

Issuance Date: January 28, 2013  
Effective Date: March 1, 2013  
Expiration Date: February 28, 2018

## State Waste Discharge Permit Number ST0045515

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

In compliance with the provisions of the  
State of Washington Water Pollution Control Law  
Chapter 90.48 Revised Code of Washington, as amended,

**Edison Wastewater Treatment System**  
Edison Clean Water Subarea – Skagit County  
Planning and Development Services  
1800 Continental Place  
Mt Vernon, WA 98273

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

Plant Location:	5801 Main Ave, Bow, WA 98232 Latitude: 48.5616, Longitude: -122.4354
Treatment Type:	Individual septic tanks with effluent pumping (STEP) with recirculating gravel filtration, UV disinfection, and drainfield disposal

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## Summary of Permit Report Submittals

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

Permit Section	Submittal	Frequency	First Submittal Date
S3.A	Discharge monitoring report	Quarterly	April 15, 2013
S3.E	Reporting permit violations	As necessary	
S4.B	Plans for maintaining adequate capacity	As necessary	
S4.D	Notification of new or altered sources	As necessary	
S5.A	Operator certification – Group I	1/permit cycle	February 28, 2018
S5.F	Reporting bypasses	As necessary	
S8	Application for permit renewal	1/permit cycle	August 31, 2017
G1	Notice of change in authorization	As necessary	
G4	Permit application for substantive changes to the discharge	As necessary	
G5	Engineering report for construction or modification activities	As necessary	
G7	Notice of permit transfer	As necessary	
G8	Payment of fees	As assessed	

## Special Conditions

### S1. Discharge limits

#### S1.A. Effluent limits

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 concentration in excess of, that authorized by this permit violates the terms and conditions of this permit. Wastewater flows and loadings must not exceed the Design Criteria specified in Section S4.

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge treated domestic wastewater to drainfields #1 and #2 and the infiltration trench subject to the limits in Table 1.

**Table 1. Wastewater effluent limits**

Discharge Locations (latitude, longitude):		
Outfall 001: Post UV (effluent monitoring location), 48.5616°, -122.43566°		
Outfall 01A: Drainfield #1, 48.5618°, -122.4343°		
Outfall 01B: Drainfield #2: 48.5600°, -122.4349°		
Outfall 01C: Infiltration Trench: 48.5622°, -122.4343°		
Parameter	Average Monthly <sup>a</sup>	
Biochemical Oxygen Demand (BOD <sub>5</sub> )	30 mg/L <sup>b</sup>	
Total Suspended Solids (TSS)	30 mg/L <sup>b</sup>	
Parameter	Monthly Geometric Mean <sup>c</sup>	
Fecal Coliform	200 count / 100 mL	
Parameter	Minimum	Maximum
pH	6.0 standard units	9.0 standard units

<sup>a</sup> Average monthly effluent limit means the highest allowable average of daily discharges over a calendar month. To calculate, add the value of each daily discharge measured during a calendar month and divide this sum by the total number of daily discharges measured.

<sup>b</sup> Since this is a septic tank effluent pumping (STEP) collection system, Ecology will assume 85% removal of BOD<sub>5</sub> and TSS is achieved in the STEP system / recirculation gravel treatment combination if the concentration limits are met.

<sup>c</sup> Ecology provides directions to calculate the monthly geometric mean in publication No.-04-10-020, *Information Manual for Treatment Plant Operators* available at: <http://www.ecy.wa.gov/pubs/0410020.pdf>

**S1.B. *Best management practices/pollution prevention***

The Permittee must comply with the following Best Management Practices to prevent pollution to waters of the State:

1. Do not discharge in excess of the hydraulic capacity of the drainfields so that the drainfields pond or overflow.
2. Do not discharge priority pollutants, dangerous wastes, or toxics in toxic amounts.

**S2. Monitoring requirements**

**S2.A. *Wastewater monitoring schedule***

The Permittee must monitor the wastewater according to the schedule in Table 2 and the requirements specified in Appendix A. A characterization period of more frequent monitoring is required to characterize facility performance throughout all seasons. After a year, the Permittee can request by letter to the Department of Ecology (Ecology) to sample at the post-characterization frequency, in accordance with Table 2. The reduced sampling frequency will be granted if there is sufficient, quality data that demonstrates the effluent meets permit limits throughout all seasons.

