	Miller Creek #17	At the Point of Discharge
Latitude: 47° 27' 45" N Longitude: -122° 19' 15" W	Miller Creek #17-A	At the Point of Discharge
Latitude: 47° 27' 30" N Longitude: -122° 19' 30" W	Miller Creek #18	At the Point of Discharge
Latitude: 47° 27' 30" N Longitude: -122° 19' 30" W	Miller Creek #18-A	At the Point of Discharge
Latitude: 47° 27' 30" N Longitude: -122° 19' 15" W	Miller Creek #19	At the Point of Discharge
Latitude: 47° 27' 30" N Longitude: -122° 19' 15" W	Miller Creek #19-A	At the Point of Discharge
Latitude: 47° 27' 15" N Longitude: -122° 19' 30" W	Miller Creek #20	At the Point of Discharge
Latitude: 47° 27' 15" N Longitude: -122° 19' 30" W	Miller Creek #20-A	At the Point of Discharge
Latitude: 47° 27' 15" N Longitude: -122° 19' 15" W	Miller Creek #21	At the Point of Discharge
Latitude: 47° 27' 15" N Longitude: -122° 19' 15" W	Miller Creek #21-A	At the Point of Discharge

Table III S1.A – Construction Stormwater Outfalls		
EXISTING OUTFALL LOCATION 1	RECEIVING WATER	SAMPLING POINT
Latitude: 47° 28' 15" N Longitude: -122° 18' 45" W	Lake Reba # 28	At the Point of Discharge
Latitude: 47° 28' 15" N Longitude: -122° 18' 45" W	Lake Reba # 28 -A	At the Point of Discharge
Latitude: 47° 28' 15" N Longitude: -122° 18' 45" W	Lake Reba # 28 - B	At the Point of Discharge
Latitude: 47° 28' 00" N Longitude: -122° 18' 45" W	Lake Reba # 29	At the Point of Discharge
Latitude: 47° 28' 00" N Longitude: -122° 18' 45" W	Lake Reba # 29-A	At the Point of Discharge
Latitude: 47° 28' 00" N Longitude: -122° 18' 30" W	Lake Reba # 30	At the Point of Discharge
Latitude: 47° 28' 00" N Longitude: -122° 18' 30" W	Lake Reba # 30-A	At the Point of Discharge
Latitude: 47° 28' 00" N Longitude: -122° 18' 30" W	Lake Reba # 30-B	At the Point of Discharge
Latitude: 47° 28' 00" N Longitude: -122° 18' 30" W	Lake Reba # 30-C	At the Point of Discharge
Latitude: 47° 28' 00" N Longitude: -122° 18' 30" W	Lake Reba # 30-D	At the Point of Discharge
Latitude: 47° 28' 00" N Longitude: -122° 18' 30" W	Lake Reba # 30-E	At the Point of Discharge
Latitude: 47° 25' 45" N Longitude: -122° 19' 00" W	Northwest Ponds #4	At the Point of Discharge
Latitude: 47° 25' 45" N Longitude: -122° 19' 00" W	Northwest Ponds #4-A	At the Point of Discharge
Latitude: 47° 25' 45" N Longitude: -122° 18' 45" W	Northwest Ponds #5	At the Point of Discharge
Latitude: 47° 25' 45" N Longitude: -122° 18' 45" W	Northwest Ponds #5-A	At the Point of Discharge
Latitude: 47° 25' 45" N Longitude: -122° 18' 45" W	Northwest Ponds #5-B	At the Point of Discharge
Latitude: 47° 25' 30" N Longitude: -122° 18' 30" W	Des Moines Creek #7	At the Point of Discharge
Latitude: 47° 25' 30" N Longitude: -122° 18' 30" W	Des Moines Creek #7-A	At the Point of Discharge
Latitude: 47° 26' 00" N Longitude: -122° 17' 45" W	Des Moines Creek #9	At the Point of Discharge
Latitude: 47° 26' 00" N Longitude: -122° 18' 00" W	Des Moines Creek #10	At the Point of Discharge
Latitude: 47° 26' 00" N Longitude: -122° 18' 00" W	Des Moines Creek #10-A	At the Point of Discharge
Latitude: 47° 26' 00" N Longitude: -122° 18' 00" W	Des Moines Creek #10-B	At the Point of Discharge
Latitude: 47° 26' 00" N Longitude: -122° 18' 15" W	Des Moines Creek # 11	At the Point of Discharge
Latitude: 47° 26' 00" N Longitude: -122° 18' 15" W	Des Moines Creek # 11-A	At the Point of Discharge
Latitude: 47° 25' 45" N Longitude: -122° 18' 15" W	Des Moines Creek #12	At the Point of Discharge
Latitude: 47° 25' 45" N Longitude: -122° 18' 15" W	Des Moines Creek #12-A	At the Point of Discharge
Latitude: 47° 25' 45" N Longitude: -122° 18' 15" W	Des Moines Creek #12-B	At the Point of Discharge

