

## **Department of Environmental Quality**

Western Region Salem Office 4026 Fairview Industrial Dr SE Salem, OR 97302 (503) 378-8240 FAX (503) 373-7944 TTY 711

December 20, 2024

Nathan Frarck City of Amity P.O. Box 159 Amity, OR 97101-0159

**Re:** NPDES Permit Public Notice Period

Comments Due: January 27, 2025, 5 p.m.

File no. 2772

EPA no. OR0026212 Permit no. 101924

Facility: Amity STP, 401 East 3<sup>rd</sup>, Amity

Yamhill County

Enclosed please find the Public Notice drafts for your proposed National Pollutant Discharge Elimination System permit including a copy of the public notice, permit, and fact sheet. Please be aware that the city may provide additional comment on the permit during this time and submit to:

Trinh Hansen, Water Quality Permit Coordinator DEQ Western Region 4026 Fairview Industrial Way Dr. SE Salem, OR 97302 trinh.hansen@deq.oregon.gov

Your comments **must be received by 5 p.m. on January 27, 2025**. DEQ will hold a public hearing if DEQ receives written requests for a hearing during the public comment period from at least 10 people, or from an organization representing 10 or more people. DEQ gives equal weight to written and oral comments. When the public participation period has ended, DEQ will take final action on your application.

Please contact me at 503-378-5055 with any questions about permitting processing.

Sincerely,

Trinh Hansen

Water Quality Permit Coordinator Western Region, Salem Office

western Region, Salem Office

Trink Hansen

ec: Regional Source File, Water Quality Division, DEQ

Brenda Kuiken, Salem, DEQ Kevin Stewart, City of Amity

ORMS



# DEQ Requests Comments on Proposed City of Amity's Water Quality Permit Renewal

## **HOW TO PROVIDE PUBLIC COMMENT**

Facility name: City of Amity

Permit type: National Pollutant Discharge

Elimination System (NPDES)

Comments due by: Monday, Jan. 27, 2025

at 5 p.m.

Send written comments to: Trinh Hansen, Oregon

DEQ, Permit Coordinator

By mail: 4026 Fairview Industrial Drive SE, Salem, OR

97302

By email: trinh.hansen@deq.oregon.gov

The Oregon Department of Environmental Quality invites the public to provide written comments on the conditions of City of Amity's proposed water quality permit, known officially as a National Pollutant Discharge Elimination System permit.

## **Summary**

Subject to public review and comment, DEQ intends to renew the proposed water quality permit, which allows the City of Amity to discharge wastewater to Salt Creek and at a land application site at the Amity Sewage Treatment Plant.

## About the facility

The City of Amity has applied for a water quality permit renewal for the Amity Sewage Treatment Plant at 401 E. Third Ave. in Amity. DEQ last renewed this permit on Sept. 2, 2010. The Amity wastewater treatment facility is a minor domestic facility with an average dry weather design flow of 120,000 gallons per day (0.12 million gallons per day, or MGD).

The facility discharges to Salt Creek north of Amity City Park. Salt Creek is listed as impaired (category 4 or 5) for several pollutants according to the most recent U.S. Environmental Protection Agency-approved integrated report for Oregon. The proposed permit reflects effluent limits established through reasonable potential analysis, best available technology or the Yamhill Subbasin Total Maximum Daily Load, or TMDL, for phosphorous.

Amity has had one water quality violation in the past permit term. The issues related to these past compliance issues have been resolved and the facility is currently operating under a Mutual Agreement and Order from DEQ.

The facility holds no other permits from DEQ.



## What types of pollutants does the permit regulate?

This permit sets conditions for how the facility deals with the following pollutants: biological oxygen demand, total suspended solids, pH, total residual chlorine, *E. coli*, and ammonia.

DEQ also requires the permittee to maintain a recycled water plan. The facility currently has a recycled water use plan and irrigates from May to October. Class C recycled water on an adjacent 17-acre field. More information on recycled water can be found in the facility's recycled water use plan. DEQ will provide an opportunity for public comment on the plan prior to approval.

## Would the draft permit change the amount of pollution the facility is allowed to release?

Yes. The draft permit would include a new ammonia limit and more stringent pH and total residual chlorine limits

Pollutant	Change
Ammonia	new
рН	-
Total Residual Chlorine	-

## How did DEQ determine permit requirements?

DEQ evaluates types and amounts of pollutants and the water quality of the surface water or groundwater where the pollutants are proposed to be discharged and determines permit requirements to ensure the proposed discharges will meet applicable statutes, rules, regulations, and effluent guidelines of Oregon and the Clean Water Act.

For this proposed permit action, DEQ evaluated the NPDES renewal application, previous permits and fact sheets, water quality data, and monthly discharge monitoring reports. These materials may be viewed at DEQ's Salem office. In addition to the review and assessment of materials noted above, DEQ has exercised discretion in establishing monitoring/reporting requirements and identifying applicable data for analyses.

Discretion exists when DEQ has the power to make a choice about whether to act or not act, to approve or not approve, or to approve with conditions. The role of the decision-maker is to make a judgment that takes into account all relevant information.

