Issuance Date: March 25, 2019
Effective Date: May 1, 2019
Expiration Date: April 30, 2024

State Reclaimed Water Permit Number ST0045498

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

In compliance with the provisions of the
State of Washington Reclaimed Water Act,
Chapter 90.46 Revised Code of Washington

King County Department of Natural Resources and Parks,
Wastewater Treatment Division
King Street Center, KSC-NR-700
201 South Jackson Street
Seattle, Washington 98104-3855

is authorized to produce and distribute reclaimed water in accordance with the Reclaimed Water and General Conditions that follow.

Plant Name and Location:	Reclaimed Water Classification:
Brightwater Reclaimed Water Facilities 22505 SR 9 SE, Woodinville, WA 98072	Class A
Reclaimed Water Treatment:	**Beneficial Uses:**
Activated Sludge with Hollow Fiber Membrane filtration. Disinfection with sodium hypochlorite.	Indoor uses, industrial and commercial uses, and 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	June 15, 2019
R3.A	Discharge Monitoring Report (DMR)	Annual	January 15, 2020
R3.B	Annual Summary Report	Annual	March 15, 2020
R3.G	Reporting Permit Violations	As necessary	
R4.B.a	Use and Distribution Agreements	As necessary	May 1, 2021
R4.C.a	Cross-connection control program plan	1/permit cycle	May 1, 2023
R6.A	Notice of compliance with cross-connection control specialist requirement	1/permit cycle	July 1, 2022
R6.C	Operations and Maintenance Manual	1/permit cycle	May 1, 2023
R8.	Application for Permit Renewal	1/permit cycle	November 1, 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.

Biological Oxidation and Filtration Performance Standards Compliance Point: Membrane Effluent Box		
Parameter	**Average Monthly [a]**	**Average Weekly [b]**
Biochemical Oxygen Demand (BOD_5)	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 [c]	N/A
pH	6.0 standard units	9.0 standard units
Parameter	**Average Monthly**	**Instantaneous Maximum**
Turbidity	0.2 Nephelometric Turbidity Units (NTU)	0.5 NTU [d]
Disinfected Reclaimed Water – RW Demo System [e] Compliance Point: Disinfection Building		
Parameter	**7-Day Median [f]**	**Sample Maximum [g]**
Total Coliform	2.2 CFU/100 mL	23 CFU /100 mL
Disinfected Reclaimed Water – Reclaimed Water High Pressure Pipeline [h] Compliance Point: Influent Pump Station		
Parameter	**7-Day Median**	**Sample Maximum**
Total Coliform	2.2 CFU/100 mL	23 CFU /100 mL
Disinfected Reclaimed Water in Distribution System Compliance Point: York Pump Station		
Parameter	**Minimum**	
Total Chlorine Residual [i]	0.5 mg/L	

Footnotes for Limit Table	
[a]	Average monthly limit means the highest allowable average of daily discharges over a calendar month. To calculate the discharge value to compare to the limit, you add the value of each daily discharge measured during a calendar month and divide this sum by the total number of daily discharges measured.

b	Average weekly 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' measured during that week.
c	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.
d	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.
e	"Disinfected Reclaimed Water – RW Demo System" refers to water produced for distribution to the Brightwater Environmental Education and Community Center System and treatment plant entrance sculpture.
f	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).
g	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.
h	"Disinfected Reclaimed Water – Reclaimed Water High Pressure Pipeline" refers to water produced for distribution external users through the Permittee's main reclaimed water distribution network.
i	The Permittee must maintain a total chlorine residual of at least 0.5 mg/L in the reclaimed water conveyance pipeline(s) to all use areas. The minimum residual limit is defined as the value a continuous measurement must not fall below for more than 95% of the time during any 24-hour period when water is being distributed. Chlorine residual measurements may remain below the minimum limit for up to a total of 72 minutes during any day reclaimed water is distributed. Durations of less than 72 minutes are not permit violations. A residual is not required in reclaimed water impoundments, storage ponds, and storage tanks at the point of use.

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. The Permittee must monitor the domestic wastewater influent to the treatment facility in accordance with Special Condition S2 of National Pollutant Discharge Elimination System (NPDES) permit WA0032247.

