

Issuance Date: September 30, 2009
Effective Date: November 1, 2009
Expiration Date: October 31, 2014

RECLAIMED WATER PERMIT NUMBER ST-7445

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 and the Water Pollution Control Law Chapter 90.48
Revised Code of Washington, as amended,

STATE OF WASHINGTON
DEPARTMENT OF HEALTH
16201 E. Indiana Avenue, Suite 1500, Spokane Valley, WA 99216

In compliance with the provisions of Chapter 90.46 and 43.70 Revised Code of Washington
Authorizes the

King County Wastewater Treatment Division
201 S. Jackson St., King Street Center, KSC-NR-0512
Seattle, Washington 98104-3855

to produce and distribute reclaimed water in accordance with the special "R" and general "G"
conditions which follow.

<u>Plant Location:</u> Water Reclamation Plant at King County South WWTP 1200 Monster Road SW, Renton, WA 98057	<u>Discharge Location:</u> Reclaimed Water from King County's South Reclamation Plant to Reuse Sites in the South King County Area.
<u>Treatment Type:</u> Advanced treatment of secondary effluent including coagulation, filtration, and disinfection.	<u>Location of Treatment Plant:</u> Latitude: 47° 28' 07" N Longitude: 122° 17' 37" W

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Washington State Department of Ecology

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SUMMARY OF PERMIT REPORT SUBMITTALS

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

Permit Section	Submittal	Frequency	First Submittal Date
R3.A	Discharge Monitoring Report (DMR)	Monthly	December 20, 2009
R3.E	Reporting Permit Violations	As necessary	
R3.F.4	Cross Connection Control Report	Annually	May 31, 2010
R4.B	Plans for Maintaining Adequate Capacity	As necessary	
R4.D	Reclaimed Water Plant Assessment	1/permit cycle	November 1, 2013
R5.E	Operation and Maintenance Manual Update	As necessary	
R8.C	Reclaimed Water Use Summary Plan	Annually	March 31, 2010
R8.D	Sale & Distribution Agreements	As necessary	
R8.E	Service and Use Area Agreements	As necessary	
R9	Application for Permit Renewal	1/permit cycle	November 1, 2013
G1	Signature Authority	As necessary	
G1.C	Notice of Change in Authorization	As necessary	
G4	Permit Application for Substantive Changes to the Discharge	As necessary	
G5	Notification of New or Altered Sources	As necessary	
G7	Notice of Permit Transfer	As necessary	

RECLAIMED WATER CONDITIONS

R1. RECLAIMED WATER LIMITS

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

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

Beginning on the effective date and lasting through the expiration date of this permit, the Permittee is authorized to distribute Class A reclaimed water to public and private entities for commercial and industrial uses and to apply reclaimed water to land for irrigation at agronomic rates at locations listed in Condition R8. The distribution of reclaimed water is subject to the following limits:

Class A Reclaimed Water Limits		
Class A Reclaimed Water Prior to Distribution		
Turbidity	<u>Average Monthly</u> ^a 2 NTU	<u>Instantaneous Maximum</u> ^b 5 NTU
Total Coliform	<u>7-day Median</u> ^c 2.2 MPN/ 100 ml	<u>Sample Maximum</u> ^d 23 MPN/100 ml
pH	Must be between 6.0 and 9.0 standard units at all times.	
Distribution System		
Chlorine Residual	<u>Minimum Daily</u> 0.5 mg/L	<u>Point of Compliance</u> ^e Reclaimed water storage tank distribution line.
^a The average monthly limitations are based on an arithmetic mean of the samples taken during distribution in a calendar month.		
^b The NTU maximum is defined as the value not to be exceeded by a continuous measurement.		
^c The median number of total coliform organisms in the reclaimed water after disinfection must not exceed 2.2 per 100 milliliters, as determined from the bacteriological results of the last 7 days for which analyses have been completed.		
^d The number of total coliform organisms must not exceed 23 per 100 milliliters in any single sample.		
^e A total chlorine residual of at least 0.5 mg/L must be maintained in the reclaimed water during conveyance to the use area.		

