

Issuance Date: December 7, 2018  
Effective Date: January 1, 2019  
Expiration Date: December 31, 2023

## State Reclaimed Water Permit Number ST0007373

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 Reclaimed Water Act,  
Chapter 90.46 Revised Code of Washington

**Holmes Harbor Sewer District**  
P.O. Box 1330  
Freeland, WA 98249

is authorized to produce, distribute, and use reclaimed water in accordance with the reclaimed water and general conditions that follow.

Plant Location:

Holmes Harbor Sewer District  
Water Reclamation Facility  
1200 E. Antelope Dr.  
Freeland, WA 98249

Treatment Type:

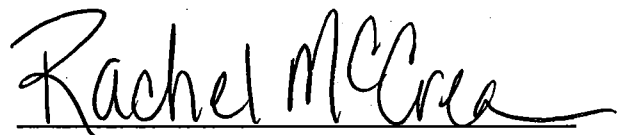
Enhanced Secondary Treatment  
Sequencing Batch Reactor (SBR) with Sand Filtration

Reclaimed Water Classification:

Class A

Beneficial Uses:

Irrigation



Rachel McCrea  
Water Quality Section Manager  
Northwest Regional Office  
Washington State Department of Ecology

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## Summary of Permit Report Submittals

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

Permit Section	Submittal	Frequency	First Submittal Date
R3.A	Discharge Monitoring Report (DMR)	Monthly	February 15, 2019
R3.B	Annual Summary Report	Annual	March 15, 2020
R3.G	Reporting Permit Violations	As necessary	
R4.C	Cross-Connection Control Evaluation Report	1/permit	June 30, 2023
R5.B	Plans for Maintaining Adequate Capacity	As necessary	
R5.D	Notification of New or Altered Sources	As necessary	
R6.C	Operations and Maintenance Manual Update	1/permit	December 31, 2020
R6.E	Reporting Bypasses	As necessary	
R9.	Application for Permit Renewal	1/permit cycle	June 30, 2023

## Reclaimed Water Conditions

### R1. Water quality limits

#### R1.A. Reclaimed water limits

All activities authorized by this permit for the production and distribution of reclaimed water must comply with the terms and conditions of this permit. The distribution of reclaimed water containing any of the following constituents more frequently than, or at a concentration in excess of, that identified and authorized by this permit violates the terms and conditions of this permit.

Beginning on the effective date of this permit, the Permittee may produce and distribute Class A reclaimed water for the beneficial uses, and to the locations, listed in Reclaimed Water Condition R4 subject to the following water quality limits.

Reclaimed Water Limits – Biological Oxidation and Filtration Performance Standards <sup>a</sup>		
Parameter	Average Monthly <sup>b</sup>	Average Weekly <sup>c</sup>
Biochemical Oxygen Demand (BOD <sub>5</sub> )	30 milligrams/liter (mg/L)	45 mg/L
Total Suspended Solids (TSS)	30 milligrams/liter (mg/L)	45 mg/L
Parameter	Minimum	Maximum
Dissolved Oxygen (DO)	≥ 0.2 mg/L <sup>d</sup>	Not applicable
pH	6.0 standard units	9.0 standard units
Parameter	Average Monthly	Instantaneous Maximum
Turbidity	2 Nephelometric Turbidity Units (NTU)	5 NTU <sup>e</sup>
Disinfected Reclaimed Water Prior to Storage Ponds		
Parameter	7-Day Median <sup>f</sup>	Sample Maximum <sup>g</sup>
Total Coliform	2.2 CFU/100 mL	23 CFU /100 mL
<sup>a</sup>	Source water for the reclaimed water facility must meet or exceed minimum technology-based secondary treatment requirements in WAC 173-221-040 to satisfy the biological oxidation treatment standard. The Permittee may measure compliance with this standard either at the end of the reclaimed water treatment system or in the secondary effluent at the point of diversion to the reclaimed water treatment system.	
<sup>b</sup>	Average monthly effluent limit means the highest allowable average of daily discharges over a calendar month. To calculate the discharge value to compare to the limit, you add the value of each daily discharge measured during a calendar month and divide this sum by the total number of daily discharges measured.	
<sup>c</sup>	Average weekly discharge limit means 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 <sup>1</sup> measured during that week.	
<sup>d</sup>	The standard for dissolved oxygen is “must be measurably present”. The limit for dissolved oxygen is set at the minimum quantitation level listed in Appendix A.	
<sup>e</sup>	The maximum turbidity limit is defined as the value not to be exceeded by a continuous measurement. The Permittee must report the maximum instantaneous turbidity that is recorded for longer than 5 consecutive minutes. Durations of less than or equal to 5 minutes over the sample maximum are not permit violations.	
<sup>f</sup>	Determine the 7-day median value using all of the bacteriological results of the last 7 days of analyses (the reporting day and the previous 6 days).	
<sup>g</sup>	The number of total coliform organisms must not exceed the sample maximum limit value in any single sample. If the Permittee collects multiple samples in a single day, it must report the highest sample value of all samples taken as the sample maximum.	