Table III S1.A – Construction Stormwater Outfalls		
EXISTING OUTFALL LOCATION 1	RECEIVING WATER	SAMPLING POINT
Latitude: 47° 25' 30" N Longitude: -122° 18' 15" W	Des Moines Creek #13	At the Point of Discharge
Latitude: 47° 25' 30" N Longitude: -122° 18' 15" W	Des Moines Creek #13-A	At the Point of Discharge
Latitude: 47° 25' 30" N Longitude: -122° 18' 15" W	Des Moines Creek #13-B	At the Point of Discharge
Latitude: 47° 25' 15" N Longitude: -122° 18' 15" W	Des Moines Creek #25	At the Point of Discharge
Latitude: 47° 25' 15" N Longitude: -122° 18' 15" W	Des Moines Creek #25-A	At the Point of Discharge
Latitude: 47° 25' 15" N Longitude: -122° 18' 15" W	Des Moines Creek #25-B	At the Point of Discharge
Latitude: 47° 26' 30" N Longitude: -122° 17' 30" W	Des Moines Creek #29	At the Point of Discharge
Latitude: 47° 27' 45" N Longitude: -122° 17' 15" W	Gilliam Creek #26	At the Point of Discharge
Latitude: 47° 27' 45" N Longitude: -122° 17' 00" W	Gilliam Creek #27	At the Point of Discharge
Latitude: 47° 27' 45" N Longitude: -122° 17' 00" W	Gilliam Creek #27-A	At the Point of Discharge
Latitude: 47° 28' 00" N Longitude: -122° 17' 15" W	Gilliam Creek #28	At the Point of Discharge
Latitude: 47° 28' 00" N Longitude: -122° 17' 15" W	Gilliam Creek #28-A	At the Point of Discharge
Latitude: 47° 27' 00" N Longitude: -122° 19' 30" W	Walker Creek #22	At the Point of Discharge
Latitude: 47° 27' 00" N Longitude: -122° 19' 30" W	Walker Creek #22-A	At the Point of Discharge
Latitude: 47° 26' 45" N Longitude: -122° 19' 30" W	Walker Creek #23	At the Point of Discharge
Latitude: 47° 26' 45" N Longitude: -122° 19' 30" W	Walker Creek #23-B	At the Point of Discharge
Latitude: 47° 26' 45" N Longitude: -122° 19' 15" W	Walker Creek #24	At the Point of Discharge
Latitude: 47° 26' 45" N Longitude: -122° 19' 15" W	Walker Creek #24-A	At the Point of Discharge
Note: The geographic coordinates included in Table 1 are based on the NAD 83 datum. This existing outfall may also be used for future construction outfall.		

3S2. MONITORING REQUIREMENTS

The Permittee must monitor all outfalls that receive construction runoff. Each outfall must be monitored, sampled, and reported individually according to the following schedule:

Category	Parameters	Units	Sample Point		Sampling Frequency ^a	Sample Type
Batch Treatment	Turbidity	NTU	Immediately prior to discharge	N/A	One/batch	Grab or continuous recording
	pH	Standard Units	Immediately prior to discharge	N/A	One/batch	Grab or continuous recording
	Total Petroleum Hydrocarbons	mg/L	Immediately prior to discharge	N/A	One/batch	Grab or continuous recording
Continuous Treatment	Turbidity	NTU	Immediately prior to discharge	N/A	At least four samples per discharge period	Grab or continuous recording
	pH	Standard Units	Immediately prior to discharge	N/A	At least four samples per discharge period	Grab or continuous recording
	Total Petroleum Hydrocarbons	mg/L	Immediately prior to discharge	N/A	At least four samples per discharge period	Grab or continuous recording
Non-chemical Treatment	Turbidity	NTU	Downstream at the point of complete mix	Upstream, outside the influence of respective outfalls, or other outfalls	See footnote "a"	Grab
	pH	Standard Units	Downstream at the point of complete mix		See footnote "a"	Grab
	Total Petroleum Hydrocarbons	mg/L	Immediately prior to discharge		See footnote "a"	Grab
Construction Stormwater Runoff	Flow	Precipitation and Flow Record must be collected and submitted to Ecology with the Discharge Monitoring Report (DMR).				

^a Sampling frequencies stated above are for construction stormwater with chemical treatment (batch or continuous). For non-chemically treated stormwater, all samples must be taken at the sampling point specified in the permit or, in case of in-stream sampling, at the point of complete mix determined by the Permittee, the storm event sampled must be representative of discharge with at least 0.5 inches of rain in a 24-hour period.

A. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit must be representative of 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 to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by Ecology.

B. Laboratory Accreditation

All monitoring data required by Ecology must be prepared by a laboratory registered or accredited under the provisions of, *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC. Flow, temperature, settleable solids, turbidity, conductivity, pH, and internal process control parameters are exempt from this requirement. Conductivity and pH must be accredited if the laboratory must otherwise be registered or accredited. Ecology exempts crops, soils, and hazardous waste data from this requirement pending accreditation of laboratories for analysis of these media.

C. Stormwater Monitoring Summary Report

On or before October 1st of each year, the Permittee must submit a report to Ecology summarizing the results of the monitoring during the preceding 12-month period from July 1 through June 30.

The report must summarize monitoring data, the Port's conclusions, if any, as to what is being learned from the data, and any modifications to operations or practices to improve compliance with the permit. The report must be submitted electronically as required in S3.A.8.G.

3S3. REPORTING AND RECORD KEEPING REQUIREMENTS

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

A. Discharge Monitoring Reports

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

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

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

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 *Permit Writer’s Manual*, Table VI-5, *Methods, detection and quantitation levels recommended for effluent characterization and effluent monitoring*.
5. Calculate average values and calculated total values (unless otherwise specified in the permit) using:
 - a. The reported numeric value for all parameters measured between the agency-required detection value and the agency-required quantitation value.
 - b. One-half the detection value (for values reported below detection) if the lab detected the parameter in another sample from the same monitoring point for the reporting period.
 - c. Zero (for values reported below detection) if the lab did not detect the parameter in another sample for the reporting period.
6. Report single-sample grouped parameters (for example: priority pollutants, PAHs, pulp and paper chlorophenolics, TTOs) on the WQWebDMR form and include: sample date, concentration detected, detection limit (DL) (as necessary), and laboratory quantitation level (QL) (as necessary).