R2. MONITORING REQUIREMENTS

A. Influent to Reclaimed Water Treatment System Monitoring

The sampling point for the influent to the reclaimed water treatment system is secondary effluent. The Permittee may use monitoring data it collects for NPDES permit number WA-002958-1 to fulfill all or part of this requirement.

The Permittee must monitor the influent to the reclaimed water system according to the following schedule (see Appendix A for analytical methods and levels):

Influent Monitoring Schedule				
Parameter	Units	Sample Point ^a	Sampling Frequency	Sample Type
BOD ₅	mg/l	Secondary effluent ^a	Daily	24-hr flow weighted composite
TSS	mg/l	Secondary effluent ^a	Daily	24-hr flow weighted composite
pH	Standard Units	Secondary effluent ^a	Continuous ^b or daily	Average of on-line analyzer or Grab ^c
Turbidity	NTU	Secondary effluent ^a	Continuous ^b	On-line analyzer with recorder
^a Secondary effluent samples must be taken at appropriate location(s) as specified in the approved engineering report.				
^b Continuous means uninterrupted except for brief lengths of time for calibration, for power failure, or for unanticipated equipment repair or maintenance. Samples must be taken every 4 hours when continuous monitoring is not possible.				
^c Grab samples must be taken at the same time daily when wastewater characteristics are the most demanding on the treatment facilities and disinfection processes.				

B. Class A Reclaimed Water Monitoring

The Permittee must monitor the reclaimed water in the appropriate advanced treatment step or in the final reclaimed water according to the following schedule (see Appendix A for analytical methods and levels):

Reclaimed Water Monitoring Schedule				
Parameter	Units	Sample Point ^a	Sampling Frequency	Sample Type
Distributed Flow	GPD	Reclaimed Water Distribution Lines	Daily	Recording Meter
pH	Standard Units	Disinfected reclaimed water	Continuous	On-line analyzer with recorder
Dissolved Oxygen	mg/L	Disinfected reclaimed water	Daily	On-line analyzer with recorder or Grab ^b
Turbidity ^c	NTU	Filter effluent prior to disinfection	Continuous	On-line analyzer with recorder
Coagulant	Type and Lbs.	Coagulant feed	Daily	Metered usage
Coagulant Aid	Type and Lbs.	Coagulant Aid feed	Daily	Metered usage
Ammonia (as N)	mg/L	Disinfected reclaimed water	Weekly	24-hr composite
Nitrate + Nitrite (as N)	mg/L	Disinfected reclaimed water	Weekly	24-hr composite
Total Phosphorus	mg/L	Disinfected reclaimed water	Weekly	24-hr composite
Total Coliform ^d	No. of org. per 100 ml	Disinfected reclaimed water	Daily	Grab ^b
Total Chlorine Residual	mg/L	Reclaimed water storage tank distribution line	Continuous	On-line analyzer with recorder
^a Disinfected reclaimed water samples must be taken at a location specified in the approved engineering report and Operation and Maintenance Manual.				
^b Grab samples must be taken at the same time daily when wastewater characteristics are the most demanding on the treatment facilities and disinfection processes.				
^c Filter effluent turbidity analysis must be performed by a continuous recording turbidimeter. When continuous monitoring is not possible, samples must be taken every 4 hours.				
^d As an alternate method, total coliform bacteria may be monitored using the ONPUG-MUG test (also called Autoanalysis Colilert System) per latest edition of <i>Standard Methods for the Examination of Water and Wastewater</i> .				

C. Sampling and Analytical Procedures

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

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

No groundwater sampling or soil analysis is required under this permit.

D. Field Instrumentation Measurement, Accuracy, and Calibration

The Permittee must:

1. Select and use appropriate flow measurement, field measurement, and continuous monitoring devices and methods consistent with accepted scientific practices.
2. Install, calibrate, and maintain these devices to ensure the accuracy of the measurements is consistent with the accepted industry standard and the manufacturer's recommendation for that type of device.
3. Verify the accuracy of on-line turbidimeters at a minimum frequency of once every two weeks.
4. Use field measurement devices as directed by the manufacturer and do not use reagents beyond their expiration dates.
5. Maintain calibration records for at least three years.

