

National Pollutant Discharge Elimination System Waste Discharge Permit WA-002496-1

State of Washington
ENERGY FACILITY SITE EVALUATION EFSEC
Olympia, Washington 98504-3172

In compliance with the provisions of the:
State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington; and

State of Washington Energy Siting Law
Chapter 80.50 Revised Code of Washington; and

Federal Water Pollution Control Act
(Clean Water Act)
Title 33 United States Code, Section 1251 et seq.

GRAY HARBOR ENERGY CENTER

Grays Harbor Energy Center
P.O. Box 26
Satsop, Washington 98583

Facility Location:

401 Keys Road
Elma, Washington 98541

Receiving Water:

Outfall 001:
Chehalis River at RM 19.7

Industry Type:

Electric Generating Plant (SIC 4911)

Discharge Location:

Outfall 001: Latitude: 46.971944° N
Latitude: 123.486333° W

Water Body ID No.: Outfall 001

WA-22-4040

Outfall 002B:

Grays Harbor Public Development Authority
pond immediately west of Keys Road

Grays Harbor Energy Center is authorized to discharge in accordance with the special and general conditions that follow.

Date: 10/28/2012

_____/s/_____
Jim Luce, Chairman,
Energy Facility Site Evaluation Council

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SUMMARY OF PERMIT REPORT SUBMITTALS

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

Permit Condition	Submittal	Frequency	First Submittal Date
S3.A	Discharge Monitoring Report (Process wastewater and stormwater)	Monthly	June 30, 2008
S3.E	Reporting Permit Violations	As necessary	As necessary
S3.F	Other Noncompliance Reporting	As necessary	As necessary
S4.A	Updated Operations and Maintenance Manual	One time	With the application for permit renewal
S5.B.1	Engineering Report Scope of Work	One time	February 1, 2011
S5.B.2	Draft Engineering Report	One time	February 1, 2012
S5.B.3	Final Engineering Report	One time	August 1, 2012
S5.B.4	Letter of Compliance with AKART	One time	February 1, 2013
S5.C	Request for Extension of Schedule of Compliance	One time	As necessary
S6	Application For Permit Renewal	One time	November 13, 2012
S7	Solid Waste Control Plan Update	Twice/permit cycle	January 1, 2009
S8	Spill Prevention Control and Countermeasure Plan Update	As necessary	As necessary
S9	Outfall Inspection	Annual	30 days after completion
S10	Acute Toxicity Testing	Every other month for one year	First report as required in S5, then 60 days after each test completed; summary report with app for permit renewal
S11	Chronic Toxicity Testing	Quarterly for one year	First report as required in S5, then 60 days after each test completed; summary report with app for permit renewal
G4	Notice of Planned Changes	As necessary	As necessary
G5	Plan Review Required	As necessary	At least 180 days prior to any proposed changes.
G20	Reporting Anticipated Non-compliance	As necessary	180 days prior to noncompliance event
G21	Reporting Other Information	As necessary	As necessary

SPECIAL CONDITIONS

S1. DISCHARGE LIMITS

A. General

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

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

The discharge of any pollutant not specifically authorized by this permit in concentrations that cause or contribute to a violation of water quality standards established under section 307(a) of the Clean Water Act or Chapter 173-201A WAC constitutes a violation of this permit and the Clean Water Act.

B. Interim Limits

Beginning on the effective date of this permit modification and lasting through February 13, 2013, the Permittee is authorized to discharge process wastewater to the Chehalis River at the permitted location subject to the following limitations:

Table 1: Effluent Limits

Parameter	Daily Maximum ¹	Monthly Average ²
Temperature	16°C	Not applicable
Ammonia (as N)	321 mg/L	160 mg/L
Free Available Chlorine	0.5 mg/L	0.2 mg/L
pH ³	6.0 - 9.0	Not applicable
Total Suspended Solids (TSS)	100.0 mg/L	30.0 mg/L
Oil and Grease	20 mg/L	15 mg/L
Chromium, Total	200 µg/L	200 µg/L
Iron, Total	1 mg/L	1 mg/L
Priority Pollutants and PCBs	See Footnote 4	

- 1 Maximum daily effluent limit means 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. This does not apply to pH.
- 2 Average monthly effluent limit means the highest allowable average of daily discharges over a calendar month. To calculate the discharge value to compare to the limit, you add the value of each daily discharge measured during a calendar month and divide this sum by the total number of daily discharges measured.
- 3 Permittee must include alarm systems for pH control to provide indication of any variance from established limits.

- 4 The Permittee must not discharge polychlorinated biphenyl compounds (PCBs). The Permittee must not discharge detectable amounts of priority pollutants (listed in 40 CFR Part 423, Appendix A), except chromium and zinc, or PCBs in the effluent from chemicals added for cooling system maintenance.

C. Mixing Zone Authorization for Outfall No. 001

Chronic Mixing Zone

Chronic aquatic life criteria and human health criteria must be met at the edge of the chronic zone. The chronic dilution factor is 182.

Acute Mixing Zone

Acute aquatic life criteria must be met at the edge of the acute zone. The acute dilution factor is 21.

D. Final Limits

Beginning on February 14, 2013 and lasting through the expiration date of this permit, the Permittee is authorized to discharge process wastewaters to the Chehalis River at the permitted location subject to final effluent limits established in the approved engineering report required in Condition S5 of this permit.

S2. MONITORING REQUIREMENTS

A. Interim Monitoring Schedule

Beginning on the effective date of this permit modification and lasting through February 13, 2013, the Permittee must monitor wastewater discharges as specified in Table 2.

The sampling required by this permit must be representative of normal operations during power generation.

Table 2: Monitoring Schedule - Circulating Cooling Water Blowdown Discharge – Outfall 001

Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Temperature	°C	Blowdown	Continuous ¹	Meter
Flow	MGD	Blowdown	Continuous ¹	Meter
pH	SUs	Blowdown	Continuous ¹	Meter
Free Available Chlorine	mg/L	Circulating Water or Blowdown	Continuous ^{1,2}	Meter or Grab
TSS	mg/L	Blowdown	Monthly	Grab
Turbidity	NTU	Blowdown	Monthly	Grab

Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Arsenic, Total	µg/L	Blowdown	Monthly	Grab
Ammonia, Total as N	mg/L	Blowdown	Monthly	Grab
Priority Pollutants and PCBs	µg/L	Blowdown	Annual	Grab
Chromium, Total	µg/L	Blowdown	Monthly	Grab
Oil and grease (HEM)	mg/L	Blowdown	Monthly	Grab
Iron, Total	mg/L	Blowdown	Monthly	Grab

- 1 Continuous means uninterrupted - except for brief lengths of time for calibration, power failure, or for unanticipated equipment repair or maintenance. If monitoring equipment fails, Permittee must implement manual monitoring.
- 2 If the monitoring equipment malfunctions, the Permittee must collect grab samples every 4 hours. The Permittee must collect a grab sample at least weekly to verify continuous monitor performance.

