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NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
WASTE DISCHARGE PERMIT No. WA-003218-2

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

In compliance with the provisions of  
The State of Washington Water Pollution Control Law  
Chapter 90.48 Revised Code of Washington  
and  
The Federal Water Pollution Control Act  
(The Clean Water Act)  
Title 33 United States Code, Section 1342 et seq.

**King County – Carnation Wastewater Treatment Facility**  
1200 Monster Road. SW  
Renton WA 99057

<u>Plant Location:</u> 4405 Larson Avenue Carnation, WA	<u>Receiving Water:</u> Snoqualmie River
<u>Water Body I.D. No.:</u> 1218442475506 Waterbody Segment: WA-07-1060	<u>Discharge Location</u> Latitude: 47° 39' 57" N Longitude: -121° 55' 30" W
<u>Plant Type:</u> Membrane Bioreactor	

is authorized to discharge in accordance with the special and general conditions that follow.

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

## TABLE OF CONTENTS

SUMMARY OF PERMIT REPORT SUBMITTALS.....5

### SPECIAL CONDITIONS

S1. DISCHARGE LIMITATIONS.....6

- A. Effluent Limitations - River Outfall, Low Flow Period
- B. Effluent Limitations – River Outfall, High Flow Period
- C. Mixing Zone Description - River Outfall

S2. MONITORING REQUIREMENTS.....7

- A. River Outfall Monitoring
- B. Sludge Monitoring
- C. Sampling and Analytical Procedures
- D. Flow Measurement
- E. Laboratory Accreditation

S3. REPORTING AND RECORDING REQUIREMENTS .....9

- A. Reporting
- B. Records Retention
- C. Recording of Results
- D. Additional Monitoring by the Permittee
- E. Notice of Noncompliance Reporting
- F. Other Noncompliance Reporting
- G. Maintaining a Copy of This Permit

S4. FACILITY LOADING.....13

- A. Design Criteria
- B. Plans for Maintaining Adequate Capacity
- C. Duty to Mitigate
- D. Notification of New or Altered Sources

S5. OPERATION AND MAINTENANCE.....14

- A. Certified Operator
- B. O & M Program
- C. Short-term Reduction
- D. Electrical Power Failure
- E. Bypass Procedures
- F. Operations and Maintenance Manual

S6. PRETREATMENT .....18

- A. General Requirements
- B. Local Limit Development

S7. RESIDUAL SOLIDS.....21

S8. TEMPERATURE STUDY OF RECEIVING WATER AND EFFLUENT .....21

S9. ADDITIONAL ANALYSIS OF EFFLUENT.....22

    A. Additional Effluent Testing

    B. Priority Pollutant Scans

S10. ACUTE TOXICITY .....23

    A. Effluent Characterization

    B. Effluent Limit for Acute Toxicity

    C. Compliance With the Effluent Limit for Acute Toxicity

    D. Compliance Testing for Acute Toxicity

    E. Response to Noncompliance with the Effluent Limit for Acute Toxicity

    F. Testing When There Is No Permit Limit for Acute Toxicity

    G. Sampling and Reporting Requirements

S11. CHRONIC TOXICITY .....27

    A. Effluent Characterization

    B. Effluent Limit for Chronic Toxicity

    C. Compliance With the Effluent Limit for Chronic Toxicity

    D. Compliance Testing for Chronic Toxicity

    E. Response to Noncompliance With the Effluent Limit for Chronic Toxicity

    F. Testing When There Is No Permit Limit for Chronic Toxicity

    G. Sampling and Reporting Requirements

S12. OUTFALL EVALUATION .....31

S13. APPLICATION FOR PERMIT RENEWAL .....31

**GENERAL CONDITIONS**

G1. SIGNATORY REQUIREMENTS.....32

G2. RIGHT OF INSPECTION AND ENTRY .....33

G3. PERMIT ACTIONS.....33

G4. REPORTING PLANNED CHANGES.....34

G5. PLAN REVIEW REQUIRED .....35

G6. COMPLIANCE WITH OTHER LAWS AND STATUTES.....35

G7. TRANSFER OF THIS PERMIT .....35

G8. REDUCED PRODUCTION FOR COMPLIANCE .....36

G9. REMOVED SUBSTANCES .....36

G10. DUTY TO PROVIDE INFORMATION.....36

G11. OTHER REQUIREMENTS OF 40 CFR.....36

G12. ADDITIONAL MONITORING.....36

G13. PAYMENT OF FEES.....36

G14. PENALTIES FOR VIOLATING PERMIT CONDITIONS .....36

G15. UPSET .....37

G16.	PROPERTY RIGHTS.....	37
G17.	DUTY TO COMPLY .....	37
G18.	TOXIC POLLUTANTS.....	37
G19.	PENALTIES FOR TAMPERING .....	37
G20.	REPORTING ANTICIPATED NONCOMPLIANCE .....	38
G21.	REPORTING OTHER INFORMATION.....	38
G22.	COMPLIANCE SCHEDULES .....	38
G23.	CONTRACT REVIEW .....	38

### 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	May 15, 2008
S3.E	Noncompliance Notification	As necessary	
S4.B	Plans for Maintaining Adequate Capacity	As necessary	
S5.G	Operations and Maintenance Manual	1/permit cycle	March 1, 2009
S5.G	Operations and Maintenance Manual Update or Review Confirmation Letter	Annually	March 1, 2010
S8.A	Receiving Water and Effluent Temperature Study Sampling and Quality Assurance Plan	1/permit cycle	June 15, 2008
S8.E	Receiving Water and Effluent Temperature Study Results	Annually	December 31, 2008
S9.A	Additional Analysis of Effluent – Priority Pollutants	3/permit cycle	January 31, 2009, July 31, 2009, & July 31, 2011
S10.A	Acute Toxicity Characterization Testing	4/permit cycle	September 30, 2009
S11.A	Chronic Toxicity Characterization Testing	4/permit cycle	September 30, 2009
S12	Outfall Evaluation	1/permit cycle	Next permit application
S13	Application for permit renewal	1/permit cycle	October 15, 2012

## SPECIAL CONDITIONS

### S1. DISCHARGE LIMITATIONS

All discharges and activities authorized by this permit must comply 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 constitutes a violation of the terms and conditions of this permit.

