NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
WASTE DISCHARGE AND RECLAIMED WATER PERMIT No. WA-002240-3

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

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The State of Washington Reclaimed Water Act
Chapter 90.46 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1342 et seq.

City of Snoqualmie
Wastewater Treatment and Water Reclamation Facility
P.O. Box 987
Snoqualmie, Washington 98065

Plant Location: 38190 SE Stearns Road Snoqualmie, WA 98065	Receiving Water: Snoqualmie River
Waterbody I.D. No.: 1218442475506	Outfall #001 Discharge Location: Latitude: 47º 32' 21" N Longitude: 121º 49' 56" W
Plant Type: Oxidation Ditch with tertiary filtration for Reclaimed Water production	Class A Reclaimed Water Storage Location (Outfall #002): Eagle Lake (9th Hole Pond) at TPC Snoqualmie Ridge Golf Course Latitude: 47º 32' 14" N Longitude: 121º 51' 45" W (Multiple end users and use locations served from this storage location)

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

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

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RECLAIMED WATER CONDITIONS

GENERAL CONDITIONS

SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special(S), Reclaimed(R), and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S3/R3	Discharge Monitoring Report	Monthly	08/15/2008
S3.E/R4.D	Noncompliance Notification	As necessary	
S4.B/R4.A	Plans for Maintaining Adequate Capacity	As necessary	
S4.C	Notification of New or Altered Sources	As necessary	
S4.D	Infiltration and Inflow Evaluation	1/permit cycle	11/30/2012
S5.B	Staffing Evaluation	1/permit cycle	12/31/2009
S5.H	Operations and Maintenance Manual Update – Oxidation Ditch Operations	1/permit cycle	7/1/2009
S5.H	Operations and Maintenance Manual Updates – Other Updates	As necessary	
S6.D	Industrial User Survey	1/permit cycle	12/31/2011
S9.B	Acute Toxicity Effluent Test Results with Permit Renewal Application	2/permit cycle	Test 1: 04/30/2012 Test 2: 10/31/2012
S10.B	Chronic Toxicity Effluent Test Results with Permit Renewal Application	2/permit cycle	Test 1: 01/31/2012 Test 2: 08/31/2012
S11.A	Priority Pollutant Scans	3/permit cycle	04/15/2012
S12	Application for Permit Renewal	1/permit cycle	12/1/2012
R3.A.3	Monthly Summary of Operating Records	Monthly with DMR	08/15/2008
R3.A.4	Cross Connection Control Report	Annual	06/01/2009
R4.B	Water Reuse Plan Update	As necessary	
R4.G	Service and Use Area Agreement Update	As necessary	
R5C.4.	Operations and Maintenance Manual Updates or Review Letter – Reclaimed Water Distribution System	1/permit cycle	9/1/2011
G1	Notice of Change in Authorization	As necessary	
G4	Reporting Planned Changes	As necessary	
G5	Engineering Report for Construction or Modification Activities	As necessary	
G21	Reporting Anticipated Noncompliance	As necessary	
G22	Reporting Other Information	As necessary	
G23	Contract Submittal	As necessary	

All submittals must be sent to the Department of Ecology at the following address:

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

All submittals related to the reclaimed water system must also be submitted to the Department of Health at:

~~Department of Health~~
~~Water Reclamation and Reuse Program~~
~~Office of Shellfish and Water Protection~~
~~1500 West 4th Avenue, Suite 403~~
~~Spokane, WA 99201~~

Department of Health
Water Reclamation and Reuse Program
16201 E. Indiana Avenue, Suite 1500
Spokane Valley, WA 99216

SPECIAL CONDITIONS

In this permit, the word "must" denotes an action that is mandatory and is equivalent to the word "shall" used in previous permits.

S1. DISCHARGE LIMITATIONS

A. Effluent 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.

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee may discharge treated municipal wastewater to the Snoqualmie River at the permitted location subject to compliance with the following limitations. Additional limitations for Class A Reclaimed Water produced by the Permittee are listed in Condition R1.

EFFLUENT LIMITATIONS[a]: OUTFALL # 001			
Parameter	Technology-Based Limits ~~Mass Discharge Limits Based on Phase 1 Design[d]~~		TMDL-Based Limits (Aug-Oct)
	Average Monthly	**Average Weekly**	**Maximum Daily[b]**
Carbonaceous Biochemical Oxygen Demand	25 mg/L, ~~259~~ 448 lbs/day 85% removal of influent CBOD	40 mg/L, ~~414~~ 717 lbs/day	206 lbs/day
Total Suspended Solids	30 mg/L, ~~310~~ 538 lbs/day 85% removal of influent TSS	45 mg/L, ~~465~~ 807 lbs/day	N/A
Fecal Coliform Bacteria	200/100 mL	400/100 mL	Technology Limits
pH[c]	Daily minimum is equal to or greater than 6.0 and the daily maximum is less than or equal to 9.0.		
Total Ammonia (as NH_3-N)	N/A	N/A	68.7 lbs/day
Parameter	**Average Monthly**	**Maximum Daily**	
Total Residual Chlorine[d]	37 µg/L	70 µg/L	

Effluent Limit Footnotes:

[a] The average monthly and weekly effluent limitations equal the arithmetic mean of the samples taken. The average monthly and weekly limitations for fecal coliform are equal to the geometric mean of the samples taken.

[b] The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day. This does not apply to pH.

[c] Indicates the range of permitted values. The Permittee must report the instantaneous maximum and minimum pH monthly. Do not average pH values.

[d] Chlorine limits apply only during emergency periods when UV disinfection is not available and the use of chlorine for disinfection is required. During normal operations with UV disinfection, chlorine limits are not applicable.

~~[d] Average monthly and average weekly discharge limits are based on Phase 1 design flows of 1.24 MGD. Condition S5.H requires the Permittee to update the approved operations and maintenance manual to identify appropriate practices and procedures necessary to efficiently manage flows based on the Phase 2 design, which includes 2 oxidation ditches. Once Ecology approves this manual update, Ecology will modify this permit to increase the mass discharge limits to those appropriate for the Phase 2 design flow of 2.15 MGD.~~

B. Mixing Zone Descriptions

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

Chronic Mixing Zone

WAC 173-201A-400(7)(a) specifies chronic mixing zones for rivers and streams shall (i) not extend in a downstream direction for a distance from the discharge port(s) greater than 300 feet plus the depth of water over the discharge port(s), or extend upstream for a distance of over 100 feet; (ii) not utilize greater than 25% of the flow; and (iii) not occupy greater than 25% of the width of the water body. Given a water depth of 10.5 feet, the mixing zone may extend downstream 310.5 feet and upstream 100 feet. Given a channel width of 160 feet, the width of the mixing zone may not extend more than 40 feet across the river channel as measured from the north bank. Chronic aquatic life criteria and human health criteria must be met at the edge of the chronic mixing zone. The maximum dilution factor for this zone is limited by the 25% flow restriction. Based on a 7Q10 flow of 346 cfs, the maximum amount of flow that may be used for dilution factor calculations is 86.5 cfs (25% of 346 cfs).

Acute Mixing Zone

WAC 173-201A-400(8)(a) specifies acute mixing zones for rivers and streams shall: (i) not extend beyond 10% of the distance towards the upstream and downstream boundaries of an authorized (chronic) mixing zone, as measured independently from the discharge port(s); (ii) not utilize greater than 2.5% of the flow; and (iii) not occupy greater than 25% of the width of the water body. Given the dimensions listed above for the chronic mixing zone, the acute mixing zone may extend downstream 31.1 feet, upstream 10 feet and 40 feet across the river channel as measured from the north bank. Acute aquatic life criteria must be met at the edge of the acute zone. The maximum dilution factor for this zone is limited by the 2.5% flow restriction. Based on a 7Q10 flow of 346 cfs, the maximum amount of flow that may be used for dilution calculations is 8.7 cfs (2.5% of 346 cfs).