## R2. Monitoring requirements

### R2.A. Class A reclaimed water monitoring

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

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
<b>(1) Wastewater influent from STEP system</b>			
Wastewater Influent means the raw sewage flow from the collection system into the treatment facility. Sample the wastewater entering the headworks of the treatment plant excluding any side-stream returns from inside the plant.			
Flow	mgd	Continuous <sup>a</sup>	Metered
BOD <sub>5</sub>	mg/L	2/week <sup>d</sup>	Manual composite <sup>b</sup>
BOD <sub>5</sub>	lbs/day	2/week	Calculated
TSS	mg/L	2/week	Manual composite
TSS	lbs/day	2/week	Calculated
<b>Reclaimed Water Monitoring</b>			
Parameter	Units	Minimum Sampling Frequency	Sample Type
<b>(1) Source Water Monitoring</b>			
The Permittee must monitor the reclaimed water to verify it meets the minimum biological oxidation performance standards. The compliance point for this monitoring is after filtration and before the chlorine disinfection.			
BOD <sub>5</sub>	mg/L	2/week	24-hour composite <sup>c</sup>
TSS	mg/L	2/week	24-hour composite
pH	Standard Units	Daily	Grab <sup>g</sup>
Dissolved Oxygen	mg/L	Daily <sup>d</sup>	Grab
Coagulant	lbs/day	Daily	Measured
<b>(4) Disinfected Reclaimed Water</b>			
The Permittee must monitor the final reclaimed water quality after the chlorine contact chamber and prior to the storage ponds.			
Flow, to storage ponds	mgd	Continuous	Metered/recorded
Turbidity <sup>e</sup>	NTU	Continuous	Metered/recorded
Total coliform <sup>f</sup>	# /100mL	Daily	Grab
Total chlorine residual	mg/L	Continuous	Metered/recorded
<b>(5) Distribution to Golf Course</b>			
Flow, to golf course from storage ponds	mgd	Continuous	Metered/recorded
<b>(6) Permit Renewal Monitoring</b>			
The Permittee may be required to conduct permit renewal monitoring during the final year of the permit as directed by the permit application.			
<b>Footnotes</b>			
<sup>a</sup>	Continuous means uninterrupted except for brief lengths of time for calibration, for power failure, or for unanticipated equipment repair or maintenance. The Permittee must measure and record continuous data at least every 30 minutes unless another footnote specifies a shorter time for a specific parameter.		
<sup>b</sup>	Manual composite samples must consist of 4 manual grab samples taken at least two hours apart.		
<sup>c</sup>	24-hour composite means a series of individual samples collected over a 24-hour period into a single container, and analyzed as one sample.		
<sup>d</sup>	2/week means two (2) times during each calendar week. Daily means one (1) per day.		

e	Effluent turbidity analysis must be performed by a continuous recording turbidimeter. The Permittee must report the maximum value that exceeds five minutes.
f	Report a daily numerical value for total coliforms. Do not report a result as too numerous to count (TNTC). The Permittee must also calculate and report a daily value for the 7-day median as described in Reclaimed Water Condition R1.
g	Grab means an individual sample collected over a fifteen (15) minute, or less, period. Grab samples must be taken at the same time daily when water characteristics are the most demanding on the treatment facilities and disinfection processes.

### ***R2.B. Sampling and analytical procedures***

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

Sampling and analytical methods used to meet the water and 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.
- Monitoring and Analytical Requirements in the National Primary Drinking Water Regulations, 40 CFR Part 141.
- Standard Methods for the Examination of Water and Wastewater (APHA).

### ***R2.C. Flow measurement, field measurement and continuous monitoring devices***

The Permittee must:

1. Select and use appropriate flow measurement, field measurement, and continuous monitoring devices and methods consistent with accepted scientific practices.
2. Install, calibrate, and maintain these devices to ensure the accuracy of the measurements is consistent with the accepted industry standard, the manufacturer's recommendation, and approved O&M manual procedures for the device and the waste stream.
3. Calibrate continuous monitoring instruments weekly unless it can demonstrate a longer period is sufficient based on monitoring records. The Permittee:
  - a. Must calibrate continuous chlorine measurement instruments using a grab sample analyzed in the laboratory within 15 minutes of sampling.
4. Calibrate flow monitoring devices at a minimum frequency of at least one calibration per year.
5. Maintain calibration records for at least three years.

#### **R2.D. Laboratory accreditation**

The Permittee must ensure that all monitoring data required by Ecology for permit specified parameters is prepared by a laboratory registered or accredited under the provisions of chapter 173-50 WAC, *Accreditation of Environmental Laboratories*. Flow, temperature, settleable solids, conductivity, pH, and internal process control parameters are exempt from this requirement. The Permittee must obtain accreditation for conductivity and pH if it must receive accreditation or registration for other parameters.

#### **R2.E. Request for reduction in monitoring**

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

The Permittee must:

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

### **R3. Reporting and recording 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.

#### **R3.A. Discharge monitoring reports**

The first monitoring period begins on the effective date of the permit (unless otherwise specified). The Permittee must:

1. Summarize, report, and submit monitoring data obtained during each monitoring period on the electronic discharge monitoring report (DMR) form provided by Ecology within the Water Quality Permitting Portal. Include data for each of the parameters tabulated in Reclaimed Condition R2 and as required by the form. Report a value for each day sampling occurred (unless specifically exempted in the permit) and for the summary values (when applicable) included on the electronic form.
2. Ensure that DMRs are electronically submitted no later than the dates specified below, unless otherwise specified in this permit.
3. The Permittee must also submit an electronic copy of the contract laboratory reports as an attachment using WQWebDMR. The contract laboratory reports must also include information on the chain of custody, QA/QC results, and documentation of accreditation for the parameter.

4. Submit DMRs for parameters with the monitoring frequencies specified in R2 (monthly, quarterly, annual, etc.) at the reporting schedule identified below. The Permittee must:
  - a. Submit **monthly** DMRs by the 28<sup>th</sup> day of the following month. The first monthly DMR must be submitted by February 15, 2019, for the month of January 2019.
5. Enter the “No Discharge” reporting code for an entire DMR, for a specific monitoring point, or for a specific parameter as appropriate, if the Permittee did not produce and/or distribute reclaimed water during a given monitoring period.
6. Report single analytical values below detection as “less than the detection level (DL)” by entering < followed by the numeric value of the detection level (e.g. < 2.0) on the DMR. If the method used did not meet the minimum DL and quantitation level (QL) identified in the permit, report the actual QL and DL in the comments or in the location provided.
7. Report single analytical values between the detection level (DL) and the quantitation level (QL) by entering the estimated value, the code for estimated value/below quantitation limit (j) and any additional information in the comments. Submit a copy of the laboratory report as an attachment using WQWebDMR.
8. **Not** report zero for bacteria monitoring. Report as required by the laboratory method.
9. Report the highest value of any total coliform sample for each day if multiple samples were taken in one day.
10. Calculate the 7-day median values for total coliform using:
  - a. The reported numeric value for all daily total coliform samples measured above the detection value except when it took multiple samples in one day. If the Permittee takes multiple samples in one day it must use the highest value for the day in the 7-day median calculation.
  - b. The detection value for those samples measured below detection.
11. Report the test method used for analysis in the comments if the laboratory used an alternative method not specified in the permit and as allowed in Appendix A.
12. Calculate average values and calculated total values (unless otherwise specified in the permit) using:
  - a. The reported numeric value for all parameters measured between the detection value and the quantitation value for the sample analysis.
  - b. One-half the detection value (for values reported below detection) if the lab detected the parameter in another sample from the same monitoring point for the reporting period.