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

7. Ensure that DMRs are electronically submitted no later than the dates specified below, unless otherwise specified in this permit.
8. Submit DMRs for parameters with the monitoring frequencies specified in S2 (monthly, quarterly, annual, etc.) at the reporting schedule identified below. The Permittee must:
 - a. Submit **monthly** DMRs by the 28th day of the following month.

B. Permit Submittals and Schedules

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

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

Water Quality Permit Coordinator
Department of Ecology
Northwest Regional Office
3190 160th Avenue SE
Bellevue, WA 98008-5452

C. Records Retention

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

D. Recording of Results

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

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

E. Additional Monitoring by the Permittee

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

F. Reporting Permit Violations

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

1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the noncompliance and correct the problem.

2. If applicable, immediately repeat sampling and analysis. Submit the results of any repeat sampling to Ecology within thirty (30) days of sampling.

- a. Immediate reporting

Any discharge of untreated stormwater below the approved design criteria for the construction stormwater management system must be reported **immediately** to the Department of Ecology's Regional Office 24-hour number 425-649-7000.

Any failure of the disinfection system, any collection system overflows which may reach surface waters, or any plant bypass discharging to a shellfish area must be reported **immediately** to the Department of Ecology and the Department of Health, Shellfish Program.

The Department of Ecology's Northwest Regional Office 24-hour number is 425-649-7000. The Department of Health's Shellfish number is 360-236-3330 (business hours) or 360-786-4183 (24 hours).

- b. Twenty-four-hour reporting

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

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

- c. Report within five days

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

1. A description of the noncompliance and its cause.
2. The period of noncompliance, including exact dates and times.
3. The estimated time the Permittee expects the noncompliance to continue if not yet corrected.

4. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
5. If the noncompliance involves an overflow prior to the treatment works, an estimate of the quantity (in gallons) of untreated overflow.

d. Waiver of written reports

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

e. All other permit violation reporting

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

G. Other Reporting

a. Spills of oil or hazardous materials

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

b. Failure to submit relevant or correct facts

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

H. Maintaining a Copy of this Permit

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

3S4. COMPLIANCE WITH STANDARDS

Permittees must comply with Washington State Surface Water Quality Standards (Chapter 173-201A WAC), Sediment Management Standards (Chapter 173-204 WAC), Ground Water Quality Standards (Chapter 173-200 WAC), and Human Health-based Criteria in the national Toxics Rule (Federal Register, Vol. 57, No. 246, December 22, 1992, pages 60848-60923). Compliance with standards applies to all discharges.

Compliance with surface water quality standards means that stormwater discharges from this facility will not cause or contribute to a violation of water quality standards in the receiving water.

Stormwater treatment systems must be fully functional for all storms meeting water quality design storm and the water quality design flow rate. A stormwater treatment system failure due to excessive storm exceeding the water quality design storm will not be considered permit violation provided the failure is solely due to severe storm and not as a result of and due to improper or lack of maintenance.

3S5. SOLID WASTE DISPOSAL

A. Solid Waste Handling

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

B. Leachate

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

3S6. OPERATIONS 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 includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems, which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

A. Operations and Maintenance Manual

An operations and maintenance (O&M) manual, for chemical treatment shall be kept available at the permitted facility and all operators shall follow the instructions and procedures of this manual. The O&M manual shall be reviewed by the Permittee at least annually and the Permittee shall confirm this review by letter to the Ecology.

1. Emergency procedures for plant shutdown and cleanup in event of treatment system upset or failure.
2. System maintenance procedures.

The operations and maintenance manual must be kept available at the permitted facility and all operators are responsible for being familiar with, and using, this manual.

B. Bypass Procedures

Bypass, which is the intentional diversion of waste streams from any portion of a treatment facility, is prohibited for stormwater events below the approved design criteria for stormwater management. Ecology may take enforcement action against a Permittee for bypass unless one of the following circumstances (1, 2, 3, or 4) is applicable:

1. Bypass of stormwater is consistent with the design criteria and part of an approved management practice in the applicable Stormwater Management Manual.
2. Bypass for essential maintenance without the potential to cause violation of permit limits or conditions. Bypass is authorized for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health.
3. Bypass of stormwater is unavoidable, unanticipated, and results in noncompliance of this permit.

This bypass is permitted 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. A severe storm event overwhelm properly designed and maintained stormwater management systems and there are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment downtime (but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment facility.
 - c. Ecology is properly notified of the bypass as required in Condition S2.E of this permit.
4. A planned action that would cause bypass of stormwater and has the potential to result in noncompliance of the permit during a storm event.

The Permittee must notify Ecology at least thirty (30) days before the planned date of bypass. The notice must contain: (1) a description of the bypass and its cause; (2) an analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing; (3) a cost-effectiveness analysis of alternatives including comparative resource damage assessment; (4) the minimum and maximum duration of bypass under each alternative; (5) a recommendation as to the preferred alternative for conducting the bypass; (6) the projected date of bypass initiation; (7) a statement of compliance with SEPA; (8) 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; and (9) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.

For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. The analysis required above must be considered during preparation of the engineering report or facilities plan and plans and specifications and must be included to the extent practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

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

- a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
- b. If there are feasible alternatives to bypass, 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.
- c. If the bypass is planned and scheduled 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. The public must be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by Ecology under RCW 90.48.120.