B. Final Monitoring Schedule

Beginning on February 14, 2013 and lasting through the expiration date of this permit, the Permittee is required to monitor its discharges as specified in the approved engineering report required in Condition S5 of this permit. The final monitoring schedule will be incorporated into the permit through a permit modification process.

C. Stormwater Benchmarks, Prohibitions, and Monitoring Requirements

1. Authorized Stormwater Discharges

Beginning on the effective date of this permit modification and lasting through its expiration date, the Permittee is authorized to discharge stormwater offsite of the facility to the C1 Pond. All discharges and activities authorized by this permit must be consistent with the terms and conditions of this permit.

Discharges must not cause or contribute to a violation of Surface Water Quality Standards (Chapter 173-201A WAC), Ground Water Quality Standards (Chapter 173-200 WAC), Sediment Management Standards (Chapter 173-204 WAC), and human health-based criteria in the National Toxics Rule (40 CFR 131.36). Discharges that are not in compliance with these standards are prohibited.

2. General Prohibitions

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

3. Monitoring Requirements

Beginning on the effective date of this permit, the Permittee must monitor stormwater for the parameters listed in Table 3.

Table 3: Stormwater Benchmarks and Monitoring Requirements

Parameter	Benchmark Value	Monitoring Frequency	Sample Type	Analytical Method	Sample Location
Turbidity	25 NTU's	Quarterly ¹	Grab	EPA 180.1	In accordance with SWPPP
Oil and Grease	²	Quarterly	Grab	EPA 413.1	
Total Zinc	117 µg/L	Quarterly	Grab	EPA 200.8	
Total Copper	14 µg/L	Quarterly	Grab	EPA 200.8	
pH	5-9 SU	Quarterly	Grab	EPA 150.1	

1 Stormwater discharges must be sampled at least once each calendar quarter.

2 The benchmark value is “no visible sheen”.

- a. The Permittee shall sample the discharge from each designated location at least once per quarter:

1st Quarter = January, February, and March

2nd Quarter = April, May, and June

3rd Quarter = July, August, and September

4th Quarter = October, November, and December

- b. The Permittee shall sample the stormwater discharge from the first fall storm event each year. “First fall storm event” means the first time after October 1st of each year that precipitation occurs and results in a stormwater discharge from a facility.
- c. The Permittee shall collect samples within the first 12 hours of stormwater discharge events. If it is not possible to collect a sample within the first 12 hours of a stormwater discharge event, the Permittee must collect the sample as soon as practicable after the first 12 hours, and keep documentation with the sampling records explaining why they could not collect samples within the first 12 hours.
- d. Collect samples that are representative of the flow and characteristics of the discharge.
- e. Visually monitor the discharge at the time of sample collection. Visual monitoring must include observations of the presence of floating materials, visible sheen, discoloration, turbidity, odor, etc. in the stormwater discharge.
- f. Conduct at least one dry weather inspection annually. Dry weather inspection must note the presence of non-stormwater discharges to the

stormwater system that are not authorized by this permit. Any non-stormwater discharges not otherwise authorized must be reported to EFSEC per Condition S3.E.

- g. Submit evaluations and visual monitoring observations with the Discharge Monitoring Report.
- h. Maintain an up-to-date copy of the SWPPP and original monitoring records, monthly inspection reports, and all relevant stormwater records in the site log at the facility at all times.

The Permittee is not required to sample outside of regular business hours (Monday-Friday, 8:00 am to 5:00 pm) or during unsafe conditions.

4. Response to Monitoring Results Above Benchmark Values

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

- a. Conduct an inspection of the drainage area for the affected outfall as promptly as possible.
- b. Identify the possible sources of stormwater contamination from industrial activity that are causing or contributing to the elevated levels of the benchmark parameter.
- c. Investigate and select all applicable and appropriate options for capital BMPs and operational source control BMPs to reduce stormwater contamination below benchmark values. Applicable and appropriate BMP's are contained in the 2005 version of Ecology's Stormwater Management Manual for Western Washington.
- d. Within 60 days of receipt of sample results complete/implement the additional operational source control BMPs identified in subsection c above.
- e. Within 6 months of receipt of sampling results complete installation/construction of the additional capital BMPs identified in subsection c above. If additional time is needed for construction the Permittee must submit to EFSEC a schedule for review and approval.
- f. Include a brief summary of inspection results and remedial actions taken with the monitoring report for the time period in which sample results were above benchmark values.

D. 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.

E. Flow Measurement

The Permittee must select and use appropriate flow measurement devices and methods consistent with accepted scientific practices. The Permittee must install, calibrate, and maintain the flow devices. This work is necessary to ensure that the accuracy of the measurements are consistent with the accepted industry standard and the manufacturers recommendation for that type of device. The Permittee must perform calibration at the frequency recommended by the manufacturer. The Permittee must maintain calibration records for at least three years.

F. Laboratory Accreditation

All monitoring data required by EFSEC 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, conductivity, pH, turbidity, free available chlorine, total residual chlorine, 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.

S3. REPORTING AND RECORDKEEPING REQUIREMENTS

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

A. Reporting

The first monitoring period begins on the effective date of the permit. Monitoring results must be submitted monthly. Monitoring data obtained during each monitoring period must be summarized, reported, and submitted on a Discharge Monitoring Report (DMR) form provided, or otherwise approved, by the Department. DMR forms must be postmarked or received no later than the 30th day of the month following the completed monitoring period, unless otherwise specified in this permit. Priority pollutant analysis data must be submitted no later than forty-five (45) days following the monitoring period. Unless otherwise specified, all toxicity test data must be submitted within sixty (60) days after the sample date. The report(s) must be sent to:

EFSEC
PO Box 43172
Olympia, WA 98504-3172

All laboratory reports providing data for organic and metal parameters must include the following information: sampling date, sample location, date of analysis, parameter name, CAS number, analytical method/ number, method detection limit (MDL), laboratory practical quantitation limit (PQL), reporting units, and concentration detected. Analytical results from samples sent to a contract laboratory must have information on the chain of custody, the analytical method, QA/QC results, and documentation of accreditation for the parameter.

DMR forms must be submitted monthly whether or not the facility was discharging. If there was no discharge during a given monitoring period, submit the form as required with the words "no discharge" entered in place of the monitoring results.

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 and plans required by this permit, site logs, inspection reports/checklists 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; and (6) the results of all analyses.

D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Condition S2, then the results of this monitoring must be included in the calculation and reporting of the data submitted in the Permittee's DMR.