- c. Zero (for values reported below detection) if the lab did not detect the parameter in another sample for the reporting period.
13. Report single-sample grouped parameters (for example: priority pollutants, PAHs, pulp and paper chlorophenolics, TTOs) on the WQWebDMR form and include: sample date, concentration detected, detection limit (DL) (as necessary), and laboratory quantitation level (QL) (as necessary).

### ***R3.B. Annual summary report***

The Permittee must submit an annual report by March 15<sup>th</sup> of each year using the Annual Report Questionnaire Form provided by Ecology in the Water Quality Permitting Portal – Permit Submittals application. The first annual summary report is due by March 15, 2020, and annually thereafter. The Permittee will generally provide summaries of reclaimed water production topics for the previous calendar year in the questionnaire. Summary topics include, but may not be limited to:

- Number of days of reclaimed water production and distribution.
- Total volume of reclaimed water produced and distributed.
- Total volume of reclaimed water distributed to each use category authorized in reclaimed condition R4.A.
- Total volume of off-spec reclaimed water diverted for disposal or retreatment, if any.
- Total volume of reclaimed water diverted from authorized use locations due to distribution system maintenance or repair.
- Number of reclaimed water quality limit violations reported on monthly DMRs, if any.
- Number of backflow incidents discovered and reported to water purveyors, if any.

In addition to providing the data listed above, the questionnaire will require the Permittee to upload supplemental summary documents that provide the following information:

- The annual volume of reclaimed water distributed to each use location.
- A list of any new users or distributors that signed agreements during the year.
- Description of the circumstances that led to the disposal of off-spec reclaimed water along with a description of corrective actions taken.
- A summary of any actions taken to enforce requirements in use or distribution agreements, including nature of the violation and the remedial action taken.
- A cross-connection control program summary.

### ***R3.C. Permit submittals and schedules***

The Permittee must use the Water Quality Permitting Portal – Permit Submittals application (unless otherwise specified in the permit) to submit all other written permit-required reports by the date specified in the permit.

When another permit condition requires submittal of a paper (hard-copy) report, the Permittee must ensure that it is postmarked or received by Ecology no later than the dates specified by this permit. Send these paper reports to Ecology at:

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

The Permittee must ensure that all other written permit-required reports are postmarked or received by Ecology no later than the dates specified in the permit.

### ***R3.D. 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.

The Permittee must retain all records pertaining to the annual cross-connection control report that is submitted to the Department of Health, Office of Drinking Water, by the water purveyor(s) that provides potable water to any reclaimed water use area for a minimum of three (3) years. This report must identify all cross-connection control assemblies tested and any cross-connection incident that occurred relating to the reclaimed water system. This report only applies to those control assemblies under the control of the Permittee.

The Permittee must retain all records pertaining to the Reclaimed Water Use Plan for a minimum of three (3) years and must retain the plan onsite.

### ***R3.E. 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 or laboratory who performed the analyses.
5. The analytical techniques or methods used.
6. The results of all analyses.

**R3.F. Additional monitoring by the Permittee**

If the Permittee monitors any pollutant more frequently than required by Reclaimed Water Condition R2 of this permit, then the Permittee must include the results of such monitoring in the calculation and reporting of the data submitted in the Permittee's DMR unless otherwise specified by Reclaimed Water Condition R2.

**R3.G. Reporting permit violations**

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

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

**a. Immediate reporting**

1. The Permittee must immediately report to Ecology and the Local Health jurisdiction (at the numbers listed below), all noncompliance that results in the production and distribution of reclaimed water that threatens public health or the environment, including:
  - Any failure of the reclaimed water treatment system resulting in the distribution of improperly treated water.
  - Plant bypasses resulting in distribution of improperly treated water.
  - Collection system overflows.
  - Overflows or leaks of transmission or irrigation pipelines that discharge to a waterbody used as a source of drinking or irrigation water.
  - Any other failures of the sewage system (pipe breaks, etc.).

Department of Ecology	(425) 649-7000
Northwest Regional Office	
Island County Health Dept	(360) 679-7350 (business hours)
	(360) 914-1452 (after hours)
2. The Permittee must report to Ecology, the local health jurisdiction, and the appropriate potable water purveyor immediately, but no later than the end of the next business day, when it discovers a backflow incident that may have contaminated the reclaimed water facility, the distribution system, or the potable water system.

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

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

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 R6.E., "Wastewater 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 violation of a maximum daily or instantaneous maximum discharge limit for any of the pollutants in Section R1.A of this permit.
5. Any overflow prior to the treatment works, whether or not such overflow endangers health or the environment or exceeds any effluent limit in the permit.

**c. Report within thirty days**

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

1. A description of the noncompliance and its cause.
2. The period of noncompliance, including exact dates and times.
3. The estimated time the Permittee expects the noncompliance to continue if not yet corrected.
4. A description of the corrective actions taken.
5. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
6. Maps, drawings, aerial photographs, or pictures as necessary to show the location and cause(s) of the non-compliance.

**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 it submits monitoring reports for R3.A ("Discharge monitoring reports"). 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.

### ***R3.H. Other reporting***

#### **a. Spills of oil or hazardous materials**

The Permittee must report a spill of oil or hazardous materials in accordance with the requirements of RCW 90.56.280 and chapter 173-303-145. You can obtain further instructions at the following website: <https://ecology.wa.gov/About-us/Get-involved/Report-an-environmental-issue/Report-a-spill>.

#### **b. Failure to submit relevant or correct facts**

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

### ***R3.I. 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 or DOH inspectors.

## **R4. Reclaimed Water Distribution and Use**

### ***R4.A. Authorized uses and locations***

1. The Permittee may produce, distribute, and use Class A reclaimed water for the following beneficial uses: Landscape irrigation.
2. The Permittee may only distribute reclaimed water for beneficial uses at the Holmes Harbor Golf Course.
3. All distribution and use of reclaimed water must comply with the terms and conditions of this permit. The distribution or release of inadequately treated water or the distribution and use of water to locations not identified in this permit is prohibited.

### ***R4.B. Use and distribution constraints***

The Permittee must document in its O&M manual, as required by R6.C, procedures and practices operators will follow to ensure compliance with the distribution and use requirements described below.

#### **a. Distribution requirements**

The Permittee must comply with the following requirements for the distribution of reclaimed water produced at the permitted facility.