E. Laboratory Accreditation

The Permittee must ensure that all monitoring data required by Ecology is prepared by a laboratory registered or accredited under the provisions of Chapter 173-50 WAC, *Accreditation of Environmental Laboratories*. Flow, temperature, settleable solids, conductivity, pH, turbidity, and internal process control parameters are exempt from this requirement.

No groundwater sampling or soil and crop testing are required under this permit.

R3. REPORTING AND RECORD KEEPING REQUIREMENTS

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

A. Reporting

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

1. Submit monitoring results each month.
2. Summarize, report, and submit monitoring data obtained during each monitoring period on a Discharge Monitoring Report (DMR) form provided, or otherwise approved, by Ecology.

3. Submit DMR forms monthly whether or not the facility was producing reclaimed water. If the facility did not distribute reclaimed water off-site during a given monitoring period, submit the form as required and place an "X" in the "NO OFF-SITE RECLAMATION OR REUSE" box.
4. Ensure that DMR forms are postmarked or received by Ecology no later than the 20th day of the month following the completed monitoring period, unless otherwise specified in this permit.
5. Send report(s) to the following agencies:

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

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

B. Records Retention

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

C. Recording of Results

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

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

D. Additional Monitoring by the Permittee

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

E. Reporting Permit Violations

1. The Permittee must take the following actions when it violates or is unable to comply with any permit condition:
 - a. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the noncompliance and correct the problem.
 - b. If applicable, immediately repeat sampling and analysis. Submit the results of any repeat sampling to Ecology within thirty (30) days of sampling.
2. Follow the established protocols for managing the system regarding sampling and wasting of reclaimed waters.
3. Repeat sampling and analysis of any violation and submit the results to the Department within thirty (30) days after becoming aware of the violation.
4. Within 24 hours of discovering the noncompliance condition, notify the Departments of Health and Ecology of the failure to comply. Notify the local health authorities of any discharge of inadequately treated reclaimed water. The Permittee must notify:
 - Ecology using the ERTS (Environmental Reporting Tracking System) by calling 425-649-7000.
 - The Department of Health by calling 509-329-2146.
 - The local health authorities at 206-296-4932 (King County Health Department's main phone number for sewage discharges to land).
5. Submit a detailed, written report to Ecology and the Department of Health with that month's DMR submittal, unless requested earlier by Ecology, describing the nature of the violation, corrective action taken and/or planned, steps to be taken to prevent a recurrence, results of the resampling, and any other pertinent information. Work with Ecology to prepare an operating protocol for conditions with frequent recurrence.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

F. Reclaimed Water Operational Records

The Permittee must:

1. Keep maintenance records for three (3) years on all major electrical and mechanical components of the reclamation facility, distribution, and use areas. Records must clearly specify the frequency and type of maintenance recommended by the manufacturer and must show the frequency and type of maintenance performed. These maintenance records must be available for inspection at all times.
2. Maintain operating records at the reclamation treatment plant or within a central depository within the Permittee's operating agency for three (3) years. These records must include records of all analyses performed, records of operational problems, unit process and equipment breakdowns, and diversions to emergency storage or disposal; and all corrective or preventative action taken.
3. Record and maintain separate record files of process or equipment failures triggering an alarm that is key to maintaining reliability of reclaimed water quality. The recorded information must include the time and cause of failure and corrective action taken.
4. Cross Connection Control Report: The Permittee must coordinate with the public water system supplier(s) serving lots with both potable and reclaimed water service to assure a cross-connection control report is submitted by the public water system(s) in conformance with the schedule and requirements imposed by the Department of Health, Office of Drinking Water.

The Permittee shall provide the Departments of Health and Ecology with written evidence that they have contacted all the public water systems serving potable water within the area served by both reclaimed water and potable water and asked that the public water systems assure they have complied with all of the cross connection control reports required by the Department of Health, Office of Drinking Water.

G. Maintaining a Copy of This Permit

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

R4. FACILITY LOADING

A. Design Criteria

The permitted reclaimed water facility must not exceed the following design criteria:

Parameter	Design Quantity
Maximum Daily Feed Rate to Filters	1.5 MGD

B. Plans for Maintaining Adequate Capacity

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

1. The actual flow reaches 85 percent of the design criteria in R4.A for three consecutive months; and
2. The projected increase would reach design capacity within five years.

