DEQ FILE

Expiration Date: January 31, 2015
Permit Number: 102833
File Number: 113611

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
WASTE DISCHARGE PERMIT

Department of Environmental Quality
Northwest Region – Portland Office
2020 SW 4th Ave., Suite 400, Portland, OR 97201
Telephone: (503) 229-5263

Issued pursuant to ORS 468B.050 and The Federal Clean Water Act

ISSUED TO:

I. Water Services, Incorporated
Attention: Greg Matthews
P.O. Box 25630
Portland, OR 97298

SOURCES COVERED BY THIS PERMIT:

Type of Waste	Outfall Number	Outfall Location
Treated wastewater	001	R.M. 14.462
Emergency effluent and sewage solids discharges.	002	Discharge to City of Portland's sanitary sewer.
Recycled water use	003	Building #1 toilet and urinal flushing water; and landscape irrigation for Block #25, greenway, and other approved areas.

FACILITY TYPE AND LOCATION:

Activated Sludge
Membrane Bioreactor (MBR) with UV Disinfection

OHSU River Campus Block #25, Building #1
3303 SW Bond Avenue
Portland, OR 97239

Treatment System Class: Level III
Collection System Class: *Not Applicable – building plumbing is source of all influent sewage.*

RECEIVING STREAM INFORMATION:

Basin: Willamette
Sub-Basin: Lower Willamette
Receiving Stream: Willamette River
LLID: 1227618456580 14.462 D
County: Multnomah

EPA REFERENCE NO: OR-003437-1

This permit is issued in response to Application No. 970917 received December 14, 2009.
This permit is issued based on the land use findings in the permit record.

Greg L. Geist, Manager, Water Quality Source Control Section, Northwest Region

April 30, 2010
Date

PERMITTED ACTIVITIES

Until this permit expires or is modified or revoked, the permittee is authorized to construct, install, modify, or operate a wastewater collection, treatment, control and disposal system and discharge to public waters adequately treated wastewaters only from the authorized discharge point or points established in Schedule A and only in conformance with all the requirements, limitations, and conditions set forth in the attached schedules as follows:

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Schedule A - Waste Discharge Limitations not to be Exceeded 3
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Unless specifically authorized by this permit, by another NPDES or WPCF permit, or by Oregon Administrative Rule, any other direct or indirect discharge of waste is prohibited, including discharge to waters of the state or an underground injection control system.

SCHEDULE-A

1. Waste discharge limitations not to be exceeded after permit issuance.

a. <u>Treated Effluent - Outfall 001</u> (Willamette River Discharge)

(1) Year-Round Limits

Parameter	Average Effluent Concentrations Monthly	Weekly	Monthly* Average lb/day	Weekly* Average lb/day	Daily* Maximum lbs
BOD_5	4 mg/L	6 mg/L	1.2	1.8	2.4
TSS	2 mg/L	3 mg/L	0.58	0.87	1.2

* The treatment facility's design average dry weather flow (**ADWF**) is **0.035 MGD**. Mass load limits are calculated using this ADWF.

(2)

Other parameters (year-round)	Limitations
E. coli Bacteria	Shall not exceed 126 organisms per 100 mL monthly geometric mean. No single sample shall exceed 406 organisms per 100 mL. (See Note 1)
pH	Shall be within the range of 6.5 - 8.5
BOD_5 and TSS removal efficiency	Shall not be less than 85% monthly average for BOD_5 and 85% monthly for TSS.
Thermal Load Limit	***Not Applicable*** (See Note 2)
Ammonia as N, daily maximum	Shall not exceed 2.3 mg/L
Ammonia as N, monthly average	Shall not exceed 1.0 mg/L

(3) Except as provided for in OAR 340-045-0080, no wastes shall be discharged and no activities shall be conducted which violate Water Quality Standards as adopted in OAR 340-041-0345, except in the following defined mixing zone:

No Willamette River mixing zone or zone of initial dilution is provided at Outfall 001. All water quality standards must be met at the Building #1 discharge point*.

**There is no Willamette River mixing zone at Outfall 001. The treatment facility must meet permit limits and all Water Quality Standards (except for effluent temperature) at Building #1. The compliance point for Outfall 001 is located at the UV disinfection system discharge. Additional dilution provided by groundwater and/or stormwater in the common pipe connecting Building #1 to Outfall 001 is not required to meet Water Quality Standards for discharge to the Willamette River, except for summer season temperature criteria (see Note 2 for discussion of temperature criteria at this discharge location).*

(4) ***<u>Chlorine and chlorine compounds must not be used as a disinfecting agent</u>*** for effluent discharged at Outfall 001. Additionally, ***<u>no chlorine residual is allowed in Outfall 001 effluent</u>***.

b. Sewage Solids and Emergency Effluent Discharges - Outfall 002

All sewage solids from this wastewater treatment facility (approximately 250 gallons per day) must be discharged to a City of Portland sanitary sewer; i.e. the City's NPDES permit controls final treatment and disposition. Likewise, emergency effluent discharges that do not meet permit limits suitable for discharge at Outfall 001 and/or Outfall 003 must be discharged to a City of Portland sanitary sewer or hauled off-site by a licensed hauler for treatment and disposal at a permitted facility.

c. Recycled Water - Outfall 003

(1) No discharge to state waters is permitted. All recycled water must either be irrigated on Blocks #24, 25, 28, and 29 landscaping, greenway, and/or other approved areas for dissipation by evaporation/transpiration and controlled seepage; or used for toilet and urinal flushing, and/or evaporative cooling in Building #1 on Block #25. Recycled water use must comply with the Recycled Water Use Plan (RWUP, the Plan); and with RWUP requirements listed in Schedule-D, Special Condition No. 1.