The Permittee must:

1. Label or color code all new reclaimed water piping, valves, outlets, storage facilities, and other appurtenances to identify the components as part of the reclaimed water distribution system. Color coding must be Pantone 512, 522 or other shade of purple color approved in the reclaimed water engineering report.
2. Maintain adequate separation between new pipes conveying reclaimed water and any nearby sanitary sewer lines, storm sewer lines, potable water lines, and potable water wells.
3. Notify all owners of potable water supplies with sources within 1,000 feet of reclaimed water storage facilities. Notification requirement applies to all new reclaimed water storage facilities and existing storage facilities for which the Permittee has not previously provided notification.
4. Maintain a minimum 200 foot horizontal separation between new reclaimed water distribution and storage infrastructure and all potable water intakes, including well heads, springs, surface water, or designated groundwater under the influence of surface water.
5. Manage cross-connection controls between reclaimed water and potable water as well as between reclaimed water and systems conveying lower quality waters, such as wastewaters and stormwater. Cross-connection controls must comply with the requirements in Reclaimed Water condition R4.C of this permit and with WAC 173-219-310.
6. Take appropriate steps to contain and divert to the sanitary sewer system or to an approved use area any reclaimed water released from the distribution system during distribution system maintenance. Maintenance releases may result line flushing or pipeline repair. Any release of reclaimed water to surface water or to any area not identified in this permit or a signed use agreement is prohibited.

**b. Use requirements**

The Permittee must:

1. Description of the authorized use(s) of reclaimed water at the site covered by the agreement.
2. Follow the requirements for cross-connection control consistent with Reclaimed Condition R4.C below.
3. Identification of the area where reclaimed water will be used. This identification must list whether the use area is included in a wellhead protection area or critical aquifer recharge area.

4. Have advisory notification at the use site. Advisory notices may include signs or distributed notices that include the following: “Reclaimed Water – Do Not Drink”. The requirement may also use alternate language that is consistent with the Washington State Uniform Plumbing Code (WAC 51-56) or approved by the Department of Health.
5. Design all new pipes carrying reclaimed water at the use site to comply with labeling and separation requirements in reclaimed water condition R4.B.b above and WAC 173-219-360.
6. Restrict operation of reclaimed water valves and outlets at the use site to authorized personnel and restrict access to hose bibs on reclaimed water lines.
7. Establish Best Management Practices (BMPs) designed to prevent incidental site runoff.

***R4.C. Cross-connection control***

The Permittee must comply with the cross-connection control requirements in this permit and in WAC 173-219-310. It must take the actions specified below to eliminate or prevent cross-connections between water supplies at the reclaimed water production facility and throughout the reclaimed water distribution system.

**a. Cross-connection control program**

- 1 The Permittee must develop and implement a cross-connection control program to ensure protection of reclaimed water from lower quality water. The program must document how the Permittee will coordinate with potable water purveyors to evaluate and prevent potential cross connection between reclaimed water and potable water supplies. The program must ensure protection of reclaimed water at all stages, starting at the production facility and ending at the property line of each use location. The Permittee must ensure that all determinations of the appropriate method of backflow prevention needed to eliminate or control cross-connections is made by a cross-connection control specialist certified under RCW 70.119.
2. The Permittee must take the steps listed below to begin developing a cross-connection control program. The Permittee must evaluate areas of potential cross-connection within the treatment facility and distribution system and submit a Cross-Connection Evaluation Report to Ecology by June 30, 2023. The evaluation report must be completed by a certified Cross-Connection Control Specialist (CCS) and include the following:
  - a. An assessment of potential cross-connections at the facility and within the distribution system and use area.

- b. Identification of alternatives for appropriate backflow prevention assemblies required to prevent or control each potential cross-connection.
  - c. An estimated schedule to install necessary backflow prevention assemblies.
  - d. Discussion of the implementation procedures for selected backflow prevention assembly along with procedures for periodic inspections and maintenance of inspection records.
3. Ecology will require the Permittee to finalize and implement the program, as outlined in R4.C.b below, by the start of the next permit term, with a final compliance date of January 1, 2024. The cross-connection control program must be incorporated into the O&M manual and submitted to Ecology for review and approval per WAC 173-219-240.
  4. The Permittee must also provide a status update on the development of the program as an element of the Annual Summary Report required in condition R3.B.

**b. Program requirements**

The permittee must use good engineering practices in the development and implementation of the cross-connection control program. The program must include the following minimum elements:

1. Adoption of a local ordinance, resolution, code, bylaw, or other written legal instrument that establishes the Permittee's authority to implement the program; describes the program's operating policies and technical provisions; and establishes corrective actions needed to enforce the program.
2. Development and implementation procedures and schedules to eliminate or control cross-connections through the proper installation and periodic inspection of approved backflow prevention assemblies at new and existing use locations.
3. Adequate personnel to develop and implement the program, including at least one cross-connection control specialist certified under RCW 70.119.
4. Procedures for responding to backflow incidents.
5. Development and maintenance of a records system that documents locations where potential cross-connections exist; identifies properties where the Permittee provides reclaimed water; identifies the potable water purveyor supplying water to properties receiving reclaimed water, if potable supply is present; a detailed inventory of cross-connection control devices used at each location; and a system for providing annual reports of the cross-connection control program and backflow incident reports.

**c. Water purveyor coordination**

The permittee must coordinate with all potable water purveyors in the service area of the reclaimed water system to eliminate potential cross-connections between the reclaimed water treatment and distribution systems and the potable water systems. The written cross-connection control program must document and describe the procedures used to coordinate with water purveyors and delineate responsibilities.

The Permittee must notify any water purveyor supplying potable water to the proposed use site of their intent to supply reclaimed water to the site. The notice must:

- Describe the treatment requirements for the reclaimed water,
- Identify the proposed use(s) at the site, and
- Identify any proposed measures to protect the potable water supply.

The permittee may not provide water to a use location before the potable water purveyor has certified that an appropriate backflow prevention assembly has been correctly installed on the potable supply line to the use location property.

**d. Backflow prevention assemblies**

Whenever the use of backflow prevention assemblies is necessary to prevent cross-connection between lower-quality water and higher-quality water, the Permittee must ensure that each assembly used is recognized as an approved device on the current *University of Southern California Foundation for Cross-Connection Control and Hydraulic Research* approved backflow assemblies list. The Permittee must review plans for each installation to verify that the device will not be submerged during flooding; that the installation will comply with applicable safety regulations; and that any bypass piping around a backflow prevention assembly includes at least the same level of protection as the assembly being bypassed.

