

Issuance Date:   ?    
Effective Date:   ?    
Expiration Date:   ?  

**National Pollutant Discharge Elimination System  
Waste Discharge Permit No. WA002515-1**

State of Washington  
ENERGY FACILITY SITE EVALUATION COUNCIL (EFSEC)  
P.O. Box 43172  
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  
The Federal Water Pollution Control Act  
(The Clean Water Act)  
Title 33 United States Code, Section 1342 et seq.

**Energy Northwest's Columbia Generating Station  
P.O. Box 968  
Richland, Washington 99352-0968**

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

|   |   |
|---|---|
| <u>Facility Location:</u><br>Latitude: 46.47170<br>Longitude: 119.33280   | <u>Receiving Water:</u><br>Outfall 001: Columbia River (river mile 351.75)<br>Outfall 002: Ground Water<br>Latitude: 46.47389<br>Longitude: 119.32861 |
| <u>Treatment Type:</u> Cooling, disinfection,<br>neutralization (blowdown) Filtration, ion<br>exchange (processed radwaste water) | <u>SIC Code:</u> 4911<br><u>NAICS Code:</u> 221113  |
| <u>Industry Type:</u><br>Steam-Electric Power Generation  | <u>Categorical Industry:</u><br>40 CFR Part 423 Steam Electric Power<br>Generating Point Source Category  |

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**William H. Lynch, Chair**  
Energy Facility Site Evaluation Council

**DRAFT**

January 15, 2014

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## Summary of Permit Report Submittals

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

| Permit Section | Submittal   | Frequency                                      | First Submittal Date                |
|----------------|---|--|-------------------------------------|
| S3.A           | Discharge Monitoring Report   | Monthly  | <a href="#">Insert date</a>         |
| S3.E           | Reporting Permit Violations   | As necessary                                   |                                     |
| S3.F           | Other Reporting   | As necessary                                   |                                     |
| S4.A           | Operations and Maintenance Manual   | 1/permit cycle                                 | <a href="#">Insert date</a>         |
| S4.A           | Operations and Maintenance Manual Update                                      | As necessary                                   |                                     |
| S4.B           | Reporting Bypasses  | As necessary                                   |                                     |
| S5.C           | Solid Waste Control Plan  | 1/permit cycle                                 | <a href="#">insert date from S6</a> |
| S5.C           | Modification to Solid Waste Plan  | As necessary                                   |                                     |
| S6             | Application for Permit Renewal  | 1/permit cycle                                 | <a href="#">insert date from S6</a> |
| S7             | Compliance Schedule   | As necessary                                   | <a href="#">Insert date</a>         |
| S7.1           | Operations and Maintenance Manual (impoundment)                               | Once   | <a href="#">Insert date from S7</a> |
| S7.2           | Notice of completion (impoundment)  | Once   | <a href="#">Insert date from S7</a> |
| S7.3           | Scope of work   | Once   | <a href="#">Insert date from S7</a> |
| S7.4           | Engineering report  | Once   | <a href="#">Insert date from S7</a> |
| S7.5           | Ground Water Quality Assurance Project Plan (QAPP) Update                     | Twice  | <a href="#">Insert date from S7</a> |
| S8             | Non-Routine and Unanticipated Discharges                                      | As necessary                                   |                                     |
| S9             | Spill Plan  | 1/permit cycle, updates submitted as necessary | <a href="#">insert date from S6</a> |
| S10            | Stormwater Pollution Prevention Plan  | 1/permit cycle                                 | <a href="#">Insert date</a>         |
| S11            | Outfall Evaluation  | 1/permit cycle                                 | <a href="#">insert date from S6</a> |
| S12.A          | Acute Toxicity Effluent Test Results - Submit with Permit Renewal Application | Once   | <a href="#">insert date from S6</a> |
| S13.A          | Chronic Toxicity Effluent Test Results with Permit Renewal Application        | Once   | <a href="#">insert date from S6</a> |
| G1             | Notice of Change in Authorization   | As necessary                                   |                                     |
| G4             | Permit Application for Substantive Changes to the Discharge                   | As necessary                                   |                                     |
| G5             | Engineering Report for Construction or Modification Activities                | As necessary                                   |                                     |
| G7             | Notice of Permit Transfer   | As necessary                                   |                                     |
| G10            | Duty to Provide Information   | As necessary                                   |                                     |
| G21            | Compliance Schedules  | As necessary                                   |                                     |

## Special Conditions

### S1. Discharge limits

#### S1.A. Process wastewater discharges

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

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

There shall be no discharge of wastewater of radioactive materials in excess of the limitations on radioactive effluents established by the Nuclear Regulatory Commission in the facility operation license and in 10 CFR Parts 20 and 50.

Beginning on the effective date of this permit, the Permittee is authorized to discharge circulating cooling water blowdown, service water system blowdown, and radioactive wastewater treatment system effluent, to the Columbia River at the permitted location subject to complying with the following limits:

| <b>Effluent Limits for Circulating Water Blowdown: Outfall 001</b>   |  |                                   |
|--|--|-----------------------------------|
| <b>Latitude 46.47139 Longitude 119.26250</b>   |  |                                   |
| <b>Parameter</b>   | <b>Average Monthly <sup>a</sup></b>  | <b>Maximum Daily <sup>b</sup></b> |
| Flow   | 5.6 million gallons/day (mgd)  | 9.4 (mgd)                         |
| Total Residual Halogen <sup>c</sup>  | Not Applicable   | 0.1 milligrams/liter (mg/L)       |
| Chromium (Total)   | 8.2 µg/L   | 16.4 µg/L                         |
| Zinc (Total)   | 53 µg/L  | 107 µg/L                          |
| Polychlorinated biphenyl compounds (PCBs)  | No discharge   | No discharge                      |
| The 126 priority pollutants (40 CFR 423 Appendix A) contained in chemicals added for cooling tower maintenance, except chromium and zinc | No detectable amount   | No detectable amount              |
|  | <b>Minimum</b>   | <b>Maximum</b>                    |
| pH <sup>d</sup>  | 6.5 standard units (SU)  | 9.0 SU                            |
| a  | Average monthly effluent limit means the highest allowable average of daily discharges over a calendar month. To calculate the discharge value to compare to the limit, you add the value of each daily discharge measured during a calendar month and divide this sum by the total number of daily discharges measured. |                                   |

| <b>Effluent Limits for Circulating Water Blowdown: Outfall 001</b><br><b>Latitude 46.47139 Longitude 119.26250</b> |   |
|--|---|
| b  | Maximum daily effluent limit is the highest allowable daily discharge. The daily discharge is the average discharge of a pollutant measured during a calendar day. This does not apply to pH or temperature.  |
| c  | The circulating water blowdown isolation valves must be closed during biofouling treatments and remain closed until the concentration of total residual halogen is less than 0.1 mg/L for at least 15 minutes.  |
| d  | When pH is continuously monitored, excursions between 5.0 and 6.5, or 9.0 and 10.0 will not be considered violations if no single excursion exceeds 60 minutes in length and total excursions do not exceed 7 hours and 30 minutes per month. Any excursions below 5.0 and above 10.0 at any time are violations. |