(2) Recycled Water Use - Summer Irrigation Season (May 1 through October 31)
During summer season, all recycled water must receive at least Class-A treatment as defined in OAR 340-055. Class-A, recycled water must be oxidized, filtered, and disinfected wastewater that meets the following numeric criteria:

(a) Before disinfection, unless otherwise approved in writing by the department, the wastewater must be treated with a filtration process, and the turbidity must not exceed an average of 2 nephelometric turbidity units (NTUs) within a 24-hour period, 5 NTU more than five percent of the time within a 24-hour period, and 10 NTU at any time;
(b) After disinfection, Class-A, recycled water must not exceed a median of 2.2 total coliform organisms per 100 milliliters, based on results of the last seven days that analyses have been completed, and 23 total coliform organisms per 100 milliliters in any single sample; and
(c) Class-A, recycled water must have a chlorine residual of at least 1 mg/L maintained at all times when measured at the recycled water storage tank (RWST) outlet.

(3) Recycled Water Use - Winter Season (November 1 through April 30)
During winter season, all recycled water must receive at least Class-B treatment as defined in OAR 340-055. Class-B, recycled water must be oxidized, filtered, and disinfected wastewater that meets the following numeric criteria:

(a) After disinfection Class-B, recycled water must not exceed a median of 2.2 total coliform organisms per 100 milliliters, based on results of the last seven days that analyses have been completed, and 23 total coliform organisms per 100 milliliters in any single sample; and
(b) Class-B, recycled water must have a chlorine residual of at least 1 mg/L maintained at all times when measured at the RWST outlet.

(4) ***Only Class-A, recycled water may be irrigated***. Irrigation application practices and quantity and timing of irrigation applications shall conform to the Recycled Water Use Plan approved by the Department. The following conditions apply to irrigation of Class-A, recycled water:

(a) No direct public contact is allowed during the irrigation cycle;
(b) Signs must be posted around irrigation areas to indicate that recycled water is used for irrigation and is not safe for drinking;

(c) Warning signs for recycled water shall read: "ATTENTION: RECYCLED WATER USED FOR IRRIGATION - - DO NOT DRINK. //ATENCION: RECLAMADO DESPERDICIO DE AGUA USADO PARA LA IRRIGACION - - NO BEBA EL AGUA;
(d) Recycled water must be irrigated in a manner, so that it is not sprayed onto an area where food is being prepared or served, or onto a drinking fountain;
(e) If aerosols are generated when using recycled water for the evaporative cooling process in Building #1, the aerosols must not create a public health hazard; and

The permittee must follow sound irrigation practices so as to prevent

(f) Prolonged ponding of recycled water on the ground surface;
(g) Surface runoff or subsurface drainage through drainage tile;
(h) The creation of odors, fly and mosquito breeding or other nuisance conditions;
(i) The overloading of land with nutrients, organics, or other pollutant parameters; and
(j) Impairment of existing or potential beneficial uses of groundwater.

(5) Permittee shall ensure that the following additional conditions for Class-A & B, recycled water reuse are met:

(a) If aerosols are generated when using recycled water for the evaporative cooling process in Building #1, the aerosols must not create a public health hazard; and
(b) Toilets and urinals, and the evaporative cooling station must be posted to alert the general public and building staff that recycled water is used at these locations, and it is not safe for drinking.

NOTES:

1. If a single sample exceeds 406 organisms per 100 mL, then five consecutive re-samples may be taken at four-hour intervals beginning within 28 hours after the original sample was taken. If the log mean of the five re-samples is $\leq$ 126 organisms per 100 mL, a violation shall not be triggered.

2. A thermal load limit* for this facility was determined to be unnecessary. Most effluent (Class-A recycled water) generated during summer season is used for evaporative cooling, toilet and urinal flushing, and for on-site irrigation per Schedule A, 1. C [Recycled Water – Outfall 003]. Groundwater is pumped year-around to dewater building foundations. This groundwater mixes with effluent in the discharge pipe leading to Outfall 001. Monitoring of the combined flow's 7-day-average daily maximum temperature prior to discharge at Outfall 001, shows that during summer season its temperature remains below the applicable criterion of 18.0 °C (64.4 °F).