E. Reporting Permit Violations

The Permittee must take the following action upon violation of any permit condition:

1. Immediate Noncompliance Notification

Any discharge of untreated wastewater must be reported immediately to the Department of Ecology's Regional Office 24-hr. number 360-407-6300 and EFSEC at 360-956-2047.

Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the noncompliance and correct the problem and, if applicable, immediately repeat sampling and analysis.

2. Twenty four hour Noncompliance Notification

The Permittee must report the following occurrences of noncompliance by telephone, to EFSEC, 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 Condition S4.B., "Bypass Procedures").
- c. Any **upset** that exceeds any effluent limitation in the permit (See General Condition G.15, "Upset").
- d. Any violation of a maximum daily or instantaneous maximum discharge limitation for any of the pollutants in Condition S1.A.
- 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.

3. Report Within Five Days

The Permittee must also provide a written submission within five days of the time that the Permittee becomes aware of any event required to be reported under Condition S3.E subsection 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.

4. Waiver of Written Reports

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

5. Report Submittal

Reports must be submitted to the address in Condition S3. "Reporting and Recordkeeping Requirements".

F. Other Noncompliance Reporting

The Permittee must report all instances of noncompliance, not required to be reported immediately or within 24 hours, at the time that monitoring reports for Condition S3.A "Reporting" are submitted. The reports must contain the information listed in Condition S3.E.3 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.

The spill of oil or hazardous materials **must** be reported in accordance with the instructions obtained at the following website:
<http://www.ecy.wa.gov/programs/spills/other/reportaspill.htm>

G. Maintaining a Copy of This Permit

The Permittee must keep a copy of the following documents at the permitted facility and be made available upon request to Department or EFSEC inspectors.

- a. Permit
- b. Permit coverage notifications
- c. Stormwater Pollution Prevention Plan (SWPPP)
- d. Site log books, inspection reports/checklists, and monitoring data.

S4. OPERATION AND MAINTENANCE

The Permittee must, at all times, properly operate and maintain all facilities or systems of treatment and control (and related appurtenances) which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up 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

1. An updated Operations and Maintenance (O&M) Manual must be submitted to EFSEC with the application for permit renewal. The updated O&M

Manual must incorporate any applicable pollution reduction measures detailed in the approved Engineering Report. The O&M Manual must be kept available at the permitted facility and all operators must follow the instructions and procedures of this manual.

In addition to the requirements of WAC 173-240-150(1) and (2), the O&M Manual must include:

- a. Emergency procedures for plant shutdown and cleanup in event of wastewater system upset or failure.
- b. Wastewater system maintenance procedures that contribute to the generation of process wastewater
- c. 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 (e.g. defining maximum allowable discharge rate for draining a tank, blocking all floor drains before beginning the overhaul of a stationary engine.)
- d. Operation and maintenance of sampling and monitoring equipment.

B. Bypass Procedures

Bypass, which is the intentional diversion of waste streams from any portion of a treatment facility, is prohibited, and EFSEC may take enforcement action against a Permittee for bypass unless one of the following circumstances (1, 2, or 3) is applicable.

1. Bypass for Essential Maintenance without the Potential to Cause Violation of Permit Limits or Conditions.

Bypass is authorized if it is 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 as determined by EFSEC 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 Which 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. 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. EFSEC is properly notified of the bypass as required in Condition S3.E of this permit.
3. Bypass which is Anticipated and has the Potential to Result in Noncompliance of this Permit.

The Permittee must notify EFSEC 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-110, 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.

EFSEC will consider the following prior to issuing an administrative order for this type 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, EFSEC 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 EFSEC 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.

S5. SCHEDULE OF COMPLIANCE

The Schedule of Compliance consists of development and submittal of a revised Engineering Report to EFSEC for review and approval as specified in this permit condition, as well as implementation of the approved Engineering Report. The Engineering Report was previously submitted to EFSEC.

The Permittee's process wastewater and stormwater discharges must be in compliance with AKART (all known, available, and reasonable methods of prevention, control, and treatment) and applicable water quality standards **by February 1, 2013**. To determine AKART, the Permittee must submit to EFSEC an Engineering Report developed in accordance with WAC 173-240-130 and -160.

The Engineering Report must also verify that the Permittee's stormwater discharges comply with the requirements of this permit and applicable requirements contained in the Industrial Stormwater General Permit.

A. Engineering Report Contents

The Permittee must develop and submit an Engineering Report in compliance with the applicable requirements in WAC 173-240-130. This includes technology-based and water quality-based requirements as specified in federal and state law. EFSEC expects the engineering report will conform to standard engineering practice. Guidance for meeting technology and water quality requirements are given Ecology's *Permit Writer's Manual*.

At a minimum the Engineering Report must contain the following elements:

1. Characterization of the Discharge – A comprehensive characterization of the discharge. The characterization must determine all species of pollutants present in the discharge to allow determination of compliance with the applicable parameters listed in the state surface water quality standards and the National Toxics Rule. For example, Chromium must be characterized for both Chromium III and Chromium VI. The Permittee must use the monitoring

methods and meet the detection and quantitation levels listed in Appendix A. The Permittee may use alternative 40 CFR Part 136 EPA-approved methods provided the method produces measureable results. If the Permittee uses an alternative method, not specified in the permit and as allowed above, it must report the test method, detection limit, and quantitation level on the discharge monitoring report or in the required report.

2. AKART - An AKART analysis of process wastewater pollutants. The Permittee must use all applicable portions of the following Ecology guidance document to develop the Engineering Report: STATE REQUIREMENTS FOR SUBMISSION OF ENGINEERING REPORTS AND PLANS FOR INDUSTRIAL WASTEWATER TREATMENT FACILITIES. This document can be downloaded from Ecology's website at: <http://www.ecy.wa.gov/biblio/0510014.html>.

Demonstrate compliance with 40 CFR 423.15(j)(1) that limits discharge of priority pollutants contained in chemicals added for cooling tower maintenance, except chromium and zinc, in circulating cooling water blowdown effluent to less than detection limits.

The AKART analysis must also evaluate and propose best management practices and pollution prevention measures utilized by the power industry to reduce pollution.

3. Compliance with Water Quality Standards - Verify compliance of all pollutant parameters in the process wastewater and stormwater discharges with all applicable water quality standards, including numeric and narrative water quality criteria, and antidegradation. Discharges must not cause or contribute to a violation of Surface Water Quality Standards (Chapter 173-201A WAC), Ground Water Quality Standards (Chapter 173-200 WAC), Sediment Management Standards (Chapter 173-204 WAC), or the human health-based criteria in the National Toxics Rule (40 CFR 131.36).
 - a. As may be required by EFSEC, update the 2004 receiving water study to characterize the Chehalis River upstream of the outfall. The Permittee must conduct the study between the confluence of the Satsop and Chehalis Rivers and 300 feet upstream of the outfall. In the event additional receiving water data must be collected, the Permittee must submit an updated Quality Assurance Project Plan (QAPP) to EFSEC for review and approval prior to beginning the study. The Permittee must use the following guidance document to develop the QAPP: Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies, Publ. No. 04-03-030, posted at: <http://www.ecy.wa.gov/biblio/0403030.html>.
 - b. Reconcile technology-based effluent limits, such as TSS and free available chlorine, with similar water quality-based parameters of turbidity and total residual chlorine, respectively.