**S1.B. Mixing zone authorization**

**Mixing zone for Outfall 001**

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

**Chronic mixing zone**

The width of the chronic mixing zone is limited to a distance of 175 feet (53 meters). The length of the chronic mixing zone extends 100 feet (30 meters) upstream and 308 feet (94 meters) downstream of the outfall. The mixing zone extends from the discharge port to the top of the water surface. The concentration of pollutants at the edge of the chronic zone must meet chronic aquatic life criteria and human health criteria.

**Acute mixing zone**

The width of the acute mixing zone is limited to a distance of 18 feet (5 meters) in any horizontal direction from the outfall. The length of the acute mixing zone extends 10 feet (3 meters) upstream and 31 feet (9 meters) downstream of the outfall. The mixing zone extends from the discharge port to the top of the water surface. The concentration of pollutants at the edge of the acute zone must meet acute aquatic life criteria.

| <b>Available Dilution (dilution factor)</b> |    |
|---|----|
| Acute Aquatic Life Criteria                 | 9  |
| Chronic Aquatic Life Criteria               | 93 |
| Human Health Criteria - Carcinogen          | 93 |
| Human Health Criteria - Non-carcinogen      | 93 |

**S1.C. Process wastewater and stormwater discharges to Outfall 002**

Beginning on the effective date of this permit, the Permittee is authorized to discharge stormwater runoff, wastewater from potable and demineralized water production, intake air wash unit blowdown, and water from non-radioactive equipment dewatering, leakage, testing, cleaning, and flushing to ground at the permitted location identified on the cover sheet. The discharge shall not cause a violation of the ground water standards (Chapter 173-200 WAC). Existing and

beneficial uses of ground water shall be protected. This authorization expires when the flows identified in this section are redirected to the double-lined impoundment required in S7.2 of this permit.

### S1.D Stormwater discharges to ground

Beginning on the effective date of this permit, the Permittee is authorized to discharge stormwater runoff to underground injection control wells identified in the permit application and any amendments to the application approved by EFSEC. The discharge shall not cause a violation of the ground water standards (Chapter 173-200 WAC). Existing and beneficial uses of ground water shall be protected.

## S2. Monitoring requirements

### S2.A. Monitoring schedule

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

| Parameter  | Units & Speciation         | Minimum Sampling Frequency                               | Sample Type                         |
|--|----------------------------|--|-------------------------------------|
| <b>(1) Circulating Water Blowdown: Outfall 001</b>   |                            |  |                                     |
| Flow   | million gallons/day (mgd)  | Continuous <sup>1</sup>                                  | Metered/recorded                    |
| pH <sup>2 and 3</sup>  | standard units             | Continuous   | Metered/recorded                    |
| Temperature <sup>4 and 5</sup>   | degrees centigrade (°C)    | Continuous   | Metered/recorded                    |
| Turbidity  | NTU                        | Monthly <sup>6</sup>                                     | Grab <sup>7</sup>                   |
| Total Residual Halogen   | milligrams/liter (mg/L)    | 2/treatment  | Grab                                |
| Copper (Total)   | micrograms/liter (µg/L)    | Monthly  | 24-Hour composite <sup>8</sup>      |
| Chromium (Total)   | µg/L                       | Monthly  | 24-Hour composite <sup>8</sup>      |
| Zinc (Total)   | µg/L                       | Monthly  | 24-Hour composite <sup>8</sup>      |
| The 126 priority pollutants (40 CFR 423 Appendix A) contained in chemicals added for cooling tower maintenance, except chromium and zinc | µg/L                       | Annually <sup>9</sup>                                    | As specified in S2.A.6 <sup>8</sup> |
| Asbestos   | million fibers/liter (MFL) | 1/Permit Cycle <sup>10</sup>                             | Grab                                |
| <b>(2) Standby Service Water Discharges to Blowdown Line Outfall 001: Pond to be discharged</b>  |                            |  |                                     |
| Volume   | mgd                        | Continuous <sup>1</sup> or volume estimate <sup>11</sup> | Metered/estimated                   |
| pH   | SU                         | Daily <sup>12</sup>                                      | Grab                                |
| <b>(3) Outfall 002 – The Permittee must monitor until flows are redirected to the evaporative pond.</b>                                  |                            |  |                                     |
| Chromium (Total)   | mg/L                       | 2/year <sup>13</sup>                                     | 24-hour composite                   |
| Lead (Total)   | mg/L                       | 2/year   | 24-hour composite                   |
| Fluoride   | mg/L                       | 2/year   | 24-hour composite                   |
| Nitrate-Nitrite (as N)   | mg/L                       | 2/year   | 24-hour composite                   |
| Copper (Total)   | mg/L                       | 2/year   | 24-hour composite                   |
| Nickel (Total)   | mg/L                       | 2/year   | 24-hour composite                   |
| Iron (Total)   | mg/L                       | 2/year   | 24-hour composite                   |