AUTHORIZED DILUTION FACTORS		
Criteria	**Acute**	**Chronic**
Aquatic Life	3.7	73.7
Human Health, Carcinogen		73.7
Human Health, Non-carcinogen		73.7

S2. MONITORING REQUIREMENTS

A. Monitoring Schedule

The Permittee must monitor in accordance with the following schedule. Additional monitoring requirements for Class A Reclaimed Water Production are listed in Condition R2.

Routine Compliance Monitoring: The following parameters will be reported on the monthly Discharge Monitoring Report for discharges from Outfall #001

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Wastewater Influent	Flow	MGD	Headworks after screening	Continuous	Recording
"	CBOD	mg/L	"	3/week	24-hr Composite
"	BOD_5	mg/L	"	2/month	24-hr Composite
"	BOD_5	lbs/day	"	2/month	Calculated
"	TSS	mg/L	"	3/week	24-hr Composite
"	TSS	lbs/day	"	3/week	Calculated
Wastewater Effluent	Flow	MGD	Overflow weir to Outfall #001	Continuous	Recording
"	CBOD	mg/L	Final Effluent	3/week	24-hr Composite
"	CBOD	lbs/day	"	3/week	Calculated
"	CBOD	% removal	"	Monthly	Calculated
"	TSS	mg/L	"	3/week	24-hr Composite
"	TSS	lbs/day	"	3/week	Calculated
"	TSS	% removal	"	Monthly	Calculated
"	pH	Standard Units	"	Continuous	Recording
"	Fecal Coliform	Org./100 mL	"	3/week	Grab
"	Total ammonia	mg/L as N	"	Weekly	Grab
"	Total ammonia	lbs/day as N	"	Weekly	Calculated
"	Soluble Reactive Phosphorus	mg/L	"	Weekly	Grab
"	Soluble Reactive Phosphorus	lbs/day	"	Weekly	Calculated
"	Temperature (See Condition S9)	°C	"	Continuous	Recording
"	Chlorine	mg/L	"	Daily, as needed[a]	Grab

[a] In the event that chlorine use is required for disinfection, the Permittee must monitor the final effluent for total residual chlorine concentrations. Monitoring will continue once per day for each day chlorine is used for disinfection.

Reapplication Monitoring: The following data will be included in the Permittee's next application for permit renewal. Report results in Parts B, D and E of the NPDES application Form 2A. Monitoring must occur during the calendar year prior to the due date of the next application.

Category	Parameter	Units	Minimum Sampling Frequency	Sample Point	Sample Type
Application Part B	Dissolved Oxygen	mg/L	Analyze 3 samples taken between Sept 2011 and Oct. 2012. See S11	Immediately after disinfection	Grab
"	Total Kjeldahl Nitrogen	mg/L N	"	"	24-hr Composite
"	Nitrate plus Nitrite N	mg/L N	"	"	24-hr Composite
"	Oil and Grease	mg/L	"	"	Grab
"	Phosphorus (Total)	mg/L P	"	"	24-hr Composite
"	Total Dissolved Solids	mg/L	"	"	24-hr Composite
Application Part D	Total Hardness	mg/L	"	"	Grab
"	EPA Priority Pollutants - metals, cyanide, and phenols. 1M – 15M		"	"	24-hr Composite
"	EPA Priority Pollutants – Volatile Organic Compounds. 1V – 31V		"	"	Grab
"	EPA Priority Pollutants – Acid-extractable Compounds. 1A – 11A		"	"	24-hr Composite
"	EPA Priority Pollutants – Base-neutral Compounds. 1B – 46B		"	"	24-hr Composite
Application Part E	Acute Whole Effluent Toxicity Testing. See Section S9.A.		Test 1, February 2012 Test 2, August 2012	"	24-hr Composite
"	Chronic Whole Effluent Toxicity Testing. See Section S10.A.		Test 1, November 2011 Test 2, June 2012	"	24-hr Composite

Monitoring Schedule Definitions:
The following definitions apply to the monitoring schedule listed in S2.A.

- "Wastewater Influent" means the raw sewage flow and must be sampled entering the headworks of the treatment plant excluding any sidestream returns from inside the plant. If sidestream or recycle flows cannot be physically excluded from the influent flow stream prior to monitoring, the Permittee must account for and deduct the influence of these internal flows from the reported influent flow and loading values.
- "Final Effluent" means wastewater which is exiting, or has exited, the last treatment process or operation. Typically, this is after the disinfection process.
- "Continuous" means without interruption throughout the operating and discharging hours of the Permittee's facility, except for infrequent shutdowns for maintenance.
- 24-hour composite means a series of individual samples collected over a 24-hour period into a single container, and analyzed as one sample.
- "Grab" means an individual sample collected over a fifteen (15) minute, or less, period.
- "3/week" frequency means three (3) times during each calendar week and on a rotational basis throughout the days of the week, including weekends and holidays.
- "Weekly" means once every calendar week during the reporting period.
- "Monthly" means once every calendar month during the reporting period.
- Calculated lbs/day to be figured concurrently with the respective sample, using the following formula: Concentration (in mg/L) X Flow (in MGD) X Conversion Factor (8.34) = lbs/day.
- Percent (%) removal of BOD and TSS must be calculated with the following algorithm (concentrations in mg/L): (Average Monthly Influent Concentration - Average Monthly Effluent Concentration)/Average Monthly Influent Concentration

B. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit must be representative of the volume and nature of the monitored parameters. 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 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. The Permittee has demonstrated through comparative analysis that Hach Method 10360 "*Luminescence Measurement of Dissolved Oxygen in Water and Wastewater*" produces results equivalent to methods listed in 40 CFR Part 136. This permit authorizes the use of the Hach method listed above for BOD_5 analysis.

C. 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 measurement devices. This work is necessary to ensure 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. During meter calibration, the Permittee must ensure that influent and effluent meters produce reasonably balanced results. Calibrated influent and effluent flows

are not required to be equal as long as an overall water balance can be accounted for with internal recycle flows and changes in process tank operating volumes. The Permittee must maintain calibration records for at least three years.

The term "effluent," as used in this condition, refers to any treated wastewater flow that leaves the facility, whether discharged to the Snoqualmie River via outfall #001 or distributed as Class A Reclaimed Water.

D. 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. Ecology exempts crops, soils, and hazardous waste data from this requirement pending accreditation of laboratories for analysis of these media.

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 15th day of the month following the completed monitoring period, unless otherwise specified in this permit. The Permittee must send report(s) to:

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

Refer to Condition R3 for additional reporting requirements related to reclaimed water production.

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.

C. Recording of Results

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

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

D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by 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 thirty (30) days of sampling.

1. Immediate Noncompliance Notification

Any failure of the disinfection system must be reported immediately to the Department of Ecology's Northwest Regional Office 24-hr. number, **425-649-7000**. Any failure of the disinfection system while discharging to the Snoqualmie River via outfall #001, any collection system overflows, or any plant bypass discharging to a waterbody used as a source of drinking water must be reported immediately to the Department of Ecology and the Department of Health, Drinking Water Program. The

Department of Health's Drinking Water Program number is 360-521-0323 (business hours) or 360-481-4901 (after business hours). Refer to Condition R.3.C for notification requirements related to loss of disinfection while producing reclaimed water.

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 S4.B., "Bypass Procedures").

c. Any **upset** that exceeds any effluent limitation in the permit (See G.15, "Upset").

d. Any violation of a maximum daily or instantaneous maximum discharge limitation for any of the pollutants in Section S1.A of this permit.

e. Any overflow prior to the treatment works, whether or not such overflow endangers health or the environment or exceeds any effluent limitation in the permit.