Drainfield #1 refers to the original drip irrigation system located directly east of the gravel filter. Drainfield #2 is the six zone infiltration system located south of drainfield #1. The infiltration trench is the overflow trench located north of drainfield #1.

**S2.B. *Disposal field monitoring schedule***

The Permittee must monitor the drainfields for ponding and record the depth to groundwater in the monitoring wells according to Table 3. The Permittee must include the following information for each well: top of casing elevation (NAVD88), well tag number, latitude/longitude, and depth to groundwater from the top of casing. For each drainfield zone, the Permittee must also indicate the elevation of the lowest-elevation discharge chamber. The Permittee must include these observations in the quarterly monitoring reports.

**S2.C. *Sampling and analytical procedures***

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

Sampling and analytical methods used to meet the wastewater monitoring requirements specified in this permit must conform to the latest revision of the following rules and documents unless otherwise specified in this permit or approved in writing by Ecology.

- *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136.
- *Standard Methods for the Examination of Water and Wastewater* (APHA).

**Table 2. Wastewater monitoring schedule**

			Characterization Period	Post-Characterization
Parameter	Units	Sample Type	Minimum Sampling Frequency	Minimum Sampling Frequency
(1) Wastewater Influent <sup>a</sup>				
Flow	gallons/day (gpd)	metered	continuous <sup>b</sup>	continuous
BOD <sub>5</sub>	mg/L	grab <sup>c</sup>	4/year <sup>d</sup>	4/year <sup>d</sup>
BOD <sub>5</sub>	lbs/day <sup>e</sup>	calculated	4/year <sup>d</sup>	4/year <sup>d</sup>
TSS	mg/L	grab	4/year <sup>d</sup>	4/year <sup>d</sup>
TSS	lbs/day	calculated	4/year <sup>d</sup>	4/year <sup>d</sup>
(2) Wastewater Effluent <sup>f</sup>				
Flow to Drainfield #1 Flow to Drainfield #2	gpd	metered	continuous	continuous
Flow to infiltration trench <sup>g</sup>	gpd	metered	1/day	1/day
BOD <sub>5</sub>	mg/L	grab	1/month	4/year <sup>d</sup>
TSS	mg/L	grab	1/month	4/year <sup>d</sup>
Fecal Coliform <sup>h</sup>	#org/100 ml	grab	1/month	1/month
Total Coliform <sup>h</sup>	#org/100 ml	grab	4/year <sup>d</sup>	-
pH <sup>i</sup>	std units	grab	1/month	4/year <sup>d</sup>
Dissolved Oxygen	mg/L	grab	4/year <sup>d</sup>	-
Kjeldahl Nitrogen (TKN)	mg/l as N	grab	4/year <sup>d</sup>	4/year <sup>d</sup>
Nitrate+Nitrite Nitrogen	mg/l as N	grab	4/year <sup>d</sup>	4/year <sup>d</sup>
Phosphorus (Total)	mg/l as P	grab	4/year <sup>d</sup>	-

<sup>a</sup> *Influent* means the raw sewage flow from the collection system into the treatment facility. Sample must be taken at the influent flow meter vault.

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

<sup>c</sup> Grab means an individual sample collected over a 15 minute, or less, period.

<sup>d</sup> 4/year samples must be taken in January, April, July, and October.

<sup>e</sup> lbs/day = (concentration [mg/L] x flow [gpd] x 8.34) / 1,000,000

<sup>f</sup> *Effluent* means wastewater that has exited the UV system prior to land application. Sample must be taken from the effluent pump chamber.

<sup>g</sup> Monitoring infiltration trench flow is only required when discharging effluent to the trench.

<sup>h</sup> Report a numerical value for fecal coliform; do not report a result as too numerous to count (TNTC). Follow procedures in Ecology's *Information Manual for Wastewater Treatment Plant Operators*, Publication Number 04-10-020 available at: <http://www.ecy.wa.gov/programs/wq/permits/guidance.html>.

<sup>i</sup> Report the instantaneous maximum and minimum pH. Do not average pH values.