C. Duty to Mitigate

The Permittee is required to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

3S7. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

A programmatic SWPPP describing all components of the Port of Seattle construction management program at the STIA must be submitted to Ecology within ninety (90) days of the effective date of this permit. In addition, a project-specific SWPPP for construction activity must be implemented for any construction activity which disturbs one or more acres of the total land area. The SWPPP for each division or subdivision of the construction project must be prepared and retained on-site prior to the start of construction of that division or subdivision. A project-specific SWPPP monitoring plan must be submitted to Ecology for review at least thirty (30) days prior to the start of the construction of that division or subdivision of the construction project. All supplemental monitoring plans must also be submitted to Ecology for review. Construction activities included in this requirement include clearing, grading, filling, and excavation activities. For construction projects that discharge solely to groundwater, the SWPPP for construction activities must be protective of the groundwater quality.

With Ecology approval, a SWPPP must not be required for construction projects that discharge to the IWS.

An updated version of the Programmatic SWPPP must be either available via internet, or sent to the local libraries, i.e., Burien and Des Moines libraries.

A. General Requirements

1. The Programmatic SWPPP and all of its modifications must be signed in accordance with General Condition G.1.B. The project specific SWPPP contract TESC sheets, hydraulic conveyances, and detention facility sizing must be

stamped by a Professional Engineer licensed by the State of Washington. All project-specific SWPPP modification, except for hydraulic conveyances and detention facility sizing, must be signed by the Contractor-certified Erosion and Sediment Control Lead.

2. The SWPPP must be retained on-site or within reasonable access to the site and be made available upon request.
3. The Permittee must be responsible for the implementation of the SWPPP. The Erosion and Sediment Control Plan must be attached to bid packages when seeking contractors to allow the contractor sufficient time to plan implementation. At construction sites for which a lease, easement, or other use agreement has been obtained from the Permittee, the Permittee must be responsible for the implementation of a SWPPP.
4. The Permittee must implement procedures for reviewing the SWPPP with contractors and subcontractors prior to initiating construction activities. The Permittee must implement procedures for addressing changes in plans and construction activities and resolving disagreements on the interpretation of the SWPPP.
5. The Permittee must designate a contact person who will be available 24 hours a day to respond to emergencies, and to inquiries or directives from Ecology. The contact person must have authority over the SWPPP implementation. These names must be listed in the SWPPP. While the Permittee is ultimately responsible for the implementation of the SWPPP, both the Permittee and the contractor/subcontractor may be held liable for violations of the permit conditions and/or the water quality standards.
6. The Permittee must retain the SWPPP and copies of inspection reports and all other reports required by this permit for at least three (3) years after the date of final stabilization of the construction site. The Permittee must make these documents available upon request.
7. Reports on incidents, such as discharge of spills and other noncompliance notification, must be included in the records.
8. Modifications:
 - a. Ecology may notify the Permittee when the SWPPP does not meet one or more of the requirements of this special condition. Upon notification by Ecology, the Permittee must take appropriate action(s) to come into compliance with this special condition. All SWPPP modifications must be submitted to Ecology for review.
 - b. The Permittee must implement SWPPP and BMP modifications as directed by Ecology if compliance with the State of Washington Surface Water Quality Standards (Chapter 173-201A WAC), Sediment Management Standards (Chapter 173-204 WAC), Ground Water Quality Standards (Chapter 173-200 WAC), and human health-based criteria in the National Toxics Rule (Federal Register, Vol. 57, No. 246, December 22, 1992, pages 60848-60923) is not being achieved.

- c. The Permittee must modify the SWPPP whenever there is a change in design, construction, operation, or maintenance of any BMP which cause(s) the SWPPP to be less effective in controlling the pollutants.
 - d. Whenever a self-inspection reveals that the description of pollutant sources or the BMPs identified in the SWPPP are inadequate, due to the actual discharge of or potential to discharge a significant amount of any pollutant, the SWPPP must be modified, as appropriate. The Permittee must provide for implementation of any modifications to the SWPPP in a timely manner.
9. BMPs must be selected from the current edition of Ecology's *Stormwater Management Manual for Western Washington* that has been available for at least one hundred and twenty (120) days prior to BMP selection or other equivalent manuals available at the time of BMP selection.
10. The Permittee may request in writing that Ecology approve the use of an experimental BMP, such as chemical treatment. The request must be submitted to Ecology at least thirty (30) days prior to the proposed use of the experimental BMP. The request must include, but not be limited to, a description of:
- a. The experimental BMP.
 - b. Why the experimental BMP is being requested.
 - c. Why the BMPs in the *Stormwater Management Manual for Western Washington* are not adequate.
 - d. Applicable construction techniques.
 - e. The characteristics of the site or sites at which use of the experimental BMP is proposed.
 - f. Design criteria for the experimental BMP and the expected results.
 - g. Maintenance procedures.
 - h. Cost estimates.
 - i. Monitoring procedures and duration.
 - j. If appropriate, an approved BMP that could be used if the experimental BMP fails.

B. SWPPP Contents and Requirements

The SWPPP must consist of and make provision for the following:

1. An erosion and sediment control plan

The erosion and sediment control plan must describe stabilization and structural practices, both of which must be implemented to minimize erosion and the transport of sediments.

a. Stabilization practices

The erosion and sediment control plan must include a description of stabilization BMPs, including site-specific scheduling of the implementation of the practices. Stabilization practices may include temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, commercially

available soil stabilization products, and other appropriate measures. A record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated must be included in the plan. Stabilization measures must be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased.