3. Report Within Five Days

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

a. A description of the noncompliance and its cause.

b. The period of noncompliance, including exact dates and times.

c. The estimated time noncompliance is expected to continue if it has not been corrected.

d. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

e. If the noncompliance involves an overflow prior to the treatment works, an estimate of the quantity (in gallons) of untreated overflow.

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. ("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

Beginning on the effective date of this permit modification, flows or waste loads for the permitted facility must not exceed the ~~Phase 1 Design~~ values listed below. ~~As required by Condition S5.H, the Permittee must update the Operations and Maintenance Manual to describe practices and procedures to efficiently use both oxidation ditches. Once Ecology has reviewed and approved this manual update, Ecology will modify this permit to allow loading up to the Phase 2 Design values.~~

Parameter	~~Phase 1 Design Quantity~~	~~Phase 2~~ Design Quantity
Monthly average flow (max. month)	~~1.24 MGD~~	2.15 MGD
BOD_5 influent loading	~~2,860 lb./day~~	5,220 lb./day
TSS influent loading	~~2,860 lb./day~~	5,220 lb./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.

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. ~~Simultaneous operation of both oxidation ditches qualifies as a "process modification" that will allow the Permittee to maintain adequate capacity by changing the enforced rated capacity to the Phase 2 Design values.~~

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.

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.

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)].

E. Infiltration and Inflow Evaluation

1. The Permittee must document actions taken to actively mange excess inflow and infiltration into the collection system. The Permittee must maintain records of:

   a. Steps taken to identify sources of excess inflow and infiltration;

   b. Projects completed to correct significant contributions to I/I; and

   c. Plans for future I/I management.

2. The Permittee must recharacterize the impact that infiltration and inflow has on the collection system. Refer to the U.S. EPA publication, *I/I Analysis and Project Certification*, available as Publication No. 97-03 at

Publications Office
Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

or at

http://www.ecy.wa.gov/programs/wq/permits/guidance.html .

The Permittee may use plant monitoring records to assess measurable infiltration and inflow.

3. The Permittee must submit a report to Ecology with the next application for permit renewal, no later than November 30, 2012, which summarizes actions taken to manage inflow and infiltration. This report will:

   a. Summarize the records of projects executed under part 1, above.

   b. Summarize any measurable infiltration and inflow identified during recharacterization.

   c. Compare measurable inflow and infiltration to results reported in the March 2006 Inflow and Infiltration Report.

   d. If infiltration and inflow have increased by more than 15 percent from that found in the previous report based on equivalent rainfall, the report must contain a plan and a schedule for locating and correcting the sources of infiltration and inflow.

4. For any segments of the collection system which are under or adjacent to surface water, the Permittee must take appropriate steps to ensure that exfiltration to surface water does not occur.

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) 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. Staffing Evaluation

1. The Permittee must evaluate the staffing needs for the permitted facility. This evaluation must determine the adequate level of staff necessary to ensure proper operation and maintenance of the treatment plant, lift stations, collection system and the reclaimed water production and distribution system (see Condition R5.B for reclaimed water system operation and maintenance requirements).

2. The Permittee must report the findings of the staffing evaluation to Ecology no later than December 31, 2009. This report must identify the number of staff necessary to ensure proper operation and maintenance of all systems listed in part 1 above. The report must also include an organizational chart that delineates which staff positions or departments are assigned responsibility over the systems listed in part 1.

3. If the staffing evaluation recommends hiring additional staff, the Permittee must include in the report a timeline for increasing staffing to recommended levels.

4. If the staffing needs identified during this evaluation differ from the levels specified in the approved Operations and Maintenance Manual, the Permittee must update the O&M Manual to reflect the new staffing recommendations. Submit O&M Manual updates in accordance with Condition S5.H.

C. O & M Program

1. The Permittee must institute an adequate operation and maintenance program for the entire sewage system.

2. 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. 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.

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

D. 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.

E. 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 and/or sewage lift stations. Adequate safeguards include, but are not limited to: alternate power sources, standby generator(s),

or retention of inadequately treated wastes. The Permittee must, at a minimum, 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.

More stringent reliability may be required when the permitted facility is producing Class A reclaimed water. Refer to Condition R4.E for specific reliability requirements for reclaimed water production.

F. Prevent Connection of Inflow

The Permittee must strictly enforce its sewer ordinances and not allow the connection of inflow (roof drains, foundation drains, etc.) to the sanitary sewer system.

G. 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.

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.

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 a request to bypass by issuing an administrative order under RCW 90.48.120.

H. Operations and Maintenance Manual

The Permittee must keep the approved Operations and Maintenance (O&M) Manual available at the treatment plant and all operators must follow the instructions and procedures of this manual. The current O&M manual does not adequately describe appropriate practices and procedures necessary to ensure efficient use of both oxidation ditches in tandem. The Permittee must update the approved manual to correct this deficiency. The update must, at a minimum, address the following topic areas:

- Identify the minimum plant influent flow rate that will sustain adequate biological activity within both oxidation ditches when operated simultaneously.
- Identify the flow range in which the facility may operate with either a single ditch in service or with both ditches in service.
- Establish a maximum sustained average influent flow rate to use as a set point to require simultaneous operation of both ditches. This maximum rate must be less than the Phase 1 design flow rate.
- Identify the procedures necessary to convert the plant from single-ditch operation to simultaneous operation of both ditches.
- Identify the length of time necessary to transition from single-ditch operation to simultaneous two-ditch operation.

The Permittee must submit the update to Ecology for review and approval by July 1, 2009. Upon approval, Ecology will modify this permit to reflect influent loading and effluent mass discharge limit calculations based on Phase 2 design values.

In addition to the preceding requirement, the Permittee must review the O&M Manual at least annually to ensure that the manual adequately addresses current operations and maintenance procedures. Whenever the Permittee makes substantial changes or updates to the O&M Manual, the Permittee must notify Ecology of the changes made. Ecology may request submission of additional updated O&M Manual sections for review and approval on a case-by-case basis.

S6. PRETREATMENT

A. General Requirements

The Permittee must work with Ecology to ensure that all commercial and industrial users of the publicly owned treatment works (POTW) comply with the pretreatment regulations in 40 CFR Part 403 and any additional regulations that may be promulgated under Section 307(b) (pretreatment) and 308 (reporting) of the Federal Clean Water Act.

B. Wastewater Discharge Permit Required

The Permittee must not allow any significant industrial users (SIUs) to discharge wastewater to the Permittee's sewer system until such user has received a wastewater discharge permit from Ecology in accordance with Chapter 90.48 RCW and Chapter 173-216 WAC.

C. Identification and Reporting of Existing, New, and Proposed Industrial Users

1. The Permittee must take continuous, routine measures to identify all existing, new, and proposed SIUs and potential significant industrial users (PSIUs) discharging or proposing to discharge to the Permittee's sewer system (see Appendix B of the fact sheet for definitions).

2. Within thirty (30) days of becoming aware of an unpermitted existing, new, or proposed industrial user who may be an SIU, the Permittee must notify such user by registered mail that, if classified as an SIU, they must apply to Ecology and obtain a State Waste Discharge Permit. The Permittee must send a copy of this notification letter to Ecology within this same thirty (30)-day period.

3. The Permittee must also notify all Potential SIUs (PSIUs), as they are identified, that if their classification should change to an SIU, they must apply to Ecology for a State Waste Discharge Permit within thirty (30) days of such change.

D. Industrial User Survey

1. The Permittee must complete an Industrial User Survey listing all SIUs and PSIUs discharging to the POTW. The Permittee must submit the survey to Ecology by December 31, 2011. At a minimum, the Permittee must develop the list of SIUs and PSIUs by means of a telephone book search, a water utility billing records search, and a physical reconnaissance of the service area. Information on PSIUs must include, at a minimum, the business name, telephone number, address, description of the industrial process(es), and the known wastewater volumes and characteristics.