   ** The thermal load limit is calculated using the design average dry weather flow (ADWF = 0.035 MGD or approximately 24.3 gpm) and the allowable summer season, 7-day-average daily maximum criterion for river temperature. The applicable temperature criterion required to protect salmon and trout rearing and migration use (this segment of the Willamette River) may not exceed 18.0 °C (64.4 °F), per OAR 340-041-0028 (4) (c).*

SCHEDULE-B

1. Minimum Monitoring and Reporting Requirements

The permittee shall monitor the parameters as specified below at the locations indicated. The laboratory used by the permittee to analyze samples shall have a quality assurance/quality control (QA/QC) program to verify the accuracy of sample analysis. If QA/QC requirements are not met for any analysis, the results shall be included in the report, but not used in calculations required by this permit. When possible, the permittee shall re-sample in a timely manner for parameters failing the QA/QC requirements, analyze the samples, and report the results.

Monitoring must be conducted according to test procedures approved under 40 CFR part 136; or in the case of sludge use and disposal, under 40 CFR Part 503, unless other test procedures have been specified in this permit.

a. Influent

The facility influent sampling locations are the following:

Influent grab samples and measurements are taken downstream of the two flow equalization tanks (FETs), just upstream of the anoxic selector. Samples for toxics are taken at the same location. Composite samples are not required because effluent is stored and mixed in the FETs prior to treatment (each tanks holds 15,000 gallons).

Item or Parameter	Minimum Frequency	Type of Sample
Total flow (MGD)	Daily	Measurement
Flow meter calibration	Annually	Verification (see Note 1)
BOD_5	Monthly	Grab
TSS	Monthly	Grab
pH	2/Week	Grab

b. Treated Effluent - Outfall 001 (Willamette River Discharge)

The facility effluent sampling locations and conditions for Outfall 001 are the following:

(1) Effluent grab and flow measurements must be taken immediately downstream of the UV disinfection unit.
(2) Samples for toxics and temperature, and dissolved oxygen measurements are taken at the same location.
(3) Composite effluent samples are not required because the treatment process produces a uniform effluent quality over a 24-hour period.

Item or Parameter	Minimum Frequency	Type of Sample
Total Flow (MGD)	Daily	Measurement
Flow meter calibration	Annual	Verification (see Note 1)
BOD_5	Monthly	Grab
TSS	Monthly	Grab
pH	2/Week	Grab
E. coli	Monthly	Grab
UV radiation intensity	Daily	Reading (See Note 2)
Pounds discharged	Monthly	Calculation

(BOD_5 and TSS)		
Average percent removed (BOD_5 and TSS)	Monthly	Calculation
Ammonia as total N	2/Week	Grab
Dissolved Oxygen	2/Week	Grab

Discharges to Outfall 001 (Willamette River) must never be chlorinated, or have a measurable chlorine residual.

c. **Temperature Monitoring at Outfall 001 River Contact (May 1 - October 31)**

(1) The temperature of final effluent (mixture of groundwater and recycled water) is taken at the discharge to the bank-side spillway located in the greenway area along the Willamette River.
(2) River temperature is taken 3-feet off of the river bank and 50-feet upstream from the Outfall 001 river contact point.
(3) Bank-side and river temperature measurements must be taken between 1400 and 1700.

Item or Parameter	Minimum Frequency	Type of Sample
Bank-side effluent temperature	2/Week	Measurement (See Notes 3, 4, & 5).
Average bank-side effluent temperature	Weekly	Calculation (average of daily measurements).
River temperature	2/Week	Measurement (See Notes 4 & 5).
Average river temperature	Weekly	Calculation (average of daily measurements).

An annual report covering temperature monitoring done in the previous calendar year is due by February 15th of the following year. The report must include all daily effluent temperatures and weekly averages for bank-side and river monitoring.

d. **Sewage Solids Management and Emergency Effluent Discharges - Outfall 002**

Discharge of sewage solids. All sewage solids from the waste activated sludge (WAS) storage tank must be discharged to a City of Portland sanitary sewer. Sewage solids flow measurement and sampling is located downstream of the WAS storage tank, per City of Portland requirements.

Emergency effluent discharges. All treatment facility flows that do not meet permitted discharge limits, per Schedule A of this permit for discharge at Outfall 001 or 003, must be discharged to a City of Portland sanitary sewer (Outfall 002), or transported off-site for treatment and disposal by a licensed hauler. Flow sampling and measurement devices shall comply with City of Portland requirements.

Item or Parameter	Minimum Frequency	Type of Sample
Sewage solids pumped from the WAS Storage Tank to a City of Portland sanitary sewer.	Each Occurrence	Date and volume (gallons).
Emergency effluent discharges to City of	Each Occurrence	Date, volume (gallons), and reason why effluent did not

Portland sanitary sewer.		attain permit limit(s).
Emergency effluent discharges hauled by licensed hauler.	Each Occurrence	Date, volume (gallons), and reason why effluent did not attain permit limit(s).
Flow meter calibration	Annually	Verify each meter (Note 1).

e. **Recycled Water Outfall - Outfall 003**

(1) Monitoring Locations

(a) Turbidity measurements are taken post filtration prior to UV disinfection.