The plan must ensure that the following requirements are satisfied:

- i) All exposed and unworked soils must be stabilized by suitable and timely application of BMPs.
- ii) Existing vegetation should be preserved whenever possible. Areas which are not to be disturbed, including setbacks, sensitive/critical areas and their buffers, trees and drainage courses, must be fenced or flagged on-site before construction activities are initiated. These areas should not be harmed when measures under the SWPPP and/or construction activities are undertaken.
- iii) Cut and fill slopes must be designed and constructed in a manner that will minimize erosion. Slopes must be stabilized in accordance with the requirements of this subsection.
- iv) Stabilization adequate to prevent erosion of outlets and adjacent stream banks must be provided at the outlets of all conveyance systems.
- v) All storm drain inlets made operable during construction must be protected and maintained.
- vi) Wherever construction vehicle access routes intersect paved roads, provisions must be made to minimize the transport of sediment (mud) onto the paved road. If sediment is transported onto a road surface, the roads adjacent to the construction site must be cleaned on a regular basis. Street washing must be allowed only after other methods to prevent the transport or removal of the sediments are unsuccessful. Street wash water may not be discharged to the stormwater system.

b. Structural practices

In addition to stabilization practices, the erosion and sediment control plan must include a description of structural BMPs to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable. Such practices may include silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and sediment basins. Structural practices should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 of the Federal Clean Water Act. The plan must ensure that the following requirements are satisfied:

- i) Prior to leaving the site, stormwater runoff must pass through a sediment pond or sediment trap, or other appropriate BMPs.
- ii) Properties adjacent to the project site must be protected from sediment deposition.
- iii) Sediment ponds and traps, perimeter dikes, sediment barriers, and other BMPs intended to trap sediment on site must be constructed as a first step in grading. These BMPs must be functional before other land disturbing activities take place. Earthen structures used for sediment control such as dams, dikes, and diversions must be stabilized as soon as possible.
- iv) Properties and waterways downstream from the construction site must be protected from erosion due to increases in volume, velocity, and peak flow of stormwater runoff from the project site. The peak flow of stormwater runoff must be controlled as specified by the *Stormwater Management Manual for Western Washington*. If local requirements are more stringent, then the Permittee must comply with the local requirements.
- v) All temporary erosion and sediment control BMPs must be removed within thirty (30) days after final site stabilization is achieved or after the temporary BMPs are no longer needed. Trapped sediment must be removed or stabilized on-site. Disturbed soil areas resulting from removal must be permanently stabilized.

c. Inspection and maintenance

All BMPs must be inspected, maintained, and repaired as needed to assure continued performance of their intended function. All on-site erosion and sediment control measures must be inspected at least once every seven (7) days and within 24 hours after any storm event of greater than 0.5 inches of rain per 24-hour period.

d. Record keeping

Reports summarizing the scope of inspections, the personnel conducting the inspection, the date(s) of the inspection, major observations relating to the implementation of the SWPPP, and actions taken as a result of these inspections must be prepared and retained as part of the SWPPP.

e. Format

The Erosion and Sediment Control Plan must consist of the following two parts: a narrative and a set of site plans. The Permittee may refer to Chapter II-4 of Ecology's *Stormwater Management Manual for Western Washington* for guidance on the content and format.

2. **Construction stormwater/dewatering monitoring plan**

The SWPPP must contain a detailed monitoring plan, including monitoring of discharges and the receiving water. The monitoring plan must include sampling upstream and downstream of discharge points sufficient to evaluate compliance with all relevant water quality standards. The plan must specify all sampling locations, parameters, and frequencies.

In the event the Permittee needs to modify the monitoring plan, revisions must be submitted to Ecology within thirty (30) days of implementing the revision.

3. **Control of pollutants other than sediment on construction sites**

All pollutants that occur on-site during construction must be handled and disposed of in a manner that does not cause contamination of stormwater.

A spill prevention and emergency cleanup plan must be included as a section in the SWPPP. BMP S1.80 in Volume IV of Ecology's *Stormwater Management Manual for Western Washington* must be used for guidance in developing this plan.

Solid chemicals, chemical solutions, paints, petroleum products, solvents, acids, caustic solutions and waste materials, including used batteries, must be stored in a manner which will prevent the inadvertent entry of these materials into waters of the state, including ground water. Storage must be in a manner that will prevent spills due to overfilling, tipping, or rupture. In addition, the following practices must be used:

- a. All liquid products and wastes must be stored on durable impervious surfaces and within bermed containment capable of containing 110% of the largest single container in the storage area.
- b. All waste storage areas, whether for waste oil or hazardous waste, must be clearly designated as such and kept segregated from new product storage.

4. **Coordination with local requirements**

This permit does not relieve the Permittee of compliance with any more stringent requirements of local government.

Also, as required by the Puget Sound water quality management plan, local governments within the Puget Sound Basin are to adopt requirements for construction, which are at least equivalent to the requirements listed in Chapter I-2 of Ecology's *Stormwater Management Manual for Western Washington*. Where Ecology has determined that the requirements adopted by a local government are equivalent to those of the *Stormwater Management Manual for Western Washington*, compliance with the local requirements is deemed compliant with Ecology's manual. If local requirements are more stringent than the *Stormwater Management Manual for Western Washington* requirements, the Permittee must comply with the local requirements.

GENERAL CONDITIONS

G1. SIGNATORY REQUIREMENTS

- A. All applications, reports, or information submitted to Ecology must be signed and certified.