## How does DEQ monitor compliance with the permit requirements?

This permit will require the facility to monitor pollutants discharged using approved monitoring practices and standards. DEQ reviews the facility's discharge monitoring reports to check for compliance with permit limits.

## What happens next?

Submit comments by sending an email or using mail service addressed to the permit coordinator listed in the "how to provide public comment" box above.

DEQ will hold a public hearing if it receives written requests for a hearing during the public comment period from at least 10 people or from an organization representing at least 10 people.

DEQ will consider and respond to all comments received and may modify the proposed permit based on comments.

## For more information

Find more information by reviewing draft permit documents attached to this notice or contact Trinh Hansen at 503-378-5055 or trinh.hansen@deq.oregon.gov with questions or to view documents in person at a DEQ office.

## **Non-discrimination statement**

DEQ does not discriminate on the basis of race, color, national origin, disability, age or sex in administration of its programs or activities. Visit DEQ's <u>Civil Rights and Environmental Justice page</u>.

Permit Number: 101924 File Number: 2772 Page 1 of 38 Pages



## NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM WASTE DISCHARGE PERMIT

Oregon Department of Environmental Quality
Western Region – Salem Office
4026 Fairview Industrial Dr. SE
Salem, OR 97302
Telephone: 503-378-8240

Issued pursuant to ORS 468B.050 and the federal Clean Water Act.

## ISSUED TO: SOURCES COVERED BY THIS PERMIT:

City of Amity	Type of Waste	Outfall Number	Outfall Location
PO Box 159 Amity, Oregon 97101	Treated Domestic	001	Lat 45.1194,
minty, Olegon 77101	Wastewater		Long -123.2108
	Recycled Water Reuse	002	Specified in Recycled Water Use Plan

#### **FACILITY LOCATION:**

#### **RECEIVING STREAM INFORMATION:**

Amity Sewage Treatment Plant 401 East 3<sup>rd</sup> Avenue Amity, Oregon 97101 County: Yamhill EPA Permit Type: Minor Domestic Receiving stream/NHD name: Salt Creek USGS 12-Digit HUC: 170900080504 OWRD Administrative Basin: Willamette

NHD Reach Code & % along reach: 17090008000169 (93.4%)

ODEQ LLID & RM: 1232202451614 - 6.5

Integrated Report AU ID: OR SR 1709000805 02 104050

Issued in response to Application No. 959338 received December 29, 2014 This permit is issued based on the land use findings in the permit record.

DRAFT	DRAFT	DRAFT
Ranei Nomura, Water Quality Manager	Issuance Date	Effective Date
Western Region		

## **PERMITTED ACTIVITIES**

Until this permit expires or is modified or revoked, the permittee is authorized to: 1) operate a wastewater collection, treatment, control and disposal system; and 2) discharge treated wastewater to waters of the state only from the authorized discharge point or points in Schedule A in conformance with the requirements, limits, and conditions set forth in this permit.

Unless specifically authorized by this permit, by another NPDES or Water Pollution Control Facility permit, or by Oregon statute or administrative rule, any other direct or indirect discharge of pollutants to waters of the state is prohibited.

Permit Number: 101924 File Number: 2772 Page 2 of 38 Pages

## **TABLE OF CONTENTS**

	EDULE A: WASTE DISCHARGE LIMITS	
1.	Outfall 001 – Permit Limits	
2.	Regulatory Mixing Zone	
3.	Use of Recycled Water	
4.	Biosolids	6
SCHE	EDULE B: MINIMUM MONITORING AND REPORTING REQUIREMENTS	8
1.	Reporting Requirements	8
2.	Monitoring and Reporting Protocols	9
3.	Monitoring and Reporting Requirements	13
4.	Recycled Water Monitoring Requirements: Outfall 002	
5.	Biosolids Monitoring Requirements	
SCHE	EDULE C: COMPLIANCE SCHEDULE	20
1.	Compliance Schedule to Meet Final Effluent Limits	20
2.	Responsibility to Meet Compliance Dates	21
SCHE	EDULE D: SPECIAL CONDITIONS	
1.	Inflow and Infiltration Management	22
2.	Lagoon Leak Test.	
3.	Emergency Response and Public Notification Plan	
4.	Recycled Water Use Plan	
5.	Exempt Wastewater Reuse at the Treatment System	
6.	Biosolids Management Plan	
7.	Wastewater Solids Transfers	
8.	Hauled Waste Control Plan	24
9.	Hauled Waste Annual Report	24
10.	Lagoon Solids	25
	Operator Certification	
	Industrial User Survey	
13.	Outfall Inspection	26
SCHE	EDULE F: NPDES GENERAL CONDITIONS	28
Note:	Schedule E (Pretreatment Activities) is not part of this permit.	
LISI	Γ OF TABLES	
Talala	A1: Permit Limits	2
	A1: Permit Limits.  A2: Recycled Water Limits.	
	A2: Recycled water Limits	
	B1: Reporting Requirements and Due Dates	
	B2: Influent Monitoring Requirements	
	B3: Effluent Monitoring Requirements	
	B4: Receiving Stream Monitoring (Salt Creek)	
	B5: Recycled Water Monitoring (When discharging)	
Table	B6: Biosolids Monitoring (required if distributing, provided for sale, or land applying biosolids)	18
	B7: Biosolids Minimum Monitoring Frequency	