(b) Recycled water must be grab sampled and flow measured downstream of the recycled water storage tank (RWST) prior to use for irrigation, evaporative cooling, and/or flushing water.

(2) Class-A, Recycled Water Monitoring

Item or Parameter	Minimum Frequency	Type of Sample
Quantity irrigated	Daily	Measurement[1,2] (gallons/day)
Quantity used for Building #1 toilet flushing and/or evaporative cooling	Daily	Measurement[2] (gallons/day)
Flow meter calibration	Annually	Verification (Note 1).
pH	Daily	Grab
Total Coliform	Daily	Grab
Turbidity	Hourly	Measurement (Note 6)
Chlorine Residual	Daily	Grab (Note 7)
Nutrients (TKN, NO_2+NO_3-N, NH_3, Total Phosphorus)	Quarterly	Grab[1]

[1]Applicable only when irrigation is active (summer season – May 1 through October 31).
[2]Provide a daily estimate for the RWST volume that is recycled water, e.g. 30%; and multiply the applicable recycled % times the total gallons irrigated each day. If flow meters are available for direct recycle flow measurement, it is permissible to use those readings instead of a daily estimate.

(3) Class-B, Recycled Water Monitoring

Item or Parameter	Minimum Frequency	Type of Sample
Quantity used for Building #1 toilet flushing and/or evaporative cooling	Daily	Measurement[1] (gallons/day)
Flow meter calibration	Annually	Verification (Note 1).
pH	3/Week	Grab
Total Coliform	3/Week	Grab
Chlorine Residual	3/Week	Grab (Note 7)

[1]Provide a daily estimate for the RWST volume that is recycled water, e.g. 30%; and multiply the applicable recycled % times the total gallons irrigated each day. If flow meters are available for direct recycle flow measurement, it is permissible to use those readings instead of a daily estimate.

2. **Reporting Procedures - For Discharge Monitoring Reports (DMRs)**

   a. Monitoring results shall be reported on approved forms. The reporting period is the calendar month. Reports must be submitted to the Department's Northwest Region - Portland office by the 15th day of the following month.

   b. State monitoring reports shall identify the name, certificate classification and grade level of each principal operator designated by the permittee as responsible for supervising the wastewater collection and treatment systems during the reporting period. Monitoring reports shall also identify each system classification as found on page one of this permit.

   c. Monitoring reports shall include a record of the quantity of all sewage solids removed from the treatment facility and all emergency effluent discharges to Outfall 002. A record of all applicable equipment breakdowns and bypassing is also required.

3. **Report Submittals**

   By no later than February 15 of each year, the permittee shall submit to the Department an annual report describing the effectiveness of the reclaimed water system to comply with approved Reclaimed Water Use Plan, the rules of Division 055, and the limitations and conditions of this permit applicable to reuse of recycled water.

NOTES:

1. Flow Meter Calibration. The date of each flow meter calibration event must be listed in the facility's log book. If the flow meter is found to be out of calibration, a discussion of the problem and probable effect on the accuracy of past measurements must also be included in the log book. The date the flow meter is certified as calibrated must be listed.
2. UV Intensity Readings. The intensity of UV radiation passing through the water column will affect the system's ability to kill organisms. To track the reduction in intensity, the UV disinfection system must include a UV intensity meter with a sensor located in the water column at a specified distance from the UV bulbs. This meter will measure the intensity of UV radiation in mWatts-seconds/cm2. The daily UV radiation intensity shall be determined by reading the meter each day. If more than one meter is used, the daily recording will be an average of all meter readings each day.
3. Temperature Monitoring. Temperature sampling is not required for those days when there is no effluent discharge to Outfall 001.
4. Temperature Monitoring. After two years of temperature monitoring, and if approved in writing by the Department, monitoring may be waived for those months when the 7-day average of bank-side effluent temperature does not exceed the stream temperature standard of 18.0 °C (64.4 °F).
5. Temperature Monitoring Results. Monitoring results must be reported on the monthly DMR.
6. Turbidity Monitoring. Report on monthly DMR the highest hourly turbidity reading that is recorded each day, and all daily turbidity violations, per Schedule A, 1.c (2).
7. Chlorine Residual. A chlorine residual of at least 1 mg/L must be maintained at this monitoring location.

SCHEDULE-C

Compliance Schedules and Conditions

(Not Applicable to This Permit)

SCHEDULE-D
Special Conditions

1. Recycled Water. The permittee shall meet the requirements for use of recycled water under Oregon Administrative Rules (OAR), Chapter 340, Division 055, including the following:

   a. All recycled water shall be managed in accordance with the approved Recycled Water Use Plan. No substantial changes shall be made in the approved plan without written approval of the Department.

   b. The permittee shall notify the Department within 24-hours if it is determined that recycled water is being used in a manner not in compliance with OAR 340-055. When the Department offices are not open, the permittee shall report the incident of noncompliance to the Oregon Emergency Response System (**Telephone Number 1-800-452-0311**).