E. Duty to Enforce Discharge Prohibitions

1. Under 40 CFR 403.5(a), the Permittee must not authorize or knowingly allow the discharge of any pollutants into its POTW which cause pass-through or interference, or which otherwise violate general or specific discharge prohibitions contained in 40 CFR Part 403.5 or WAC-173-216-060.

2. The Permittee must not authorize or knowingly allow the introduction of any of the following into their treatment works:

   a. Pollutants which create a fire or explosion hazard in the POTW (including, but not limited to waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21).

   b. Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, or greater than 11.0 standard units, unless the works are specifically designed to accommodate such discharges.

   c. Solid or viscous pollutants in amounts that could cause obstruction to the flow in sewers or otherwise interfere with the operation of the POTW.

   d. Any pollutant, including oxygen-demanding pollutants, (BOD, etc.) released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW.

   e. Petroleum oil, nonbiodegradable cutting oil, or products of mineral origin in amounts that will cause interference or pass-through.

   f. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity which may cause acute worker health and safety problems.

   g. Heat in amounts that will inhibit biological activity in the POTW resulting in interference but in no case heat in such quantities such that the temperature at the POTW headworks exceeds 40 degrees Centigrade (104 degrees Fahrenheit) unless Ecology, upon request of the Permittee, approves, in writing, alternate temperature limits.

h. Any trucked or hauled pollutants, except at discharge points designated by the Permittee.

i. Wastewaters prohibited to be discharged to the POTW by the Dangerous Waste Regulations (Chapter 173-303 WAC), unless authorized under the Domestic Sewage Exclusion (WAC 173-303-071).

3. This Permit prohibits all of the following from discharge to the POTW unless approved in writing by Ecology under extraordinary circumstances (such as a lack of direct discharge alternatives due to combined sewer service or the need to augment sewage flows due to septic conditions):

   a. Noncontact cooling water in significant volumes.

   b. Stormwater, and other direct inflow sources.

   c. Wastewaters significantly affecting system hydraulic loading, which do not require treatment, or would not be afforded a significant degree of treatment by the system.

4. The Permittee must notify Ecology if any industrial user violates the prohibitions listed in this section.

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. This permit does not authorize discharge of leachate from residual solids to state surface or ground waters. The Permittee must decommission the solids storage lagoons by January 1, 2013, as a measure to cease existing discharges of leachate to groundwater. The Permittee must notify Ecology in writing when the lagoon decommissioning project is complete.

S8. EFFLUENT TEMPERATURE MONITORING

The Permittee must collect information on the effluent 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. The Permittee must measure effluent temperature using in-line, continuous data recording instrumentation. Temperature must be measured during all months in which any effluent is discharged through outfall #001.

B. 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. The Permittee may use temperature recording instrumentation that is integrated into the facility's SCADA system as long as the calibration and accuracy of the probe is equivalent to the devices discussed in the above guidance document.

C. Temperature monitoring data must be reported on monthly discharge monitoring reports 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.

D. Temperature data for each month must be submitted to Ecology on the monthly discharge monitoring report.

S9. ACUTE TOXICITY

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

The Permittee must:

- Conduct acute toxicity testing on final, disinfected effluent. One sampling event must take place during February 2012. A second sampling event must take place during August 2012.

- Submit the results to Ecology with the permit renewal application and as specified in S9.B.9 below.

- Conduct acute toxicity testing on a series of at least five concentrations of effluent, including 100% effluent, and a control.

- Use each of the following species and protocols for each acute toxicity test:

    1. Fathead minnow, *Pimephales promelas* (96-hour static-renewal test, method: EPA-821-R-02-012).

    2. Daphnid, *Ceriodaphnia dubia*, *Daphnia pulex*, or *Daphnia magna* (48-hour static test, method: EPA-821-R-02-012).

B. Sampling and Reporting Requirements

1. The Permittee must submit all reports for toxicity testing in accordance with the most recent version of Department of Ecology Publication 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 27.0% 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 test results must be submitted to Ecology within sixty (60) days after each sample date. The Permittee will also summarize the results in the next application for permit renewal.

S10. CHRONIC TOXICITY

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

The Permittee must:

- Conduct chronic toxicity testing on final, disinfected effluent. One sampling event must take place during November 2011. A second sampling event must take place during June 2012.
- Submit the results to Ecology with the permit renewal application and as specified in Condition S11.B.9 below.
- 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 27.0% effluent.
- 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.
- 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	*Pimephales promelas*	EPA-821-R-02-013
Water flea	*Ceriodaphnia dubia*	EPA-821-R-02-013
Alga	*Selenastrum capricornutum/ Raphidocelis subcapitata*	EPA-821-R-02-013

B. Sampling and Reporting Requirements

1. The Permittee must submit all reports for toxicity testing in accordance with the most recent version of Department of Ecology Publication 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 A 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 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 1.4% effluent. The ACEC equals 27.0% 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 test results must be submitted to Ecology within sixty (60) days after each sample date. The Permittee will also summarize the results in the next application for permit renewal.

S11. ADDITIONAL CHEMICAL ANALYSIS OF EFFLUENT

A. <u>General Requirements</u>

The Permittee must conduct chemical analyses of effluent samples collected from the wastewater treatment system in accordance with protocols, monitoring requirements, and QA/QC procedures specified in this section.

The Permittee must analyze effluent samples for the following constituents:

- Dissolved Oxygen
- Total Kjeldahl Nitrogen
- Nitrate plus Nitrite Nitrogen
- Oil and Grease
- Total Phosphorus
- Total Dissolved Solids
- Total Hardness
- EPA Priority Pollutants – (see Appendix A of this modified permit ~~Fact Sheet Appendix I for complete list~~)

The Permittee must time effluent sampling to coincide with one sampling of the effluent for acute and chronic toxicity. The Permittee must submit results in the next application for permit renewal. In addition, the Permittee must report the results of EPA Priority Pollutant testing to Ecology within 45 days of each sampling event.

B. Monitoring Requirements

1. The Permittee must collect and analyze three samples of effluent from the wastewater treatment. Sampling must take place between September 2011 and October 2012. At least one sampling period must occur during the winter "wet-weather" season (November through February). One sampling period must occur during the summer season (June through August); Permittee must ensure summer sampling occurs at a time when flow is directed to outfall #001 (do not sample reclaimed water flow). The third sampling period may occur during either the spring (March through May) or fall (September through October) seasons.

2. The Permittee must collect representative 24-hour composite samples of the effluent unless the approved testing method requires grab samples. When grab samples are required, the Permittee must collect six grab samples equally spaced over a 24-hour period.

C. Protocols

The Permittee must conduct sample analyses in accordance with 40 CFR Part 136. For mercury testing, the Permittee must use EPA Method 1669 for sampling and use EPA Method 1631E for analysis.

D. Quality Assurance/Quality Control Procedures

The Permittee must follow the quality assurance procedures of 40 CFR Part 136.

S12. APPLICATION FOR PERMIT RENEWAL

The Permittee must submit an application for renewal of this permit by December 1, 2012.

RECLAIMED WATER CONDITIONS

Beginning on the effective date of this permit and lasting through its expiration date, all wastewater produced by the Permittee for reclamation under this permit must comply with the Special Conditions (S.) and General Conditions (G.) as well as the Reclaimed Water Conditions (R.) of this permit.

R1. RECLAIMED WATER LIMITATIONS

A. Discharge Limitations

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 constituents or parameters in reclaimed water more frequently than, or at a concentration in excess of, that authorized by this permit must constitute a violation of the terms and conditions of this permit.