#### A. Effluent Limitations - River Outfall, Low Flow Period

Beginning on the effective date of this permit and lasting through the expiration date the Permittee is authorized to discharge municipal wastewater at the permitted river outfall (Outfall 001) during *August, September, and October* subject to the limitations listed in Table 1. The 1994 TMDL study assigned waste load allocations for BOD<sub>5</sub>, ammonia, fecal coliform, and soluble reactive phosphorus (SRP).

**Table 1. Effluent Limitations – River Outfall, Low Flow (August – October)**

Parameter	Average Monthly <sup>a</sup>	Average Weekly <sup>a</sup>
Biochemical Oxygen Demand (5-day)	30 mg/L 85% removal of influent BOD <sub>5</sub>	45 mg/L
Total Suspended Solids	30 mg/L (120 lb/day) 85% removal of influent TSS	45 mg/L (180 lb/day)
Fecal Coliform Bacteria	200 cfu/100mL	400 cfu/100mL
Total Residual Chlorine <sup>b</sup>	0.5 mg/L	0.75 mg/L
pH <sup>c</sup>	Daily minimum is equal to or greater than 6.0 and the daily maximum is less than or equal to 9.0 standard units.	
Parameter	Average Monthly <sup>a</sup>	Maximum Daily <sup>d</sup>
Biochemical Oxygen Demand (5-day)	12.5 lb/day - TMDL Limit	25 lb/day - TMDL Limit
Total Ammonia (as NH <sub>3</sub> -N)	4.2 lb/day - TMDL Limit	8.4 lb/day - TMDL Limit
Fecal Coliform Bacteria	1.55+E09 cfu/day -TMDL Limit	3.1+E09 cfu/day - TMDL Limit

<sup>a</sup> The average monthly and weekly effluent limitations are based on the arithmetic mean of the samples taken with the exception of fecal coliform, which is based on the geometric mean.

<sup>b</sup> This effluent limit applies whenever chlorine is used for disinfection of secondary. If no chlorine is used during the monitoring period, enter "no discharge of chlorine" on the DMR for the period.

<sup>c</sup> Indicates the range of permitted values. The Permittee must report the instantaneous maximum and minimum pH monthly. Do not average pH values.

<sup>d</sup> The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day.

**B. Effluent Limitations – River Outfall, High Flow Period**

Beginning on the effective date of this permit and lasting through the expiration date the Permittee is authorized to discharge municipal wastewater at the permitted river outfall (Outfall 001) during *November through July* subject to the limitations listed in Table 2.

**Table 2. Effluent Limitations – River Outfall, High Flow (November – July)**

Parameter	Average Monthly <sup>a</sup>	Average Weekly <sup>a</sup>
Biochemical Oxygen Demand (5-day)	30 mg/L (120 lb/day) 85% removal of influent BOD	45 mg/L (180 lb/day)
Total Suspended Solids	30 mg/L (120 lb/day) 85% removal of influent TSS	45 mg/L (180 lb/day)
Fecal Coliform Bacteria	200 cfu/100 mL	400 cfu/100 mL
Total Residual Chlorine <sup>b</sup>	0.5 mg/L	0.75 mg/L
pH <sup>c</sup>	Daily minimum is equal to or greater than 6.0 and the daily maximum is less than or equal to 9.0 standard units.	

<sup>a</sup> The average monthly and weekly effluent limitations are based on the arithmetic mean of the samples taken with the exception of fecal coliform, which is based on the geometric mean.

<sup>b</sup> This effluent limit applies whenever chlorine is used for disinfection of secondary effluent. If no chlorine is used during the monitoring period, enter “no discharge of chlorine” on the DMR for the period.

<sup>c</sup> Indicates the range of permitted values. The Permittee must report the instantaneous maximum and minimum pH monthly. Do not average pH values.

**C. Mixing Zone Description - River Outfall**

This outfall is located on the Carnation Farm Road Bridge between RM 22 and 23. The mixing zone width is 50 feet. The zone of chronic criteria exceedance extends 100 feet upstream and 300 feet downstream of the outfall pipe. The dilution at the edge of the chronic mixing zone during critical conditions is 150:1.

The zone of acute criteria exceedance extends upstream and downstream of the outfall pipe 10% of the dimensions of the chronic mixing zone, or 10 feet and 30 feet, respectively. The width of the zone of acute criteria exceedance is 50 feet. The dilution at the edge of the zone of acute criteria exceedance during critical conditions is 10.3:1.

**S2. MONITORING REQUIREMENTS**

**A. River Outfall Monitoring**

While discharging from the Carnation Bridge outfall, the Permittee must monitor in accordance with the schedule shown in Table 3.