Reclaimed Water Monitoring			
Parameter	**Units**	**Minimum Sampling Frequency**	**Sample Type**
(1) Reclaimed Water Prior to Disinfection – Membrane Effluent Box			
The Permittee must monitor reclaimed water prior to the disinfection system to verify it meets the minimum biological oxidation performance standards and required water clarity. The compliance point for this monitoring is at the Membrane Effluent Box. The Permittee may report BOD_5 and TSS results monitored at the Influent Pump Station, as required by table S2.A.2 of the Brightwater NPDES permit (WA0032247) to satisfy these monitoring requirements.			
BOD_5	mg/L	5/week	24-hour composite [a]
TSS	mg/L	5/week	24-hour composite
pH [b]	Standard Units	Continuous [c]	Metered/recorded
Dissolved Oxygen	mg/L	Continuous	Metered/recorded
Turbidity [d]	NTU	Continuous	Metered/recorded

Reclaimed Water Monitoring			
Parameter	**Units**	**Minimum Sampling Frequency**	**Sample Type**
(2) Disinfected Reclaimed Water – Disinfection Building			
The Permittee must monitor the following water quality parameters in final reclaimed water for distribution to the Brightwater Environmental Education and Community Center. The compliance point for this monitoring is at the Disinfection Building.			
Flow	Gallons/day (gpd)	Continuous	Metered/recorded
Total coliform [e]	#CFU/100mL	Daily	Grab [f]
Total Chlorine Residual [g]	mg/L	Continuous	
(3) Disinfected Reclaimed Water – Influent Pump Station			
The Permittee must monitor the following water quality parameters in final reclaimed water for distribution through the Reclaimed Water High Pressure Pipeline. The compliance point for this monitoring is at the Influent Pump Station.			
Flow	Million-gallons/day (MGD)	Continuous	Metered/recorded
Total coliform	#CFU/100mL	Daily	Grab
Total Chlorine Residual [g]	mg/L	Continuous	Metered/recorded
(4) Distribution System – York Pump Station			
The Permittee must monitor the following parameters in the reclaimed water distribution system at York Pump Station.			
Total Chlorine residual [h]	mg/L	Continuous	Metered/recorded
Residual excursion duration [h]	Minutes	Daily, if needed	Calculated
(5) Permit Renewal Application Requirements – Membrane Effluent Box			
The Permittee must monitor the following parameters in reclaimed water prior to disinfection for permit renewal application purposes. The Permittee must monitor during periods when reclaimed water is distributed through the RWHP. The Permittee may use the results of monitoring done at the Influent Pump Station required by the Brightwater NPDES permit (WA0032247) to satisfy any of the required monitoring listed below as long as the monitoring is done during a day in which the facility produces and distributes reclaimed water.			
Total Nitrogen (as N)	mg/L	Once per year	24-hour composite
Total Phosphorous (as P)	mg/L	Once per year	24-hour composite
Total Dissolved Solids	mg/L	Once per year	24-hour composite
Cyanide	µg/L	Once per year	Grab
Total Phenolic Compounds	µg/L	Once per year	Grab
Priority Pollutants (PP) – Total Metals	µg/L; nanograms (ng/L) for mercury	Once per year	Grab or Composite

Footnotes for monitoring tables	
a	24-hour composite means a series of individual samples collected over a 24-hour period into a single container, and analyzed as one sample.
b	The Permittee must continuously record effluent pH using inline analyzers. Report the daily maximum and minimum pH values from instantaneous data averaged over a maximum interval of 5 minutes. Do not report daily average pH values.
c	Continuous means uninterrupted except for brief lengths of time for calibration, for power failure, or for unanticipated equipment repair or maintenance.
d	Effluent turbidity analysis must be performed by a continuous recording turbidimeter. The Permittee must report the maximum value that exceeds 5 minutes.
e	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.

f	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.
g	The Permittee must continuously record total residual chlorine concentration after disinfection using inline analyzers. Report the highest concentration from instantaneous data averaged over a maximum interval of 10 minutes as the daily maximum concentration.
h	The Permittee must continuously record total residual chlorine concentration in the distribution system and the York Pump Station using inline analyzers. Report the lowest concentration from continuously recorded data for each day in which reclaimed water is distributed. If during any day the recorded residual falls below 0.5 mg/L, the Permittee must report the total duration of time the residual remains below the limit. Durations of less than one minute are considered transitory and are not valid for reporting purposes.