1. In the case of corporations, by a responsible corporate officer.

For the purpose of this section, a responsible corporate officer means: (i) 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 (ii) 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.

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

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

1. The authorization is made in writing by a person described above and submitted to Ecology.
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

- C. Changes to authorization. If an authorization under paragraph B.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 B.2, above, must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.

- D. Certification. Any person signing a document under this section must make the following certification:

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

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

G3. PERMIT ACTIONS

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

- A. The following are causes for terminating this permit during its term, or for denying a permit renewal application:
 - 1. Violation of any permit term or condition.
 - 2. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.
 - 3. A material change in quantity or type of waste disposal.
 - 4. 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 [40 CFR Part 122.64(3)].

5. 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 [40 CFR Part 122.64(4)].
 6. Nonpayment of fees assessed pursuant to RCW 90.48.465.
 7. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.
- B. The following are causes for modification but not revocation and reissuance except when the Permittee requests or agrees:
1. A material change in the condition of the waters of the state.
 2. New information not available at the time of permit issuance that would have justified the application of different permit conditions.
 3. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.
 4. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.
 5. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR Part 122.62.
 6. Ecology has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.
 7. Incorporation of an approved local pretreatment program into a municipality's permit.
- C. The following are causes for modification or alternatively revocation and reissuance:
1. Cause exists for termination for reasons listed in A1 through A7, of this section, and Ecology determines that modification or revocation and reissuance is appropriate.
 2. 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 G8) 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 sixty (60) 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; or
- 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 must be construed as excusing 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.

A. Transfers by Modification

Except as provided in paragraph B, below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR 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.

B. Automatic Transfers

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

1. The Permittee notifies Ecology at least thirty (30) days in advance of the proposed transfer date.
2. The notice includes a written agreement between the existing and new Permittee's containing a specific date transfer of permit responsibility, coverage, and liability between them.
3. Ecology does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under the 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 will 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 is a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit must 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 Condition S3.E; and
- 4) the Permittee complied with any remedial measures required under S4.C of this permit.

In any enforcement proceedings 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 will, 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 will 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 ANTICIPATED NONCOMPLIANCE

The Permittee must give advance notice to Ecology by submission of a new application or supplement thereto at least one hundred and eighty (180) days prior to commencement of such discharges, of any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate unavoidable interruption of operation and degradation of effluent quality, must be scheduled during non-critical water quality periods and carried out in a manner approved by Ecology.

G21. REPORTING OTHER INFORMATION

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, such facts or information must be submitted promptly.

**G22. 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:

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

G23. COMPLIANCE SCHEDULES

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

APPENDIX A

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

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

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

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

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

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

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

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

CONVENTIONAL POLLUTANTS

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

NONCONVENTIONAL POLLUTANTS

Pollutant & CAS No. (if available)	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
Alkalinity, Total		SM2320-B		5 mg/L as CaCO ₃
Aluminum, Total	7429-90-5	200.8	2.0	10
Ammonia, Total (as N)		SM4500-NH ₃ -B and C/D/E/G/H		20
Barium Total	7440-39-3	200.8	0.5	2.0
BTEX (benzene +toluene + ethylbenzene + m,o,p xylenes)		EPA SW 846 8021/8260	1	2
Boron, Total	7440-42-8	200.8	2.0	10.0
Chemical Oxygen Demand		SM5220-D		10 mg/L
Chloride		SM4500-Cl B/C/D/E and SM4110 B		Sample and limit dependent
Chlorine, Total Residual		SM4500 Cl G		50.0
Cobalt, Total	7440-48-4	200.8	0.05	0.25
Color		SM2120 B/C/E		10 color units
Dissolved oxygen		SM4500-OC/OG		0.2 mg/L
Flow		Calibrated device		
Fluoride	16984-48-8	SM4500-F E	25	100
Hardness, Total		SM2340B		200 as CaCO ₃
Iron, Total	7439-89-6	200.7	12.5	50
Magnesium, Total	7439-95-4	200.7	10	50
Manganese, Total	7439-96-5	200.8	0.1	0.5
Molybdenum, Total	7439-98-7	200.8	0.1	0.5
Nitrate + Nitrite Nitrogen (as N)		SM4500-NO ₃ - E/F/H		100
Nitrogen, Total Kjeldahl (as N)		SM4500-N _{org} B/C and SM4500NH ₃ -B/C/D/EF/G/H		300
NWTPH Dx ⁴		Ecology NWTPH Dx	250	250
NWTPH Gx ⁵		Ecology NWTPH Gx	250	250
Phosphorus, Total (as P)		SM 4500 PB followed by SM4500-PE/PF	3	10
Salinity		SM2520-B		3 practical salinity units or scale (PSU or PSS)
Settleable Solids		SM2540 -F		Sample and limit dependent
Soluble Reactive Phosphorus (as P)		SM4500-P E/F/G	3	10
Sulfate (as mg/L SO ₄)		SM4110-B		0.2 mg/L
Sulfide (as mg/L S)		SM4500-S ² F/D/E/G		0.2 mg/L
Sulfite (as mg/L SO ₃)		SM4500-SO ₃ B		2 mg/L
Temperature (max. 7-day avg.)		Analog recorder or use micro-recording devices known as thermistors		0.2° C
Tin, Total	7440-31-5	200.8	0.3	1.5
Titanium, Total	7440-32-6	200.8	0.5	2.5
Total Coliform		SM 9221B, 9222B, 9223B	N/A	Specified in method - sample aliquot dependent
Total Organic Carbon		SM5310-B/C/D		1 mg/L
Total dissolved solids		SM2540 C		20 mg/L