The plan and schedule for continuing to maintain capacity must be sufficient to achieve the reclaimed water limits and other conditions of this permit. This plan must identify any of the following actions or any other actions necessary to meet the objective of maintaining capacity.

- Analysis of the present design, including the introduction of any process modifications that would establish the ability of the existing facility to achieve the reclaimed water limits and other requirements of this permit at specific levels in excess of the existing design criteria specified in paragraph A, above.

Engineering documents associated with the plan must meet the requirements of WAC 173-240-060, "Engineering Report," and be approved by Ecology prior to any construction.

C. Duty to Mitigate

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

D. Reclaimed Water Plant Assessment

1. The Permittee must conduct an assessment of their influent flow and loadings and submit a report to Ecology with the permit renewal application.

2. The report must contain the following: an indication of compliance or noncompliance with the permit effluent limits and a comparison between the existing and design capacities.
3. The report must also state the estimated date upon which the design capacity is projected to be reached.

R5. OPERATION AND MAINTENANCE

The Permittee must, at all times, properly operate and maintain all facilities or systems of treatment and control (and related appurtenances) which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems, which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

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 wastewater treatment plant. An operator certified for at least a Class III plant must be in charge during all regularly-scheduled shifts.

B. O & M Program

The Permittee must:

1. Institute an adequate operation and maintenance program for the entire reclamation system.
2. Keep maintenance records on all major electrical and mechanical components of the reclaimed water treatment plant. Such records must clearly specify the frequency and type of maintenance recommended by the manufacturer and must show the frequency and type of maintenance performed.
3. Make maintenance records available for inspection at all times.
4. Maintain, at all times, the reclamation facility, distribution, and use areas to ensure that all equipment is kept in a reliable operating condition.
5. Maintain a chlorine residual of at least 0.5 mg/l in the reclaimed water during conveyance from the reclamation plant to the use area, as determined by measurements at the reclaimed water storage tank.

C. Short-term Reduction

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.

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

D. Electrical Power Failure

The Permittee must ensure that adequate safeguards prevent the discharge of untreated wastes or reclaimed water not treated in accordance with the requirements of this permit during electrical power failure at the water reclamation treatment plant. Adequate safeguards include, but are not limited to, alternate power sources, standby generator(s), retention of inadequately treated wastes, or retention of reclaimed water. The Permittee must maintain Adequate and Reliable Treatment for Class A reclaimed water in accordance with "Water Reclamation and Reuse Standards, September 1997."

E. Operation and Maintenance Manual

The Permittee must:

1. Review the Operation and Maintenance (O&M) Manual at least annually.
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 O&M Manual at the permitted facility.
4. Follow the instructions and procedures of this manual.

In addition to the requirements of WAC 173-240-150(1) and (2), the O&M Manual must include:

1. Emergency procedures for plant shutdown and cleanup in event of reclaimed water system upset or failure.
2. Reclaimed water system maintenance procedures and the proper handling of any associated wastewater as a result of these procedures.

3. Reclaimed water system maintenance procedures that contribute to the generation of wastewater.
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 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. Reclaimed water sampling protocols and procedures for compliance with the sampling and reporting requirements in the reclaimed water permit.
7. Minimum staffing adequate to operate and maintain the treatment processes and carry out compliance monitoring required by the permit.
8. Alarm condition response plan to ensure that no untreated or inadequately-treated wastewater will be delivered to reclaimed water use areas.
9. Discussion of the cross-connection control and inspection program, including who will be responsible for compliance and testing of the cross-connection control devices.
10. Operational Control Strategies for reclaimed water use under the Permittee's control.

R6. RESIDUAL SOLIDS

Reclaimed water plant residual solids (i.e. sand filter backwash materials) must not be conveyed directly to the effluent transfer system (ETS).

The handling of any residuals generated from the reclamation process must be as described in NPDES Permit No. WA-002958-1 and the South WWTP engineering report approved by Ecology.