| Parameter   | Units & Speciation  | Minimum Sampling Frequency | Sample Type                           |
|---|---|----------------------------|---------------------------------------|
| Manganese (Total)   | mg/L  | 2/year                     | 24-hour composite                     |
| Zinc (Total)  | mg/L  | 2/year                     | 24-hour composite                     |
| Chloride  | mg/L  | 2/year                     | 24-hour composite                     |
| Sulfate   | mg/L  | 2/year                     | 24-hour composite                     |
| Total Dissolved Solids  | mg/L  | 2/year                     | 24-hour composite                     |
| pH  | SU  | 2/year                     | Grab                                  |
| Conductivity  | µS/cm   | 2/year                     | Grab                                  |
| <b>(4) Evaporative Pond</b>   |   |                            |                                       |
| Flow  | gallons per day (gpd)   | Continuous <sup>1</sup>    | Metered/recorded                      |
| <b>(5) Evaporative Pond Leak Detection System</b> – The Permittee must monitor in accordance with the approved Leak Detection Plan required in S7.1 and report in accordance with S3. |   |                            |                                       |
| <b>(6) Permit Renewal Application Requirements – Outfall 001</b>  |   |                            |                                       |
| See Appendix A to identify the specific pollutants in the priority pollutant groups listed below  |   |                            |                                       |
| Cyanide   | µg/L  | Once in the last year      | Grab                                  |
| Total Phenolic Compounds  | µg/L  | Once in the last year      | Grab                                  |
| Priority Pollutants (PP) – Total Metals   | µg/L; ng/L for mercury  | Once in the last year      | 24-Hour composite<br>Grab for mercury |
| PP – Volatile Organic Compounds   | µg/L  | Once in the last year      | Grab                                  |
| PP – Acid-extractable Compounds   | µg/L  | Once in the last year      | 24-Hour composite                     |
| PP – Base-neutral Compounds   | µg/L  | Once in the last year      | 24-Hour composite                     |
| PP – Dioxin   | pg/L  | Once in the last year      | 24-Hour composite                     |
| <b>(7) Whole Effluent Toxicity Testing – Circulating Water Blowdown: Outfall 001</b>  |   |                            |                                       |
| Acute Toxicity Testing  | As specified in Special Condition S12   |                            |                                       |
| Chronic Toxicity Testing  | As specified in Special Condition S13   |                            |                                       |
| 1   | Continuous means uninterrupted except for brief lengths of time for calibration, power failure, or unanticipated equipment repair or maintenance. The Permittee must sample daily when continuous monitoring is not possible.   |                            |                                       |
| 2   | The Permittee must report the instantaneous maximum and minimum pH monthly. Do not average pH values.   |                            |                                       |
| 3   | <p>The Permittee must record and report the:</p> <ul style="list-style-type: none"> <li>• Number of minutes the pH value measured between 5.0 and 6.5 and between 9.0 and 10.0 for each day.</li> <li>• Total minutes for the month.</li> <li>• Monthly instantaneous maximum and minimum pH.</li> </ul> <p>If multiple excursions occur during the day, note the duration for each excursion. If submitting electronic DMRs, include this additional information in the parameter notes.</p> |                            |                                       |
| 4   | Temperature grab sampling must occur when the effluent is at or near its daily maximum temperature, which usually occurs in the late afternoon. If measuring temperature continuously, the Permittee must determine and report a daily maximum from half-hour measurements in a 24-hour period. Continuous monitoring instruments must achieve an accuracy of 0.2 degrees C and the Permittee must verify accuracy annually.  |                            |                                       |
| 5   | The sampling point for temperature is at the Circulating Water Pumphouse until monitoring equipment is operational in the River Pumphouse. The Permittee must inform EFSEC on the monthly report and in writing when it makes this change.  |                            |                                       |

| Parameter | Units & Speciation   | Minimum Sampling Frequency | Sample Type |
|-----------|--|----------------------------|-------------|
| 6         | Monthly means once every calendar month.   |                            |             |
| 7         | Grab means an individual sample collected over a fifteen (15) minute, or less, period.   |                            |             |
| 8         | A Grab sample may be substituted for 24-Hour composite sampling until equipment installed as required in Section S7.8 is operational. The Permittee must inform EFSEC on the monthly report of the sample type.  |                            |             |
| 9         | If the Permittee submits engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR part 136, annual monitoring is not required.   |                            |             |
| 10        | Asbestos grab sampling must occur once during the permit cycle when the circulating water cooling system is operating at an average number of cycles of concentration and only blowdown is being discharged. Test results must be submitted with the application for permit renewal. |                            |             |
| 11        | Volumes of batch releases of water for pond draining may be estimated based on level measurements. Feed-and-bleed discharges made directly to the blowdown line must be measured by flow meter.  |                            |             |
| 12        | Prior to commencement of discharges, the Permittee must verify that pH is within specified limits. Measurements must be taken daily while discharge is in progress.  |                            |             |
| 13        | Samples must represent a typical facility discharge to Outfall 002. The Permittee must collect one sample annually between March 15 – May 15 and one sample annually between September 15 – November 15.   |                            |             |

### **S2.B. Sampling and analytical procedures**

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

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

### **S2.C. Flow measurement, field measurement, and continuous monitoring devices**

The Permittee must:

1. Select and use appropriate flow measurement, field measurement, and continuous monitoring devices and methods consistent with accepted scientific practices.
2. Install, calibrate, and maintain these devices to ensure the accuracy of the measurements is consistent with the accepted industry standard and the manufacturer's recommendation for that type of device.
3. Calibrate continuous monitoring instruments for the following parameters weekly unless it can demonstrate a longer period is sufficient based on monitoring records. The Permittee:

- a. May calibrate apparatus for continuous monitoring of dissolved oxygen by air calibration.
  - b. Must calibrate continuous pH measurement instruments using a grab sample analyzed in the lab with a pH meter calibrated with standard buffers and analyzed within 15 minutes of sampling.
  - c. Must calibrate continuous chlorine measurement instruments using a grab sample analyzed in the laboratory within 15 minutes of sampling.
4. Use field measurement devices as directed by the manufacturer and do not use reagents beyond their expiration dates.
  5. Calibrate flow-monitoring devices at a minimum frequency of at least one calibration per year.
  6. Maintain calibration records for at least three years.

#### **S2.D. Laboratory accreditation**

The Permittee must ensure that all monitoring data required by EFSEC 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.

#### **S2.E. Request for reduction in monitoring**

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

The Permittee must:

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

### **S3. Reporting and recording requirements**

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

#### **S3.A. Reporting**

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

1. Summarize, report, and submit monitoring data obtained during each monitoring period on the electronic Discharge Monitoring Report (DMR) form provided by Ecology within WQWebDMR. 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 WQWebDMR 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.
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 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 PDF copy of the laboratory report using WQWebDMR.

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

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

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

If the Permittee has obtained a waiver, it must ensure that paper forms are postmarked or received by EFSEC no later than the dates specified below, unless otherwise specified in this permit.

8. Submit DMRs for parameters with the monitoring frequencies specified in S2 (monthly, quarterly, annual, etc.) at the reporting schedule identified below. The Permittee must:

- a. Submit **monthly** DMRs by the 15<sup>th</sup> day of the following month.
- b. Submit **annual DMRs**, unless otherwise specified in the permit, by January 15 for the previous calendar year. The annual sampling period is the calendar year.
- c. Submit **semiannual DMRs**, unless otherwise specified in the permit, by July 15 and January 15 of each year. Semiannual sampling periods are January through June, and July through December.
- d. Submit permit renewal application monitoring data in WQWebDMR as required in Special Condition S2 by X/X/20XX. If the Permittee has obtained a waiver from EFSEC, it must submit the permit renewal application monitoring data in a report by X/X/20XX.