**Table 3. Monitoring Schedule – River Outfall (Outfall 001)**

Parameter	Sample Point	Minimum Sampling Frequency	Units	Sample Type
<b>[1] Compliance Monitoring:</b>				
Flow	Influent <sup>a</sup> & Final Effluent	Continuous <sup>b</sup>	mgd	Recording
BOD <sub>5</sub>	Influent <sup>a</sup> & Final Effluent	2/week	mg/L	24-hr Composite
TSS	Influent <sup>a</sup> & Final Effluent	2/week	mg/L	24-hr Composite
pH	Final Effluent	Continuous <sup>b</sup>	Std units	Recording
Fecal Coliform	Final Effluent	2/week	cfu/100 mL	Grab
Temperature	End of Pipe & Receiving Water (upstream)	Every 30 minutes, July 1 <sup>st</sup> thru October 31 <sup>st</sup>	°C	Recording (thermistor)
Total Available Residual Chlorine <sup>c</sup>	Final Effluent	Daily	mg/L	Grab
Total Kjeldahl Nitrogen – as N	Final Effluent	1/month in Aug, Sept, & Oct.	mg/L	24-hr Composite
Total Ammonia – as N	Final Effluent	1/month in Aug, Sept, & Oct.	mg/L	24-hr Composite
Nitrate + Nitrite – as N	Final Effluent	1/month in Aug, Sept, & Oct.	mg/L	Grab
Soluble Reactive Phosphorus	Final Effluent	1/month in Aug, Sept, & Oct.	mg/L	24-hr Composite
<b>[2] Pollutants listed in Part B.6 of the NPDES Permit App. – Form EPA 3510-2A<sup>d</sup> (Section S9):</b>				
(a) Total Dissolved Solids	Final Effluent	3/permit cycle	mg/L or µg/L	24-hr Composite
(b) Dissolved Oxygen	“	“	“	Grab
(c) Oil and Grease	“	“	“	Grab
<b>[3] Additional Effluent Monitoring (Sections S9, S10, &amp; S11):</b>				
Priority Pollutants <sup>e</sup>	Final Effluent	3/permit cycle in January 2009, July 2009 & July 2011	µg/L	24-hr Composite, or grab when appropriate
WET Testing	Final Effluent	4/permit cycle in July, Aug., or Sept. of 2009, 2010, 2011, & 2012	-	24-hr Composite

<sup>a</sup> Influent is the compliance point for the loading criteria discussed in Section S4.A.

<sup>b</sup> Continuous means uninterrupted except for brief lengths of time for calibration, power failure, or unanticipated equipment repair or maintenance. Measurements shall be taken daily when continuous monitoring is not possible.

<sup>c</sup> Monitoring for Total Residual Chlorine is required only when chlorine is used for disinfection of secondary effluent.

<sup>d</sup> To provide required data for Part B.6 of the EPA Form EPA 3510-2A (NPDES Permit Application) for the next permit application, the final effluent shall be tested for these parameters. Samples shall be collected for analysis at least three times during the term of this permit, and results shall be reported in part B.6 of the next permit application.

<sup>e</sup> Priority pollutants are listed in Appendix F of fact sheet. Mercury shall be analyzed using an EPA Method that can adequately measure levels of 0.005 µg/L.

B. Sludge Monitoring

The Permittee shall monitor biosolids as required by the biosolids permit.

C. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit must be representative of the volume and nature of the monitored parameters. The Permittee must conduct representative sampling of any unusual discharge or discharge condition, including bypasses, upsets and maintenance-related conditions that may affect effluent quality.

Sampling and analytical methods used to meet the water and wastewater monitoring requirements specified in this permit shall conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 or to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by the Department of Ecology (Ecology).

Sludge monitoring requirements specified in this permit shall be conducted according to test procedures specified in 40 CFR Part 503.

D. Flow Measurement

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

E. Laboratory Accreditation

The Permittee must ensure that all monitoring data required by Ecology 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. Conductivity and pH must be accredited if the laboratory must otherwise be registered or accredited.

### **S3. REPORTING AND RECORDING REQUIREMENTS**

The Permittee must monitor and report in accordance with the following conditions.

Falsification of information submitted to Ecology is a violation of the terms and conditions of this permit.

A. Reporting

The first monitoring period begins on the effective date of the permit. The Permittee must submit monitoring results each month. The Permittee must summarize, report, and submit monitoring data obtained during each monitoring period on a Discharge Monitoring Report (DMR) form provided, or otherwise approved, by Ecology. The Permittee must ensure that DMR forms are postmarked or received by Ecology no later than the 15<sup>th</sup> day of the month following the completed monitoring period, unless otherwise specified in this permit. The Permittee must submit priority pollutant analysis data no later than forty-five (45) days following the monitoring period. The Permittee must send report(s) to:

Department of Ecology  
Northwest Regional Office  
3190 – 160<sup>th</sup> Avenue SE  
Bellevue, WA 98008-5452

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

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

B. Records Retention

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

The Permittee shall retain all records pertaining to the monitoring of sludge for a minimum of five years.

C. Recording of Results

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

- 1) Date, exact place, method, and time of sampling or measurement.
- 2) Individual who performed the sampling or measurement.
- 3) Dates the analyses were performed.
- 4) Individual who performed the analyses.

- 5) Analytical techniques or methods used.
- 6) Results of all analyses.

D. Additional Monitoring by the Permittee

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

E. Notice of Noncompliance Reporting

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

*Immediately* take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the noncompliance and correct the problem and, if applicable, immediately repeat sampling and analysis. The results of any repeat sampling must be submitted to Ecology within 30 days of sampling.

1. Immediate Noncompliance Notification -

Any failure of the disinfection system, overflow from the collection system within King County control, or any plant bypass discharging to a waterbody used as a source of drinking water must be reported *immediately* to the Department of Ecology (425-649-7000), Washington State Department of Health, and the King County Department of Health (206-205-2252).

2. Twenty-four Hour Noncompliance Notification -

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

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

3. Written Report Required Within Five Days -

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

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

4. Waiver of Written Reports -

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

5. Report Submittal -

Reports must be submitted to the address in S3.A ("REPORTING AND RECORDING REQUIREMENTS").

F. Other Noncompliance Reporting

The Permittee must report all instances of noncompliance, not required to be reported immediately or within 24 hours, at the time that monitoring reports for S3.A ("Reporting") are submitted. The reports must contain the information listed in paragraph E.3, above. Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

The spill of oil or hazardous materials *must* be reported in accordance with the instructions obtained at the following website:

<http://www.ecy.wa.gov/programs/spills/other/reportaspill.htm>

G. Maintaining a Copy of This Permit

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

## S4. FACILITY LOADING

### A. Design Criteria

The flows or waste loads for the permitted facility must not exceed the following design criteria:

Average flow for the maximum month:	0.48 MGD
BOD <sub>5</sub> influent loading for maximum month:	1,669 pounds/day
TSS influent loading for maximum month:	1,669 pounds/day

### B. Plans for Maintaining Adequate Capacity

The Permittee must submit a plan and a schedule for continuing to maintain capacity to Ecology when:

1. The actual flow or waste load reaches 85 percent of any one of the design criteria in S4.A for three consecutive months; or
2. The projected increase would reach design capacity within five years, whichever occurs first.
3. The plan and schedule for continuing to maintain capacity must be sufficient to achieve the effluent limitations and other conditions of this permit. This plan must identify any of the following actions or any other actions necessary to meet the objective of maintaining capacity.
  - a. Analysis of the present design including the introduction of any process modifications that would establish the ability of the existing facility to achieve the effluent limits and other requirements of this permit at specific levels in excess of the existing design criteria specified in paragraph A, above.
  - b. Reduction or elimination of excessive infiltration and inflow of uncontaminated ground and surface water into the sewer system.
  - c. Limitation on future sewer extensions or connections or additional waste loads.
  - d. Modification or expansion of facilities necessary to accommodate increased flow or waste load.
  - e. Reduction of industrial or commercial flows or waste loads to allow for increasing sanitary flow or waste load.
4. Engineering documents associated with the plan must meet the requirements of WAC 173-240-060, "Engineering Report," and be approved by Ecology prior to any construction.
5. If the Permittee intends to apply for state or federal funding for the design or construction of a facility project, the plan must also meet the requirements of a "Facility Plan" as described in 40 CFR 35.2030. The plan must specify any contracts, ordinances, methods for financing, or other arrangements necessary to achieve this objective.

C. Duty to Mitigate

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

D. Notification of New or Altered Sources

1. The Permittee must submit written notice to Ecology whenever any new discharge or a substantial change in volume or character of an existing discharge into the POTW is proposed which:
  - a. Would interfere with the operation of, or exceed the design capacity of, any portion of the POTW;
  - b. Is not part of an approved general sewer plan or approved plans and specifications; or
  - c. Would be subject to pretreatment standards under 40 CFR Part 403 and Section 307(b) of the Clean Water Act.
2. This notice must include an evaluation of the POTW's ability to adequately transport and treat the added flow and/or waste load, the quality and volume of effluent to be discharged to the POTW, and the anticipated impact on the Permittee's effluent [40 CFR 122.42(b)].

**S5. OPERATION AND MAINTENANCE**

The Permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances owned and operated by King County) that 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.

A. Certified Operator

This permitted facility must be operated by an operator certified by the state of Washington for at least a Class III plant. This operator must be in responsible charge of the day-to-day operation of the wastewater treatment plant. An operator certified for at least a Class II plant must be in charge during all regularly scheduled shifts.

B. O & M Program

1. The Permittee must keep maintenance records on all major electrical and mechanical components of the treatment plant, as well as the sewage system and pumping stations owned and operated by King County. Such records must clearly specify the frequency and type of maintenance recommended by the manufacturer and must show the frequency and type of maintenance performed.

2. The Permittee must make maintenance records available for inspection at all times.

C. Short-term Reduction

If a Permittee contemplates a reduction in the level of treatment that would cause a violation of permit discharge limitations on a short-term basis for any reason, and such reduction cannot be avoided, the Permittee must:

1. Give written notification to Ecology, if possible, thirty (30) days prior to such activities.
2. The notice must detail the reasons for, length of time of, and the potential effects of the reduced level of treatment.
3. This notification does not relieve the Permittee of its obligations under this permit.

D. Electrical Power Failure

The Permittee must ensure that adequate safeguards prevent the discharge of untreated wastes or wastes not treated in accordance with the requirements of this permit during electrical power failure at the treatment plant. Adequate safeguards include, but are not limited to, alternate power sources, standby generator(s), or retention of inadequately treated wastes.

The Permittee must maintain Reliability Class II (EPA 430/9-74-001) at the wastewater treatment plant. Reliability Class II requires a backup power source sufficient to operate all vital components and critical lighting and ventilation during peak wastewater flow conditions. Vital components used to support the secondary processes (i.e., mechanical aerators or aeration basin air compressors) need not be operable to full levels of treatment, but must be sufficient to maintain the biota.

E. Bypass Procedures

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

1. Bypass is 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 limitations or other conditions of this permit, or adversely impact public health as determined by Ecology prior to the bypass. The Permittee must submit prior notice, if possible, at least ten (10) days before the date of the bypass.

2. Bypass is unavoidable, unanticipated, and results in noncompliance with the conditions 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:
    - i. The use of auxiliary treatment facilities;
    - ii. Retention of untreated wastes;
    - iii. Stopping production;
    - iv. Maintenance during normal periods of equipment downtime, but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass; or
    - v. Transport of untreated wastes to another treatment facility.
  - c. The Permittee has properly notified Ecology of the bypass as required in Condition S3.E of this permit.
3. If bypass is anticipated and has the potential to result in noncompliance of this permit.
    - a. The Permittee must notify Ecology at least thirty (30) days before the planned date of bypass. The notice must contain:
      - i. A description of the bypass and its cause;
      - ii. An analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing;
      - iii. A cost-effectiveness analysis of alternatives including comparative resource damage assessment;
      - iv. The minimum and maximum duration of bypass under each alternative;
      - v. A recommendation as to the preferred alternative for conducting the bypass;
      - vi. The projected date of bypass initiation;
      - vii. A statement of compliance with SEPA;

- viii. A request for modification of water quality standards as provided for in WAC 173-201A-410, if an exceedance of any water quality standard is anticipated; and
  - ix. Details of the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.
- b. For probable construction bypasses, the Permittee must notify Ecology of the need to bypass as early in the planning process as possible. The Permittee must consider the analysis required above during preparation of the engineering report or facilities plan and plans and specifications and must include these to the extent practical. In cases where the Permittee determines the probable need to bypass early, the Permittee must continue to analyze conditions up to and including the construction period in an effort to minimize or eliminate the bypass.
- c. Ecology will consider the following prior to issuing an administrative order for this type of bypass:
- i. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
  - ii. 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.
  - iii. If the Permittee planned and scheduled the bypass to minimize adverse effects on the public and the environment.