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 and continuous monitoring devices

The Permittee must:

1. Select and use appropriate flow 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. May calibrate apparatus for continuous monitoring of dissolved oxygen by air calibration.

b. Must calibrate continuous pH measurement instruments using a grab sample analyzed in the lab with a pH meter calibrated with standard buffers and analyzed within 15 minutes of sampling.

c. Must calibrate continuous chlorine measurement instruments using a grab sample analyzed in the laboratory within 15 minutes of sampling.

4. Establish a calibration frequency for each device or instrument in the O&M manual that conforms to the frequency recommended by the manufacturer.

5. Calibrate flow monitoring devices at a minimum frequency of at least one calibration per year.

6. Maintain calibration records for at least three years.

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 Water 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 report 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 15th day of the following month.
    b. Submit **annual DMRs**, unless otherwise specified in the permit, by January 15 for the previous calendar year. The annual sampling period is the calendar year.
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 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, 2020, and annually thereafter using the Annual Report Questionnaire Form provided by Ecology in the Water Quality Permitting Portal – Permit Submittals application. The Permittee will provide summaries of reclaimed water production topics for the previous calendar year in the questionnaire. Appendix B includes a sample of the Annual Report 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 Water 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
Department of Ecology
Northwest Regional Office
3190 160th 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.

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.
   - Overflows or leaks of transmission or irrigation pipelines that discharge to a waterbody used as a source of drinking or irrigation water.

Northwest Regional Office	**425-649-7000**
Snohomish Health District	**425-339-5250 (main number)** **425-339-5295 (afterhours)**
Public Health – Seattle & King County	**206-477-8050**

Notify local health jurisdiction responsible for area where incident occurred or where public health impact may be seen.

2. If a reclaimed water system leak reported in sub-conditions 1, above, results in a release of reclaimed water into a municipal separate storm sewer system (MS4), the Permittee must notify the appropriate MS4 owner or operator.

3. 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 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. The Permittee must report:

1. Any noncompliance that may endanger health or the environment, unless previously reported under immediate reporting requirements.
2. Any violation of a maximum daily or instantaneous maximum discharge limit for any of the parameter listed in Section R1.A of this 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 and distribute Class A reclaimed water for the following beneficial uses:
   - Indoor use for non-potable applications at commercial, industrial, institutional, and residential buildings.
   - Non-potable water supply for activities at industrial, commercial, and institutional facilities including, but not limited to, dust control, street sweeping, sewer line flushing, and fire suppression.
   - Irrigation of nonfood crops (trees and fodder, fiber, seed crops and pastures).
   - Food crop irrigation.
   - Landscape irrigation.
2. The Permittee may add beneficial uses listed in the "Commercial, Industrial, and Institutional Uses" and "Land Application or Irrigation" section(s) of Table 3 in WAC 173-219-390 without modifying this permit as long as the new use does not include additional use-based requirements that are more stringent than the requirements listed in Reclaimed Water Condition R4.B.c.
3. All distribution and use of reclaimed water must comply with the terms and conditions of this permit and with signed distribution and use agreements. The distribution or release of inadequately treated water or the distribution and use of water to locations not identified in this permit or use agreements is prohibited.

4. The Permittee may distribute reclaimed water for beneficial uses to the following locations. The Permittee may add new reclaimed water users without modification of this permit by submitting a signed use agreement with the new user for Ecology review and approval prior to providing reclaimed water to the new user.