R7. PRETREATMENT

The Permittee must ensure that all commercial and industrial contributors to the collection system are in compliance with pretreatment regulations, and that the pretreatment requirements in NPDES Permit No. WA-002958-1 are met.

R8. RECLAIMED WATER DISTRIBUTION AND USE

A. Authorized Uses and Locations

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

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

The Permittee may produce and distribute Class A reclaimed water for the following uses at the following locations, and for new uses and locations as described in R8.B.

Customer	Use	Location
Starfire Sports	Irrigation – soccer fields and landscaping areas.	Fort Dent Park (leased from City of Tukwila)
City of Tukwila	Purple Hydrant – sewer flushing and street sweeping. Also, landscape irrigation.	Hydrant located south of Interurban Pump Station near S. 140 th Street.
King Conservation District	Irrigation – Wetland Plant Nursery	Island of land between Longacres Dr. and SW Grady Way.
City of Renton	Irrigation – Landscaping	North side of SW Grady Way between Longacres Dr. and Oaksdale Ave SW.
King County Wastewater Treatment Division	Irrigation – Landscaping	Outside WWTP fence line on north, west, and south sides.
King County Water and Land Resource Division Reclaimed Water Truck Fill Station @ South WWTP	Irrigation – Landscaping for levee, stream, and wetland buffer restoration.	Reclaimed water trucked to various sites in King County.
Tukwila and Cascade Land Conservancy Reclaimed Water Truck Fill Station @ South WWTP	Irrigation – Riverbend Hill Park	Generally located at 3950 S. 115 th Street, north and south sides.

B. Authorization for New Direct Non-potable Uses of Reclaimed Water

The Permittee may provide reclaimed water for direct beneficial uses at locations not listed in the Reclaimed Water Use Summary Plan required by this permit in accordance with the terms and conditions of this permit provided the following conditions are met:

1. Direct beneficial uses and requirements for use are as listed in the Washington State Water Reclamation and Reuse Standards. The class of reclaimed water provided meets or exceeds the minimum requirements for the proposed use. Irrigation uses do not exceed agronomic rates of application.
2. The use area is located within King County or other nearby counties. The water reclamation facility and use areas must comply with local permitting and land use requirements.
3. The reclaimed water meets all applicable requirements of this permit for the approved class of reclaimed water, including source control, treatment, water quality limits, monitoring, reporting, record keeping, operation and maintenance, distribution, and use.
4. The Permittee lists the new uses in the next annual Reclaimed Water Use Summary Plan and a copy of the revised plan is submitted to the Departments of Ecology and Health. The plan is described in R8.C.
5. The Permittee submits to the Departments of Ecology and Health the Sale and Distribution of Reclaimed Water Agreement (if applicable) which is the contract between King County and the water purveyor and/or the Service and Use Area Agreement which is the contract between King County and the end user.

C. Reclaimed Water Use Summary Plan

The Permittee must prepare a Water Use Summary Plan, which contains a summary description of the reclaimed water distribution system. The Permittee must review and update the plan annually and submit updates to the Departments of Health and Ecology. The annual updates are due March 31st of each year, and cover the previous calendar year. The plan must contain, but not be limited to, the following:

1. Description of the current reuse distribution system.
2. Identification of all current water purveyors, uses, and location of reuse sites.
3. Evaluation of reuse sites, estimated volume of reclaimed water use at each site, means of application, purpose of application (e.g., irrigation), the application rates, water balance, expected agronomic uptake, and assure reclaimed water is not discharged to any ground water or surface except as allowed for specific beneficial uses or under an existing NPDES or State Waste Discharge Permit.