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

F. Operations and Maintenance Manual

The Permittee must prepare an Operations and Maintenance (O&M) Manual according to WAC 173-240-080 and submit it to Ecology for approval by March 1, 2009. In addition to the requirements of WAC 173-240-080 (1) through (5) the O&M Manual must include:

1. Emergency procedures for plant shutdown, disinfection failures, and cleanup in the event of wastewater system upset or failure.
2. Wastewater system maintenance procedures that contribute to the generation of process wastewater.

3. Any directions to maintenance staff when cleaning, or maintaining other equipment or performing other tasks which are necessary to protect the operation of the wastewater system (for example, defining maximum allowable discharge rate for draining a tank, blocking all floor drains before beginning the overhaul of a stationary engine.)
4. The treatment plant process control monitoring schedule

The Permittee must review the O&M Manual at least annually and confirm this review by letter to Ecology on March 1<sup>st</sup> of each year. Whenever the Permittee makes substantial changes or updates to the O&M Manual, the Permittee must submit the changes to Ecology for review and approval.

The Permittee must keep the approved Operations and Maintenance Manual available at the treatment plant and all operators must follow the instructions and procedures of this manual.

## **S6. PRETREATMENT**

### **A. General Requirements**

1. The Permittee shall implement the Industrial Pretreatment Program in accordance with the legal authorities, policies, procedures, and financial provisions described in the Permittee's approved pretreatment program submittal approved and dated April 27, 1981; any approved revisions thereto; and the General Pretreatment Regulations (40 CFR Part 403). At a minimum, the following pretreatment implementation activities shall be undertaken by the Permittee:
  - a. Enforce categorical pretreatment standards under Section 307(b) and (c) of the Federal Clean Water Act (hereinafter, the Act), prohibited discharge standards as set forth in 40 CFR 403.5, local limitations, or state standards, whichever are most stringent or apply at the time of issuance or modification of a local industrial waste discharge permit. Locally derived limitations are defined as pretreatment standards under Section 307(d) of the Act and are not limited to categorical industrial facilities.
  - b. Issue industrial waste discharge permits to all significant industrial users [SIUs, as defined in 40 CFR 403.3(t)(i)(ii)] contributing to the treatment system, including those from other jurisdictions. Industrial waste discharge permits must contain, as a minimum, all the requirements of 40 CFR 403.8 (f)(l)(iii). The Permittee must coordinate the permitting process with Ecology regarding any industrial facility which may possess a state waste discharge permit issued by Ecology.
  - c. Maintain and update, as necessary, records identifying the nature, character, and volume of pollutants contributed by industrial users to the POTW. The Permittee must maintain records for at least a 3-year period.

- d. Perform inspections, surveillance, and monitoring activities on industrial users to determine or confirm compliance with pretreatment standards and requirements. The Permittee must conduct a thorough inspection of SIUs annually except that middle tier categorical industrial users as defined by 40 CFR 403.8(f)(2)(v)(B)&(C) need only be inspected once every two years. The Permittee must conduct regular local monitoring of SIU wastewaters commensurate with the character and volume of the wastewater but not less than twice per year except for middle tier categorical industrial users which may be sampled once every two years. The Permittee must collect and analyze samples in accordance with 40 CFR Part 403.12(b)(5)(ii)-(v) and 40 CFR Part 136.
- e. Enforce and obtain remedies for noncompliance by any industrial users with applicable pretreatment standards and requirements. Once violations have been identified, the Permittee must take timely and appropriate enforcement action to address the noncompliance. The Permittee's action must follow its enforcement response procedures and any amendments, thereof.
- f. Publish, at least annually in a newspaper of general circulation within the Permittee's service area, a list of all non-domestic users which, at any time in the previous 12 months, were in significant noncompliance as defined in 40 CFR 403.8(f)(2)(vii).
- g. If the Permittee elects to conduct sampling of an SIU's discharge in lieu of requiring user self-monitoring, it must satisfy all requirements of 40 CFR Part 403.12. This includes monitoring and record keeping requirements of Sections 403.12(g) and (o). For SIUs subject to categorical standards (CIUs), the Permittee may either complete baseline and initial compliance reports for the CIU (when required by 403.12(b) and (d)) or require these of the CIU. The Permittee must ensure SIUs are provided the results of sampling in a timely manner, inform SIUs of their right to sample, their obligations to report any sampling they do, to respond to noncompliance, and to submit other notifications. These include a slug load report (403.12(f)), notice of changed discharge (403.12(j)), and hazardous waste notifications (403.12(p)). If sampling for the SIU, the Permittee must not sample less than once in every 6-month period unless the Permittee's approved program includes procedures for reduction of monitoring for Middle-Tier or Non-Significant Categorical Users per 403.12(e)(2) and (3) and those procedures have been followed.
- h. Develop and maintain a data management system designed to track the status of the Permittee's industrial user inventory, industrial user discharge characteristics, and compliance status.
- i. Maintain adequate staff, funds, and equipment to implement its pretreatment program.

- j. Establish, where necessary, contracts or legally-binding agreements with contributing jurisdictions to ensure compliance with applicable pretreatment requirements by commercial or industrial users within these jurisdictions. These contracts or agreements must identify the agency responsible for the various implementation and enforcement activities to be performed in the contributing jurisdiction.
2. Per 40 CFR 403.8(f)(2)(vi), the Permittee must evaluate each Significant Industrial User to determine if a Slug Control Plan is needed to prevent interference, pass-through, or other violations of the Permittee's regulations, local limits, or permit conditions. The Slug Control Plan evaluation shall occur within one year of a user's designation as a Significant Industrial User. Per 40 CFR 403.8(f)(1)(iii)(B)(6), a SIU's permit shall include slug discharge control requirements if the Permittee determines that they are necessary.
3. Whenever Ecology determines that any waste source contributes pollutants to the Permittee's treatment works in violation of Subsection (b), (c), or (d) of Section 307 of the Act, and the Permittee has not taken adequate corrective action, Ecology will notify the Permittee of this determination. If the Permittee fails to take appropriate enforcement action within thirty (30) days of this notification, Ecology may take appropriate enforcement action against the source or the Permittee.
4. The Permittee must request and obtain approval from Ecology before making any significant changes to the approved local pretreatment program. The Permittee must follow the procedure in 40 CFR 403.18 (b) and (c).