Water Use Site	Site Location	Authorized Uses
Brightwater Facility Distribution System		
Brightwater Environmental Education Community Center	22509 State Route 9 #101 Woodinville, WA 98072	Toilet/urinal flushing irrigation (turf, landscaping, and food crops)
Brightwater WWTP Entrance	22509 State Route 9 #101 Woodinville, WA 98072	Water supply to sculpture at facility entrance
Reclaimed Water High Pressure Pipeline Distribution System		
Brightwater Influent Pump Station	11711 NE 195th Street Bothell, WA 98011	Turf and landscape irrigation
King County North Creek Pump Station	18707 North Creek Parkway Bothell, WA 98011	Landscape irrigation
King County York Pump Station	14120 NE 124th Street Redmond, WA 98052	Landscape irrigation
King County Hollywood Pump Station	14815 NE 124th Street Redmond, WA 98052	Landscape irrigation
Willows Run Golf Complex	10402 Willows Road NE Redmond, WA 98052	Turf irrigation
King County Sixty Acres Park	15200 NE 116th Street Redmond, WA 98052	Turf irrigation
King County Department of Natural Resources and Parks - Sammamish River Landscaping Strip	West bank of Sammamish River between NE 124th Street and NE 100th Court Redmond, WA 98052	Turf and landscape irrigation
Buttonwood Tree Farm	14500 NE 116th Street Redmond, WA 98052	Tree irrigation

R4.B. Use and distribution constraints

a. Agreements required

The Permittee must maintain and enforce use agreements for each user that receives reclaimed water generated by the permitted facility. Agreements may take one of the following forms:

- Individual agreements with each user or distributor that receives reclaimed water.
- Standardized general agreements or templates that the Permittee will use for all users or distributors.
- Local ordinances that regulate the use and distribution of reclaimed water generated at the permitted facility.

The Permittee must submit each individual agreement, general agreement template, or ordinance to Ecology for review and approval prior to providing reclaimed water.

Any use agreement in effect prior to February 23, 2018, that does not comply with the requirements of WAC 173-219-290(2) and with Reclaimed Water Condition R4.B.c of this permit may remain in effect for up to two years after the effective date of this permit. The Permittee must modify, as necessary, and resubmit any non-conforming agreement to Ecology for review and approval prior by May 1, 2021.

b. 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. Maintain a minimum total chlorine residual of 0.5 mg/L throughout the distribution system to each point of use. A chlorine residual is not required in reclaimed water impoundments, storage ponds, or storage tanks at the point of use.
2. 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.
3. 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.
4. Maintain adequate separation between pipes conveying reclaimed water and any nearby sanitary sewer lines, storm sewer lines, potable water lines, and potable water wells.
5. Maintain a minimum 200 foot horizontal separation between 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.
6. 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.

7. 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 from 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.
8. The Permittee may distribute reclaimed water produced at the permitted facility by means of transport vehicles. Uses of reclaimed water distributed by transport vehicle is limited to the authorized uses listed in Reclaimed Water Condition R4.A. Filling of transport vehicles may occur only at the following designated reclaimed water fill stations.

Authorized reclaimed water fill stations	
Station name	**Station address**
King County York Pump Station	14120 NE 124th Street Redmond, WA 98052

In addition to the cross-connection control requirement listed above, all vehicle fill stations must include appropriate cross-connection controls to prevent contamination of the reclaimed water distribution system connected to the station.

Vehicles used to transport reclaimed water must use signs or other appropriate labeling to identify that it is used to transport reclaimed or non-potable water. The Permittee may not allow the following vehicles to transport reclaimed water:

- Vehicles used to transport potable water.
- Vehicles used to transport hazardous or dangerous wastes.

c. Use agreement requirements

1. Before entering into any use agreement, the Permittee must first evaluate the proposed use site to assure the proposed site is appropriate for the prospective reclaimed water use. The Permittee must also verify that the proposed use is not prohibited by local codes or ordinances and that the use is protective of public health and the environment. A completed site evaluation must accompany each use agreement submitted to Ecology for review and approval.

   A site evaluation is not required for use agreements in place prior to February 23, 2018. A new or updated evaluation will be required for existing use areas if the agreements are modified to increase the amount of reclaimed water supplied to the site or to change the types of beneficial uses at the sites. The Permittee must also reevaluate use sites when they become aware of changes in local codes or ordinances that may affect the use of reclaimed water at the site or if they become of aware of any other circumstances that may impact the ability to appropriately use reclaimed water at a site.

2. 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.

   A copy of the notification must accompany each agreement submitted to Ecology for review and approval.