D. Sale & Distribution Agreements

Where the reclaimed water distribution system or additional treatment system to maintain reclaimed water quality is not under direct control of the Permittee:

1. The entity that provides additional treatment, distributes, owns, or otherwise maintains control over the reclaimed water use area is responsible for reuse facilities and activities inherent to the distribution and use of the reclaimed water to ensure that the system operates as approved by the Departments of Health and Ecology in accordance with this permit.
2. A binding Sale & Distribution Agreement among the parties involved is required to ensure that distribution, operation, maintenance, and monitoring meet all requirements of the Departments of Health and Ecology. The Sale & Distribution Agreement must be consistent with the requirements of the *Water Reclamation and Reuse Standards, 1997*. A standard Sale & Distribution Agreement must be reviewed and approved by the Departments of Health and Ecology prior to implementation. A copy of each site-specific Sale & Distribution Agreement must be provided to the Departments of Health and Ecology prior to use.
3. The Sale & Distribution Agreements must provide the Permittee with authority to terminate service of reclaimed water to a customer violating the state's Water Reclamation and Reuse Standards and restrictions outlined in the Sale & Distribution Agreement.
4. The Permittee must maintain all Sale & Distribution Agreements for the duration of the permit. The Permittee must inform the Departments of Health and Ecology in writing of any proposed changes to the approved, standard Sale & Distribution Agreement.

E. Service and Use Area Agreements

Where the reclaimed water use area is not under direct control of the Permittee:

1. The entity who owns or otherwise maintains control over the reclaimed water use area is responsible for on-site reclaimed water facilities, infrastructure, and activities inherent to the use of the reclaimed water to ensure that the system operates as approved by the Departments of Health and Ecology in accordance with this permit.
2. Reclaimed water use, including runoff and spray, must be confined to the designated and approved use areas.
3. A binding Service and Use Area Agreement among the parties involved is required to ensure that construction, operation, maintenance, and monitoring meet all requirements of the Departments of Health and Ecology. This Service and Use Area Agreement must be consistent with the requirements of the *Water Reclamation and Reuse Standards, 1997*. A

standard Service and Use Area Agreement must be reviewed and approved by the Departments of Health and Ecology prior to implementation. A copy of each site-specific Service and Use Area Agreement must be provided to the Departments of Health and Ecology prior to use.

4. The Service and Use Area Agreement must provide the Permittee with authority to terminate service of reclaimed water to a customer violating the state's Water Reclamation and Reuse Standards and restrictions outlined in the reclaimed water use agreement.
5. The Permittee must maintain all Service and Use Area Agreements for the duration of the permit. The Permittee must inform the Departments of Health and Ecology in writing of any proposed changes to the approved, standard Service and Use Area Agreement.

F. Use Area Responsibilities

1. The Permittee must develop general language, symbols, and colors to be used for notification signs and have it approved by the Departments of Ecology and Health. The signs must be used in all reclaimed water use areas, consistent with the *Water Reclamation and Reuse Standards*.
2. All reclaimed water valves, storage facilities, and outlets shall be tagged or labeled to warn the public or employees that the water is not intended for drinking. The signage or advisory notification shall be colored purple with white or black lettering.
3. Reclaimed water use, including runoff and spray, must be confined to the designated and approved use area.
4. Precautions shall be taken to assure that reclaimed water will not be sprayed on people or any facility or area not designated for reuse, including but not limited to buildings, passing vehicles, and drinking water fountains.
5. There shall be no hose bibs on reclaimed irrigation lines unless approved by the Departments of Health and Ecology.
6. Where the reclaimed water production, distribution, and use areas are under direct control of the Permittee, the Permittee must maintain control and be responsible for all facilities and activities inherent to the production, distribution, and use of the reclaimed water. The Permittee must ensure that the reuse system operates as approved by the Departments of Health and Ecology.

7. Tank trucks and other equipment used to distribute reclaimed water shall be clearly identified with advisory signs. Tank trucks used to transport reclaimed water shall not be used to transport potable water that is used for drinking or other potable purposes, unless they have been cleaned and disinfected to the satisfaction of the potable water purveyor, and the tank truck is contracted to or operated by an approved public water supplier. Tank trucks used to transport reclaimed water shall not be filled through onboard piping or hoses that may subsequently be used to fill tanks with water from a potable water supply. Tank trucks used to transport reclaimed water shall be inspected and approved for such use prior to transporting reclaimed water.
8. The Permittee must assure that all customers or authorized personnel using reclaimed water have completed training in the requirements for appropriate use of the water, including signage, cross connection control requirements, public health, and environmental protection.