2. Cover Crop. Unless otherwise approved in writing by the Department, a cover crop of ornamental landscaping (or equal) shall be maintained on all irrigation areas at all times. Vegetation shall be periodically trimmed and removed to ensure maximum evapotranspiration and nutrient capture. Drip and spray irrigation were selected to distribute recycled water on the vegetation.

3. Operator Certification. The permittee shall comply with (OAR, Chapter 340, Division 049, Regulations Pertaining to Certification of Wastewater System Operator Personnel as follows:

   a. The permittee shall have its wastewater system supervised by one or more operators who are certified in a classification and grade level (equal to or greater) that corresponds with the classification (collection and/or treatment) of the system to be supervised, as specified on Page One of this permit.

   Note: **A "supervisor" is defined as the person exercising authority for establishing and executing the specific practice and procedures of operating the system in accordance with the policies of the permittee and requirements of the waste discharge permit. "Supervise" means responsible for the technical operation of a system, which may affect its performance or the quality of the effluent produced. Supervisors are not required to be on-site at all times.**

   b. The wastewater system may not be without supervision (as required by Special Condition 3.a. above) for more than thirty (30) days. During this period, and at any time that the supervisor is not available to respond on-site (i.e. vacation, sick leave or off-call), the permittee must make available another person who is certified at no less than one grade lower then the system classification.

   c. If the wastewater system has more than one daily shift, the permittee shall have the shift supervisor, if any, certified at no less than one grade lower than the system classification.

   d. The permittee is responsible for ensuring the wastewater system has a properly certified supervisor available at all times to respond on-site at the request of the permittee and to any other operator.

   e. The permittee shall notify the Department of Environmental Quality in writing within thirty (30) days of replacement or redesignation of certified operators responsible for supervising wastewater system operation. The notice shall be filed with the Water Quality Division, Operator Certification Program, 811 SW 6th Ave, Portland, OR 97204. This requirement is in addition to the reporting requirements contained under Schedule B of this permit.

   f. Upon written request, the Department may grant the permittee reasonable time, not to exceed 120 days, to obtain the services of a qualified person to supervise the wastewater system. The written request must include justification for the time extension, a schedule for recruiting and hiring, the date

the system supervisor availability ceased, and the name of the alternate system supervisor(s), as required by 3.b. above.

4. Malfunctions. The permittee shall notify the DEQ Northwest Region - Portland Office **[Phone: (503) 229-5263]** in accordance with the response times noted in the General Conditions of this permit (Schedule-F), of any malfunction so that corrective action can be coordinated between the permittee and the Department.

5. Spills Plan. An adequate contingency plan for prevention and handling of spills and unplanned discharges must be in force at all times. A continuing program of employee orientation and education must be maintained to ensure awareness of the necessity of good process control and quick and proper action in the event of a spill or accident.

6. Hydrogeologic Characterization. The permittee is not required to perform a hydrogeologic characterization or groundwater monitoring during the term of this permit provided:

   a. The facility is operated in accordance with the permit conditions, and;

   b. There are no adverse groundwater quality impacts (complaints or other indirect evidence) resulting from facility operation.

   If warranted, at permit renewal the Department may evaluate the need for a full assessment of the facility's impact on groundwater quality.

SCHEDULE-F
NPDES GENERAL CONDITIONS – DOMESTIC FACILITIES

(Schedule-F, last update 9.18.2009)

SECTION A. STANDARD CONDITIONS

1. Duty to Comply with Permit

The permittee must comply with all conditions of this permit. Failure to comply with any permit condition is a violation of Oregon Revised Statutes (ORS) 468B.025 and the federal Clean Water Act and is grounds for an enforcement action. Failure to comply is also grounds for the Department to terminate, modify and reissue, revoke, or deny renewal of a permit.

2. Penalties for Water Pollution and Permit Condition Violations

The permit is enforceable by DEQ or EPA, and in some circumstances also by third-parties under the citizen suit provisions 33 USC §1365. DEQ enforcement is generally based on provisions of state statutes and EQC rules, and EPA enforcement is generally based on provisions of federal statutes and EPA regulations.

ORS 468.140 allows the Department to impose civil penalties up to $10,000 per day for violation of a term, condition or requirement of a permit. The federal Clean Water Act provides for civil penalties not to exceed $32,500 and administrative penalties not to exceed $11,000 per day for each violation of any condition or limitation of this permit.

Under ORS 468.943, unlawful water pollution, if committed by a person with criminal negligence, is punishable by a fine of up to $25,000, imprisonment for not more than one year, or both. Each day on which a violation occurs or continues is a separately punishable offense. The federal Clean Water Act provides for criminal penalties of not more than $50,000 per day of violation, or imprisonment of not more than 2 years, or both for second or subsequent negligent violations of this permit.

Under ORS 468.946, a person who knowingly discharges, places, or causes to be placed any waste into the waters of the state or in a location where the waste is likely to escape into the waters of the state is subject to a Class B felony punishable by a fine not to exceed $200,000 and up to 10 years in prison. The federal Clean Water Act provides for criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment of not more than 3 years, or both for knowing violations of the permit. In the case of a second or subsequent conviction for knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than 6 years, or both.