3. Each use agreement must include the following:

   a. Identification of the person or organization entering into the agreement to use the reclaimed water. For agreements with an organization, include the name of the individual responsible for overseeing the use of the reclaimed water.

   b. 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.

   c. Description of the authorized use(s) of reclaimed water at the site covered by the agreement.

   d. Requirements for cross-connection control consistent with Reclaimed Water Condition R4.C below.

   e. As necessary, specification of required monitoring points, monitored parameters, and sample times if use location monitoring is necessary to implement the terms and conditions in this permit.

   f. Requirements for 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.

   g. Require the design for all 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. Ecology may waive this requirement on a case-by-case basis.

   h. 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.

   i. Establish Best Management Practices (BMPs) designed to prevent incidental site runoff.

d. Enforcement of agreements

Each use agreement must include enforcement provisions that specify consequences of the user's failure to comply with the terms of the agreement. The Permittee may use discretion in selecting the appropriate enforcement strategies, but must include suspending delivery of reclaimed water or termination of the agreements as potential actions. The Permittee must, at a minimum, immediately take appropriate enforcement actions under the following conditions:

- Discovery of failed or inadequate cross-connection control devices at the use area covered by an agreement.
- Discovery of use of reclaimed waters to areas not identified in use agreements or for uses not authorized by an agreement or this permit.
- Discovery of the use of reclaimed water at rates greater than the rates authorized by an agreement or in a manner inconsistent with the terms and conditions of this permit and the agreement.
- Failure of a user to provide adequate labeling or use area notification.
- Failure of a user to implement appropriate measures to protect human health and the environment.

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

The Permittee must develop and implement a cross-connection control program to ensure protection of reclaimed water from lower quality water. The program must also 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.

The Permittee must complete program development and begin implementation by May 1, 2023. The Permittee must also provide a status update on the development of the program as an element of the Annual Summary Report required in Reclaimed Water Condition R3.B.

b. 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 and required quality of the reclaimed water,
- Identify the proposed use(s) at the site, and
- Request certification from the purveyor that appropriate cross-connection control devices have been installed on the potable water lines entering the proposed use area.

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

c. Program requirements

The permittee must use good engineering practices in the development and implementation of the 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 staffing 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.

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

The Permittee must comply with the Facility Loading requirements in Special Condition S4 of NPDES Permit No. WA0032247 for the influent wastewater to the treatment facility. The following additional conditions apply to the water reclamation process at the permitted facility.

R5.A. Design criteria

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

Maximum Design Flow – RW Demo system	**14,400 GPD**
Maximum Design Flow – RWHP system	**12 MGD**
Maximum Annual Production Volume – full facility	**7,665 MG**

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 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.

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.

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 and distribute 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.

This condition supplements operations and maintenance requirements in Special Condition S5 of NPDES Permit No. WA0032247.

R6.A. Certified operator

An operator certified for at least a Class IV 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 III 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.

A person certified as a Cross-Connection Control Specialist (CCS) must oversee the development and implementation of the Cross-Connection Control Program required in Reclaimed Water Condition R4.C.a. The Permittee must comply with the CCS requirement by July 1, 2022.

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 or to disposal as authorized by Special Condition S1 of NPDES Permit No. WA0032247.

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, membrane 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 times 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, membrane 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.

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.

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 to meets the requirements of WAC 173-219-240 and submit it to Ecology for review by May 1, 2023.
2. Review the O&M manual at least annually.
3. Submit to Ecology for review substantial changes or updates to the O&M manual whenever it incorporates them into the manual.
4. Keep the approved O&M manual at the permitted facility.
5. 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 be consistent with the guidance in section 5.2.6 of the *Reclaimed Water Facilities Manual* (Purple Book). 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. Reporting protocols for submitting reports to Ecology to comply with the reporting requirements in this permit.
4. 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.)
5. Treatment plant process control monitoring schedule.
6. Sampling protocols and procedures for compliance with the sampling and reporting requirements in the reclaimed water permit.
7. Procedures to ensure that "off spec" reclaimed water is re-treated so that it meets all reclaimed water permit limits or is discharged through an approved NPDES outfall according to the terms and conditions of the NPDES permit. "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.
8. 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.
9. Minimum staffing adequate to operate and maintain the treatment processes and carry out compliance monitoring required by the permit.

R7. Pretreatment and source control

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. The treatment of domestic sewage used as a source water for the permitted facility must comply with Special Condition S6, Pretreatment, of NPDES Permit No. WA0032247.