9. Submit reports to EFSEC online using Ecology's electronic WQWebDMR submittal forms (electronic DMRs) as required above. Send paper reports to:

EFSEC  
P.O. Box 43172  
Olympia, WA 98504-3172

Department of Ecology  
Richland Office  
Attn: Columbia Generating Station Monitoring  
3100 Port of Benton Blvd.  
Richland, WA 99354

### **S3.B. Records retention**

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

**S3.C. Recording of results**

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

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

**S3.D. Additional monitoring by the Permittee**

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

**S3.E. Reporting permit violations**

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

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

**a. Immediate reporting**

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

- Failures of the disinfection system.
- Plant bypasses discharging to a waterbody used as a source of drinking water.

|                                  |                                     |
|----------------------------------|-------------------------------------|
| Ecology, Central Regional Office | 509-575-2490                        |
| EFSEC                            | 360-956-2121                        |
| Department of Health,            | 800-521-0323 (business hours)       |
| Drinking Water Program           | 877-481-4901 (after business hours) |

**b. Twenty-four-hour reporting**

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

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

**c. Report within five days**

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

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

**d. Waiver of written reports**

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

**e. All other permit violation reporting**

The Permittee must report all permit violations, which do not require immediate or within 24 hours reporting, when it submits monitoring reports for S3.A ("Reporting"). The reports must contain the information listed in subpart c, above. Compliance with these requirements does not relieve the

Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

**f. Report Submittal**

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

**S3.F. Other reporting**

**a. Spills of Oil or Hazardous Materials**

The Permittee must report a spill of oil or hazardous materials in accordance with the requirements of RCW 90.56.280 and chapter 173-303-145 WAC. 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 EFSEC, it must submit such facts or information promptly.

**S3.G. Maintaining a copy of this permit**

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

**S4. Operation and maintenance**

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

**S4.A. Operations and maintenance (O&M) manual**

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

The Permittee must:

1. Prepare an O&M Manual for the evaporative pond system and associated piping that meets the requirements of 173-240-150 WAC and submit it to EFSEC for approval by Insert Date. The Permittee must submit a paper copy and an electronic copy (preferably in a portable document format (PDF)).

2. Submit to EFSEC for review substantial changes or updates to the O&M Manual whenever it incorporates them into the manual. The Permittee must submit a paper copy and an electronic copy (preferably as a PDF).
3. Submit to EFSEC the latest version of the evaporative pond and circulating water system O&M Manuals with the next application for permit renewal.
4. Keep the approved O&M Manual at the permitted facility.
5. Follow the instructions and procedures of this manual.

#### **S4.B. Bypass procedures**

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

EFSEC 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 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 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 EFSEC 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 EFSEC 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 EFSEC 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. EFSEC 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, EFSEC will approve or deny the request. EFSEC

will give the public an opportunity to comment on bypass incidents of significant duration, to the extent feasible. EFSEC will approve a request to bypass by issuing an administrative order under RCW 90.48.120.

## **S5. Solid wastes**

### **S5.A. Solid waste handling**

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

The Permittee must follow the procedures in EFSEC Resolution No. 299 or the most current resolution pertaining to the disposal of sediments from the cooling water system and double-lined impoundment.

### **S5.B. Leachate**

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

### **S5.C. Solid waste control plan**

The Permittee must submit all proposed revisions or modifications to the solid waste control plan to EFSEC for review and approval at least 30 days prior to implementation. The Permittee must comply with the approved solid waste control plan and any modifications once approved. The Permittee must submit an update of the solid waste control plan by [Insert the application for permit renewal date](#). The Permittee must submit a paper copy and an electronic copy (preferably as a PDF).

## **S6. Application for permit renewal or modification for facility changes**

The Permittee must submit an application for renewal of this permit by [Insert Date at least 180 days prior to expiration date](#). 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. Compliance schedule

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

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

|   | Tasks   | Date Due   |
|---|---|--|
| Outfall 002                             |   |  |
| 1.                                      | <p>Submit an Operation and Maintenance (O&amp;M) Manual for the planned double-lined impoundment to EFSEC for review and approval.</p> <p>In addition to the requirements of Chapter 173-240-150 WAC, the O&amp;M Manual must include a leak detection plan to monitor or test for the structural integrity of the impoundment liner.</p>   | <u>Insert date (within 1 year of effective date)</u>   |
| 2.                                      | Complete installation of the double-lined impoundment and submit a Notice of Completion to EFSEC.   | <u>Insert date (w/n 1½ yrs of effective date)</u>      |
| Circulating cooling water system losses |   |  |
| 3.                                      | <p>Submit a scope of work for analysis of circulating cooling water system losses to EFSEC for review and approval.</p> <p>The scope of work must include plans for how the analysis will be conducted. The analysis must include a methodology to estimate the quantity of water losses. The methodology must include a proposal for mounding analysis, as well as recommendations for water quality sampling and water level measurements based on previous findings.</p> | <u>Insert date (w/n 2 years of effective date)</u>     |
| 4.                                      | Submit an approvable engineering report in accordance with Chapter 173-240 WAC for circulating cooling water system losses to EFSEC for review and approval.  | <u>Insert permit renewal application date</u>          |
| Groundwater monitoring                  |   |  |
| 5.                                      | <p>Submit an update to the <i>Ground Water Quality Study Quality Assurance Project Plan (QAPP)</i> prepared as a requirement under the previous permit to EFSEC for review and approval.</p> <p>The update must address changes to the QAPP required due to both on-the-ground changes and findings of studies completed to-date.</p>   | <u>Insert date (within 6 months of effective date)</u> |

|                                    | <b>Tasks</b>  | <b>Date Due</b>  |
|------------------------------------|---|--|
| 6.                                 | Submit an update to the <i>Ground Water Quality Study Quality Assurance Project Plan (QAPP)</i> to EFSEC for review and approval.<br><br>The update must address the findings of Tasks 1-5 above.   | <u>Insert permit renewal application date</u>          |
| Outfall 001 temperature monitoring |   |  |
| 7.                                 | Relocate temperature monitoring and reporting location to the River Pumphouse. Update the O&M Manual to address this change.  | <u>Insert date (within one year of effective date)</u> |
| Outfall 001 composite sampling     |   |  |
| 8.                                 | Install sampling equipment capable of collecting 24-Hour composite and grab samples for parameters specified in Section S2 and begin sampling using this method as soon as possible following installation. Update the O&M Manual to address this change. | <u>Insert date (within one year of effective date)</u> |

### **S8. 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 EFSEC. Prior to any such discharge, the Permittee must contact EFSEC and at a minimum provide the following information:
  - a. The proposed discharge location
  - b. The nature of the activity that will generate the discharge
  - c. Any alternatives to the discharge, such as reuse, storage, or recycling of the water
  - d. The total volume of water it expects to discharge
  - e. The results of the chemical analysis of the water
  - f. The date of proposed discharge
  - g. The expected rate of discharge discharged, in gallons per minute
2. The Permittee must analyze the water for all constituents limited for the discharge and report them as required by subpart 1.e above. The analysis must also include any parameter deemed necessary by EFSEC. 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 EFSEC.
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 EFSEC has reviewed the information provided and has authorized the discharge by letter to the Permittee or by an Administrative Order. Once approved and if the proposed discharge is to a municipal storm drain, the Permittee must obtain prior approval from the municipality and notify it when it plans to discharge.