**Table 3. Disposal field monitoring schedule**

Parameter	Units	Sample Locations	Sample Type	Sample Frequency
Depth of groundwater from top of casing	inches	P8, P10, P11	Measure	Monthly in 2013 and 2014
Ponding in drainfield	description	Drip Field	Observation	Monthly in 2013 and 2014

**S2.D. Flow measurement, field measurement, and continuous monitoring devices**

The Permittee must:

1. Select and use appropriate flow measurement, field measurement, and continuous monitoring devices and methods consistent with accepted scientific practices.
2. Install, calibrate, and maintain these devices to ensure the accuracy of the measurements is consistent with the accepted industry standard and the manufacturer's recommendation for that type of device.
3. The Permittee must calibrate continuous pH measurement instruments using a grab sample analyzed in the lab with a pH meter calibrated with standard buffers and analyzed within 15 minutes of sampling.
4. Use field measurement devices as directed by the manufacturer and do not use reagents beyond their expiration dates.
5. Calibrate these devices at the frequency recommended by the manufacturer.
6. Maintain calibration records for at least three years.

**S2.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, pH, and internal process control parameters are exempt from this requirement.

**S2.F. Request for reduction in monitoring**

The Permittee may request, in writing, a reduction of the sampling frequency after twelve (12) months of monitoring. Ecology will consider reducing the monitoring frequency to the "post-characterization" frequency listed in Table 2. After twelve (12) months of monitoring at the post-characterization frequency, the Permittee may request an additional reduction of the sampling frequency. At this point Ecology will review each request and at its discretion grant the request when it reissues the permit or by a permit modification.

For these additional requests the Permittee must:

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



### **S3. Reporting and record keeping requirements**

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

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

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

1. Summarize, report, and submit monitoring data obtained during each monitoring period on a Discharge Monitoring Report (DMR) form provided, or otherwise approved, by Ecology. Include a summary listing daily results for the parameters tabulated in Special Condition S2, including MDLs and QLs (when applicable). If submitting DMRs electronically, report a value for each day sampling occurred and for the summary values (when applicable) included on the form.
2. If the Permittee used an alternative method not specified in the permit and as allowed in Appendix A, report the test method, DL, and QL on the discharge monitoring report or in the required online report.
3. Ensure that DMR forms are postmarked or received by Ecology no later than the dates specified below, unless otherwise specified in this permit. If submitting DMRs electronically, submit the DMR no later than the dates specified below, unless otherwise specified in this permit.
4. Submit DMRs for parameters with the monitoring frequencies specified in S2 (monthly, 4/year, etc.) at the reporting schedule identified below. The Permittee must:

Submit **quarterly** DMRs by the 15<sup>th</sup> day of the month following the monitoring period. Quarterly sampling periods are January through March, April through June, July through September, and October through December.

5. Submit reports to Ecology online using Ecology's WQWebDMR system or send reports to Ecology at:

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

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

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

**S3.C. *Recording of results***

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

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

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

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

**S3.E. *Reporting permit violations***

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

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

**a. *Immediate reporting***

The Permittee must immediately report to Ecology and the Local Health jurisdiction (at the numbers listed below), all:

- Failures of the disinfection system.
- Collection system overflows.
- Plant bypasses resulting in a discharge.
- Any other failures of the sewage system (pipe breaks, etc)

Ecology's Northwest Regional Office	425-649-7000
Skagit County Health Department	360-336-9380

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

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

1. Any noncompliance that may endanger health or the environment, unless previously reported under immediate reporting requirements.

2. Any unanticipated bypass that causes an exceedance of an effluent limit in the permit (See Part S5.F, *Bypass Procedures*).
3. Any upset that causes an exceedance of an effluent limit in the permit. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limits because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
4. Any overflow prior to the treatment works, whether or not such overflow endangers health or the environment or exceeds any effluent limit in the permit.

**c. Report within five days**

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

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

**d. Waiver of written reports**

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

**e. All other permit violation reporting**

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

**f. Report submittal**

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

**S3.F. Other reporting**

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

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

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

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

**S4. Facility loading**

**S4.A. Design criteria**

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

Overall Facility Maximum Day Flow with 2 Drainfields	20,000 gpd
Drainfield #1 – Maximum Day Flow	2,000 gpd
Drainfield #2 – Maximum Day Flow	18,000 gpd
BOD <sub>5</sub> Influent Loading to Treatment Plant for Maximum Day	56 lb/day
TSS Influent Loading to Treatment Plant for Maximum Day	56 lb/day

**S4.B. Plans for maintaining adequate capacity**

**1. Conditions triggering plan submittal**

The Edison wastewater treatment system is currently approaching full capacity due to hydraulic limitations of the drainfields. If plant flows or loadings are projected to exceed drainfield or gravel filter capacity within five years, the Permittee must submit to Ecology a plan and a schedule for increasing capacity of the affected component(s).