The production and use of reclaimed water must be in compliance with all specific conditions and requirements of the Washington State Water Reclamation and Reuse Standards, 1997, and is subject to the requirements listed below:

Beginning on the effective date and lasting through the expiration date of this permit, the Permittee is authorized to distribute Class A reclaimed water to public and private entities for commercial and industrial uses and/or to apply reclaimed water to land for irrigation at agronomic rates at locations listed in Condition R4. The distribution and use of reclaimed water is subject to the following treatment and water quality limitations:

Reclaimed Water Limitations (Outfall #002)			
Oxidized Wastewater – Secondary Effluent [a]			
Dissolved Oxygen	Must be measurably present in secondary effluent at all times.		
Coagulated/ Filtered Wastewater – Prior to Disinfection			
Parameter	**Average Monthly[b]**	**Average Weekly [c]**	**Sample Maximum [d]**
Turbidity	2 NTU	N/A	5 NTU
Disinfected - Reclaimed Water			
Flow	1.56 MGD	N/A	N/A
CBOD[e]	25 mg/L	40 mg/L	N/A
TSS[e]	30 mg/L	45 mg/L	N/A
Total Nitrogen as N	10 mg/L	N/A	15 mg/L
Total Coliform	N/A	**Maximum 7-day Median[f]** 2.2 MPN/ 100 ml	**Sample Maximum [d]** 23 MPN/100 ml
pH	Must be between 6.0 and 9.0 standard units at all times.		
Distribution System Point of compliance [g]			
Chlorine Residual	**Daily Minimum Concentration:** ~~0.5~~ 0.7 mg/L		

[a] The compliance point for Dissolved Oxygen is "Secondary Effluent," to be monitored at a point after the secondary clarifiers and prior to coagulant addition.

[b] The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

[c] The average weekly effluent limitation is defined as the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

[d] The sample maximum is defined as the value not to be exceeded by any single sample.

[e] The compliance point for CBOD and TSS will be the final, disinfected reclaimed water, to be monitored immediately following UV disinfection. This compliance point will also serve as the compliance point for discharges from outfall #001.

[f] The median number of total coliform organisms in the reclaimed water after disinfection may not exceed 2.2 per 100 milliliters, as determined from the bacteriological results over 7 consecutive days for which analyses have been completed. This value is **NOT** an arithmetic average or geometric average. Median is defined as the middle number of a group of numbers; that is, half the numbers have values that are greater than the median, and half the numbers have values that are less than the median. The number of total coliform organisms must not exceed 23 per 100 milliliters in any single sample.

[g] A chlorine residual of at least ~~0.5~~ 0.7 mg/L must be maintained in the reclaimed water during conveyance to the use area, or the storage pond if reclaimed water is not directly piped to the use area.

R2. RECLAIMED WATER MONITORING REQUIREMENTS

A. Class A Reclaimed Water Monitoring

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee must monitor reclaimed water production according to the following schedule. This monitoring is supplemental to monitoring requirements listed in Condition S2.

Parameter	Units	Sample Point	Sampling Frequency	Sample Type
Reclaimed Product Water Flow	MGD	Overflow weir to effluent wet well	Continuous	Recording meter
Dissolved Oxygen[a]	mg/L	Secondary Control Structure ~~After secondary clarifiers, prior to coagulant addition~~	Continuous	Recording meter
	mg/L	Reclaimed Water, After UV ~~Disinfected reclaimed water~~	Continuous	Recording meter
CBOD	mg/l	Reclaimed Water, After UV ~~Disinfected reclaimed water~~	3/week	24-hour composite
TSS	mg/l	Reclaimed Water, After UV ~~Disinfected reclaimed water~~	3/week	24-hour composite
pH	Standard Units	Reclaimed Water, After UV ~~Disinfected reclaimed water~~	Daily	Measurement
Turbidity[a]	NTU	Secondary Control Structure ~~After secondary clarifiers, prior to coagulant addition~~	Continuous	Recording meter
	NTU	Filter effluent prior to disinfection	Continuous	Recording meter
Coagulant	Lbs.	Coagulant feed	Daily	Metered usage
Coagulant Aid	Lbs.	Coagulant feed	Daily	Metered usage
Total Nitrogen	mg/l (as N)	Reclaimed Water, After UV ~~Disinfected reclaimed water~~	Weekly	24-hr composite
Total Coliform	No. of org. per 100 ml	Distribution Line @ Hydrant Sample Port ~~Disinfected reclaimed water~~	Daily (whenever reclaimed water is produced)	Grab
Total Chlorine Residual	mg/L	Distribution Line @ Hydrant Sample Port ~~Water Reuse Distribution Line~~	Continuous (whenever reclaimed water is produced)	Recording meter

[a] As of the effective date of the permit, the Permittee will not have proper instrumentation installed to provide continuous monitoring of Dissolved Oxygen or Turbidity at all points of compliance. The Permittee must install appropriate instrumentation within one year of the effective date. In the interim, the Permittee must collect one grab sample per day from each Dissolved Oxygen and Turbidity monitoring point. Grab samples are required only when the facility is producing reclaimed water.

Monitoring Schedule Definitions and Requirements:

- "Reclaimed Product Water Flow" must measure only the flow of plant effluent that has been treated to Class A Reclaimed Standards. Flow measurement must **NOT** include the flow of raw well water added to the reclaimed water distribution system. Record and report well water additions separately.
- ~~"Disinfected reclaimed water"~~ "Reclaimed Water, After UV" is the Class A product water immediately following UV Disinfection.
- The point of compliance for residual chlorine and total coliform is at the "Hydrant Sample Port" located at the BPA easement road near the end of the distribution system ~~just prior to entry to~~ at the Eagle Lake storage reservoir.
- Filter effluent turbidity analysis must be performed by a continuous recording turbidimeter and must also be read and recorded at least every four hours.
- "Continuous" means without interruption throughout the operating and discharging hours of the Permittee's facility, except for infrequent shutdowns for maintenance.
- 24-hour composite means a series of individual samples collected over a 24-hour period into a single container, and analyzed as one sample.
- "Grab" means an individual sample collected over a fifteen (15) minute, or less, period.
- "3/week" frequency means three (3) times during each calendar week and on a rotational basis throughout the days of the week, including weekends and holidays.

B. Sampling and Analytical Procedures

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

Sampling and analytical methods used to meet the water and wastewater 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, unless otherwise specified in this permit or approved in writing by the Department of Ecology (Ecology).

C. 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 measurement devices. This work is necessary to ensure 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. During meter calibration, the Permittee must ensure that all influent and effluent flow meters produce reasonably balanced results. Calibrated influent and effluent flows are not required to be equal as long as an overall water balance can be accounted for with internal recycle flows and changes in process tank operating volumes. The Permittee must maintain calibration records for at least three years.

The term "effluent," as used in this condition, refers to any treated wastewater flow that leaves the facility, whether discharged to the Snoqualmie River via outfall #001 or distributed as Class A Reclaimed Water. Effluent flow measurement must not include any flow of raw well water that is blended with Class A Reclaimed water for transmission to the Eagle Lake storage reservoir.

Appropriate flow measurement devices and methods consistent with accepted scientific practices must be selected and used to ensure the accuracy and reliability of measurements of the quantity of monitored flows. The devices must be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted industry standard for that type of device. Frequency of calibration must be in conformance with manufacturer's recommendations and at a minimum frequency of at least one calibration per year. Calibration records must be maintained for at least three years.

D. Instrumentation Calibration

Monitoring devices must be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted industry standard for that type of device. Frequency of calibration must be in conformance with the manufacturer's recommendations. Calibration records must be maintained for at least three years.

The Permittee must also verify the accuracy of on-line turbidimeters at a minimum frequency of at least once every two weeks by comparison to a laboratory bench-top turbidimeter.

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. Ecology exempts crops, soils, and hazardous waste data from this requirement pending accreditation of laboratories for analysis of these media.