PRIORITY POLLUTANTS	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
METALS, CYANIDE & TOTAL PHENOLS					
Antimony, Total	114	7440-36-0	200.8	0.3	1.0
Arsenic, Total	115	7440-38-2	200.8	0.1	0.5
Beryllium, Total	117	7440-41-7	200.8	0.1	0.5
Cadmium, Total	118	7440-43-9	200.8	0.05	0.25
Chromium (hex) dissolved	119	18540-29-9	SM3500-Cr C	0.3	1.2
Chromium, Total	119	7440-47-3	200.8	0.2	1.0
Copper, Total	120	7440-50-8	200.8	0.4	2.0
Lead, Total	122	7439-92-1	200.8	0.1	0.5
Mercury, Total	123	7439-97-6	1631E	0.0002	0.0005
Nickel, Total	124	7440-02-0	200.8	0.1	0.5
Selenium, Total	125	7782-49-2	200.8	1.0	1.0
Silver, Total	126	7440-22-4	200.8	0.04	0.2
Thallium, Total	127	7440-28-0	200.8	0.09	0.36
Zinc, Total	128	7440-66-6	200.8	0.5	2.5
Cyanide, Total	121	57-12-5	335.4	5	10
Cyanide, Weak Acid Dissociable	121		SM4500-CN I	5	10
Cyanide, Free Amenable to Chlorination (Available Cyanide)	121		SM4500-CN G	5	10
Phenols, Total	65		EPA 420.1		50

PRIORITY POLLUTANTS	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
ACID COMPOUNDS					
2-Chlorophenol	24	95-57-8	625	1.0	2.0
2,4-Dichlorophenol	31	120-83-2	625	0.5	1.0
2,4-Dimethylphenol	34	105-67-9	625	0.5	1.0
4,6-dinitro-o-cresol (2-methyl-4,6,-dinitrophenol)	60	534-52-1	625/1625B	1.0	2.0
2,4 dinitrophenol	59	51-28-5	625	1.0	2.0
2-Nitrophenol	57	88-75-5	625	0.5	1.0
4-Nitrophenol	58	100-02-7	625	0.5	1.0
Parachlorometa cresol (4-chloro-3-methylphenol)	22	59-50-7	625	1.0	2.0
Pentachlorophenol	64	87-86-5	625	0.5	1.0
Phenol	65	108-95-2	625	2.0	4.0
2,4,6-Trichlorophenol	21	88-06-2	625	2.0	4.0

PRIORITY POLLUTANTS	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
VOLATILE COMPOUNDS					
Acrolein	2	107-02-8	624	5	10
Acrylonitrile	3	107-13-1	624	1.0	2.0
Benzene	4	71-43-2	624	1.0	2.0
Bromoform	47	75-25-2	624	1.0	2.0
Carbon tetrachloride	6	56-23-5	624/601 or SM6230B	1.0	2.0

PRIORITY POLLUTANTS	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
VOLATILE COMPOUNDS					
Chlorobenzene	7	108-90-7	624	1.0	2.0
Chloroethane	16	75-00-3	624/601	1.0	2.0
2-Chloroethylvinyl Ether	19	110-75-8	624	1.0	2.0
Chloroform	23	67-66-3	624 or SM6210B	1.0	2.0
Dibromochloromethane (chlordibromomethane)	51	124-48-1	624	1.0	2.0
1,2-Dichlorobenzene	25	95-50-1	624	1.9	7.6
1,3-Dichlorobenzene	26	541-73-1	624	1.9	7.6
1,4-Dichlorobenzene	27	106-46-7	624	4.4	17.6
Dichlorobromomethane	48	75-27-4	624	1.0	2.0
1,1-Dichloroethane	13	75-34-3	624	1.0	2.0
1,2-Dichloroethane	10	107-06-2	624	1.0	2.0
1,1-Dichloroethylene	29	75-35-4	624	1.0	2.0
1,2-Dichloropropane	32	78-87-5	624	1.0	2.0
1,3-dichloropropene (mixed isomers)(1,2-dichloropropylene) ⁶	33	542-75-6	624	1.0	2.0
Ethylbenzene	38	100-41-4	624	1.0	2.0
Methyl bromide (Bromomethane)	46	74-83-9	624/601	5.0	10.0
Methyl chloride (Chloromethane)	45	74-87-3	624	1.0	2.0
Methylene chloride	44	75-09-2	624	5.0	10.0
1,1,2,2-Tetrachloroethane	15	79-34-5	624	1.9	2.0
Tetrachloroethylene	85	127-18-4	624	1.0	2.0
Toluene	86	108-88-3	624	1.0	2.0
1,2-Trans-Dichloroethylene (Ethylene dichloride)	30	156-60-5	624	1.0	2.0
1,1,1-Trichloroethane	11	71-55-6	624	1.0	2.0
1,1,2-Trichloroethane	14	79-00-5	624	1.0	2.0
Trichloroethylene	87	79-01-6	624	1.0	2.0
Vinyl chloride	88	75-01-4	624/SM6200B	1.0	2.0