The Permittee must inspect or test backflow protection assemblies, including air gaps, at the following intervals:

- At the time of installation to verify proper construction
- At least annually after installation. More frequent inspection may be required for assemblies installed at premises or in systems that may pose a high risk of cross-connection hazard or that have a repeated history of failure.
- After a backflow incident.
- After a repair, reinstallation, or relocation of a system.

#### ***R4.D. Water rights protection***

The use of reclaimed water produced at the permitted facility must not impair any existing water right downstream of the freshwater discharge point(s) of the facility unless the Permittee makes appropriate compensation or mitigation to the affected right holder. Existing water rights include any permits, claims, certificates, or instream flows established pursuant to RCW 90.22 and RCW 90.54, along with all federally reserved water rights existing at the time the Permittee completed their initial impairment analysis.

The Permittee must document in the next application for permit renewal how the use of reclaimed water from the permitted facility complies with the water rights protection provisions in WAC 173-219-090 and RCW 90.46.130.

### **R5. Facility loading**

#### ***R5.A. Design criteria***

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

Maximum Month Design Flow (MMDF)	0.1 MGD
BOD <sub>5</sub> Influent Loading for Maximum Month	150 lbs/day
TSS Influent Loading for Maximum Month	125 lbs/day

#### ***R5.B. Plans for maintaining adequate capacity***

##### **a. Conditions triggering plan submittal**

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 R5.A for three consecutive months.
2. The projected plant flow or loading would reach design capacity within five years.

##### **b. Plan and schedule content**

The plan and schedule 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.

1. Analysis of the present design and proposed process modifications.
2. Reduction or elimination of excessive infiltration and inflow of uncontaminated ground and surface water into the sewer system.
3. Limits on future sewer extensions or connections or additional waste loads.
4. Modification or expansion of facilities.
5. Reduction of industrial or commercial flows or waste loads.

6. Engineering documents associated with the plan must meet the requirements of WAC 173-219-210 (engineering reports for reclaimed water facilities) and WAC 173-240-060, (engineering reports for wastewater treatment facilities) and be approved by Ecology prior to any construction.

***R5.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.

***R5.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.
  - 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 [40 CFR 122.42(b)].

**R6. Operation and maintenance**

The Permittee must at all times properly operate and maintain all facilities or systems of treatment and control (and related appurtenances) installed to produce, distribute and use reclaimed water in compliance with the terms and conditions of this permit. Proper operation and maintenance includes keeping a daily operation logbook (paper or electronic), adequate laboratory controls, and appropriate quality assurance procedures.

The Permittee must keep maintenance records on all major electrical and mechanical components of the treatment plant and reclaimed water distribution system. 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. It must make maintenance records available for inspection at all times.

***R6.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 reclaimed water production. An operator certified for at least a Class II plant must be in charge

during all regularly scheduled shifts. The Permittee must notify Ecology when the operator in charge at the facility changes. It must provide the new operator's name and certification level and provide the name of the operator leaving the facility.

**R6.B. Treatment reliability**

The Permittee must ensure compliance with the reliability requirements of WAC 173-219-350. It must use adequate safeguards to prevent the distribution of water that is not treated in accordance with the requirements of this permit. Adequate safeguards include, but are not limited to alarms to alert operators of problems, use of redundant power sources, retention of inadequately treated wastes, and automatic diversions of water to storage or other authorized disposal when problems occur.

**a. Reclaimed water bypass prohibited**

The Permittee must not bypass inadequately treated wastewater from the permitted facility to the distribution system or any point of use. It must divert any water not treated in accordance with the reclaimed water requirements of this permit to storage for retreatment.

**b. Alarms and automatic diversion**

The Permittee must use alarm systems at the permitted facility to alert operators to failures in critical treatment unit processes. All alarms must sound at an attended location or through an automated notification system that will alert a designated, on-call operator of the need to take corrective action. The alarm system must include automated response programming that, upon failure of a critical system, starts back-up components, diverts water to storage, or diverts water to authorized disposal. Critical systems include, but are not limited to, primary plant power supply, biological treatment, coagulation, filtration, and disinfection treatment processes. Any programming to automatically divert water to storage or disposal must include a requirement for an operator to manually reset after verifying correction of the initial failure.

**c. Power supply**

The Permittee must at all time maintain power sufficient to operate all vital treatment components, alarms, and critical lighting and ventilation during peak flow conditions. Vital treatment components include biological treatment units, coagulation, filtration and disinfection. Upon loss of primary power, the Permittee must ensure one of the following actions occur.

1. An alarm alerts the plant operator to the power loss and power supply switches to a back-up power source.
2. An alarm alerts the plant operator to the loss of power and automated flow control equipment divert wastewater to storage for retreatment after power returns.

3. An alarm alerts the plant operator to the loss of power and automated flow control equipment divert wastewater to an authorized disposal location.
4. The power supply to all alarms and automated flow diversion equipment must be independent of the primary power supply for the reclaimed water facility or use an independent, uninterruptible back-up power source.

**d. Restoring service**

The Permittee may not restore reclaimed water distribution until appropriate back-up systems have been brought online or until the plant failure has been corrected. It must develop and implement checklists and standard operating procedures for operators to use in determining that the plant has been restored to normal operation. The checklists and standard operating procedures must be included in the operations and maintenance manual approved by Ecology in accordance with Reclaimed Water Condition R6.C.

**e. Short-term reduction**

The Permittee must schedule any facility maintenance, which might require interruption of reclaimed water treatment system and degrade reclaimed water quality, during non-critical production periods and carry this maintenance out according to the approved O&M manual or as otherwise 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 (30) days prior to such activities.
2. Detail the reasons for, length of time of, and the potential effects of the reduced level of treatment.
3. Store inadequately treated flow and retreat after full treatment capability has been restored, or divert all inadequately treated flow to permitted disposal.
4. If available storage capacity is insufficient to store all flow during the short-term reduction period and permitted disposal is not available, the Permittee must work with Ecology to develop options for managing the excess off-spec water.
5. Follow the requirements for “Restoring service” listed above before resuming reclaimed water production.
6. This notification does not relieve the Permittee of its obligations under this permit.