**2. Plan and schedule content**

The capacity plan must identify the actions necessary to maintain adequate capacity for the expected population growth and to meet the limits and requirements of the permit. The Permittee must consider the following topics and actions in its plan.

- a. Analysis of the present design and proposed process modifications.
- b. Reduction or elimination of excessive infiltration and inflow of ground and surface water into the sewer system.
- c. Limits on future sewer extensions or connections or additional waste loads.
- d. Modification or expansion of facilities.
- e. Reduction of commercial flows or waste loads.

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.

**S4.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.

**S4.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 wastewater treatment plant is proposed which:
  - a. Would interfere with the operation of, or exceed the design capacity of, any portion of the wastewater treatment plant,
  - b. Is not part of an approved general sewer plan or approved plans and specifications, or
  - c. Is 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 wastewater treatment plant'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 treatment plant, and the anticipated impact on the Permittee's effluent.

**S5. *Operation and maintenance***

The Permittee must, at all times, properly operate and maintain all facilities or systems of treatment and control (and related appurtenances), which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes keeping an 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.

**S5.A. *Certified operator***

Beginning February 28, 2018, this facility must be operated by an operator certified by the state of Washington for at least a Class I plant. This operator must be in responsible charge of the day-to-day operation of the wastewater treatment plant.

**S5.B. *O & M program***

The Permittee must:

1. Maintain an adequate operation and maintenance program for the entire sewage system.

2. 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. Make maintenance records available for inspection at all times.

**S5.C. *Short-term reduction***

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

If a Permittee contemplates a reduction in the level of treatment that would cause a violation of permit discharge limits 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 days prior to such activities.
2. Detail the reasons for, length of time of, and the potential effects of the reduced level of treatment.

This notification does not relieve the Permittee of its obligations under this permit.

**S5.D. *Electrical power failure***

The Permittee must ensure that adequate safeguards prevent the discharge of untreated wastes or wastes not treated in accordance with the requirements of this permit during electrical power failure at the treatment plant 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 maintain Reliability Class II (EPA 430-99-74-001) at the wastewater treatment plant, which requires primary sedimentation and disinfection. For this facility, the school owns, tests, and maintains the backup diesel generator.

**S5.E. *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.

**S5.F. *Bypass procedures***

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

1. *Bypass for essential maintenance without the potential to cause violation of permit limits or conditions.* This permit authorizes a bypass if it allows for essential maintenance and does not have the potential to cause violations of limits or other conditions of this permit, or adversely impact public health as determined by Ecology prior to the bypass. The Permittee must submit prior notice, if possible, at least ten (10) days before the date of the bypass.

2. *Bypass which is unavoidable, unanticipated, and results in noncompliance of this permit.* This permit authorizes such a bypass only if:
  - a. Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities that would cause them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass.
  - b. No feasible alternatives to the bypass exist, such as:
    - The use of auxiliary treatment facilities.
    - Retention of untreated wastes.
    - Transport of untreated wastes to another treatment facility or preventative maintenance), or transport of untreated wastes to another treatment facility.
  - c. Ecology is properly notified 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 days before the planned date of bypass. The notice must contain:
    - A description of the bypass and its cause.
    - An analysis of all known alternatives that would eliminate, reduce, or mitigate the need for bypassing.
    - A cost-effectiveness analysis of alternatives including comparative resource damage assessment.
    - The minimum and maximum duration of bypass under each alternative.
    - A recommendation as to the preferred alternative for conducting the bypass.
    - The projected date of bypass initiation.
    - A statement of compliance with SEPA.
    - Details of the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.
  - b. For probable construction bypasses, the Permittee must notify Ecology of the need to bypass as early in the planning process as possible. The Permittee must consider the analysis required above during preparation of the engineering report or facilities plan and plans and specifications and must include these to the extent practical. In cases where the Permittee determines the probable need to bypass early, the Permittee must continue to analyze conditions up to and including the construction period in an effort to minimize or eliminate the bypass.

- c. Ecology will consider the following prior to issuing an administrative order for this type of bypass:
- If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
  - If feasible alternatives to bypass exist, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
  - If the Permittee planned and scheduled the bypass to minimize adverse effects on the public and the environment.