- c. Determine which of the technology-based limits or water quality-based limits for each pollutant present in the discharge is the most stringent. State and federal regulations require that the most stringent of the technology-based or water quality-based limits be incorporated into the permit.
- d. Determine whether the discharge complies with the state antidegradation policy. The analysis must be conducted in compliance with requirements in Ecology's antidegradation guidance document, which is posted at: <http://www.ecy.wa.gov/programs/wq/swqs/antideg.html>
- e. Demonstrate compliance with the state's whole effluent toxicity (WET) standards in WAC 173-201A-240(1) as early in the engineering study as possible. If preliminary effluent and receiving water characterizations indicate the Permittee's discharge complies with the water quality standards without the need for additional wastewater treatment, the Permittee must conduct the WET testing specified in Conditions S10 and S11 before submitting the final engineering report to EFSEC.

If preliminary characterizations indicate additional wastewater treatment of the discharge is necessary before compliance of the water quality standards can be assured, the Permittee may delay WET (as per Condition S5.C.) testing until after the proposed engineering improvements have been implemented.

- f. Demonstrate compliance with the stormwater requirements of Condition S2.C and demonstrate substantial compliance with Ecology's Industrial Stormwater General Permit (ISWGP) issued on October 21, 2009. For example, the Permittee must assess the permit requirements of the 2009 ISWGP and propose revisions to the existing SWPPP that will assure compliance with the ISWGP and this permit on an ongoing basis.

The point of compliance for stormwater benchmarks is at the stormwater sewer manhole near the entry gate to the facility. If discharges to the sewer exceed benchmark values in Condition S2.C.3, the engineering report must propose source control or treatment BMP's that will assure compliance.

2. Monitoring – Propose a final monitoring program that adequately verifies compliance of the discharges with proposed final effluent limits and applicable water quality standards developed in the engineering report and stormwater benchmarks. The engineering report must propose monitoring parameters and appropriate sampling frequencies, locations, and methods (grab, composite, continuous).

B. Compliance Schedule

1. Engineering Report Revision - Scope of Work

The Permittee must submit a plan and schedule in the form of an approvable Scope of Work to EFSEC **by February 1, 2011.**

2. Draft Engineering Report Revision

The Permittee must submit an approvable draft Engineering Report to EFSEC **by February 1, 2012.**

3. Final Engineering Report Revision

The Permittee must submit a final Engineering Report to EFSEC for review and approval **by August 1, 2012.**

4. Compliance with AKART

The Permittee must verify compliance with the EFSEC-approved Engineering Report required in this permit condition, by letter, **no later than February 1, 2013.**

C. Request for Extension of Schedule of Compliance

In the event more time is necessary to complete the tasks required in this Schedule of Compliance, the Permittee may request that EFSEC grant an extension. The Permittee must request an extension by formal written letter, which must contain: (1) an explanation of why more time is needed, and (2) a revised schedule for completing the remaining tasks. EFSEC will grant the extension at its discretion through an administrative order or permit modification.

S6. APPLICATION FOR PERMIT RENEWAL

The Permittee must submit an application for renewal of this permit **by November 13, 2012.**

S7. 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 prevention, control, or 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.

C. Solid Waste Control Plan

The Permittee must submit an updated solid waste control plan to EFSEC with the application for permit renewal. This plan must address all solid wastes generated by the Permittee. The plan must include at a minimum a description, source, generation rate, and disposal methods of these solid wastes. This plan must not be in conflict with local or state solid waste regulations. Any proposed revision or modification of the solid waste control plan must be submitted to EFSEC for review and approval at least 30 days prior to implementation. The Permittee must comply with the plan and any modifications thereof. The Permittee must submit an update of the solid waste control plan with the application for permit renewal prior to the expiration date of the permit.

S8. SPILL PLAN

The Permittee must review and update the Spill Prevention Control and Countermeasures (SPCC) Plan, as needed and submit any changes to the plan to EFSEC. The plan and any supplements must be followed throughout the term of the permit.

The updated spill control plan must include the following:

- a. A description of the reporting system, which the Permittee will use to alert responsible managers and legal authorities in the event of a spill.
- b. A description of preventive measures and facilities (including an overall facility plot showing drainage patterns), which prevent, contain, or treat spills of these materials.
- c. A list of all oil and chemicals used, processed, or stored at the facility, which may spill into state waters.

For the purpose of meeting this requirement, plans and manuals, or portions thereof, required by 33 CFR 154, 40 CFR 109, 40 CFR 110, 40 CFR Part 112, the Federal Oil Pollution Act of 1990, Chapter 173-181, and contingency plans required by Chapter 173-303 WAC may be submitted.

S9. OUTFALL INSPECTION

The Permittee must inspect, annually, the submerged portion of the outfall line and diffuser to document its integrity and its continued function and perform repairs/maintenance as required. If conditions allow for a photographic verification, it must be included in the report. The Permittee must submit the inspection report EFSEC within 30 days of its completion.

S10. ACUTE TOXICITY

A. Effluent Characterization

The acute critical effluent concentration (ACEC) means the maximum concentration of effluent during critical conditions at the boundary of the acute mixing zone, defined in Condition S1. The ACEC will be determined in the approved engineering report.

The Permittee must conduct acute toxicity testing on the final effluent every other month for one year.

Testing must commence as required by Condition S5.A.3.e. The Permittee must submit a written report to EFSEC within sixty (60) days after each sample date.

The Permittee must use a dilution series consisting of a minimum of five concentrations and a control.

The Permittee must conduct the following two, acute toxicity tests on each sample:

1. Fathead minnow, *Pimephales promelas*, 96-hour static-renewal test (Reference: EPA-821-R-02-012).
2. Daphnid, *Ceriodaphnia dubia*, *Daphnia pulex*, or *Daphnia magna*, 48-hour static test (Reference: EPA-821-R-02-012).

B. Sampling and Reporting Requirements

1. The Permittee must submit all reports for toxicity testing in accordance with the most recent version of Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. Reports must contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data in electronic format for entry into EFSEC's database, then the Permittee must send the data to EFSEC along with the test report, bench sheets, and reference toxicant results.
2. The Permittee must collect grab samples for toxicity testing. The Permittee must cool the samples to 0 - 6 degrees Celsius during collection and send them to the lab immediately upon completion. The lab must begin the toxicity testing as soon as possible but no later than 36 hours after sampling was completed.
3. The laboratory must conduct water quality measurements on all samples and test solutions for toxicity testing, as specified in the most recent version of Department of Ecology Publication # 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 Ecology of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If EFSEC 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 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. 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.
8. Reports of individual characterization or compliance test results must be submitted to EFSEC within 60 days after each sample date.
9. The Acute Toxicity Summary Report must be submitted to EFSEC with the next application for permit renewal.