R3. REPORTING AND RECORDING REQUIREMENTS

The Permittee must maintain records and report to the Departments of Ecology and Health in accordance with Special Condition S3, and the following conditions. All records must be retained for a minimum of three years. The falsification of information submitted to the Departments of Ecology and Health will constitute a violation of the terms of this permit.

A. Reclaimed Water Operational Records

1. Operating records must be maintained at the reclamation treatment plant or within a central depository within the Permittee's operating agency. These records must include: records of all analyses performed, records of operational problems, unit process and equipment breakdowns, and diversions to emergency storage or disposal; and all corrective or preventative action taken.

2. Process or equipment failures triggering an alarm that is key to maintaining reliability of reclaimed water quality must be recorded and maintained as a separate record file. The recorded information must include the time and cause of failure and corrective action taken.

3. A monthly summary of operating records as specified above must be submitted with the Discharge Monitoring Report form to the Departments of Ecology and Health at that address listed under R3.B, below.

4. The Permittee is required to coordinate with all public water system purveyors serving potable water to lots also served with reclaimed water. The Permittee must submit a letter of concurrence from the water system purveyor(s) that the all annual backflow protection assembly testing is complete and that any cross connection control reports required to be submitted to the Department of Health, Office of Drinking Water has been submitted in compliance with current Office of Drinking Water requirements. The annual report shall describe any cross connection incidents which occurred within the reuse system in the past year.

B. Submittal Reporting

The first monitoring period begins on the effective date of the permit. Monitoring results must be submitted monthly. Monitoring data obtained during the previous month must be summarized and reported on a form provided, or otherwise approved, by the Departments of Health and Ecology, and be received no later than the 15th day of the month following the completed reporting period, unless otherwise specified in this permit.

Monitoring report forms must be submitted monthly whether or not the facility is producing and distributing reclaimed water. If the reclamation facility was not operating during a given monitoring period, submit the form as required with the words "no reclamation or reuse" entered in place of the monitoring results.

Reclaimed water monitoring reports must be submitted to the following addresses:

1: Department of Ecology
Northwest Regional Office
3190 160th Avenue SE
Bellevue, WA 98008-5452

2: Department of Health
Water Reclamation and Reuse Program
16201 E. Indiana Avenue, Suite 1500
Spokane Valley, WA 99216
~~Department of Health~~
~~Water Reclamation and Reuse Program~~
~~Office of Shellfish and Water Protection~~
~~1500 West 4th Avenue, Suite~~ 403
~~Spokane, WA 99201~~

C. Notice of Noncompliance Reporting

The Permittee must take the following actions upon violation of any condition of the reclaimed water permit conditions:

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 and Health within thirty (30) days of sampling.

Any failure of the disinfection system or failure of any other treatment system components that result in distribution of reclaimed water that does not meet Class A standards, must be reported immediately to the Department of Ecology's Northwest Regional Office 24-hour number, 425-649-7000, and to the Department of Health Water Reclamation and Reuse Program at 509-329-2146 ~~509-456-2466 (business hours) or 509-370-4901 (after business hours~~). Any discharges of reclaimed water that violates end user agreements or at locations other than at permitted locations (whether due to a break in the distribution line or illicit connection) must be reported to the Departments of Ecology and Health within 24 hours of discovery.

R4. RECLAIMED WATER DISTRIBUTION AND USE

The Permittee must monitor the reclamation facility loading in accordance with Special Condition S4 and the following conditions.

A. Design Criteria and Plan to Maintain Adequate Capacity

The maximum average monthly flow of reclaimed product water through the permitted facility must not be exceeded 1.56 million gallons per day. This average does not include the flow volume of any raw well water that is blended with Class A product water for delivery to the Eagle Lake storage reservoir.

When the actual flow reaches 85 percent of the above design criteria for three consecutive months, or when the projected increases would reach design capacity within five years, whichever occurs first, the Permittee must submit to the Departments of Ecology and Health, a plan and a schedule for continuing to maintain capacity at the facility sufficient to achieve the reclaimed water limitations and other conditions of this permit.

Engineering documents associated with the plan must meet the requirements of the Water Reclamation and Reuse Standards and WAC 173-240-060, "Engineering Report," and be approved by the Departments of Ecology and Health prior to any construction. The plan must specify any contracts, ordinances, methods for financing, or other arrangements necessary to achieve this objective.

B. Authorized Uses and Locations

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to distribute water reclaimed in accordance with the terms and conditions of this permit for authorized uses.

The distribution by the Permittee of reclaimed water that does not meet the treatment, water quality and monitoring requirements established in this permit, or the use of reclaimed water other than for authorized uses and locations listed in a Department of Health- and Ecology-approved reclaimed water engineering report will constitute a violation of the terms and conditions of this permit.

The Permittee may produce and distribute Class A reclaimed water to the Eagle Lake storage reservoir at the Snoqualmie Ridge Golf Course. The Permittee may enter into end user agreements that allow withdrawal of water from the storage reservoir for use as landscape and turf irrigation. The Permittee must maintain at the treatment facility a record of authorized end users, as required by R4.G, below. End user records must identify the allowed rate of use and the approved location of use for each end user, including water used by city departments.

C. Water Reuse Plan

The Permittee must review their water reuse plan annually. The review must determine if the plan adequately contains a current summary description of the water reuse system. If amendment to the water reuse plan is necessary, the amended plan must be submitted to the Departments of Health and Ecology. Plan contents must include, but not be limited to, the following:

1. Description of the reuse distribution system.

2. Identification of uses, users, and location of reuse sites.

3. Evaluation of reuse sites, estimated volume of reclaimed water use, means of application, and for irrigation or surface percolation uses, the application rates, water balance, expected agronomic uptake, potential to impact ground water or surface water at the site, background water quality and hydrogeological information necessary to evaluate potential water quality impacts.

D. Bypass Prohibited

There must be no bypassing of untreated or partially treated wastewater from the reclamation plant or any intermediate unit processes to the distribution system or point of use at any time. All reclaimed water being distributed for beneficial use must meet Class A requirements at all times. Water not meeting Class A must be retained for additional treatment by diversion to a bypass storage lagoon or discharged to an authorized wastewater outfall.

The Departments of Ecology and Health must be notified by telephone within 24 hours of any diversion to a bypass storage lagoon or authorized outfall. Substandard wastewater must not be discharged to the reclaimed water distribution system or use areas without specific approval from the Departments of Health and Ecology.

E. Reliability

The Permittee must maintain the highest reliability class as described in the Water Reclamation and Reuse Standards which require one of the following features for each of the critical reclamation treatment unit processes of oxidation, coagulation, filtration and disinfection:

1. Alarms and standby power source. Standby power must meet Reliability Class I (EPA 430/9-74-001) at all times when producing Class A reclaimed water. Reliability Class I requires a backup power source sufficient to operate all vital components and critical lighting and ventilation during peak wastewater flow conditions. Class I reliability requires all vital components used to support the secondary processes (i.e., mechanical aerators, in-plant pumps, and disinfection system) be operable to full levels of treatment at all times. Standby power capacity must also be sufficient to operate all reclaimed water production systems, including coagulation feed system, filters and chlorination system. If there is insufficient standby power available to operate all secondary and reclaimed water treatment units, the partially treated reclaimed water must be diverted automatically upon loss of power to Outfall #001 for disposal or stored on site for treatment at a later time.

2. Alarms and automatically actuated short-term (24-hour) storage or disposal provisions. If standby power is not sufficient to meet Class I reliability, the Permittee must divert effluent to short term storage or disposal through outfall #001 during a power outage.

3. Automatically actuated long-term storage or disposal provisions for treated wastewater. If standby power is not sufficient to meet Class I reliability, the Permittee must divert effluent to short term storage or disposal through outfall #001 during a power outage.