3. Duty to Mitigate

The permittee must take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment. In addition, upon request of the Department, the permittee must correct any adverse impact on the environment or human health resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

4. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and have the permit renewed. The application must be submitted at least 180 days before the expiration date of this permit.

The Department may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date.

5. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

a. Violation of any term, condition, or requirement of this permit, a rule, or a statute;
b. Obtaining this permit by misrepresentation or failure to disclose fully all material facts;
c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge;
d. The permittee is identified as a Designated Management Agency or allocated a wasteload under a Total Maximum Daily Load (TMDL);
e. New information or regulations;
f. Modification of compliance schedules;
g. Requirements of permit reopener conditions;
h. Correction of technical mistakes made in determining permit conditions;
i. Determination that the permitted activity endangers human health or the environment;
j. Other causes as specified in 40 CFR 122.62, 122.64, and 124.5;
k. For communities with combined sewer overflows (CSOs);
   (1) To comply with any state or federal law regulation that addresses CSOs that is adopted or promulgated subsequent to the effective date of this permit;
   (2) If new information, not available at the time of permit issuance, indicates that CSO controls imposed under this permit have failed to ensure attainment of water quality standards, including protection of designated uses;
   (3) Resulting from implementation of the Permittee's Long-Term Control Plan and/or permit conditions related to CSOs.

The filing of a request by the permittee for a permit modification, revocation or reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

6. Toxic Pollutants

The permittee must comply with any applicable effluent standards or prohibitions established under Oregon Administrative Rules (OAR) 340-041-0033 and 307(a) of the federal Clean Water Act for toxic pollutants, and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act, within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

7. Property Rights and Other Legal Requirements

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege, or authorize any injury to persons or property or invasion of any other private rights, or any infringement of federal, tribal, state, or local laws or regulations.

8. Permit References
Except for effluent standards or prohibitions established under Section 307(a) of the federal Clean Water Act and OAR 340-041-0033 for toxic pollutants, and standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act, all rules and statutes referred to in this permit are those in effect on the date this permit is issued.

9. Permit Fees
The permittee must pay the fees required by Oregon Administrative Rules.

SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance
The permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

2. Need to Halt or Reduce Activity Not a Defense
For industrial or commercial facilities, upon reduction, loss, or failure of the treatment facility, the permittee must, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until the facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced or lost. It is not a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Bypass of Treatment Facilities
   a. Definitions
      (1) "Bypass" means intentional diversion of waste streams from any portion of the treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, provided the diversion is to allow essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs b. and c. of this section.
      (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
   b. Prohibition of bypass.
      (1) Bypass is prohibited and the Department may take enforcement action against a permittee for bypass unless:
         i. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
         ii. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been

installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventative maintenance; and

iii. The permittee submitted notices and requests as required under General Condition B.3.c.

(2) The Department may approve an anticipated bypass, after considering its adverse effects and any alternatives to bypassing, when the Department determines that it will meet the three conditions listed above in General Condition B.3.b.(1).

c. Notice and request for bypass.

(1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, a written notice must be submitted to the Department at least ten days before the date of the bypass.

(2) Unanticipated bypass. The permittee must submit notice of an unanticipated bypass as required in General Condition D.5.

4. Upset

a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operation error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of General Condition B.4.c are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the permittee can identify the causes(s) of the upset;

(2) The permitted facility was at the time being properly operated;

(3) The permittee submitted notice of the upset as required in General Condition D.5, hereof (24-hour notice); and

(4) The permittee complied with any remedial measures required under General Condition A.3 hereof.

d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

5. Treatment of Single Operational Upset

For purposes of this permit, A Single Operational Upset that leads to simultaneous violations of more than one pollutant parameter will be treated as a single violation. A single operational upset is an exceptional incident that causes simultaneous, unintentional, unknowing (not the result of a knowing act or omission), temporary noncompliance with more than one Clean Water Act effluent discharge pollutant parameter. A single operational upset does not include Clean Water Act violations involving discharge without a NPDES permit or noncompliance to the extent caused by improperly designed or inadequate treatment facilities. Each day of a single operational upset is a violation.

6. Overflows from Wastewater Conveyance Systems and Associated Pump Stations

a. Definitions

(1) "Overflow" means any spill, release or diversion of sewage including:
   i. An overflow that results in a discharge to waters of the United States; and
   ii. An overflow of wastewater, including a wastewater backup into a building (other than a backup caused solely by a blockage or other malfunction in a privately owned sewer or building lateral), even if that overflow does not reach waters of the United States.

b. Prohibition of overflows. Overflows are prohibited. The Department may exercise enforcement discretion regarding overflow events. In exercising its enforcement discretion, the Department may consider various factors, including the adequacy of the conveyance system's capacity and the magnitude, duration and return frequency of storm events.

c. Reporting required. All overflows must be reported orally to the Department within 24 hours from the time the permittee becomes aware of the overflow. Reporting procedures are described in more detail in General Condition D.5.