R8. Application for permit renewal or modification for facility changes

The Permittee must submit an application for renewal of this permit by November 1, 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 increasing the class of water produced at the permitted facility from Class B to Class A; facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility.

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 or 40 CFR Part 141.

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.

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)[1] *µg/L unless specified***	**Quantitation Level (QL) [2] *µg/L unless specified***
Biochemical Oxygen Demand		SM5210-B		2 mg/L
Biochemical Oxygen Demand, Soluble		SM5210-B [3]		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^+ B	N/A	N/A
Total Suspended Solids		SM2540-D		5 mg/L

NONCONVENTIONAL POLLUTANTS

Pollutant	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) µg/L unless specified	Quantitation Level (QL)[2] µg/L unless specified
Alkalinity, Total		SM2320-B		5 mg/L as CaCO3
Aluminum, Total	7429-90-5	200.8	2.0	10
Ammonia, Total (as N)		SM4500-NH3-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 CaCO3
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-NO3- E/F/H		100
Nitrogen, Total Kjeldahl (as N)		SM4500-N_{org}B/C and SM4500NH_3-B/C/D/EF/G/H		300
NWTPH Dx [4]		Ecology NWTPH Dx	250	250
NWTPH Gx [5]		Ecology NWTPH Gx	250	250
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_4)		SM4110-B		0.2 mg/L
Sulfide (as mg/L S)		SM4500-S^2F/D/E/G		0.2 mg/L
Sulfite (as mg/L SO_3)		SM4500-SO3B		2 mg/L
Temperature (max. 7-day avg.)		Analog recorder or use micro-recording devices known as thermistors		0.2º 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

PRIORITY POLLUTANTS – METALS, CYANIDE & TOTAL PHENOLS

Pollutant	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL) *µg/L unless specified*	Quantitation Level (QL) [2] *µg/L unless specified*
Antimony, Total	114	7440-36-0	200.8	0.3	1.0
Arsenic, Total	115	7440-38-2	200.8	0.1	0.5
Beryllium, Total	117	7440-41-7	200.8	0.1	0.5
Cadmium, Total	118	7440-43-9	200.8	0.05	0.25
Chromium (hex) dissolved	119	18540-29-9	SM3500-Cr C	0.3	1.2
Chromium, Total	119	7440-47-3	200.8	0.2	1.0
Copper, Total	120	7440-50-8	200.8	0.4	2.0
Lead, Total	122	7439-92-1	200.8	0.1	0.5
Mercury, Total	123	7439-97-6	1631E	0.0002	0.0005
Nickel, Total	124	7440-02-0	200.8	0.1	0.5
Selenium, Total	125	7782-49-2	200.8	1.0	1.0
Silver, Total	126	7440-22-4	200.8	0.04	0.2
Thallium, Total	127	7440-28-0	200.8	0.09	0.36
Zinc, Total	128	7440-66-6	200.8	0.5	2.5
Cyanide, Total	121	57-12-5	335.4	5	10
Cyanide, Weak Acid Dissociable	121		SM4500-CN I	5	10
Cyanide, Free Amenable to Chlorination (Available Cyanide)	121		SM4500-CN G	5	10
Phenols, Total	65		EPA 420.1		50

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

2. Quantitation Level (QL) also known as Minimum Level of Quantitation (ML) – The lowest level at which the entire analytical system must give a recognizable signal and acceptable calibration point for the analyte. It is equivalent to the concentration of the lowest calibration standard, assuming that the lab has used all method-specified sample weights, volumes, and cleanup procedures. The QL is calculated by multiplying the MDL by 3.18 and rounding the result to the number nearest to (1, 2, or 5) x 10^n, where n is an integer (64 FR 30417).
   ALSO GIVEN AS:
   The smallest detectable concentration of analyte greater than the Detection Limit (DL) where the accuracy (precision & bias) achieves the objectives of the intended purpose. (Report of the Federal Advisory Committee on Detection and Quantitation Approaches and Uses in Clean Water Act Programs Submitted to the US Environmental Protection Agency, December 2007).

3. Soluble Biochemical Oxygen Demand method note: First, filter the sample through a Millipore Nylon filter (or equivalent) - pore size of 0.45-0.50 um (prep all filters by filtering 250 ml of laboratory grade deionized water through the filter and discard). Then, analyze sample as per method 5210-B.