F. Use Area Responsibilities

1. A standard notification sign must be developed by the Permittee using colors and verbiage approved by the state Department of Health. The signs must be used in all reclaimed water use areas, consistent with the *Water Reclamation and Reuse Standards*.

2. Reclaimed water use, including runoff and spray, must be confined to the designated and approved use area.

3. The Permittee must control industrial and toxic discharges to the sanitary sewer that may affect reclaimed water quality through either a delegated pretreatment program with the Department of Ecology or assuring all applicable discharges have permits issued under the Water Pollution Control Act, Chapter 90.48 RCW, and the State Waste Discharge Permit Regulation, Chapter 173-216 WAC.

4. Where the reclaimed water production, distribution and use areas are under direct control of the Permittee, the Permittee must maintain control and be responsible for all facilities and activities inherent to the production, distribution and use of the reclaimed water. The Permittee must ensure that the reuse system operates as approved by the Departments of Health and Ecology.

G. Service and Use Area Agreement

Where the reclaimed water additional treatment, distribution system or use area is not under direct control of the Permittee:

1. The person(s) who provides additional treatment, distributes, owns, or otherwise maintains control over the reclaimed water use area is responsible for reuse facilities and activities inherent to the production, distribution and use of the reclaimed water to ensure that the system operates as approved by the Departments of Health and Ecology in accordance with this permit.

2. Reclaimed water uses, including runoff and spray, must be confined to the designated and approved use areas.

3. A binding Service and Use Area Agreement among the parties involved is required to ensure that construction, operation, maintenance, and monitoring meet all requirements of the Departments of Health and Ecology. This agreement must be consistent with the requirements of the *Water Reclamation and Reuse Standards*, 1997. Health and Ecology have approved a master end user agreement for use by the Permittee. The Permittee must sign agreements with all existing and new end users. Copies of the signed agreements must be available for inspection at the wastewater treatment plant. Any changes made to the master end user agreement must be submitted to and approved by Ecology and Health prior to implementation.

4. The Service and Use Area Agreement must provide the Permittee with authority to terminate service of reclaimed water to a customer violating the state *Water Reclamation and Reuse Standards* and restrictions outlined in the Service and Use Area Agreement.

5. No reclaimed water must be distributed by the Permittee without a reclaimed water service and use agreement approved by Health and Ecology.

H. Reclaimed Water Ordinance

The Permittee must complete and maintain an up-to-date local ordinance that includes policies and procedures for the distribution and delivery of reclaimed water. The ordinance must provide the Permittee with the authority to terminate service of reclaimed water from any customer violating the state *Water Reclamation and Reuse Standards* and restrictions outlined in the service and use agreement.

I. Irrigation Use

1. For any irrigation use of reclaimed water, the hydraulic loading rate of reclaimed water must be determined based on a detailed water balance analysis. The calculated loading rate(s) and the parameters and methods used to determine the loading rate(s) must be submitted to Ecology and Health for approval.

2. There must be no runoff of reclaimed water applied to land by spray irrigation to any surface waters of the state or to any land not authorized by approved use agreement.

3. There must be no application of reclaimed water for irrigation purposes when the ground is saturated or frozen.

4. The reclaimed water must not be applied to the irrigation lands in quantities that:

   a. Significantly reduce or destroy the long-term infiltration rate of the soil.

   b. Cause long-term anaerobic conditions in the soil.

   c. Cause ponding of reclaimed water and produce objectionable odors or support insects or vectors.

   d. Cause leaching losses of constituents of concern beyond the treatment zone or in excess of the approved design. Constituents of concern are constituents in the reclaimed water, partial decomposition products, or soil constituents that would alter ground water quality in amounts that would affect current and future beneficial uses.

5. The Permittee must maintain all irrigation agreements for lands not owned for the duration of the permit. The Permittee must inform the Departments of Health and Ecology in writing of any proposed changes to existing agreements.

R5. OPERATION AND MAINTENANCE

The Permittee must operate and maintain the facility in accordance with Special Condition S5 and the following conditions.

A. Certified Operator

An operator certified for at least a Class III plant by the state of Washington must be in responsible charge of the day-to-day operation of the water reclamation plant. An operator certified for at least a Class II plant must be in charge during all regularly scheduled shifts.

B. Reclaimed Water System Maintenance

The Permittee must institute an adequate operation and maintenance (O&M) program for the entire reclamation facility. Maintenance records must be maintained on all major electrical and mechanical components of the treatment plant, collection, distribution and use areas. 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. These maintenance records must be available for inspection at all times.

1. At all times, the reclamation facility, distribution and use areas must be maintained to ensure that all equipment is kept in a reliable operating condition.

2. A chlorine residual of at least ~~0.5~~ 0.7 mg/l must be maintained in the reclaimed water during conveyance from the reclamation plant to the use area ~~unless waived by the Departments of Health and Ecology~~. Permittee must employ reliability measures that prevent the distribution of reclaimed water to Eagle Lake that does not meet this standard.

3. Maintenance of a chlorine residual is not required in reclaimed water impoundments and storage ponds. At the discretion of the Departments of Health and Ecology, chlorine residual may not be required in reclaimed water distributed from storage ponds.

C. Operation and Maintenance Manual

The Operation and Maintenance Manual for the facility must include the following reclaimed water information:

1. An alarm condition response plan to ensure that no untreated or inadequately treated wastewater will be delivered to the use areas.

2. A discussion of the cross-connection control and inspection program, including who will be responsible for compliance and testing of cross connection control devices.

3. Operational strategies for the reclaimed water use areas.

4. The manual must clearly describe practices and procedures that prevent distribution of water not meeting Class A standards to Eagle Lake. Permittee must review the current manual and, as necessary, revise the manual to describe methods used to prevent water from being distributed to Eagle Lake when there is insufficient chlorine

residual in the line. Permittee must submit all necessary O&M Manual revisions to Ecology and Health for review and approval by September 1, 2011. If no revisions are necessary, the Permittee must submit a letter to Ecology and Health by the date listed above confirming this review was completed.

The Permittee must evaluate the reclaimed water system information in the existing operations and maintenance manual on an annual basis. Refer to Condition S5.H for notification and submission requirements for revisions made to the approved O&M Manual.

GENERAL CONDITIONS

G1. SIGNATORY REQUIREMENTS

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

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

   For the purpose of this section, a responsible corporate officer means:

   (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or

   (ii) The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

2. In the case of a partnership, by a general partner.

3. In the case of sole proprietorship, by the proprietor.

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

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

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

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

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

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

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

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

G2. RIGHT OF INSPECTION AND ENTRY

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

A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit.

B. To have access to and copy, at reasonable times and at reasonable cost, any records required to be kept under the terms and conditions of this permit.

C. To inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.

D. To sample or monitor, at reasonable times, any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

G3. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the Permittee) or upon Ecology's initiative. However, the permit may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR 122.62, 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 thirty (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 resuspended or reintroduced to the final effluent stream for discharge to state waters.

G10. DUTY TO PROVIDE INFORMATION

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

G11. OTHER REQUIREMENTS OF 40 CFR

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

G12. ADDITIONAL MONITORING

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

G13. PAYMENT OF FEES

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

G14. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit is deemed guilty of a crime, and upon conviction thereof 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 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 noncritical 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 ensure 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.

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.