## **S9. Spill control plan**

### **S9.A. Spill control plan submittals and requirements**

The Permittee must:

1. Submit to EFSEC an update to the existing *Oil and Hazardous Substances Spill Prevention, Control and Counter-Measure Plan* by Insert the application for permit renewal date. The Permittee must submit a paper copy and an electronic copy (preferably as a PDF).
2. Update the spill plan as needed.
3. Send changes to the plan to EFSEC.
4. Follow the plan and any supplements throughout the term of the permit.

### **S9.B. Spill control plan components**

The spill control plan must include the following:

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

The Permittee may submit plans and manuals required by 40 CFR Part 112, contingency plans required by Chapter 173-303 WAC, or other plans required by other agencies, which meet the intent of this section.

## **S10. Stormwater pollution prevention plan**

The Permittee must prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the requirements of this permit. The SWPPP must be submitted to EFSEC by Insert date (one year after effective date). The SWPPP and all of its modifications must be signed in accordance with General Condition G1. Retain the SWPPP on-site.

### **S10.A. Stormwater pollution prevention plan (SWPPP) general requirements**

The Permittee must:

1. Provide all known, available, and reasonable methods of prevention, control, and treatment (AKART) of stormwater pollution.
2. Prevent violations of surface water quality, ground water quality, or sediment management standards.
3. Comply with applicable federal technology-based treatment requirements under 40 CFR 125.3.
4. Modify the SWPPP whenever there is a change in design, construction, operation, or maintenance at the facility that significantly changes the nature of pollutants discharged in stormwater from the facility, or significantly increases the quantity of pollutants discharged.
5. Send modifications to the plan to EFSEC.
6. Follow the plan and any supplements throughout the term of the permit.

### **S10.B. SWPPP components**

The Permittee must prepare the SWPPP in accordance with the guidance provided in the *Stormwater Pollution Prevention Planning for Industrial Facilities* (Ecy Pub. No. 04-10-030, <http://www.ecy.wa.gov/biblio/0410030.html>). The SWPPP may include applicable portions of plans prepared for other purposes at the facility. Plans or portions of plans incorporated into the SWPPP become enforceable requirements of this permit.

The SWPPP must include the following elements:

1. A site map.
2. Assessment and description of existing and potential pollutant sources.
3. A description of the operational best management practices (BMPs).
4. A description of the selected source-control BMPs.
5. When necessary, a description of the erosion and sediment control BMPs.
6. When necessary, a description of the treatment BMPs.
7. An implementation schedule.

### **S10.C. SWPPP implementation**

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

1. The wet season inspection must be conducted during a rainfall event by personnel named in the SWPPP to verify that the description of potential pollutant sources required under this permit are accurate; the site map as required in the SWPPP has been updated or otherwise modified to reflect

current conditions; and the controls to reduce pollutants in stormwater discharges associated with industrial activities identified in the SWPPP are being implemented and are adequate. The wet weather inspection must include observations of the presence of floating materials, suspended solids, oil and grease, discolorations, turbidity, odor, etc. in the stormwater discharge(s).

2. Personnel named in the SWPPP must conduct the dry season inspection. The inspection must determine the presence of unpermitted non-stormwater discharges such as domestic wastewater, noncontact cooling water, or process water to the stormwater system. If an unpermitted, non-stormwater discharge is discovered, the Permittee must immediately notify EFSEC.

#### **S10.D. SWPPP evaluation**

The Permittee must evaluate whether measures to reduce pollutant loadings identified in the SWPPP are adequate and properly implemented in accordance with the terms of the permit or whether additional controls are needed. A record must be maintained summarizing the results of inspections and include a certification, in accordance with General Condition G1, that the facility is in compliance with the plan and in compliance with the permit. The record must identify any incidents of noncompliance.

### **S11. Outfall evaluation**

The Permittee must inspect, every five years, the submerged portion of the outfall line and diffuser to document its integrity and continued function. If conditions allow for a photographic verification, the Permittee must include such verification in the report. By Insert Date (with the permit renewal application), the Permittee must submit the inspection report to EFSEC.

### **S12. Acute toxicity**

#### **S12.A. Testing**

The Permittee must:

1. Conduct acute toxicity testing on final effluent once per quarter in the year prior to submission of the application for permit renewal.
2. Submit the results to EFSEC Insert Date (with the permit renewal application).
3. Conduct acute toxicity testing on a series of at least five concentrations of effluent, including 100% effluent and a control.
4. Use each of the following species and protocols for each acute toxicity test:

| <b>Acute Toxicity Tests</b>                | <b>Species</b>             | <b>Method</b>    |
|--|----------------------------|------------------|
| Fathead minnow 96-hour static-renewal test | <i>Pimephales promelas</i> | EPA-821-R-02-012 |

| Acute Toxicity Tests        | Species  | Method           |
|-----------------------------|--|------------------|
| Daphnid 48-hour static test | <i>Ceriodaphnia dubia</i> ,<br><i>Daphnia pulex</i> , or<br><i>Daphnia magna</i> | EPA-821-R-02-012 |

### S12.B. Sampling and reporting requirements

1. The Permittee must submit all reports for toxicity testing in accordance with the most recent version of Ecology Publication No. WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. Reports must contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data in electronic format for entry into Ecology's database, then the Permittee must send the data to Ecology along with the test report, bench sheets, and reference toxicant results.
2. The Permittee must collect 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 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 Section A or pristine natural water of sufficient quality for good control performance.
6. The Permittee must chemically dechlorinate final effluent samples for whole effluent toxicity testing with sodium thiosulfate just prior to test initiation. Do not add more sodium thiosulfate than is necessary to neutralize the chlorine. Provide in the test report the calculations to determine the amount of sodium thiosulfate necessary to just neutralize the chlorine in the sample.