7. Public Notification of Effluent Violation or Overflow

If effluent limitations specified in this permit are exceeded or an overflow occurs that threatens public health, the permittee must take such steps as are necessary to alert the public, health agencies and other affected entities (e.g., public water systems) about the extent and nature of the discharge in accordance with the notification procedures developed under General Condition B.8. Such steps may include, but are not limited to, posting of the river at access points and other places, news releases, and paid announcements on radio and television.

8. Emergency Response and Public Notification Plan

The permittee must develop and implement an emergency response and public notification plan that identifies measures to protect public health from overflows, bypasses or upsets that may endanger public health. At a minimum the plan must include mechanisms to:

a. Ensure that the permittee is aware (to the greatest extent possible) of such events;
b. Ensure notification of appropriate personnel and ensure that they are immediately dispatched for investigation and response;
c. Ensure immediate notification to the public, health agencies, and other affected public entities (including public water systems). The overflow response plan must identify the public health and other officials who will receive immediate notification;
d. Ensure that appropriate personnel are aware of and follow the plan and are appropriately trained;
e. Provide emergency operations; and
f. Ensure that DEQ is notified of the public notification steps taken.

9. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters must be disposed of in such a manner as to prevent any pollutant from such materials from entering waters of the state, causing nuisance conditions, or creating a public health hazard.

SECTION C. MONITORING AND RECORDS

1. Representative Sampling

Sampling and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples must be taken at the monitoring points specified in this permit, and shall be taken, unless otherwise specified, before the effluent joins or is diluted by any other waste

stream, body of water, or substance. Monitoring points may not be changed without notification to and the approval of the Department.

2. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices must be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices must be installed, calibrated and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected must be capable of measuring flows with a maximum deviation of less than ± 10 percent from true discharge rates throughout the range of expected discharge volumes.

3. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR part 136, or in the case of sludge use and disposal, under 40 CFR part 503, unless other test procedures have been specified in this permit.

4. Penalties of Tampering

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit may, upon conviction, be punished by a fine of not more than $10,000 per violation, imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person, punishment is a fine not more than $20,000 per day of violation, or by imprisonment of not more than four years, or both.

5. Reporting of Monitoring Results

Monitoring results must be summarized each month on a Discharge Monitoring Report form approved by the Department. The reports must be submitted monthly and are to be mailed, delivered or otherwise transmitted by the 15th day of the following month unless specifically approved otherwise in Schedule B of this permit.

6. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR part 136, or in the case of sludge use and disposal, under 40 CFR part 503, or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report. Such increased frequency must also be indicated. For a pollutant parameter that may be sampled more than once per day (e.g., Total Chlorine Residual), only the average daily value must be recorded unless otherwise specified in this permit.

7. Averaging of Measurements

Calculations for all limitations that require averaging of measurements must utilize an arithmetic mean, except for bacteria which shall be averaged as specified in this permit.

8. Retention of Records

Records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities shall be retained for a period of at least five years (or longer as required by 40

CFR part 503). Records of all monitoring information including all calibration and maintenance records, all original strip chart 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 shall be retained for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of the Department at any time.

9. Records Contents

Records of monitoring information must include:

a. The date, exact place, time, and methods of sampling or measurements;
b. The individual(s) who performed the sampling or measurements;
c. The date(s) analyses were performed;
d. The individual(s) who performed the analyses;
e. The analytical techniques or methods used; and
f. The results of such analyses.

10. Inspection and Entry

The permittee must allow the Department or EPA upon the presentation of credentials to:

a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit, and
d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by state law, any substances or parameters at any location.

11. Confidentiality of Information

Any information relating to this permit that is submitted to or obtained by DEQ is available to the public unless classified as confidential by the Director of DEQ under ORS 468.095. The Permittee may request that information be classified as confidential if it is a trade secret as defined by that statute. The name and address of the permittee, permit applications, permits, effluent data, and information required by NPDES application forms under 40 CFR 122.21 will not be classified as confidential. 40 CFR 122.7(b).

SECTION D. REPORTING REQUIREMENTS

1. Planned Changes

The permittee must comply with OAR chapter 340, division 52, "Review of Plans and Specifications" and 40 CFR Section 122.41(l) (1). Except where exempted under OAR chapter 340, division 52, no construction, installation, or modification involving disposal systems, treatment works, sewerage systems, or common sewers may be commenced until the plans and specifications are submitted to and approved by the Department. The permittee must give notice to the Department as soon as possible of any planned physical alternations or additions to the permitted facility.

2. Anticipated Noncompliance

The permittee must give advance notice to the Department of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

3. Transfers

This permit may be transferred to a new permittee provided the transferee acquires a property interest in the permitted activity and agrees in writing to fully comply with all the terms and conditions of the permit and the rules of the Commission. No permit may be transferred to a third party without prior written approval from the Department. The Department may require modification, revocation, and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under 40 CFR Section 122.61. The permittee must notify the Department when a transfer of property interest takes place.

4. Compliance Schedule

Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date. Any reports of noncompliance must include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements.