G. Irrigation Uses

1. For any irrigation use of reclaimed water, the hydraulic loading rate of reclaimed water must be determined based on a water balance analysis and applied at agronomic rates.
2. There must be no runoff of reclaimed water applied to land by spray irrigation to any surface waters of the state or to any land not authorized by approved Service and Use Area Agreement.
3. There must be no application of reclaimed water for irrigation purposes when the ground is saturated or frozen.
4. The reclaimed water must not be applied to the irrigation lands in quantities that:
 - a. Significantly reduce or destroy the long-term infiltration rate of the soil.
 - b. Cause long-term anaerobic conditions in the soil.
 - c. Cause ponding of reclaimed water and produce objectionable odors or support insects or vectors.

H. Commercial and Industrial Uses

Commercial and industrial uses must conform to the state Water Reclamation and Reuse Standards for Class A reclaimed water. Any wastewater discharged from commercial or industrial uses is regulated as wastewater and subject to waste discharge permit requirements.

I. Other Uses of Reclaimed Water

Water reclamation plant effluent used for sewage treatment purposes within the bounds of the wastewater treatment facility is not required to meet the state Water Reclamation and Reuse Standards for Class A reclaimed water, except in areas where there is potential public exposure as determined by the Departments of Health and Ecology.

J. Reliability

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

1. Alarms and standby power source.
2. Alarms and automatically actuated disposal provisions.

K. Bypass Prohibited

The Permittee must not bypass untreated or partially-treated wastewater from the reclamation plant or any intermediate unit processes to the distribution system or point of use at any time. All reclaimed water being distributed for beneficial use must meet Class A requirements at all times. Water not meeting Class A Reclaimed Water Standards must be retained for additional treatment by diversion to a bypass storage structure or discharged back to the headworks for additional treatment.

The Departments of Ecology and Health must be notified by telephone within 24 hours of any discharge not meeting Class A entering the distribution system. Substandard wastewater must not be discharged to the reclaimed water use areas.

L. Revocation of Authorization

Ecology may revoke authorization to provide service if the Permittee fails to comply with any requirement in this permit. Determination to revoke authorization must be based on the risk to public health and safety or threat to waters of the state. Ecology may revoke the authorization for any or all reclamation facilities and use areas located within a specific geographic area if, due to a geologic or hydrologic condition, the cumulative effect of the reclamation facilities and use areas causes the violation of state water quality standards. Before revoking the authorization, Ecology must notify the Permittee in writing and provide a reasonable opportunity and time frame to correct the noncompliance.

R9. APPLICATION FOR PERMIT RENEWAL

The Permittee must apply for permit renewal at least by November 1, 2013.

GENERAL CONDITIONS

G1. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to the Departments of Ecology or Health must be signed as follows:

- A. All permit applications must be signed by either a principal executive officer or ranking elected official.
- B. All reports required by this permit and other information requested by Ecology must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - 1. The authorization is made in writing by the person described above and is submitted to Ecology or Health at the time of authorization, and
 - 2. The authorization specifies either a named individual or any individual occupying a named position.
- C. Changes to authorization. If an authorization under paragraph B.2, above, is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.
- D. Certification. Any person signing a document under this section must make the following certification:

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

G2. RIGHT OF ENTRY

Representatives of the Departments of Ecology or Health have the right to enter at all reasonable times in or upon any property, public or for the purpose of inspecting and investigating conditions relating to the pollution or the possible pollution of any waters of the state. Reasonable times include normal business hours; hours during which production, treatment, or discharge occurs; or times when Ecology or Health suspects a violation requiring immediate inspection. Representatives of Ecology or Health must be allowed to have access to, and copy at reasonable cost, any records required to be kept

under terms and conditions of the permit; to inspect any monitoring equipment or method required in the permit; and to sample the discharge, waste treatment processes, or internal waste streams.

G3. PERMIT ACTIONS

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

- A. Violation of any permit term or condition;
- B. Obtaining a permit by misrepresentation or failure to disclose all relevant facts;
- C. A material change in quantity or type of waste disposal;
- D. A material change in the condition of the waters of the state; or
- E. Nonpayment of fees assessed pursuant to RCW 90.48.465.