S11. CHRONIC TOXICITY

A. Effluent Characterization

The chronic critical effluent concentration (CCEC) means the maximum concentration of effluent during critical conditions at the boundary of the mixing zone, defined in Condition S1. The CCEC will be determined in the approved engineering report.

The Permittee must conduct chronic toxicity testing on the final effluent quarterly for one year.

Testing must commence as required by Condition S5.A.3.e. The Permittee must submit a written report to EFSEC within sixty (60) days after each sample date.

The Permittee must conduct chronic toxicity testing during effluent characterization on a series of at least five concentrations of effluent and a control. This series of dilutions must include the acute critical effluent concentration (ACEC). The ACEC will be established in the approved engineering report.

The Permittee must conduct the following three, chronic toxicity tests on each sample:

1. Fathead minnow survival and growth, *Pimephales promelas* (Reference: EPA-821-R-02-013).
2. Water flea survival and reproduction, *Ceriodaphnia dubia* (Reference: EPA-821-R-02-013).
3. Alga, *Selenastrum capricornutum*/*Raphidocelis subcapitata* (Reference: EPA-821-R-02-013).

B. Sampling and Reporting Requirements

1. The Permittee must submit all reports for toxicity testing in accordance with the most recent version of Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. Reports must contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data in electronic format for entry into EFSEC's database, then the Permittee must send the data to EFSEC along with the test report, bench sheets, and reference toxicant results.
2. The Permittee must collect grab samples for toxicity testing. The Permittee must cool the samples to 0 - 6 degrees Celsius during collection and send them to the lab immediately upon completion. The lab must begin the toxicity testing as soon as possible but no later than 36 hours after sampling was completed.
3. The laboratory must conduct water quality measurements on all samples and test solutions for toxicity testing, as specified in the most recent version of Department of Ecology Publication # 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 Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If EFSEC 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. 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.
8. Reports of individual characterization or compliance test results must be submitted to EFSEC within 60 days after each sample date.
9. The Chronic Toxicity Summary Report must be submitted to EFSEC with the next application for permit renewal.

S12. PERMIT REOPENER

EFSEC may modify this permit on the basis of monitoring results or other causes consistent with state and federal regulations and/or to modify or establish specific monitoring requirements, effluent limits, or other conditions in the permit. EFSEC will modify this permit in accordance with the requirements of WAC 463-76-041, WAC 463-76-042, and WAC 463-76-043.

GENERAL CONDITIONS

G1. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to the Department must be signed and certified.

- A. All permit applications must be signed by either a responsible corporate officer of at least the level of vice president of a corporation, a general partner of a partnership, or the proprietor of a sole proprietorship.
- B. All reports required by this permit and other information requested by the Department 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 the Department.
 - 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 General Condition G1.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 the Department 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 entry to an authorized representative of EFSEC, upon the presentation of credentials and such other documents as may be required by law:

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

G3. PERMIT ACTIONS

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

1. The following are causes for terminating this permit during its term, or for denying a permit renewal application:
 - a. Violation of any permit term or condition.
 - b. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.
 - c. A material change in quantity or type of wastewater disposal.
 - d. A determination that the permitted activity endangers human health or the environment or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination (40 CFR part 122.64[3]).
 - e. A change in any condition that requires either a temporary or permanent reduction or elimination of any discharge or sludge use or disposal practice controlled by the permit (40 CFR part 122.64[4]).
 - f. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.
2. The following are causes for modification but not revocation and reissuance except when the Permittee requests or agrees:
 - a. A material change in the condition of the waters of the state.
 - b. New information not available at the time of permit issuance that would have justified the application of different permit conditions.
 - c. Material and substantial alterations or additions to the permitted facility or activities that occurred after this permit issuance.
 - d. Promulgation of new or amended standards or regulations having a direct bearing on permit conditions, or requiring permit revision.
 - e. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR Part 122.62.

- f. EFSEC has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.
 - g. Incorporation of an approved local pretreatment program into a municipality's permit.
3. The following are causes for modification or alternatively revocation and reissuance:
 - a. Cause exists for termination for reasons listed above in General Condition G3.1, and EFSEC determines that modification or revocation and reissuance is appropriate.
 - b. EFSEC has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer (General Condition G7.) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new Permittee.

G4. REPORTING PLANNED CHANGES

The Permittee must, as soon as possible, give notice to EFSEC of planned physical alterations or additions to the permitted facility, production increases, or process modification that 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, 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

Before constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications must be submitted to EFSEC for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications must be submitted at least 180 days before the planned start of construction unless a shorter time is approved by EFSEC. 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 EFSEC.

A. Transfers by Modification

Except as provided in General Condition G7.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 EFSEC at least 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. EFSEC 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 EFSEC, within a reasonable time, all information that EFSEC 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 EFSEC upon request copies of records required to be kept by this permit (40 CFR 122.41[h]).

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

EFSEC 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 EFSEC.

G14. PENALTIES FOR VIOLATING PERMIT CONDITIONS

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

Any person who violates the terms and conditions of a waste discharge permit 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 must be a separate and distinct offense, and in case of a continuing violation, every day's continuance must be 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 limitations 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 limitations 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 Condition S4.C of this permit.

In any enforcement proceeding, 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 must, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two 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 must 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 EFSEC by submitting a new application or supplement at least 180 days before commencement of such discharges, of any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility or activity that may result in noncompliance with permit limits or conditions. Any maintenance of facilities that might interrupt operation and degrade effluent quality must be scheduled during noncritical water quality periods and carried out in a manner approved by EFSEC.

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 EFSEC, it must promptly submit such facts or information.

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 EFSEC as soon as they know or have reason to believe:

1. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
 - 100 micrograms per liter ($\mu\text{g/L}$).
 - 200 $\mu\text{g/L}$ for acrolein and acrylonitrile; 500 $\mu\text{g/L}$ for 2, 4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and 1 mg/L for antimony.
 - Five times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g) (7).
 - The level established by EFSEC in accordance with 40 CFR 122.44(f).