B. Local Limit Development

As sufficient data becomes available, the Permittee must, in consultation with Ecology, reevaluate their local limits in order to prevent pass-through or interference. If Ecology determines that any pollutant present causes pass-through or interference, or exceeds established sludge standards, the Permittee must establish new local limits or revise existing local limits as required by 40 CFR 403.5. Ecology may also require the Permittee to revise or establish local limits for any pollutant discharged from the POTW that has a reasonable potential to exceed the water quality standards, sediment standards, or established effluent limits, or causes whole effluent toxicity. Ecology makes this determination in the form of an Administrative Order.

Ecology may modify this permit to incorporate additional requirements relating to the establishment and enforcement of local limits for pollutants of concern. Any permit modification is subject to formal due process procedures under state and federal law and regulation.

## **S7. RESIDUAL SOLIDS**

Residual solids include screenings, grit, scum, primary sludge, waste activated sludge, and other solid waste. The Permittee must store and handle all residual solids in a manner that prevents their entry into state ground or surface waters. The Permittee must not discharge leachate from residual solids to state surface or ground waters.

## **S8. TEMPERATURE STUDY OF RECEIVING WATER AND EFFLUENT**

The Permittee must collect temperature data on the effluent and receiving water to determine if the effluent has a reasonable potential to cause a violation of the water quality standards. If reasonable potential exists, Ecology will use this information to calculate effluent limits.

- A. Quality Assurance Project Plan: The Permittee must submit a sampling and quality assurance plan for Ecology review and approval by June 15, 2008. The Permittee must conduct all sampling and analysis in accordance with the guidelines given in *Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies*, Ecology Publication 04-03-030 (<http://www.ecy.wa.gov/pubs/0403030.pdf>). A model Quality Assurance Plan specific for temperature may be found at: <http://www.ecy.wa.gov/programs/wq/permits/guidance.html>.
- B. Temperature must be measured in the effluent and in the ambient water upstream of the outfall. Temperature must be measured during the months of July through October of each year, beginning July 1, 2008.
- C. Temperature must be monitored using micro-recording temperature devices known as thermistors. Ecology's Quality Assurance Project Plan Development Tool (*Continuous Temperature Sampling Protocols for the Environmental Monitoring and Trends*) contains protocols for continuous temperature sampling. This document is available online at: <http://www.ecy.wa.gov/programs/eap/qa/docs/QAPPtool/Mod6%20Ecology%20SOPs/Protocols/ContinuousTemperatureSampling.pdf>. Calibration as specified in this document is not required if the Permittee uses recording devices which are certified by the manufacturer. Ecology does not require manufacture-specific equipment as given in this document; however, if the Permittee wishes to use measuring devices from another company, the accuracy must be demonstrated to be equivalent. The recording devices must be set to record at one-half-hour intervals.
- D. Temperature monitoring data must be reported as: daily maximum, seven-day running average of the daily maximums, and the monthly maximum of the seven-day running average. The model Quality Assurance Plan shows an example of these calculations.
- E. Temperature data for each July-October period must be submitted to Ecology by December 31<sup>st</sup> of that year.

## **S9. ADDITIONAL ANALYSIS OF EFFLUENT**

### **A. Additional Effluent Testing**

The Permittee must conduct the following additional effluent tests to provide the required information for EPA Form 3510-2A, Part B6 (NPDES Application) for the next permit cycle. The Permittee must collect samples for analysis at least three times during the term of this permit, and results must be reported with the next NPDES permit application.

Dissolved Oxygen  
Oil & Grease  
Total Dissolved Solids  
Ammonia, as N  
Total Kjeldahl nitrogen, as N  
Nitrate + nitrite, as N  
Total phosphorus

*Protocols:* The Permittee must conduct sample analysis in accordance with 40 CFR Part 136. It is appropriate for 24-hour composite sampling to be performed for Ammonia, TKN, Total Phosphorus, and TDS determinations. It is appropriate for grab sampling to be performed on Dissolved Oxygen, Nitrite-Nitrate, and Oil & Grease determinations.

### **B. Priority Pollutant Scans**

The Permittee must analyze the effluent for priority pollutants in January 2009, July 2009, and July 2011. The samples analyzed shall be 24-hour composites, unless 40 CFR Part 136 specifies otherwise. The parameters to be tested are listed in EPA Form 3510-2A, Part D (NPDES Application), and also in Appendix F of the fact sheet. The Permittee must submit a written report of the sampling results to Ecology within 45 days of sampling and with the next permit application.

*Protocols:* The Permittee must conduct sample analysis in accordance with 40 CFR Part 136. All analysis for metals must use the methods given in 40 CFR Part 136 and be reported as total recoverable. The required detection levels used for the analysis are listed in Table 4. For copper, the required method detection level (MDL) is 1 µg/L; the quantitation level (QL) for copper is 5 µg/L (5 x MDL). Mercury shall be analyzed using an EPA Method that can adequately analyze mercury levels down to 0.005 µg/L. The Permittee must follow the quality assurance procedures of 40 CFR Part 136.

**Table 4. Required Metal Detection Limits**

<b>Pollutant Parameter</b>	<b>Required Detection Limit</b>
Copper	1.0 µg/L
Lead	1.0 µg/L
Nickel	1.0 µg/L
Chromium	1.0 µg/L
Zinc	2.0 µg/L
Cadmium	0.1 µg/L
Selenium	2.0 µg/L
Silver	0.2 µg/L
Mercury	0.005 µg/L
Arsenic	1.0 µg/L

**S10. ACUTE TOXICITY**

**A. Effluent Characterization**

The Permittee shall test the final effluent during the low flow months of July, August, or September of 2009, 2010, 2011, and 2012. This toxicity testing is an application requirement for facilities with a Pretreatment Program. The Permittee must submit a written report to Ecology within sixty (60) days after each sample date.