### **R6.C. Operations and maintenance manual**

The Permittee must at all times operate and maintain all facilities or systems of control installed to achieve compliance with the reclaimed water conditions in this permit according to the instructions in an Operations and Maintenance (O&M) manual approved by Ecology.

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

The Permittee must:

1. Update the O&M manual and submit it to Ecology by December 31, 2020. The updated manual must meet the requirements of WAC 173-219-240 and WAC 173-240-080 and include components in R6.C.b below. The permittee must submit an electronic copy (preferably as PDF).
2. Submit to Ecology for review and approval substantial changes or updates to the O&M manual whenever it incorporates them into the manual.
3. Keep the approved O&M manual at the permitted facility.
4. Follow the instructions and procedures of this manual.

#### **b. O&M manual components**

The O&M manual for the reclaimed water facility must include all contents listed in WAC 173-219-240(2) and WAC 173-240-080 and be consistent with the guidance in the draft *Reclaimed Water Facilities Manual* (Purple Book). The Permittee may also use the guidance in Table G1-3 in the *Criteria for Sewage Works Design* (Orange Book), 2008. Required content for the O&M manual include, but are not limited to:

1. Emergency procedures for plant shutdown and cleanup in event of wastewater or reclaimed water system upset or failure, or distribution system leak.
2. System maintenance procedures that contribute to the generation of wastewater or may result in the discharge of reclaimed water at an unauthorized location.
3. A review of system components which if failed could pollute surface water or could impact human health. Provide a procedure for a routine schedule of checking the function of these components.
4. Reporting protocols for submitting reports to Ecology to comply with the reporting requirements in this permit.
5. 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 or reclaimed water system (for example, defining maximum allowable discharge rate for draining a tank, blocking all floor drains before beginning the overhaul of a stationary engine.)

6. Treatment plant process control monitoring schedule.
7. Sampling protocols and procedures for compliance with the sampling and reporting requirements in the reclaimed water permit.
8. Procedures to ensure that “off spec” reclaimed water is re-treated so that it meets all reclaimed water permit limits. “Off spec” refers to water produced by the reclaimed water facility that does not meet required water quality requirements or is otherwise not treated according to the requirements of this reclaimed water permit.
9. Description of all uses of water produced at the facility for internal purposes (i.e. for washing or cleaning equipment at the treatment facility).
10. Procedures to decontaminate reclaimed water piping and other appurtenances prior to returning the facilities to reclaimed water service following incidents when off spec reclaimed water is produced.
11. Minimum staffing adequate to operate and maintain the treatment processes and carry out compliance monitoring required by the permit.
12. Documentation of procedures and practices operators will follow to ensure compliance with the distribution and use requirements as outlined in R4.B.

***R6.D. 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 that is tributary to the reclaimed water facility.

***R6.E. Wastewater bypass procedures***

A bypass is the intentional diversion of waste streams from any portion of a treatment facility. This permit prohibits all bypasses except when the bypass is for essential maintenance, as authorized in special condition R6.E.1, or is approved by Ecology as an anticipated bypass following the procedures in R6.E.2. This condition supplements the prohibition in reclaimed water condition R6.B.a (Reclaimed water bypass prohibited).

1. Bypass for essential maintenance without the potential to cause violation of permit limits or conditions.

This permit allows bypasses for essential maintenance of the treatment system when necessary to ensure efficient operation of the system. The Permittee may bypass the treatment system for essential maintenance only if doing so does not cause violations of effluent limits and the Permittee can demonstrate that the reclaimed water production complies with the treatment reliability standards in reclaimed water condition R6.B. The Permittee is not required to notify Ecology when bypassing for essential maintenance. However the Permittee must comply with the monitoring requirements specified in reclaimed water condition R2.C.

2. Anticipated bypasses for non-essential maintenance

Ecology may approve an anticipated bypass under the conditions listed below. This permit prohibits any anticipated bypass that is not approved through the following process.

- a. If a bypass is for non-essential maintenance, the Permittee must notify Ecology, if possible, at least ten (10) days before the planned date of bypass. The notice must contain:
  - A description of the bypass and the reason the bypass is necessary.
  - An analysis of all known alternatives which would eliminate, reduce, or mitigate the potential impacts from the proposed bypass.
  - A cost-effectiveness analysis of alternatives.
  - The minimum and maximum duration of bypass under each alternative.
  - A recommendation as to the preferred alternative for conducting the bypass.
  - The projected date of bypass initiation.
  - A statement of compliance with SEPA.
  - A request for modification of water quality standards as provided for in WAC 173-201A-410, if an exceedance of any water quality standard is anticipated.
  - Details of the steps taken or planned to reduce, eliminate, and prevent recurrence 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 the project planning and design process. The project-specific engineering report as well as the plans and specifications must include details of probable construction bypasses 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 determine if the Permittee has met the conditions of reclaimed water condition R6.E.2 a and b and consider the following prior to issuing a determination letter, an administrative order, or a permit modification as appropriate for an anticipated bypass:
  - If the Permittee planned and scheduled the bypass to minimize adverse effects on the public and the environment.
  - If the 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.

- If feasible alternatives to the bypass exist, such as:
  - The use of auxiliary treatment facilities.
  - Retention of untreated wastes.
  - Stopping production.
  - Maintenance during normal periods of equipment downtime, but not if the Permittee should have installed adequate backup equipment in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance.
  - Transport of untreated wastes to another treatment facility.

## **R7. Pretreatment and source control**

### ***R7.A. General requirements***

The Permittee must implement source water controls that prevent the presence of substances that may affect the reclaimed water quality or impact the ability to produce reclaimed water in accordance with this permit. It 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 the Environmental Protection Agency (U.S. EPA) may promulgate under Section 307(b) (pretreatment) and 308 (reporting) of the Federal Clean Water Act.

### ***R7.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 POTW 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 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<sub>5</sub>, etc.) released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW.
  - e. Petroleum oil, non-biodegradable 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. The Permittee must also not allow the following discharges to the POTW 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.
4. The Permittee must notify Ecology if any industrial user violates the prohibitions listed in this section (R7.B), and initiate enforcement action to promptly curtail any such discharge.