2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant that is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
 - 500µg/L.
 - 1 mg/L for antimony.
 - Ten times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g) (7).
 - The level established by EFSEC 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 EFFLUENT CHARACTERIZATION FOR WASHINGTON STATE PRIORITY TOXIC CHEMICALS

EPA 307(A) REF. #	Pollutant & CAS No. (if available)	Recommende d Analytical Protocol	Detection (DL) ^{1,2} µg/L unless specified	Quantitation Level (QL) ^{1,2} µg/L unless specified	Lowest Criteria Values µg/L unless specified
Conventionals					
	Biochemical Oxygen Demand	405.1		2 mg/L	
	Chemical Oxygen Demand	410.1			
	Total Organic Carbon	5310 BCD		1 mg/L	
	Total Suspended Solids	2540 D		10 mg/L	
	Total Ammonia (as N)	4500-NH3- H			
	Flow	Calibrated device			
	Dissolved oxygen	4500-OC			
	Temperature (max. 7-day avg.)	Analog recorder or Use micro- recording devices known as thermistors			
	pH	150.1			
Nonconventionals					
	Bromide (24959-67-9)	4110 B	100	400	
	Chlorine, Total Residual	4500 CI G	10.0	40.0	7.5
	Color				
	Fecal Coliform				
	Fluoride (16984-48-8)	4500-F E	25	100	
	Nitrate-Nitrite (as N)	4500-NO2- I	2.5	10	10,000
	Nitrogen, Total Organic (as N)	4500-NO3- B	6.3	25	
	Ortho-Phosphorus (PO ₄ as P)	4500-P G	0.8	3.0	
	Phosphorus, Total (as P)	200.8	0.25	1.0	

	Oil and Grease	1664A	1250	5,000	
	Radioactivity				
	Sulfate (as mg/l SO ₄)	375.2	750	3,000	
	Sulfide (as mg/l S)	376.1	250	1000	2.0
	Sulfite (as mg/l SO ₃)	4500-SO3B	500	2,000	
	Surfactants	5540 C	2.5	10	
	Total dissolved solids	2540 D			500 mg/L ¹⁶
	Aluminum, Total (7429-90-5)	200.8	0.15	0.6	750
	Barium Total (7440-39-3)	200.8	0.5	2.0	
	Boron Total (7440-42-8)	200.8(mod)	1.0	4.0	
	Cobalt, Total (7440-48-4)	200.8	0.03	0.12	
	Iron, Total (7439-89-4)	200.8	12.5	50	300
	Magnesium, Total (7439-95-4)	200.8(mod)	1.0	4.0	
	Molybdenum, Total (7439-98-7)	200.8(mod)	0.1	0.4	
	Manganese, Total (7439-96-5)	200.8(mod)	0.06	0.24	50
	Tin, Total (7440-31-5)	200.8(mod)	0.04	0.16	
	Titanium, Total (7440-32-6)	200.8(mod)	0.04	0.16	
Metals, Cyanide & Total Phenols					
114	Antimony, Total (Inorganic) (7440-36-0)	200.8	0.08	0.3	14 ⁵
115	Arsenic, Total (dissolved) (7440-38-2)	200.8	0.9	3.6	36 ⁷
117	Beryllium, Total (7440-43-9)	200.8	0.1	0.4	4 ⁸
118	Cadmium, Total (7440-43-9)	200.8	0.1	0.4	0.37 ³
	Chromium (hex) dissolved (185-402-99)	200.8	0.4	1.6	10 ⁷
119	Chromium, Total (Tri) (7440-47-3)	200.8	0.07	0.28	57.2 ³
120	Copper, Total (7440-50-8)	200.8	0.03	0.12	3.1 ³
122	Lead, Total (7439-92-1)	200.8	0.08	0.32	0.54 ³
123	Mercury, Total (7439-97-6)	1631E	0.0001	0.0005	0.012 ⁷
124	Nickel, Total (7440-02-0)	200.8	0.2	0.8	8.2 ³
125	Selenium, Total (7782-49-2)	200.8	1.3	5.2	5 ⁷
126	Silver, Total (7440-22-4)	200.8	0.05	0.2	0.32 ³
127	Thallium, Total (7440-28-0)	200.8	0.09	0.36	1.7 ⁵
PSP	Tributyltin (688-73-3)	GC/MS ¹²	0.001	0.004	0.0074 ⁴

128	Zinc, Total (7440-66-6)	200.8	0.3	1.0	32.3 ³
121	Cyanide, Total (7440-66-6)	335.4	1.3	5	1.0 ⁷
PSP	Phenols, Total	420.1	12.5	50	300 ⁹
Dioxin					
129	2,3,7,8-Tetra-Chlorodibenzo-P-Dioxin (176-40-16)	1613B	1.3 pg/L	5 pg/L	0.000000013 ⁵
Volatile Compounds					
002	Acrolein (107-02-8)	624	12.5QL	50	320/780 ⁵
003	Acrylonitrile (107-13-1)	603	0.5	2.0	0.059/0.66 ⁵
004	Benzene (71-43-2)	624	0.07	0.28	5.0 ⁸
018	Bis(2-Chloroethyl)ether (111-44-4)	611/625	0.25	1.0	0.031 ⁵
042	Bis(2-Chloroisopropyl) ether (108-60-1)	611/625	0.03	0.10	1400 ⁵
047	Bromoform (75-25-2)	624	4.7	19.0	4.3 ⁵
006	Carbon tetrachloride (108-90-7)	624/601 or SM6230B	0.12	0.5	0.25 ⁵
007	Chlorobenzene (108-90-7)	624	6.0	24.0	680 ⁵
016	Chloroethane (75-00-3)	624/601	0.52	2.0	
019	2-Chloroethylvinyl Ether (110-75-8)	624	50 QL		3540 ¹⁰
023	Chloroform (67-66-3)	624 or SM6210B	1.6	6.4	5.7 ⁵
051	Dibromochloromethane (124-48-1)	624	0.09	0.36	0.41 ⁵
048	Dichlorobromomethane (75-27-4)	SM6200B	0.112	0.45	0.27 ⁵
013	1,1-Dichloroethane (75-34-3)	624	4.7	18.8	
010	1,2-Dichloroethane (107-06-2)	601	0.03	0.12	0.38 ⁵
029	1,1-Dichloroethylene (75-35-4)	SM6200C	0.035	0.14	0.057 ⁵
032	1,2-Dichloropropane (78-87-5)	624	6	24	3 ¹³
033	1,3-dichloropropylene (mixed isomers) (542-75-6)	624	5	20	10 ⁵
038	Ethylbenzene (100-41-4)	624	7.2	29.0	3100 ⁵
046	Methyl bromide (74-83-9) (Bromomethane)	624/601	1.2	4.8	48 ⁵
045	Methyl chloride (74-87-3) (Chloromethane)	601	0.08	0.32	270000 ¹³
044	Methylene chloride (75-09-2)	624	2.8	11.2	4.7 ⁵
015	1,1,2,2-Tetrachloroethane (79-34-5)	601	0.03	0.12	0.17 ⁵