PRIORITY POLLUTANTS	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)					
Acenaphthene	1	83-32-9	625	0.2	0.4
Acenaphthylene	77	208-96-8	625	0.3	0.6
Anthracene	78	120-12-7	625	0.3	0.6
Benzidine	5	92-87-5	625	12	24
Benzyl butyl phthalate	67	85-68-7	625	0.3	0.6
Benzo(a)anthracene	72	56-55-3	625	0.3	0.6
Benzo(b)fluoranthene (3,4-benzofluoranthene) ⁷	74	205-99-2	610/625	0.8	1.6
Benzo(j)fluoranthene ⁷		205-82-3	625	0.5	1.0
Benzo(k)fluoranthene (11,12-benzofluoranthene) ⁷	75	207-08-9	610/625	0.8	1.6
Benzo(r,s,t)pentaphene		189-55-9	625	0.5	1.0
Benzo(a)pyrene	73	50-32-8	610/625	0.5	1.0
Benzo(ghi)Perylene	79	191-24-2	610/625	0.5	1.0
Bis(2-chloroethoxy)methane	43	111-91-1	625	5.3	21.2

PRIORITY POLLUTANTS	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)					
Bis(2-chloroethyl)ether	18	111-44-4	611/625	0.3	1.0
Bis(2-chloroisopropyl)ether	42	39638-32-9	625	0.3	0.6
Bis(2-ethylhexyl)phthalate	66	117-81-7	625	0.1	0.5
4-Bromophenyl phenyl ether	41	101-55-3	625	0.2	0.4
2-Chloronaphthalene	20	91-58-7	625	0.3	0.6
4-Chlorophenyl phenyl ether	40	7005-72-3	625	0.3	0.5
Chrysene	76	218-01-9	610/625	0.3	0.6
Dibenzo (a,h)acridine		226-36-8	610M/625M	2.5	10.0
Dibenzo (a,i)acridine		224-42-0	610M/625M	2.5	10.0
Dibenzo(a-h)anthracene (1,2,5,6-dibenzanthracene)	82	53-70-3	625	0.8	1.6
Dibenzo(a,e)pyrene		192-65-4	610M/625M	2.5	10.0
Dibenzo(a,h)pyrene		189-64-0	625M	2.5	10.0
3,3-Dichlorobenzidine	28	91-94-1	605/625	0.5	1.0
Diethyl phthalate	70	84-66-2	625	1.9	7.6
Dimethyl phthalate	71	131-11-3	625	1.6	6.4
Di-n-butyl phthalate	68	84-74-2	625	0.5	1.0
2,4-dinitrotoluene	35	121-14-2	609/625	0.2	0.4
2,6-dinitrotoluene	36	606-20-2	609/625	0.2	0.4
Di-n-octyl phthalate	69	117-84-0	625	0.3	0.6
1,2-Diphenylhydrazine (as Azobenzene)	37	122-66-7	1625B	5.0	20
Fluoranthene	39	206-44-0	625	0.3	0.6
Fluorene	80	86-73-7	625	0.3	0.6
Hexachlorobenzene	9	118-74-1	612/625	0.3	0.6
Hexachlorobutadiene	52	87-68-3	625	0.5	1.0
Hexachlorocyclopentadiene	53	77-47-4	1625B/625	0.5	1.0
Hexachloroethane	12	67-72-1	625	0.5	1.0
Indeno(1,2,3-cd)Pyrene	83	193-39-5	610/625	0.5	1.0
Isophorone	54	78-59-1	625	0.5	1.0
3-Methyl cholanthrene		56-49-5	625	2.0	8.0
Naphthalene	55	91-20-3	625	0.3	0.6
Nitrobenzene	56	98-95-3	625	0.5	1.0
N-Nitrosodimethylamine	61	62-75-9	607/625	2.0	4.0
N-Nitrosodi-n-propylamine	63	621-64-7	607/625	0.5	1.0
N-Nitrosodiphenylamine	62	86-30-6	625	0.5	1.0
Perylene		198-55-0	625	1.9	7.6
Phenanthrene	81	85-01-8	625	0.3	0.6
Pyrene	84	129-00-0	625	0.3	0.6
1,2,4-Trichlorobenzene	8	120-82-1	625	0.3	0.6

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

PRIORITY POLLUTANTS	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
PESTICIDES/PCBs					
Aldrin	89	309-00-2	608	0.025	0.05
alpha-BHC	102	319-84-6	608	0.025	0.05
beta-BHC	103	319-85-7	608	0.025	0.05
gamma-BHC (Lindane)	104	58-89-9	608	0.025	0.05
delta-BHC	105	319-86-8	608	0.025	0.05
Chlordane ⁸	91	57-74-9	608	0.025	0.05
4,4'-DDT	92	50-29-3	608	0.025	0.05
4,4'-DDE	93	72-55-9	608	0.025	0.05
4,4' DDD	94	72-54-8	608	0.025	0.05
Dieldrin	90	60-57-1	608	0.025	0.05
alpha-Endosulfan	95	959-98-8	608	0.025	0.05
beta-Endosulfan	96	33213-65-9	608	0.025	0.05
Endosulfan Sulfate	97	1031-07-8	608	0.025	0.05
Endrin	98	72-20-8	608	0.025	0.05
Endrin Aldehyde	99	7421-93-4	608	0.025	0.05
Heptachlor	100	76-44-8	608	0.025	0.05
Heptachlor Epoxide	101	1024-57-3	608	0.025	0.05
PCB-1242 ⁹	106	53469-21-9	608	0.25	0.5
PCB-1254	107	11097-69-1	608	0.25	0.5
PCB-1221	108	11104-28-2	608	0.25	0.5
PCB-1232	109	11141-16-5	608	0.25	0.5
PCB-1248	110	12672-29-6	608	0.25	0.5
PCB-1260	111	11096-82-5	608	0.13	0.5
PCB-1016 ⁹	112	12674-11-2	608	0.13	0.5
Toxaphene	113	8001-35-2	608	0.24	0.5

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