***R7.C. Wastewater discharge permit required***

The Permittee must:

- 1. Establish a process for authorizing non-domestic wastewater discharges that ensures all SIUs in all tributary areas meet the applicable state waste discharge permit (SWDP) requirements in accordance with chapter 90.48 RCW and chapter 173-216 WAC.
- 2. Immediately notify Ecology of any proposed discharge of wastewater from a source, which may be a significant industrial user (SIU) [see fact sheet definitions or refer to 40 CFR 403.3(v)(i)(ii)].

3. Require all SIUs to obtain a SWDP from Ecology prior to accepting their non-domestic wastewater, or require proof that Ecology has determined they do not require a permit.
4. Require the documentation as described in R7.C.3 at the earliest practicable date as a condition of continuing to accept non-domestic wastewater discharges from a previously undiscovered, currently discharging and unpermitted SIU.
5. Require sources of non-domestic wastewater, which do not qualify as SIUs but merit a degree of oversight, to apply for a SWDP and provide it a copy of the application and any Ecology responses.
6. Keep all records documenting that its users have met the requirements of R7.C.

***R7.D. 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 C** of the fact sheet for definitions).
2. Within 30 days of becoming aware of an unpermitted existing, new, or proposed industrial user who may be a significant industrial user (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 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 30 days of such change.

**R8. Solid wastes**

***R8.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. It must not resuspend or reintroduce collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment to the reclaimed water process or to the finished reclaimed water.

***R8.B. Leachate***

The Permittee must not allow leachate from its solid waste material to enter state waters or to contaminate reclaimed water produced at the facility. It must not allow such leachate to cause violations of the State Surface Water Quality Standards, Chapter 173-201A WAC, the State Ground Water Quality Standards,

Chapter 173-200 WAC, or applicable Reclaimed Water Performance and Uses-based standards, WAC 173-219. All leachate must receive all known, available, and reasonable methods of treatment through the wastewater treatment facility or through a separate leachate treatment system prior to discharge.

**R9. Application for permit renewal or modification for facility changes**

The Permittee must submit an application for renewal of this permit by June 30, 2023.

The Permittee must also submit a new or supplemental application 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 facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility.

The District must submit a permit application if they intend to supply reclaimed water for a use or location not authorized under R4.A.

## **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 G1.2, above, is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization 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 facility 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 facility 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 entry**

Representatives of Ecology and Health have the right to enter and inspect any property related to the purpose of this permit, public or private, at reasonable times in order to determine compliance with the laws and rules under each agency's jurisdiction.

Representatives of Ecology and Health may enter with prior notification, but need not provide prior notification when there is reasonable cause to believe there is a violation of the law that poses a serious threat to public health and safety or to the environment. The Permittee must allow unimpeded access to the permitted reclaimed water facility, the premises where the Permittee keeps records, and any distribution and use areas for the following purposes:

- To inspect any records the permit requires the Permittee to keep;

- To inspect any facility, equipment, practice, or operation permitted or required at the reclaimed water facility;
- To sample or monitor any substance or any parameter at the reclaimed water facility;
- To copy, at a reasonable cost, any records required by the terms and conditions of this permit.

### **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 quality of water produced;
4. A change in beneficial uses that require addition of new use-based limits or permit conditions; or
5. Nonpayment of fees assessed pursuant to WAC 173-224.

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 planned changes**

The Permittee must, as soon as possible, but no later than one hundred eighty (180) days prior to the proposed changes, give notice to Ecology of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in:

1. Increases the volume of reclaimed water produced above the amount authorized in this permit.
2. Increases the quality of produced reclaimed water from Class B to Class A.
3. Decreases the quality of produced reclaimed water from Class A to Class B.
4. Supplies reclaimed water to use areas that require a change in use-based limits or conditions in this permit.

In conjunction with such notice, the Permittee must submit a new or supplemental permit application. The Permittee must use the State Reclaimed Water Permit application for the requested modification. It must also submit engineering, feasibility, and water rights protection documents required by Chapter 172-219 prior to, or in conjunction with, submitting the new or supplemental application. Following submittal of the new or supplemental application and any required engineering documents, Ecology may modify or revoke and reissue pursuant to General Condition G3. 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**

The Permittee must submit all feasibility, planning, design, and construction documents to Ecology for review and approval prior to constructing new reclaimed water facilities or modifying existing facilities. All documents must comply with applicable requirements of chapter 137-219. The Permittee must submit documents at least 90 days prior to the date Ecology review comments or approval is desired. It must not begin construction of any improvements until Ecology has approved appropriate documents. Facilities must be constructed and operated in accordance with the approved engineering documents.

## **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 may transferred to a new owner or operator if:

1. Ecology grants prior approval for the transfer;
2. The Permittee submits a written request to Ecology at least 30 days prior to the proposed transfer date;
3. The written request includes a written agreement between the existing permittee and the new permittee that demonstrates the new permittee meets the feasibility requirements provided for in WAC 173-219-180;
4. The written request must also specify the date of the reclaimed water permit responsibility, coverage, and liability.

Permit transfer is effective on the date specified in the written agreement unless Ecology notifies the parties of their intent to modify or revoke and reissue the reclaimed water permit.

## **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 entity who is found guilty of willfully violating chapter 90.46 RCW, or any written orders or directives of Ecology or a court, is guilty of a gross misdemeanor, and upon conviction may be punished by a fine of up to ten thousand dollars and costs of prosecution, or by imprisonment, or both, at the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any entity who violates the terms and conditions of a reclaimed water permit incurs, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars for every such violation. Each such violation is a separate and distinct offense, and in case of a continuing violation, every day's continuance is considered a separate and distinct violation.

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

The falsification of information submitted to Ecology constitutes a violation of the terms and conditions of this permit. The Permittee must submit:

1. All the information requested by Ecology to determine if cause exists for modifying, revoking, reissuing, or terminating the reclaimed water permit, or to determine compliance with the permit or Chapter 173-219 WAC;
2. Copies of records required by this chapter.

#### **G11. Duty to comply**

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of chapter 90.46 RCW and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

#### **G12. Service agreement review**

The Permittee must submit to Ecology any proposed service agreements and proposed revisions or updates to existing agreements for the operation of any reclaimed water treatment of distribution facility covered by this permit. The review is to ensure consistency with chapters 90.46 as required by RCW 70.150.040(9). In the event that Ecology does not comment within a thirty-day (30) period, the Permittee may assume consistency and proceed with the service agreement or the revised/updated service agreement.

## Appendix A

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

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

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

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

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

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

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.