085	Tetrachloroethylene (127-18-4)	SM6200B	0.047	0.19	0.80 ⁵
086	Toulene (108-88-3)	624	6	24	6800 ⁵
030	1,2-Trans-Dichloroethylene (156-60-5) (Ethylene dichloride)	624	1.6	6.4	700 ⁴
011	1,1,1-Trichloroethane (71-55-6)	624	3.8	15.2	200 ⁸
014	1,1,2-Trichloroethane (79-00-5)	601	0.02	0.08	0.6 ⁵
087	Trichloroethylene (79-01-6)	624	1.9	7.6	2.7 ⁵
	Trichlorofluoromethane (75-69-4)	624	0.06	0.24	-
088	Vinyl chloride (75-01-4)	624/SM6200B	0.12	0.48	2 ⁵
Acid Compounds					
PSP	Bisphenol A (80-05-7)	625	0.3	1.2	0.9 ¹³
024	2-Chlorophenol (95-57-8)	625	3.3	13.2	81 ⁴
031	2,4-Dichlorophenol (120-83-2)	625	2.7	10.8	93 ⁵
034	2,4-Dimethylphenol (105-67-9)	625	2.7	10.8	380 ⁴
060	4,6-dinitro-o-cresol (534-52-1) (2-methyl-4,6,-dinitrophenol)	625/1625B	5	20	13.4 ⁵
059	2,4 dinitrophenol (51-28-5)	625	42	168	70 ⁵
057	2-Nitrophenol (88-75-5)	625	3.6	14.4	450 ¹³
058	4-nitrophenol (100-02-7)	625	2.4	9.6	600 ¹³
PSP	Nonylphenol, total (104-40-5)	625	0.9	5.0	7
022	Parachlorometa cresol (59-50-7) (4-chloro-3-methylphenol)	625	3.0	12.0	-
064	Pentachlorophenol (87-86-5)	604 (ECD)	0.005	0.021 ¹¹	0.28 ⁵
065	Phenol (108-95-2)	625	1.5	6.0	21000 ⁵
021	2,4,6-Trichlorophenol (88-06-2)	604(ECD)	0.58	2.3	2.1 ⁵
Base/Neutral Compounds					
001	Acenaphthene (83-32-9)	625	1.9	7.6	670 ⁶
077	Acenaphtylene (208-96-8)	625	3.5	14.0	132000 ¹³
078	Anthracene (120-12-7)	625	1.9	7.6	9600 ⁵
005	Benzidine (92-87-5)	605	0.08	0.32	0.00012 ⁵
067	Benzyl butyl phthalate (85-68-7)	625	2.5	10.0	1500
072	Benzo(a)anthracene (56-55-3)	610	0.013	0.05	0.0028 ⁵
PBT	Benzo(j)fluoranthene (205-82-3)	610M/625M	0.02	0.08	-
PBT	Benzo(r,s,t)pentaphene (189-55-9)	610M/625M	0.02	0.08	-
073	Benzo(a)pyrene (50-32-8)	610/625	0.023	0.09	0.0028/0.031 ⁵
074	3,4-benzofluoranthene	610/625	0.018	0.07	-

	(Benzo(b)fluoranthene) (205-99-2)				
075	11,12-benzofluoranthene (Benzo(k)fluoranthene) (207-08-9)	610/625	0.017	0.07	0.0028/0.031 ⁵
079	Benzo(<i>ghi</i>)Perylene (191-24-2)	610/625	0.076	0.30	0.1 ¹³
043	Bis(2- <i>chloroethoxy</i>)methane (111-91-1)	625	5.3	21.2	92000 ¹³
018	Bis(2- <i>chloroethyl</i>)ether (111-44-4)	611/625	0.3	1.2	0.031 ⁵
042	Bis(2- <i>chloroisopropyl</i>)ether (108-60-1)	625	5.3	21.2	1400 ⁵
066	Bis(2- <i>ethylhexyl</i>)phthalate (117-81-7)	625	2.5	10.0	1.8 ⁵
070	Butyl benzyl phthalate	625	0.25	1.0	1500
041	4-Bromophenyl phenyl ether (101-55-3)	625	1.9	7.6	180 ¹³
020	2-Chloronaphthalene (91-58-7)	625	1.9	7.6	1000 ⁶
040	4-Chlorophenyl phenyl ether (7005-72-3)	625	4.2	16.8	365 ¹³
076	Chrysene (218-01-9)	610/625	0.15	0.6	0.0028 ⁵
PSP	7H-Dibenzo(c,g)carazole (194-59-2)	610M/625M	0.25	1.0	-
PBT	Dibenzo (a,j)acridine (224-42-0)	610M/625M	2.5	10.0	-
PBT	Dibenzo (a,h)acridine (226-36-8)	610M/625M	2.5	10.0	-
082	Dibenzo(a- <i>h</i>)anthracene (53-70-3) (1,2,5,6-dibenzanthracene)	625	2.5	10.0	2700 ⁵
PBT	Dibenzo(a,e)pyrene (192-65-4)	610M/625M	2.5	10.0	-
PBT	Dibenzo(a,h)pyrene (189-64-0)	625M	2.5	10.0	
025	1,2-Dichlorobenzene (95-50-1)	625	1.9	7.6	2700 ⁵
026	1,3-Dichlorobenzene (541-73-1)	625	1.9	7.6	400 ⁵
027	1,4-Dichlorobenzene (106-46-7)	625	4.4	17.6	400 ⁵
028	3,3'-Dichlorobenzidine (91-94-1)	605/625	0.13	0.52	0.04 ⁵
PSP	1,2-Dichloropropane (788-7-5)	624	0.15	0.6	0.50 ⁶
070	Diethyl phthalate (84-66-2)	625	1.9	7.6	23000 ⁵
071	Dimethyl phthalate (131-11-3)	625	1.6	6.4	313000 ⁵
068	Di- <i>n</i> -butyl phthalate (84-74-2)	625	2.5	10.0	2700 ⁵
035	2,4-dinitrotoluene (121-14-2)	609	0.01	0.04	0.11 ⁵