4. NWTPH Dx - Northwest Total Petroleum Hydrocarbons Diesel Extended Range – see 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

Appendix B

Sample Annual Report Questionnaire

Condition R3.B requires the Permittee to submit an annual report using a questionnaire form in the Water Quality Permitting Portal – Permit Submittals application. The following table provides an example of the questions that will appear in the form. The questionnaire will require the Permittee to either fill in numbers, upload files for supporting documents, or answer "yes/no" questions. Most "yes/no" questions will trigger a need to supply additional information or files if the Permittee answers "yes".

Question Number	Permit Section	Question	Expected Response
1a	R3.B	How many days did the facility produce reclaimed water during the last year?	enter number
1b	R3.B	How many days did the facility distribute reclaimed water during the last year?	enter number
2a	R3.B	What was the total volume (in millions of gallons) of reclaimed water produced during the last year?	enter number
2b	R3.B	What was the total volume (in millions of gallons) of reclaimed water distributed during the last year?	enter number
3	R3.B	Please summarize the volume of reclaimed water distributed by use category (in millions of gallons). Attach a document that provides a detailed breakdown of reclaimed water distributed to each authorized user.	upload file
3a	*R3.B*	*Indoor Uses*	*enter number*
3b	*R3.B*	*Commercial, Industrial, and Institutional Uses*	*enter number*
3c	*R3.B*	*Irrigation – Class A food crops*	*enter number*
3d	*R3.B*	*Irrigation – Class A other*	*enter number*
3e	*R3.B*	*Irrigation – Class B process food crops, nonfood crops, and orchard frost protection*	*enter number*
3f	*R3.B*	*Irrigation – Class B other*	*enter number*
3g	*R3.B*	*Wetland Enhancement (all classes)*	*enter number*
3h	*R3.B*	*Surface Water Augmentation*	*enter number*
3i	*R3.B*	*Groundwater Recharge (direct and indirect)*	*enter number*
3j	*R3.B*	*Aquifer Storage and Recovery*	*enter number*
Questions 3a-3j will include an option to check "N/A" for any use that category that is not applicable to the permit.			
4	R4.B.a	Were any new user or distributors added to the system during the last year?	Yes or No
4a	*R4.B.a*	*Attach a list identifying the new users, the type of uses, and the use locations along with the date of Ecology's approval of the use agreement.*	*upload file*
5	R4.B.d	Were any actions taken during the last year to enforce requirements of a use or distribution agreement?	Yes or No
5a	*R4.B.d*	*Attach a file identifying the user or distributor involved, the nature of the violation, and the remedial actions taken.*	*upload file*
6	R3.B	Were there any reclaimed water limit violations reported on monthly DMRs during the last year (includes all limits associated with reclaimed water production as well as distribution system chlorine residual limits, if applicable)?	Yes or No
6a	*R3.B*	*How many violations were reported?*	*enter number*

Question Number	Permit Section	Question	Expected Response
7	R6.B.a	Did the facility diverted off-spec reclaimed water for disposal or retreatment during the last year?	Yes or No
7a	*R6.B.a*	*What volume of water was diverted (in millions of gallons)?*	*enter number*
7b	*R6.B.a*	*Please attach a file that describes the circumstances that required diversion and the steps taken to remedy.*	*upload file*
8	R4.B.b.7	Was any reclaimed water diverted from authorized use locations due to distribution system maintenance or repair?	Yes or No
8a	*R4.B.b.7*	*What volume of water was diverted (in millions of gallons)?*	*enter number*
8b	*R4.B.b.7*	*Please attach a file that describes the circumstances that required diversion and the steps taken to remedy.*	*upload file*
9	R3.G.a.3	Were any backflow incidents discovered and reported during the last year?	Yes or No
9a	*R3.G.a.3*	*How many incidents were reported?*	*enter number*
9b	*R3.G.a.3*	*Attach a document that summarizes the reported incidents and remedial actions taken.*	*upload file*
Questions 4a, 5a, 6a, 7a, 7b, 8a, 8b, 9a, and 9b are conditional questions that will only appear if the Permittee answers "Yes" in questions 4, 5, 6, 7, 8, or 9.			