The lists below include conventional pollutants (as defined in CWA section 502(6) and 40 CFR Part 122.), toxic or priority pollutants as defined in CWA section 307(a)(1) and listed in 40 CFR Part 122 Appendix D, 40 CFR Part 401.15 and 40 CFR Part 423 Appendix A), and nonconventionals. 40 CFR Part 122 Appendix D (Table V) also identifies toxic pollutants and hazardous substances which are required to be reported by dischargers if expected to be present. This permit Appendix A list does not include those parameters.

## CONVENTIONAL POLLUTANTS

Pollutant	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) <sup>1</sup> µg/L unless specified	Quantitation Level (QL) <sup>2</sup> µg/L unless specified
Biochemical Oxygen Demand		SM5210-B		2 mg/L
Biochemical Oxygen Demand, Soluble		SM5210-B <sup>3</sup>		2 mg/L
Fecal Coliform		SM 9221E,9222	N/A	Specified in method - sample aliquot dependent
Oil and Grease (HEM) (Hexane Extractable Material)		1664 A or B	1,400	5,000
pH		SM4500-H <sup>+</sup> B	N/A	N/A
Total Suspended Solids		SM2540-D		5 mg/L

## NONCONVENTIONAL POLLUTANTS

Pollutant & CAS No. (if available)	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) <sup>1</sup> µg/L unless specified	Quantitation Level (QL) <sup>2</sup> µg/L unless specified
Alkalinity, Total		SM2320-B		5 mg/L as CaCO <sub>3</sub>
Aluminum, Total	7429-90-5	200.8	2.0	10
Ammonia, Total (as N)		SM4500-NH <sub>3</sub> -B and C/D/E/G/H		20
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
Chemical Oxygen Demand		SM5220-D		10 mg/L
Chloride		SM4500-Cl B/C/D/E and SM4110 B		Sample and limit dependent
Chlorine, Total Residual		SM4500 Cl G		50.0
Cobalt, Total	7440-48-4	200.8	0.05	0.25
Color		SM2120 B/C/E		10 color units
Dissolved oxygen		SM4500-OC/OG		0.2 mg/L
Flow		Calibrated device		
Fluoride	16984-48-8	SM4500-F E	25	100
Hardness, Total		SM2340B		200 as CaCO <sub>3</sub>
Iron, Total	7439-89-6	200.7	12.5	50
Magnesium, Total	7439-95-4	200.7	10	50
Manganese, Total	7439-96-5	200.8	0.1	0.5
Molybdenum, Total	7439-98-7	200.8	0.1	0.5
Nitrate + Nitrite Nitrogen (as N)		SM4500-NO <sub>3</sub> - E/F/H		100
Nitrogen, Total Kjeldahl (as N)		SM4500-N <sub>org</sub> B/C and SM4500NH <sub>3</sub> - B/C/D/EF/G/H		300
NWTPH Dx <sup>4</sup>		Ecology NWTPH Dx	250	250
NWTPH Gx <sup>5</sup>		Ecology NWTPH Gx	250	250

## **NONCONVENTIONAL POLLUTANTS**

<b>Pollutant &amp; CAS No. (if available)</b>	<b>CAS Number (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL)<sup>1</sup> µg/L unless specified</b>	<b>Quantitation Level (QL)<sup>2</sup> µg/L unless specified</b>
Phosphorus, Total (as P)		SM 4500 PB followed by SM4500-PE/PF	3	10
Salinity		SM2520-B		3 practical salinity units or scale (PSU or PSS)
Settleable Solids		SM2540 -F		Sample and limit dependent
Soluble Reactive Phosphorus (as P)		SM4500-P E/F/G	3	10
Sulfate (as mg/L SO <sub>4</sub> )		SM4110-B		0.2 mg/L
Sulfide (as mg/L S)		SM4500-S <sup>2</sup> F/D/E/G		0.2 mg/L
Sulfite (as mg/L SO <sub>3</sub> )		SM4500-SO <sub>3</sub> B		2 mg/L
Temperature (max. 7-day avg.)		Analog recorder or use micro-recording devices known as thermistors		0.2° C
Tin, Total	7440-31-5	200.8	0.3	1.5
Titanium, Total	7440-32-6	200.8	0.5	2.5
Total Coliform		SM 9221B, 9222B, 9223B	N/A	Specified in method - sample aliquot dependent
Total Organic Carbon		SM5310-B/C/D		1 mg/L
Total dissolved solids		SM2540 C		20 mg/L

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<sup>n</sup>, where n is an integer (64 FR 30417).  
 ALSO GIVEN AS:  
 The smallest detectable concentration of analyte greater than the Detection Limit (DL) where the accuracy (precision & bias) achieves the objectives of the intended purpose. (Report of the Federal Advisory Committee on Detection and Quantitation Approaches and Uses in Clean Water Act Programs Submitted to the US Environmental Protection Agency, December 2007).
3. **Soluble Biochemical Oxygen Demand** method note: First, filter the sample through a Millipore Nylon filter (or equivalent) – pore size of 0.45-0.50 µm (prep all filters by filtering 250 ml of laboratory grade deionized water through the filter and discard). Then, analyze sample as per method 5210-B.
4. **NWTPH Dx** – Northwest Total Petroleum Hydrocarbons Diesel Extended Range – see <https://fortress.wa.gov/ecy/publications/documents/97602.pdf>
5. **NWTPH Gx** – Northwest Total Petroleum Hydrocarbons Gasoline Extended Range – see <https://fortress.wa.gov/ecy/publications/documents/97602.pdf>
6. **1, 3-dichloropropylene (mixed isomers)** –You may report this parameter as two separate parameters: cis-1, 3-dichloropropene (10061-01-5) and trans-1, 3-dichloropropene (10061-02-6).

7. Total Benzo(a)fluoranthenes – Because Benzo(b)fluoranthene, Benzo(j)fluoranthene and Benzo(k)fluoranthene co-elute you may report these three isomers as total benzo(a)fluoranthenes.
8. Chlordane – You may report alpha-chlordane (5103-71-9) and gamma-chlordane (5103-74-2) in place of chlordane (57-74-9). If you report alpha and gamma-chlordane, the DL/PQLs that apply are 14/42 ng/L.
9. PCB 1016 & PCB 1242 – You may report these two PCB compounds as one parameter called PCB 1016/1242.