036	2,6-dinitrotoluene (606-20-2)	609/625	0.01	0.04	6250 ¹⁹
069	Di-n-octyl phthalate (117-84-0)	625	2.5	10.0	3.1 ¹⁹
037	1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	625	10	40.0	0.04 ⁵
039	Fluoranthene (206-44-0)	625	2.2	8.8	300 ⁵
080	Fluorene (86-73-7)	625	1.9	7.6	1300 ⁵
009	Hexachlorobenzene (118-74-1)	612/625	0.05	0.2	0.00075 ⁵
052	Hexachlorobutadiene (87-68-3)	625	0.09	0.36	0.44 ⁵
053	Hexachlorocyclopentadiene (77-47-4)	1625B/625	2.5	10	240 ⁵
012	Hexachloroethane (67-72-1)	625	1.6	6.4	1.9 ⁵
083	Indeno(1,2,3-cd)Pyrene (193-39-5)	610/625	0.043	0.17	0.0028 ⁶
054	Isophorone (78-59-1)	625	2.2	8.8	8.4 ⁵
PBT	3-Methyl cholanthrene (56-49-5)	625	2.0	8.0	—
055	Naphthalene (91-20-3)	625	1.6	6.4	400 ¹³
056	Nitrobenzene (98-95-3)	625	1.9	7.6	17 ⁵
PSP	N-Nitrosodibutylamine (924-16-3)	625	10	40	0.005 ¹⁵
PSP	N-Nitrosodiethylamine (55-18-5)	625	10	40	0.0008 ¹⁴
061	N-Nitrosodimethylamine (62-75-9)	607/625	0.04	0.15	0.00069 ⁵
063	N-Nitrosodi-n-propylamine (621-64-7)	607/625	0.12	0.46	0.005 ⁵
062	N-Nitrosodiphenylamine (86-30-6)	625	1.9	7.6	5 ⁵
PSP	Pentachlorobenzene (608-93-5)	625	1.9	7.6	0.154 ⁶
PBT	Perylene (198-55-0)	625	1.9	7.6	
081	Phenanthrene (85-01-8)	625	5.4	21.6	4 ¹³
084	Pyrene (129-00-0)	625	1.9	7.6	960 ⁵
008	1,2,4-Trichlorobenzene (120-82-1)	625	1.9	7.6	35 ⁶
GC/MS Fraction - Pesticides					
089	Aldrin (309-00-2)	608	0.004	0.016	0.00013 ⁵
102	alpha-BHC (319-84-6)	608	0.003	0.012	0.0039 ⁵
103	beta-BHC (319-85-7)	608	0.006	0.024	0.014 ⁵
104	gamma-BHC (58-89-9)	608	0.009	0.036	0.019 ⁵
105	delta-BHC (319-86-8)	608	0.004	0.016	7.0 ¹³
091	Chlordane (57-74-9)	608	0.014	0.056	0.00057 ⁵
092	4,4'-DDT (50-29-3)	608	0.012	0.048	0.00059 ⁵

093	4,4'-DDE (72-55-9)	608	0.001	0.003 ¹¹	0.00059 ⁵
094	4,4' DDD (72-54-8)	608	0.011	0.044	0.00083 ⁵
PSP	Diazinon (333-41-5)	614/1657	0.0013	0.005 ¹¹	0.17 ⁴
090	Dieldrin (60-57-1)	608	0.002	0.008	0.00014 ⁵
095	alpha-Endosulfan (959-98-8)	608	0.014	0.056	0.0087 ⁵
096	beta-Endosulfan (33213-65-9)	608	0.004	0.016	0.0087 ⁵
097	Endosulfan Sulfate (1031-07-8)	608	0.066	0.26	0.093 ⁵
098	Endrin (72-20-8)	608	0.006	0.024	0.0023 ⁵
099	Endrin Aldehyde (7421-93-4)	608	0.023	0.092	0.76 ⁵
100	Heptachlor (76-44-8)	608	0.003	0.012	0.00021 ⁵
101	Heptachlor Epoxide (1024-57-3)	608	0.083	0.33	0.00010 ⁵
PSP	Parathion (56-38-2)	614/1657	0.003	0.01 ¹¹	0.013 ⁷
106	PCB-1242 (53469-21-9)	608	0.065	0.26	0.000170 ⁵
107	PCB-1254 (11097-69-1)	625	36	144	0.000170 ⁵
108	PCB-1221 (11104-28-2)	625	30	120	0.000170 ⁵
109	PCB-1232 (11141-16-5)	608	0.13	0.5	0.000170 ⁵
110	PCB-1248 (12672-29-6)	608	0.13	0.5	0.000170 ⁵
111	PCB-1260 (11096-82-5)	608	0.13	0.5	10.5 ¹³
112	PCB-1016 (12674-11-2)	608	0.13	0.5	0.42 ¹³
113	Toxaphene (8001-35-2)	608	0.24	0.96	0.00073 ⁵

PBT - Denotes a State of Washington toxic compound or additional parameter.

PSP — Puget Sound Pollutant

1. The DL and QL values were obtained from USEPA Region 10 (as compiled from 40 CFR Part 136), from Ecology Laboratory Manual, or from sources noted by other footnote. USEPA Region 10 compiled their list from the Methods Update Rule (MUR) FR vol. 72, no. 47, Monday, March 12, 2007. Parameter #53 in Table 1c of the MUR was published as 2,3-dinitrophenol which is technically incorrect; parameter #53 should have been listed as 2,4-dinitrophenol and appears corrected here.

Methods have different ways to express detection limits and quantification limits. When a method published sensitivity information it was listed as a detection limit (DL); when a method indicated an instrument detection limit (IDL) that too was identified as a detection limit (DL). When a method was published with method detection limits (MDL) as per 40 CFR 136 Appendix B, then these limits were listed under MDL. When a method published a working or operational concentration range then the lowest value for that range was used to in the column called LLCR or lowest level of the concentration range. When a method published minimum levels,

then these were listed under ML. Where only a DL or QL was provided the corresponding QL or DL was estimated by multiplying by 4 (or 0.25).

2. 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.

Quantitation Level (QL) is equivalent to EPA's Minimum Level (ML) which is defined in 40 CFR Part 136 as the minimum level at which the entire GC/MS system must give recognizable mass spectra (background corrected) and acceptable calibration points. These levels were published as proposed in the Federal Register on March 28, 1997.

3. This criterion is dependent upon receiving water characteristics. This value is the aquatic life chronic value at a hardness of 25 mg/l
4. EPA 822-R-03-031
5. Human health criteria as fresh or marine – EPA National Toxic Rule
6. Fresh water aquatic life as Acute or Chronic – EPA recommended values
7. Aquatic life as Acute or Chronic – WAC 173-201A
8. USEPA Drinking Water Criteria
9. Taste and odor criteria
10. No human health based screening levels were available for 2-chloroethylvinyl ether. This value is the surface water screening values derived by U.S. EPA Region 4 Water Management Division. These values were obtained from Water Quality Criteria documents and represent the chronic ambient water quality criteria values for the protection of aquatic life.
11. USGS 2004-5194. Pesticides Detected in Urban Streams in King County, Washington, 1998–2003.
12. Virginia Institute of Marine Science. 1996. A Manual for the Analysis of Butyltins in Environmental Samples.
13. Estimated effect level
14. Report on Carcinogens. 11th Edition. National Institute of Health. 2007.
15. EPA Region 10 criteria approval, Warm Springs Confederated Tribes. 2006.
16. Chapter 173-200 WAC.