5. Twenty-Four Hour Reporting

The permittee must report any noncompliance that may endanger health or the environment. Any information must be provided orally (by telephone) to DEQ or to the Oregon Emergency Response System (1-800-452-0311) as specified below within 24 hours from the time the permittee becomes aware of the circumstances.

a. Overflows.
   (1) Oral Reporting within 24 hours.
      i. For overflows other than basement backups, the following information must be reported to the Oregon Emergency Response System (OERS) at 1-800-452-0311. For basement backups, this information should be reported directly to DEQ.
         a) The location of the overflow;
         b) The receiving water (if there is one);
         c) An estimate of the volume of the overflow;
         d) A description of the sewer system component from which the release occurred (e.g., manhole, constructed overflow pipe, crack in pipe); and
         e) The estimated date and time when the overflow began and stopped or will be stopped.
      ii. The following information must be reported to the Department's Regional office within 24 hours, or during normal business hours, whichever is first:
         a) The OERS incident number (if applicable) along with a brief description of the event.
   (2) Written reporting within 5 days.
      i. The following information must be provided in writing to the Department's Regional office within 5 days of the time the permittee becomes aware of the overflow:
         a) The OERS incident number (if applicable);
         b) The cause or suspected cause of the overflow;
         c) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps;

d) Steps taken or planned to mitigate the impact(s) of the overflow and a schedule of major milestones for those steps; and

e) (for storm-related overflows) The rainfall intensity (inches/hour) and duration of the storm associated with the overflow.

The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

b. Other instances of noncompliance.

(1) The following instances of noncompliance must be reported:

i. Any unanticipated bypass that exceeds any effluent limitation in this permit;

ii. Any upset that exceeds any effluent limitation in this permit;

iii. Violation of maximum daily discharge limitation for any of the pollutants listed by the Department in this permit; and

iv. Any noncompliance that may endanger human health or the environment.

(2) During normal business hours, the Department's Regional office must be called. Outside of normal business hours, the Department must be contacted at **1-800-452-0311** (Oregon Emergency Response System).

(3) A written submission must be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission must contain:

i. A description of the noncompliance and its cause;

ii. The period of noncompliance, including exact dates and times;

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

iv. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; and

v. Public notification steps taken, pursuant to General Condition B.7

(4) The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

6. Other Noncompliance

The permittee must report all instances of noncompliance not reported under General Condition D.4 or D.5, at the time monitoring reports are submitted. The reports must contain:

a. A description of the noncompliance and its cause;
b. The period of noncompliance, including exact dates and times;
c. The estimated time noncompliance is expected to continue if it has not been corrected; and
d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

7. Duty to Provide Information

The permittee must furnish to the Department within a reasonable time any information that the Department may request to determine compliance with the permit or to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit. The permittee must also furnish to the Department, upon request, copies of records required to be kept by this permit.

Other Information: When the permittee becomes aware that it has failed to submit any relevant facts or has submitted incorrect information in a permit application or any report to the Department, it must promptly submit such facts or information.

8. Signatory Requirements

All applications, reports or information submitted to the Department must be signed and certified in accordance with 40 CFR Section 122.22.

9. Falsification of Information
Under ORS 468.953, any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, is subject to a Class C felony punishable by a fine not to exceed $100,000 per violation and up to 5 years in prison. Additionally, according to 40 CFR 122.41(k)(2), any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a federal civil penalty not to exceed $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

10. Changes to Indirect Dischargers
The permittee must provide adequate notice to the Department of the following:
   a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of the Clean Water Act if it were directly discharging those pollutants and;
   b. Any substantial change in the volume or character of pollutants being introduced into the POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
   c. For the purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

SECTION E. DEFINITIONS

1. *BOD* means five-day biochemical oxygen demand.
2. *CBOD* means five day carbonaceous biochemical oxygen demand
3. *TSS* means total suspended solids.
4. "*Bacteria*" includes but is not limited to fecal coliform bacteria, total coliform bacteria, and E. coli bacteria.
5. *FC* means fecal coliform bacteria.
6. *Total residual chlorine* means combined chlorine forms plus free residual chlorine
7. *Technology based permit effluent limitations* means technology-based treatment requirements as defined in 40 CFR Section 125.3, and concentration and mass load effluent limitations that are based on minimum design criteria specified in OAR Chapter 340, Division 41.
8. *mg/l* means milligrams per liter.
9. *kg* means kilograms.
10. m^3/d means cubic meters per day.
11. *MGD* means million gallons per day.
12. 24-hour *Composite sample* means a sample formed by collecting and mixing discrete samples taken periodically and based on time or flow. The sample must be collected and stored in accordance with 40 CFR Part 136.
13. *Grab sample* means an individual discrete sample collected over a period of time not to exceed 15 minutes.

14. *Quarter* means January through March, April through June, July through September, or October through December.
15. *Month* means calendar month.
16. *Week* means a calendar week of Sunday through Saturday.
17. *POTW* means a publicly owned treatment works.

Schedule-F, last update 9.18.2009

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