## S13. Chronic toxicity

### S13.A. Testing

The Permittee must:

1. Conduct chronic toxicity testing on final effluent once per quarter in the year prior to submission of the application for permit renewal.

2. Submit the results to EFSEC Insert Date (with the permit renewal application).
3. Conduct chronic toxicity testing on a series of at least five concentrations of effluent and a control. This series of dilutions must include the acute critical effluent concentration (ACEC). The ACEC equals 11% effluent. The series of dilutions should also contain the CCEC of 1% effluent.
4. Compare the ACEC to the control using hypothesis testing at the 0.05 level of significance as described in Appendix H, EPA/600/4-89/001.
5. Perform chronic toxicity tests with all of the following species and the most recent version of the following protocols:

| Freshwater Chronic Test              | Species                    | Method           |
|--------------------------------------|----------------------------|------------------|
| Fathead minnow survival and growth   | <i>Pimephales promelas</i> | EPA-821-R-02-013 |
| Water flea survival and reproduction | <i>Ceriodaphnia dubia</i>  | EPA-821-R-02-013 |

**S13.B. Sampling and reporting requirements**

1. The Permittee must submit all reports for toxicity testing in accordance with the most recent version of Ecology Publication No. WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. Reports must contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data in electronic format for entry into Ecology’s database, then the Permittee must send the data to Ecology along with the test report, bench sheets, and reference toxicant results.
2. The Permittee must collect 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 chemically dechlorinate final effluent samples for whole effluent toxicity testing with sodium thiosulfate just prior to test initiation. Do not add more sodium thiosulfate than is necessary to neutralize the chlorine. Provide in the test report the calculations to determine the amount of sodium thiosulfate necessary to just neutralize the chlorine in the sample.

## General Conditions

### G1. Signatory requirements

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

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

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

paragraph G1.2, above, must be submitted to EFSEC prior to or together with any reports, information, or applications to be signed by an authorized representative.

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

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

## **G2. Right of inspection and entry**

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

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

## **G3. Permit actions**

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the permittee) or upon 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 waste disposal.

- d. A determination that the permitted activity endangers human health or the environment, or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination.
  - e. A change in any condition that requires either a temporary or permanent reduction, or elimination of any discharge or sludge use or disposal practice controlled by the permit.
  - f. Nonpayment of fees assessed pursuant to RCW 90.48.465.
  - g. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.
2. The following are causes for modification but not revocation and reissuance except when the Permittee requests or agrees:
- a. A material change in the condition of the waters of the state.
  - b. New information not available at the time of permit issuance that would have justified the application of different permit conditions.
  - c. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.
  - d. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.
  - e. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR Part 122.62.
  - f. 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. When cause exists for termination for reasons listed in 1.a through 1.g of this section, and EFSEC determines that modification or revocation and reissuance is appropriate.
  - b. When 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, but no later than one hundred eighty (180) days prior to the proposed changes, give notice to EFSEC of planned physical alterations or

additions to the permitted facility, production increases, or process modification which will result in:

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

#### **G5. Plan review required**

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications must be submitted to EFSEC 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 EFSEC. Facilities must be constructed and operated in accordance with the approved plans.

#### **G6. Compliance with other laws and statutes**

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

#### **G7. Transfer of this permit**

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

1. Transfers by Modification  
Except as provided in paragraph (2) below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR 122.62(b)(2), or a minor modification made under 40 CFR 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.
2. Automatic Transfers  
This permit may be automatically transferred to a new Permittee if:
  - a. The Permittee notifies EFSEC at least thirty (30) days in advance of the proposed transfer date.

- b. The notice includes a written agreement between the existing and new Permittees containing a specific date transfer of permit responsibility, coverage, and liability between them.
- c. 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 this subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

### **G8. Reduced production for compliance**

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

### **G9. Removed substances**

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

### **G10. Duty to provide information**

The Permittee must submit to EFSEC, within a reasonable time, all information which 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.

### **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 is deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars (\$10,000) and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

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

## **G15. Upset**

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

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

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

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

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

## **G16. Property rights**

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

## **G17. Duty to comply**

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for

enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

### **G18. Toxic pollutants**

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

### **G19. Penalties for tampering**

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

### **G20. Reporting requirements applicable to existing manufacturing, commercial, mining, and silvicultural dischargers**

The Permittee belonging to the categories of existing manufacturing, commercial, mining, or silviculture must notify 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 which is not limited in this permit, if that discharge will exceed the highest of the following “notification levels:”
  - a. One hundred micrograms per liter (100 µg/L).
  - b. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony.
  - c. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
  - d. The level established by the Director in accordance with 40 CFR 122.44(f).
  
2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following “notification levels:”
  - a. Five hundred micrograms per liter (500µg/L).
  - b. One milligram per liter (1 mg/L) for antimony.
  - c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
  - d. The level established by the Director in accordance with 40 CFR 122.44(f).