The Permittee must use a dilution series consisting of a minimum of five concentrations and a control. The Permittee must conduct the following two acute toxicity tests on each sample:

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

After this series of effluent characterization, IF:

1. The median survival of any species in 100% effluent is below 80%, OR
2. Any one test of any species exhibits less than 65% survival in 100% effluent,

Then the Permittee has an effluent limit for acute toxicity.

If the Permittee has an effluent limit for acute toxicity, the Permittee must immediately follow the instructions in Subsections B, C, D, E, and G.

If the Permittee has no effluent limit for acute toxicity, then the Permittee must follow the instructions in Subsections F and G.

B. Effluent Limit for Acute Toxicity

**The effluent limit for acute toxicity is: No acute toxicity detected in a test concentration representing the acute critical effluent concentration (ACEC).**

The ACEC means the maximum concentration of effluent during critical conditions at the boundary of the acute mixing zone, defined in Section S1.C of this permit. The ACEC equals 8.8% effluent.

C. Compliance With the Effluent Limit for Acute Toxicity

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

If the test results show a statistically significant difference in survival between the control and the ACEC, the test does not comply with the effluent limit for acute toxicity. The Permittee must then immediately conduct the additional testing described in Subsection E. The Permittee will comply with the requirements of this section by meeting the requirements of Subsection E.

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

D. Compliance Testing for Acute Toxicity

The Permittee must:

- Perform the acute toxicity tests with 100% effluent, the ACEC, and a control, or with a full dilution series.
- Submit a written report of all test results to Ecology within sixty (60) days after each sample date.

The Permittee must perform compliance tests biannually using each of the species and protocols listed below on a rotating basis:

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

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

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

The Permittee must conduct one additional test each week for four consecutive weeks, using the same test and species as the failed compliance test. To determine appropriate point estimates, the Permittee must test at least five effluent concentrations and a control. One of these effluent concentrations must equal the ACEC. The results of the test at the ACEC will determine compliance with the effluent limit for acute toxicity as described in Subsection C. The Permittee must return to the original monitoring frequency in Subsection D after completion of the additional compliance monitoring.

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

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

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

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

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

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

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

F. Testing When There Is No Permit Limit for Acute Toxicity

The Permittee must continue to conduct acute toxicity testing at the required frequency on a series of at least five concentrations of effluent, including 100% effluent and a control.

G. Sampling and Reporting Requirements

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

7. The Permittee may choose to conduct a full dilution series test during compliance testing in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the acute critical effluent concentration (ACEC). The ACEC equals 8.8% effluent.
8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing must comply with the acute statistical power standard of 29% as defined in WAC 173-205-020. If the test does not meet the power standard, the Permittee must repeat the test on a fresh sample with an increased number of replicates to increase the power.
9. Reports of individual characterization or compliance test results must be submitted to Ecology within sixty (60) days after each sample date.
10. The Acute Toxicity Summary Report must be submitted to Ecology with the next permit application.

## S11. CHRONIC TOXICITY

### A. Effluent Characterization

The Permittee shall test the final effluent during the low flow months of July, August, or September of 2009, 2010, 2011, and 2012. This toxicity testing is an application requirement for facilities with a Pretreatment Program. The Permittee must submit a written report to Ecology within sixty (60) days after each sample date.

The Permittee must conduct chronic toxicity testing during effluent characterization on a series of at least five concentrations of effluent and a control. This series of dilutions must include the acute critical effluent concentration (ACEC). The ACEC equals 8.8% effluent.

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

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

After this series of effluent characterization, if:

Any test shows a significant difference between the control and the ACEC at the 0.05 level of significance using hypothesis testing (Appendix H, EPA/600/4-89/001),

Then the Permittee has an effluent limit for chronic toxicity.

If the Permittee has an effluent limit for chronic toxicity, the Permittee must immediately follow the instructions in Subsections B, C, D, E and G.

If the Permittee has no effluent limit for chronic toxicity, then the Permittee must follow the instructions in Subsections F and G.

B. Effluent Limit for Chronic Toxicity

**The effluent limit for chronic toxicity is: No toxicity detected in a test concentration representing the chronic critical effluent concentration (CCEC).**

The CCEC means the maximum concentration of effluent during critical conditions at the boundary of the mixing zone, defined in Section S1.C of this permit. The CCEC equals 0.66% effluent.

C. Compliance With the Effluent Limit for Chronic Toxicity

Compliance with the effluent limit for chronic toxicity means the results of the testing specified in Subsection D show no statistically significant difference in response between the control and the CCEC.

If the test results show a statistically significant difference in response between the control and the CCEC, the test does not comply with the effluent limit for chronic toxicity. The Permittee must then immediately conduct the additional testing described in Subsection E. The Permittee will comply with the requirements of this section by meeting the requirements of Subsection E.

The Permittee must determine the statistical significance by conducting a hypothesis test at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in response between the control and the CCEC is less than 20%, the Permittee must conduct the hypothesis test at the 0.01 level of significance.

Ecology will reevaluate the need for the chronic toxicity limit in future permits. Therefore, the Permittee must also conduct this same hypothesis test (Appendix H, EPA/600/4-89/001) to determine whether a statistically significant difference in response exists between the acute critical effluent concentration (ACEC) and the control.

D. Compliance Testing for Chronic Toxicity

The Permittee must:

- Perform the acute toxicity tests using the CCEC, the ACEC, and a control, or with a full dilution series.
- Submit a written report of all test results to Ecology within sixty (60) days after each sample date. This written report must include the results of hypothesis testing conducted as described in Subsection C using both the ACEC and CCEC versus the control.

Perform compliance tests biannually using the following species on a rotating basis and the most recent version of the following protocols:

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

E. Response to Noncompliance With the Effluent Limit for Chronic Toxicity

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

The Permittee must conduct additional testing each month for three consecutive months using the same test and species as the failed compliance test. To determine appropriate point estimates, the Permittee must use a series of at least five effluent concentrations and a control. One of these effluent concentrations must equal the CCEC. The results of the test at the CCEC will determine compliance with the effluent limit for acute toxicity as described in Subsection B. The Permittee must return to the original monitoring frequency in Subsection C after completion of the additional compliance monitoring.