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

G4. REPORTING A CAUSE FOR MODIFICATION

The Permittee must submit a new application at least sixty (60) days before it wants to discharge more of any pollutant, a new pollutant, or more flow than allowed under this permit. The Permittee should use the State Waste Discharge Permit application, and submit required plans at the same time. Required plans include an engineering report, plans and specifications, and an Operation and Maintenance Manual (see Chapter 173-240 WAC). The Departments of Ecology and Health may waive these plan requirements for small changes, so contact Ecology and Health if they do not appear necessary. The Permittee must obtain the written concurrence of the receiving POTW on the application before submitting it to Ecology and Health. The Permittee must continue to comply with the existing permit until it is modified or reissued. Submitting a notice of dangerous waste discharge (to comply with Pretreatment or Dangerous Waste rules) triggers this requirement as well.

G5. PLAN REVIEW REQUIRED

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications must be submitted to Ecology for approval in accordance with Chapter 173-240 WAC. Prior to constructing or modifying any reclamation facility, an engineering report and detailed plans and specifications must be submitted to the Departments of Health and Ecology for approval. Engineering reports, plans, and specifications should be submitted at least 180 days prior to the planned start of construction. Facilities must be constructed and operated in accordance with the approved plans.

G6. COMPLIANCE WITH OTHER LAWS AND STATUTES

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

G7. TRANSFER OF THIS PERMIT

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

A. Transfers by Modification

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

B. Automatic Transfers

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

1. The Permittee notifies Ecology and Health at least thirty (30) days in advance of the proposed transfer date.
2. The notice includes a written agreement between the existing and new Permittees containing a specific date transfer of permit responsibility, coverage, and liability between them.
3. Ecology does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under this subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

G8. PAYMENT OF FEES

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

G9. PENALTIES FOR VIOLATING PERMIT CONDITIONS

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

Any person who violates the terms and conditions of a waste discharge permit 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 and every 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 Permittee must submit to the Departments of Ecology and Health, within a reasonable time, all information which Ecology and Health may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee must also submit to Ecology and Health upon request, copies of records required to be kept by this permit.

G11. DUTY TO COMPLY

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

G12. CONTRACT REVIEW

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

APPENDIX A

Please see Section R2 of this permit for the parameters to be monitored.

The following table with analytical levels is to be used as guidance for reclaimed water monitoring. The objectives of this table is to reduce the number of analytical “non-detects” in monitoring reports and to measure concentrations near or below criteria values where possible at a reasonable cost. If a Permittee knows that an alternate, less sensitive method (higher DL and QL) is sufficient to produce measurable results in their effluent, that method may be used for analysis.

EPA 307 (A) REF. #	Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL) ¹ µg/L unless specified	Quantitation Level (QL) ² µg/L unless specified	Lowest Criteria Values µg/L unless specified
	Biochemical Oxygen Demand	SM5210-B		5 mg/L	
	Total Suspended Solids	SM2540-D		2 mg/L	
	pH	SM4500-H ⁺ B	N/A	N/A	
	Turbidity	Calibrated device		<0.1 NTU	
	Flow	Calibrated device	N/A	N/A	
	Dissolved Oxygen	SM4500-OC/OG		0.2 mg/L	
	Total Coliform	SM9222A		0 organisms	
	Total Chlorine Residual	SM4500 Cl G		50.0	7.5
	Total Ammonia (as N)	SM4500-NH3- GH		0.3 mg/L	
	Nitrate-Nitrite (as N)	SM4500-NO3- E/F/H		100	10,000
	Nitrogen, Total Kjeldahl (as N)	SM4500-NH3- C/E/FG/SM4500-Norg-B		300	
	Total Phosphorus (as P)	SM4500-PE/PF	100	100	

1. Detection level (DL) or detection limit means the minimum concentration of an analyte (substance) that can be measured and reported with a 99 percent 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) is equivalent to EPA's Minimum Level (ML) which is defined in 40 CFR Part 136 as the minimum level at which the entire GC/MS system must give recognizable mass spectra (background corrected) and acceptable calibration points. These levels were published as proposed in the Federal Register on March 28, 1997.