## **G21. Compliance schedules**

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

## Appendix A

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

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

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

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

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

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

#### **CONVENTIONAL PARAMETERS**

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

### NONCONVENTIONAL PARAMETERS

| Pollutant & CAS No. (if available)                     | Recommended Analytical Protocol                                     | Detection (DL) <sup>1</sup> µg/L unless specified | Quantitation Level (QL) <sup>2</sup> µg/L unless specified |
|--|---|---|--|
| Total Alkalinity                                       | SM2320-B  |   | 5 mg/L as CaCO <sub>3</sub>                                |
| Bromide (24959-67-9)                                   | EPA 300.0   |   | 500  |
| Chlorine, Total Residual                               | SM4500 Cl G   |   | 50.0   |
| Color  | SM2120 B/C/E  |   | 10 color units   |
| Fecal Coliform   | SM 9221E,9222   | N/A   | Specified in method - sample aliquot dependent             |
| Fluoride (16984-48-8)                                  | SM4500-F E  | 25  | 100  |
| Nitrate + Nitrite Nitrogen (as N)                      | SM4500-NO <sub>3</sub> - E/F/H                                      |   | 100  |
| Nitrogen, Total Kjeldahl (as N)                        | SM4500-N <sub>org</sub> B/C and SM4500NH <sub>3</sub> -B/C/D/EF/G/H |   | 300  |
| Soluble Reactive Phosphorus (as P)                     | SM4500- PE/PF   | 3   | 10   |
| Phosphorus, Total (as P)                               | SM 4500 PB followed by SM4500-PE/PF                                 | 3   | 10   |
| Oil and Grease (HEM)                                   | 1664 A or B   | 1,400   | 5,000  |
| Radioactivity  |   |   |  |
| Alpha, Total   | SM 7110 B   |   |  |
| Beta, Total  | SM 7110 B   |   |  |
| Radium, Total  | SW 7500-Ra C  |   |  |
| Salinity   | SM2520-B  |   | 3 practical salinity units or scale (PSU or PSS)           |
| Settleable Solids                                      | SM2540 -F   |   | 500 (or 0.1 mL/L)  |
| Sulfate (as mg/L SO <sub>4</sub> )                     | SM4110-B  |   | 200  |
| Sulfide (as mg/L S)                                    | SM4500-S <sup>2</sup> F/D/E/G                                       |   | 200  |
| Sulfite (as mg/L SO <sub>3</sub> )                     | SM4500-SO <sub>3</sub> B  |   | 2000   |
| Total Coliform   | SM 9221B, 9222B, 9223B  | N/A   | Specified in method - sample aliquot dependent             |
| Total dissolved solids                                 | SM2540 C  |   | 20 mg/L  |
| Total Hardness   | SM2340B   |   | 200 as CaCO <sub>3</sub>                                   |
| Aluminum, Total (7429-90-5)                            | 200.8   | 2.0   | 10   |
| Barium Total (7440-39-3)                               | 200.8   | 0.5   | 2.0  |
| BTEX (benzene +toluene + ethylbenzene + m,o,p xylenes) | EPA SW 846 8021/8260  | 1   | 2  |
| Boron Total (7440-42-8)                                | 200.8   | 2.0   | 10.0   |
| Cobalt, Total (7440-48-4)                              | 200.8   | 0.05  | 0.25   |
| Iron, Total (7439-89-6)                                | 200.7   | 12.5  | 50   |
| Magnesium, Total (7439-95-4)                           | 200.7   | 10  | 50   |
| Molybdenum, Total (7439-98-7)                          | 200.8   | 0.1   | 0.5  |
| Manganese, Total (7439-96-5)                           | 200.8   | 0.1   | 0.5  |
| NWTPH Dx <sup>4</sup>                                  | Ecology NWTPH Dx  | 250   | 250  |
| NWTPH Gx <sup>5</sup>                                  | Ecology NWTPH Gx  | 250   | 250  |

| <b>Pollutant &amp; CAS No. (if available)</b> | <b>Recommended Analytical Protocol</b> | <b>Detection (DL)<sup>1</sup><br/>µg/L unless specified</b> | <b>Quantitation Level (QL)<sup>2</sup> µg/L unless specified</b> |
|---|--|---|--|
| Tin, Total (7440-31-5)                        | 200.8                                  | 0.3   | 1.5  |
| Titanium, Total (7440-32-6)                   | 200.8                                  | 0.5   | 2.5  |

### **PRIORITY POLLUTANTS**

| <b>Pollutant &amp; CAS No. (if available)</b>              | <b>Recommended Analytical Protocol</b> | <b>Detection (DL)<sup>1</sup><br/>µg/L unless specified</b> | <b>Quantitation Level (QL)<sup>2</sup> µg/L unless specified</b> |
|--|--|---|--|
| <b>METALS, CYANIDE &amp; TOTAL PHENOLS</b>                 |  |   |  |
| Antimony, Total (7440-36-0)                                | 200.8                                  | 0.3   | 1.0  |
| Arsenic, Total (7440-38-2)                                 | 200.8                                  | 0.1   | 0.5  |
| Beryllium, Total (7440-41-7)                               | 200.8                                  | 0.1   | 0.5  |
| Cadmium, Total (7440-43-9)                                 | 200.8                                  | 0.05  | 0.25   |
| Chromium (hex) dissolved (18540-29-9)                      | SM3500-Cr EC                           | 0.3   | 1.2  |
| Chromium, Total (7440-47-3)                                | 200.8                                  | 0.2   | 1.0  |
| Copper, Total (7440-50-8)                                  | 200.8                                  | 0.4   | 2.0  |
| Lead, Total (7439-92-1)                                    | 200.8                                  | 0.1   | 0.5  |
| Mercury, Total (7439-97-6)                                 | 1631E                                  | 0.0002  | 0.0005   |
| Nickel, Total (7440-02-0)                                  | 200.8                                  | 0.1   | 0.5  |
| Selenium, Total (7782-49-2)                                | 200.8                                  | 1.0   | 1.0  |
| Silver, Total (7440-22-4)                                  | 200.8                                  | 0.04  | 0.2  |
| Thallium, Total (7440-28-0)                                | 200.8                                  | 0.09  | 0.36   |
| Zinc, Total (7440-66-6)                                    | 200.8                                  | 0.5   | 2.5  |
| Cyanide, Total (57-12-5)                                   | 335.4                                  | 5   | 10   |
| Cyanide, Weak Acid Dissociable                             | SM4500-CN I                            | 5   | 10   |
| Cyanide, Free Amenable to Chlorination (Available Cyanide) | SM4500-CN G                            | 5   | 10   |
| Phenols, Total   | EPA 420.1                              |   | 50   |

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

| <b>Pollutant &amp; CAS No. (if available)</b> | <b>Recommended Analytical Protocol</b> | <b>Detection (DL)<sup>1</sup><br/>µg/L unless specified</b> | <b>Quantitation Level (QL)<sup>2</sup> µg/L unless specified</b> |
|---|--|---|--|
| Phenol (108-95-2)                             | 625                                    | 2.0   | 4.0  |
| 2,4,6-Trichlorophenol (88-06-2)               | 625                                    | 2.0   | 4.0  |