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

*S5.G. Operations and maintenance manual*

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

The Permittee must:

- a. Submit to Ecology for review and approval substantial changes or updates to the O&M Manual whenever it incorporates them into the manual. The Permittee must submit an electronic copy (preferably as a PDF).
- b. Keep the approved O&M Manual at the permitted facility.
- c. Follow the instructions and procedures of this manual.

**2. O&M manual components**

In addition to the requirements of WAC 173-240-150(1) and (2), the Permittee must ensure that the following are included in the O&M manual with the next manual revision:

- a. Emergency procedures for plant shutdown and cleanup in event of wastewater system upset or failure, or collection system leak.
- b. Reporting protocols for submitting reports to Ecology to comply with the reporting requirements in the discharge permit.
- c. Any directions to maintenance staff when cleaning, or maintaining other equipment or performing other tasks which are necessary to protect the operation of the wastewater system (for example blocking all floor drains before beginning the overhaul of a stationary engine.)
- d. Treatment plant process control monitoring schedule.
- e. Wastewater sampling protocols and procedures for compliance with the sampling and reporting requirements in the wastewater discharge permit.



- f. Minimum staffing adequate to operate and maintain the treatment processes and carry out compliance monitoring required by the permit.

**S5.H. *Land application best management practices***

The Permittee must:

1. Not allow any surface runoff of wastewater from drainfields to any surface waters of the state or to any land not owned by or under its control.
2. Use recognized good practices, and all available and reasonable procedures to control odors from the land application system.
3. Implement measures to reduce odors to a reasonable minimum.
4. Not apply wastewater to the drainfields in quantities that:
  - a. Significantly reduce or destroy the long-term infiltration rate of the soil.
  - b. Would cause long-term anaerobic conditions in the soil.
  - c. Would cause ponding of wastewater and produce objectionable odors or support insects or vectors.
  - d. Would 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 wastewater, partial decomposition products, or soil constituents that would alter groundwater quality in amounts that would affect current and future beneficial uses.

**S6. Pretreatment**

The Permittee must work with Ecology to ensure that all commercial users comply with the pretreatment regulations in 40 CFR Part 403 and any additional regulations that the Environmental Protection Agency (U.S. EPA) may promulgate under Section 307(b) (pretreatment) and 308 (reporting) of the Federal Clean Water Act.

**S6.A. *Discharge authorization required***

The Permittee must

1. Establish a process for authorizing non-domestic wastewater discharges that ensures that no significant industrial users (SIUs) discharge to the collection system.
2. Require sources of non-domestic wastewater that do not qualify as SIUs but merit a degree of oversight to apply for a state waste discharge permit. The Permittee must provide the source a copy of Ecology's application and any Ecology responses.

**S6.B. *Duty to enforce discharge prohibitions***

1. Under federal regulations (40 CFR 403.5(a) and (b)), the Permittee must not authorize or knowingly allow the discharge of any pollutants into its system which may be reasonably expected to 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 that create a fire or explosion hazard in the wastewater system (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 that will cause corrosive structural damage to the wastewater system, 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 wastewater system.
  - d. Any pollutant, including oxygen-demanding pollutants, (BOD<sub>5</sub>, etc.) released in a discharge at a flow rate and/or pollutant concentration that will cause interference with the wastewater system.
  - e. Petroleum oil, non-biodegradable cutting oil, or products of mineral origin in amounts that will cause interference or pass through.
  - f. Pollutants that result in the presence of toxic gases, vapors, or fumes within the wastewater system in a quantity which may cause acute worker health and safety problems.
  - g. Heat in amounts that will inhibit biological activity in the wastewater system resulting in interference but in no case heat in such quantities such that the temperature at the 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 wastewater system by the Dangerous Waste Regulations (chapter 173-303 WAC), unless authorized under the Domestic Sewage Exclusion (WAC 173-303-071).
3. The Permittee must also not allow the following discharges to the system unless approved in writing by Ecology:
  - 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.

**S7. Solid wastes**

*S7.A. Solid waste handling*

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

*S7.B. Leachate*

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

**S8. Application for permit renewal or modification for facility changes**

The Permittee must submit an application for renewal of this permit by August 31, 2017. The Permittee must submit a paper copy and an electronic copy (preferably as a PDF).