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

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

CONVENTIONAL PARAMETERS

Pollutant & CAS No. *(if available)*	**Recommended Analytical Protocol**	**Detection (DL)[1]** *µg/L unless specified*	**Quantitation Level (QL)[2]** *µg/L unless specified*
Biochemical Oxygen Demand	SM5210-B		2 mg/L
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- GH		0.3 mg/L
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		0.2º C
pH	SM4500-H^+ B	N/A	N/A

NONCONVENTIONAL PARAMETERS

Pollutant & CAS No. *(if available)*	**Recommended Analytical Protocol**	**Detection (DL)[1]** *µg/L unless specified*	**Quantitation Level (QL)[2]** *µg/L unless specified*
Total Alkalinity	SM2320-B		5 mg/L as CaCO3
Chlorine, Total Residual	SM4500 Cl G		50.0
Color	SM2120 B/C/E		10 color units
Fecal Coliform	SM 9221D/E,9222	N/A	N/A
Fluoride (16984-48-8)	SM4500-F E	25	100
Nitrate-Nitrite (as N)	SM4500-NO3- E/F/H		100
Nitrogen, Total Kjeldahl (as N)	SM4500-NH3-C/E/FG		300
Ortho-Phosphate (PO_4 as P)	SM4500- PE/PF	3	10
Phosphorus, Total (as P)	SM4500-PE/PF	3	10
Oil and Grease (HEM)	1664A	1,400	5,000
Salinity	SM2520-B		3 PSS
Settleable Solids	SM2540 -F		100
Sulfate (as mg/L SO_4)	SM4110-B		200
Sulfide (as mg/L S)	SM4500-S^2F/D/E/G		200
Sulfite (as mg/L SO_3)	SM4500-SO3B		2000
Total dissolved solids	SM2540 C		20 mg/L
Total Hardness	SM2340B		200 as CaCO3
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	Ecology NWTPH Dx	250	250
NWTPH Gx	Ecology NWTPH Gx	250	250
Tin, Total (7440-31-5)	200.8	0.3	1.5
Titanium, Total (7440-32-6)	200.8	0.5	2.5

PRIORITY POLLUTANTS

Pollutant & CAS No. *(if available)*	Recommended Analytical Protocol	Detection (DL)[1] *µg/L unless specified*	Quantitation Level (QL)[2] *µg/L unless specified*
METALS, CYANIDE & TOTAL PHENOLS			
Antimony, Total (7440-36-0)	200.8	0.3	1.0
Arsenic, Total (7440-38-2)	200.8	0.1	0.5
Beryllium, Total (7440-41-7)	200.8	0.1	0.5
Cadmium, Total (7440-43-9)	200.8	0.05	0.25
Chromium (hex) dissolved (18540-29-9)	SM3500-Cr EC	0.3	1.2
Chromium, Total (7440-47-3)	200.8	0.2	1.0
Copper, Total (7440-50-8)	200.8	0.4	2.0
Lead, Total (7439-92-1)	200.8	0.1	0.5
Mercury, Total (7439-97-6)	1631E	0.0002	0.0005
Nickel, Total (7440-02-0)	200.8	0.1	0.5
Selenium, Total (7782-49-2)	200.8	1.0	1.0
Silver, Total (7440-22-4)	200.8	0.04	0.2
Thallium, Total (7440-28-0)	200.8	0.09	0.36
Zinc, Total (7440-66-6)	200.8	0.5	2.5
Cyanide, Total (57-12-5)	335.4	5	10
Cyanide, Weak Acid Dissociable	SM4500-CN I	5	10
Phenols, Total	EPA 420.1		50
DIOXIN			
2,3,7,8-Tetra-Chlorodibenzo-P-Dioxin (176-40-16)	1613B	1.3 pg/L	5 pg/L

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

PRIORITY POLLUTANTS (continued)

Pollutant & CAS No. *(if available)*	**Recommended Analytical Protocol**	**Detection (DL)[1]** *µg/L unless specified*	**Quantitation Level (QL)[2]** *µg/L unless specified*
VOLATILE COMPOUNDS			
Acrolein (107-02-8)	624	5	10
Acrylonitrile (107-13-1)	624	1.0	2.0
Benzene (71-43-2)	624	1.0	2.0
Bromoform (75-25-2)	624	1.0	2.0
Carbon tetrachloride (56-23-5)	624/601 or SM6230B	1.0	2.0
Chlorobenzene (108-90-7)	624	1.0	2.0
Chloroethane (75-00-3)	624/601	1.0	2.0
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) [3]	624	1.0	2.0
Ethylbenzene (100-41-4)	624	1.0	2.0
Methyl bromide (74-83-9) (Bromomethane)	624/601	5.0	10.0
Methyl chloride (74-87-3) (Chloromethane)	624	1.0	2.0
Methylene chloride (75-09-2)	624	5.0	10.0
1,1,2,2-Tetrachloroethane (79-34-5)	624	1.9	2.0
Tetrachloroethylene (127-18-4)	624	1.0	2.0
Toluene (108-88-3)	624	1.0	2.0
1,2-Trans-Dichloroethylene (156-60-5) (Ethylene dichloride)	624	1.0	2.0
1,1,1-Trichloroethane (71-55-6)	624	1.0	2.0
1,1,2-Trichloroethane (79-00-5)	624	1.0	2.0
Trichloroethylene (79-01-6)	624	1.0	2.0
Vinyl chloride (75-01-4)	624/SM6200B	1.0	2.0

PRIORITY POLLUTANTS (continued)

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

Pollutant & CAS No. *(if available)*	**Recommended Analytical Protocol**	**Detection (DL)[1]** *µg/L unless specified*	**Quantitation Level (QL)[2]** *µg/L unless specified*
BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)			
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
3-Methyl cholanthrene (56-49-5)	625	2.0	8.0
Naphthalene (91-20-3)	625	0.3	0.6
Nitrobenzene (98-95-3)	625	0.5	1.0
N-Nitrosodimethylamine (62-75-9)	607/625	2.0	4.0
N-Nitrosodi-n-propylamine (621-64-7)	607/625	0.5	1.0
N-Nitrosodiphenylamine (86-30-6)	625	0.5	1.0
Perylene (198-55-0)	625	1.9	7.6
Phenanthrene (85-01-8)	625	0.3	0.6
Pyrene (129-00-0)	625	0.3	0.6
1,2,4-Trichlorobenzene (120-82-1)	625	0.3	0.6

Pollutant & CAS No. *(if available)*	**Recommended Analytical Protocol**	**Detection (DL)[1]** *µg/L unless specified*	**Quantitation Level (QL)[2]** *µg/L unless specified*
PESTICIDES/PCBs			
Aldrin (309-00-2)	608	0.025	0.05
alpha-BHC (319-84-6)	608	0.025	0.05
beta-BHC (319-85-7)	608	0.025	0.05
gamma-BHC (58-89-9)	608	0.025	0.05
delta-BHC (319-86-8)	608	0.025	0.05
Chlordane (57-74-9) [5]	608	0.025	0.05
4,4'-DDT (50-29-3)	608	0.025	0.05
4,4'-DDE (72-55-9)	608	0.025	0.05[10]
4,4' DDD (72-54-8)	608	0.025	0.05
Dieldrin (60-57-1)	608	0.025	0.05
alpha-Endosulfan (959-98-8)	608	0.025	0.05
beta-Endosulfan (33213-65-9)	608	0.025	0.05
Endosulfan Sulfate (1031-07-8)	608	0.025	0.05

PRIORITY POLLUTANTS (continued)

Pollutant & CAS No. *(if available)*	Recommended Analytical Protocol	Detection (DL)[1] *µg/L unless specified*	Quantitation Level (QL)[2] *µg/L unless specified*
PESTICIDES/PCBs			
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) [6]	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) [6]	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, or 5) x 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. 1, 3-dichloroproylene (mixed isomers) You may report this parameter as two separate parameters: cis-1, 3-dichlorpropropene (10061-01-5) and trans-1, 3-dichloropropene (10061-02-6).

4. Total Benzofluoranthenes - Because Benzo(b)fluoranthene, Benzo(j)fluoranthene and Benzo(k)fluoranthene co-elute you may report these three isomers as total benzofluoranthenes.

5. 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.

6. PCB 1016 & PCB 1242 – You may report these two PCB compounds as one parameter called PCB 1016/1242.