**PRIORITY POLLUTANTS (continued)**

| <b>Pollutant &amp; CAS No. (if available)</b>                                       | <b>Recommended Analytical Protocol</b> | <b>Detection (DL)<sup>1</sup><br/>µg/L unless specified</b> | <b>Quantitation Level (QL)<sup>2</sup><br/>µg/L unless specified</b> |
|---|--|---|--|
| <b>VOLATILE COMPOUNDS</b>   |  |   |  |
| Acrolein (107-02-8)   | 624                                    | 5   | 10   |
| Acrylonitrile (107-13-1)  | 624                                    | 1.0   | 2.0  |
| Benzene (71-43-2)   | 624                                    | 1.0   | 2.0  |
| Bromoform (75-25-2)   | 624                                    | 1.0   | 2.0  |
| Carbon tetrachloride (56-23-5)  | 624/601 or SM6230B                     | 1.0   | 2.0  |
| Chlorobenzene (108-90-7)  | 624                                    | 1.0   | 2.0  |
| Chloroethane (75-00-3)  | 624/601                                | 1.0   | 2.0  |
| 2-Chloroethylvinyl Ether (110-75-8)   | 624                                    | 1.0   | 2.0  |
| Chloroform (67-66-3)  | 624 or SM6210B                         | 1.0   | 2.0  |
| Dibromochloromethane (124-48-1)   | 624                                    | 1.0   | 2.0  |
| 1,2-Dichlorobenzene (95-50-1)   | 624                                    | 1.9   | 7.6  |
| 1,3-Dichlorobenzene (541-73-1)  | 624                                    | 1.9   | 7.6  |
| 1,4-Dichlorobenzene (106-46-7)  | 624                                    | 4.4   | 17.6   |
| Dichlorobromomethane (75-27-4)  | 624                                    | 1.0   | 2.0  |
| 1,1-Dichloroethane (75-34-3)  | 624                                    | 1.0   | 2.0  |
| 1,2-Dichloroethane (107-06-2)   | 624                                    | 1.0   | 2.0  |
| 1,1-Dichloroethylene (75-35-4)  | 624                                    | 1.0   | 2.0  |
| 1,2-Dichloropropane (78-87-5)   | 624                                    | 1.0   | 2.0  |
| 1,3-dichloropropene (mixed isomers) (1,2-dichloropropylene) (542-75-6) <sup>6</sup> | 624                                    | 1.0   | 2.0  |
| Ethylbenzene (100-41-4)   | 624                                    | 1.0   | 2.0  |
| Methyl bromide (74-83-9)<br>(Bromomethane)  | 624/601                                | 5.0   | 10.0   |
| Methyl chloride (74-87-3)<br>(Chloromethane)  | 624                                    | 1.0   | 2.0  |
| Methylene chloride (75-09-2)  | 624                                    | 5.0   | 10.0   |
| 1,1,2,2-Tetrachloroethane (79-34-5)   | 624                                    | 1.9   | 2.0  |
| Tetrachloroethylene (127-18-4)  | 624                                    | 1.0   | 2.0  |
| Toluene (108-88-3)  | 624                                    | 1.0   | 2.0  |
| 1,2-Trans-Dichloroethylene (156-60-5) (Ethylene dichloride)                         | 624                                    | 1.0   | 2.0  |

| Pollutant & CAS No. (if available) | Recommended Analytical Protocol | Detection (DL) <sup>1</sup><br>µg/L unless specified | Quantitation Level (QL) <sup>2</sup><br>µg/L unless specified |
|------------------------------------|---------------------------------|--|---|
| <b>VOLATILE COMPOUNDS</b>          |                                 |  |   |
| 1,1,1-Trichloroethane (71-55-6)    | 624                             | 1.0  | 2.0   |
| 1,1,2-Trichloroethane (79-00-5)    | 624                             | 1.0  | 2.0   |
| Trichloroethylene (79-01-6)        | 624                             | 1.0  | 2.0   |
| Vinyl chloride (75-01-4)           | 624/SM6200B                     | 1.0  | 2.0   |

**PRIORITY POLLUTANTS (continued)**

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

| <b>Pollutant &amp; CAS No. (if available)</b>                      | <b>Recommended Analytical Protocol</b> | <b>Detection (DL)<sup>1</sup><br/>µg/L unless specified</b> | <b>Quantitation Level (QL)<sup>2</sup><br/>µg/L unless specified</b> |
|--|--|---|--|
| <b>BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)</b> |  |   |  |
| Dibenzo(a-h)anthracene (53-70-3)(1,2,5,6-dibenzanthracene)         | 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 (91-94-1)                                    | 605/625                                | 0.5   | 1.0  |
| Diethyl phthalate (84-66-2)  | 625                                    | 1.9   | 7.6  |
| Dimethyl phthalate (131-11-3)                                      | 625                                    | 1.6   | 6.4  |
| Di-n-butyl phthalate (84-74-2)                                     | 625                                    | 0.5   | 1.0  |
| 2,4-dinitrotoluene (121-14-2)                                      | 609/625                                | 0.2   | 0.4  |
| 2,6-dinitrotoluene (606-20-2)                                      | 609/625                                | 0.2   | 0.4  |

**PRIORITY POLLUTANTS (continued)**

| <b>Pollutant &amp; CAS No. (if available)</b>                      | <b>Recommended Analytical Protocol</b> | <b>Detection (DL)<sup>1</sup><br/>µg/L unless specified</b> | <b>Quantitation Level (QL)<sup>2</sup><br/>µg/L unless specified</b> |
|--|--|---|--|
| <b>BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)</b> |  |   |  |
| Di-n-octyl phthalate (117-84-0)                                    | 625                                    | 0.3   | 0.6  |
| 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)                   | 1625B                                  | 5.0   | 20   |
| Fluoranthene (206-44-0)  | 625                                    | 0.3   | 0.6  |
| Fluorene (86-73-7)   | 625                                    | 0.3   | 0.6  |
| Hexachlorobenzene (118-74-1)                                       | 612/625                                | 0.3   | 0.6  |
| Hexachlorobutadiene (87-68-3)                                      | 625                                    | 0.5   | 1.0  |
| Hexachlorocyclopentadiene (77-47-4)                                | 1625B/625                              | 0.5   | 1.0  |
| Hexachloroethane (67-72-1)   | 625                                    | 0.5   | 1.0  |
| Indeno(1,2,3-cd)Pyrene (193-39-5)                                  | 610/625                                | 0.5   | 1.0  |
| Isophorone (78-59-1)   | 625                                    | 0.5   | 1.0  |
| <b>3-Methyl cholanthrene (56-49-5)</b>                             | 625                                    | 2.0   | 8.0  |
| Naphthalene (91-20-3)  | 625                                    | 0.3   | 0.6  |
| Nitrobenzene (98-95-3)   | 625                                    | 0.5   | 1.0  |
| N-Nitrosodimethylamine (62-75-9)                                   | 607/625                                | 2.0   | 4.0  |
| N-Nitrosodi-n-propylamine (621-64-7)                               | 607/625                                | 0.5   | 1.0  |
| N-Nitrosodiphenylamine (86-30-6)                                   | 625                                    | 0.5   | 1.0  |
| <b>Perylene (198-55-0)</b>   | 625                                    | 1.9   | 7.6  |
| Phenanthrene (85-01-8)   | 625                                    | 0.3   | 0.6  |
| Pyrene (129-00-0)  | 625                                    | 0.3   | 0.6  |
| 1,2,4-Trichlorobenzene (120-82-1)                                  | 625                                    | 0.3   | 0.6  |

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

***PRIORITY POLLUTANTS (continued)***

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

1. Detection level (DL) or detection limit means the minimum concentration of an analyte (substance) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero as determined by the procedure given in 40 CFR part 136, Appendix B.

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