The Permittee must also submit a new application or supplement at least one hundred eighty (180) days prior to commencement of discharges resulting from the activities listed below, which may result in permit violations. These activities include any facility expansions or other planned changes, such as process modifications.

## General Conditions

### G1. Signatory requirements

All applications, reports, or information submitted to Ecology must be signed as follows:

1. All permit applications must be signed by either a principal executive officer or ranking elected official.
2. 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:
  - a. The authorization is made in writing by the person described above and is submitted to Ecology at the time of authorization, and
  - b. The authorization specifies either a named individual or any individual occupying a named position.
3. *Changes to authorization.* If an authorization under paragraph 2b above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. *Certification.* Any person signing a document under this section must make the following certification:  
*"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."*

### G2. Right of inspection and entry

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

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

### **G3. Permit actions**

This permit is subject to modification, suspension, or termination, in whole or in part by Ecology for any of the following causes:

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 material change in the condition of the waters of the state; or
5. Nonpayment of fees assessed pursuant to RCW 90.48.465.

Ecology may also modify this permit, including the schedule of compliance or other conditions, if it determines good and valid cause exists, including promulgation or revisions of regulations or new information.

### **G4. Reporting a cause for modification**

The Permittee must submit a new application at least 180 days before it wants to discharge more of any pollutant, a new pollutant, or more flow than allowed under this permit. Unless Ecology indicates otherwise, the Permittee should use the State Waste Discharge Permit application and submit required plans at the same time. Required plans include an Engineering Report, Plans and Specifications, and an Operations & Maintenance manual (see Chapter 173-240 WAC). Ecology may waive these plan requirements for small changes, so contact Ecology if they do not appear necessary. The Permittee must continue to comply with the existing permit until it is modified or reissued. Submitting a notice of dangerous waste discharge (to comply with Pretreatment or Dangerous Waste rules) triggers this requirement as well.

### **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 and plans & specifications should be submitted at least 180 days prior to the planned start of construction. Facilities must be constructed and operated in accordance with the approved plans.

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

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

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

This permit is automatically transferred to a new owner or operator if:

1. A written agreement between the old and new owner or operator containing a specific date for transfer of permit responsibility, coverage, and liability is submitted to Ecology;
2. A copy of the permit is provided to the new owner and;
3. Ecology does not notify the Permittee of the need to modify the permit.

Unless automatically transferred, this permit may be transferred only if it is modified to identify the new Permittee and to incorporate such other requirements as determined necessary by Ecology.

**G8. Payment of fees**

The Permittee must submit payment of fees associated with this permit as assessed by Ecology. Ecology may revoke this permit if the permit fees established under Chapter 173-224 WAC are not paid.

**G9. 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 may incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars (\$10,000) for every such violation. Each and every such violation is a separate and distinct offense, and in case of a continuing violation, every day's continuance is deemed to be a separate and distinct violation.

**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. Duty to comply**

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of chapter 90.48 RCW and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

**G12. 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.

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.

<b>Pollutant</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL)<sup>1</sup>, µg/L</b>	<b>Quantitation Level (QL)<sup>2</sup>, µg/L unless specified</b>
Biochemical Oxygen Demand	SM5210-B		2 mg/L
Total Suspended Solids	SM2540-D		5 mg/L
Fecal Coliform	SM 9221D/E, 9222	N/A	N/A
Total Coliform	SM 9221B, 9222B, 9223B or colilert	N/A	N/A
Nitrate-Nitrite (as N)	SM4500-NO3- E/F/H		100
Nitrogen, Total Kjeldahl (as N)	SM4500-NH3-C/E/FG		300
Phosphorus, Total (as P)	SM4500-PE/PF	3	10
Flow	Calibrated device		
Dissolved oxygen	SM4500-OC/OG		0.2 mg/L
pH	SM4500-H+ B	N/A	N/A

<sup>1</sup> **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.

<sup>2</sup> **Quantitation Level (QL)** also known as Minimum Level of Quantitation (ML) – The lowest level at which the entire analytical system must give a recognizable signal and acceptable calibration point for the analyte. It is equivalent to the concentration of the lowest calibration standard, assuming that the lab has used all method-specified sample weights, volumes, and cleanup procedures. The QL is calculated by multiplying the MDL by 3.18 and rounding the result to the number nearest to  $(1, 2, \text{ or } 5) \times 10^n$ , where n is an integer (64 FR 30417).