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

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

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

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

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

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

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

F. Testing When There Is No Permit Limit for Chronic Toxicity

The Permittee must continue to conduct chronic toxicity testing at the required frequency and submit the results to Ecology within sixty (60) days and with the permit renewal application.

G. Sampling and Reporting Requirements

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

5. The laboratory must use control water and dilution water meeting the requirements of the EPA methods listed in Subsection C or pristine natural water of sufficient quality for good control performance.
6. The Permittee must conduct whole effluent toxicity tests on an unmodified sample of final effluent.
7. The Permittee may choose to conduct a full dilution series test during compliance testing in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the CCEC and the ACEC. The CCEC and the ACEC may either substitute for the effluent concentrations that are closest to them in the dilution series or be extra effluent concentrations. The CCEC equals 0.66% effluent. The ACEC equals 8.8% effluent.
8. All whole effluent toxicity tests that involve hypothesis testing must comply with the chronic statistical power standard of 39% as defined in WAC 173-205-020. If the test does not meet the power standard, the Permittee must repeat the test on a fresh sample with an increased number of replicates to increase the power.
9. Reports of individual characterization or compliance test results must be submitted to Ecology within sixty (60) days after each sample date.
10. The Chronic Toxicity Summary Report must be submitted to Ecology with the next permit application.

## **S12. OUTFALL EVALUATION**

Prior to the expiration of this permit, the Permittee shall inspect the outfall line and port to document its integrity and continued function. The inspection shall evaluate the structural condition of the outfall and determine whether the port is flowing freely. If conditions allow for a photographic verification of the outfall port, it shall be included in the report. A brief report on this inspection shall be submitted to Ecology with the next permit application.

## **S13. APPLICATION FOR PERMIT RENEWAL**

The Permittee must submit an application for renewal of this permit by October 15, 2012.

## GENERAL CONDITIONS

### G1. SIGNATORY REQUIREMENTS

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

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

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

(b) In the case of a partnership, by a general partner.

(c) In the case of sole proprietorship, by the proprietor.

(d) In the case of a municipal, state, or other public facility, by either a principal executive officer or ranking elected official.

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

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

1. The authorization is made in writing by a person described above and submitted to Ecology.

2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

C. Changes to authorization. If an authorization under paragraph B.2, above, is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph B.2, above, must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.

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

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

## **G2. RIGHT OF INSPECTION AND ENTRY**

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

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

## **G3. PERMIT ACTIONS**

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

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

4. A determination that the permitted activity endangers human health or the environment, or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination.
  5. A change in any condition that requires either a temporary or permanent reduction, or elimination of any discharge or sludge use or disposal practice controlled by the permit.
  6. Nonpayment of fees assessed pursuant to RCW 90.48.465.
  7. Failure or refusal of the permittee to allow entry as required in RCW 90.48.090.
- B. The following are causes for modification but not revocation and reissuance except when the permittee requests or agrees:
1. A material change in the condition of the waters of the state.
  2. New information not available at the time of permit issuance that would have justified the application of different permit conditions.
  3. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.
  4. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.
  5. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR part 122.62.
  6. Ecology has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.
  7. Incorporation of an approved local pretreatment program into a municipality's permit.
- C. The following are causes for modification or alternatively revocation and reissuance:
1. When cause exists for termination for reasons listed in A1 through A7 of this section, and Ecology determines that modification or revocation and reissuance is appropriate.
  2. When Ecology has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer (General Condition G8) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new permittee.

#### **G4. REPORTING PLANNED CHANGES**

The Permittee must, as soon as possible, but no later than sixty (60) days prior to the proposed changes, give notice to Ecology of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in: 1) the permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b); 2) a significant change in the nature or an increase in quantity of pollutants discharged; or 3) a significant change in the Permittee's sludge use or disposal practices. Following such notice,

and the submittal of a new application or supplement to the existing application, along with required engineering plans and reports, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation.

#### **G5. PLAN REVIEW REQUIRED**

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications must be submitted to Ecology for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications must be submitted at least one hundred eighty (180) days prior to the planned start of construction unless a shorter time is approved by Ecology. Facilities must be constructed and operated in accordance with the approved plans.

#### **G6. COMPLIANCE WITH OTHER LAWS AND STATUTES**

Nothing in this permit must be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

#### **G7. TRANSFER OF THIS PERMIT**

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

##### **A. Transfers by Modification**

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

##### **B. Automatic Transfers**

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

1. The Permittee notifies Ecology at least 30 days in advance of the proposed transfer date.
2. 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.
3. Ecology does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under 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 re-suspended or reintroduced to the final effluent stream for discharge to state waters.

#### **G10. DUTY TO PROVIDE INFORMATION**

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

#### **G11. OTHER REQUIREMENTS OF 40 CFR**

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

#### **G12. ADDITIONAL MONITORING**

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

#### **G13. PAYMENT OF FEES**

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

#### **G14. PENALTIES FOR VIOLATING PERMIT CONDITIONS**

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

Any person who violates the terms and conditions of a waste discharge permit will 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 limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

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

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

- 1) an upset occurred and that the Permittee can identify the cause(s) of the upset;
- 2) the permitted facility was being properly operated at the time of the upset;
- 3) the Permittee submitted notice of the upset as required in Condition S3.E; and
- 4) the Permittee complied with any remedial measures required under S4.C 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 must, 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 must be a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four (4) years, or by both.

## **G20. REPORTING ANTICIPATED NONCOMPLIANCE**

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

## **G21. REPORTING OTHER INFORMATION**

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

## **G22. 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.

## **G23. CONTRACT REVIEW**

The Permittee must submit to Ecology any proposed contract for the operation of any wastewater treatment facility covered by this permit. The review is to insure consistency with Chapters 90.46 and 90.48 RCW. In the event that Ecology does not comment within a thirty (30)-day period, the Permittee may assume consistency and proceed with the contract.