Permit Number: 101924 File Number: 2772 Page 3 of 38 Pages

## **SCHEDULE A: WASTE DISCHARGE LIMITS**

## 1. Outfall 001 - Permit Limits

During the term of this permit, the permittee must comply with the limits in the following table:

**Table A1: Permit Limits** 

Parameter	Units	Average Monthly	Average Weekly	Daily Maximum
Effluent Flow (May 1–October 31)	MGD	No discharge (D	Paily max limit = (	) MGD)
	mg/L	30	45	-
BOD <sub>5</sub> (November 1–April 30)	lb/day	39	58	78
	% removal	85	-	-
Trace of the state	mg/L	50	70	-
TSS (November 1–April 30)	lb/day	64	96	130
	% removal	65	<b>)</b> -	-
Final Total Residual Chlorine (See note a and c.) (November 1–April 30)	mg/L	0.01	-	0.03
Interim Total Residual Chlorine (See note a and c.) (November 1–April 30)	mg/L	0.19	-	0.5
Final Ammonia (See note c.) (November 1–April 30)	mg/L	4.0	-	10.1
Final pH (See note c.) (November 1–April 30)	SÜ	Instantaneous limit between a daily minimum 6.5 and a daily maximum of 9.0		
Interim pH (See note c.) (November 1–April 30)	SU	Instantaneous limit between a daily minimum 6.4 and a daily maximum of 9.0		•
E. coli (See note b.) (November 1–April 30)	#/100 mL	Must not exceed a monthly geometric mean of 126, no single sample may exceed 406		

Permit Number: 101924 File Number: 2772 Page 4 of 38 Pages

Parameter	Units	Average Monthly	Average Weekly	Daily Maximum
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#### Notes:

- a. DEQ has established a Quantitation Limit of 0.05 mg/L for Total Residual Chlorine. Any analysis done for Total Residual Chlorine must have a quantitation limit that is either equal to or less than 0.05 mg/L. In cases where the average monthly or maximum daily limit for Total Residual Chlorine is lower than the Quantitation Limit, DEQ will use the reported Quantitation Limit as the compliance evaluation level.
- b. If a single sample exceeds 406 organisms/100 mL, the permittee may take at least 5 consecutive resamples at 4-hour intervals beginning within 28 hours after the original sample was taken. A geometric mean of the 5 re-samples that is less than or equal to 126 *E. coli* organisms/100 mL demonstrates compliance with the limit.
- c. The interim pH and chlorine limits are effective upon permit effective date. The final pH, chlorine, and ammonia limits are effective after completion of the compliance schedule in Schedule C.

## 2. Regulatory Mixing Zone

Pursuant to OAR 340-041-0053, the permittee is granted a regulatory mixing zone as described below:

That portion of Salt Creek contained within a band extending out 20 feet from the east bank of the creek and extending from a point 10 feet upstream of the outfall to a point 100 feet downstream from the outfall. The Zone of Immediate Dilution (ZID) shall be defined as that portion of the allowable mixing zone that is within 10 feet of the point of discharge.

## 3. Use of Recycled Water

The permittee is authorized to distribute recycled water if it is:

- a. Treated and used according to the criteria listed in Table A2.
- b. Managed in accordance with its DEQ-approved Recycled Water Use Plan unless exempt as provided in Schedule D.
- c. Used in a manner and applied at a rate that does not adversely affect groundwater quality.
- d. Applied at a rate and in accordance with site management practices that ensure continued agricultural, horticultural, or silvicultural production and does not reduce the productivity of the site.
- e. Irrigated using sound irrigation practices to prevent:
  - i. Offsite surface runoff or subsurface drainage through drainage tile;
  - ii. Creation of odors, fly and mosquito breeding, or other nuisance conditions; and
  - iii. Overloading of land with nutrients, organics, or other pollutants.

Permit Number: 101924 File Number: 2772 Page 5 of 38 Pages

**Table A2: Recycled Water Limits** 

Class	Level of Treatment (after disinfection unless otherwise specified)	Beneficial Uses
A	Class A recycled water must be oxidized, filtered and disinfected.  Before disinfection turbidity may not exceed:  • An average of 2 NTUs within a 24-hour period.  • 5 NTUs more than five percent of the time within a 24-hour period.  • 10 NTUs at any time.  After disinfection, total coliform may not exceed:  • A median of 2.2 organisms per 100 mL based on daily sampling over the last 7 days that analyses have been completed.  • 23 organisms per 100 mL in any single sample.	<ul> <li>Class A recycled water may be used for:</li> <li>Class B, Class C, Class D, and non-disinfected uses.</li> <li>Irrigation for any agricultural or horticultural use.</li> <li>Landscape irrigation of parks, playgrounds, school yards, residential landscapes, or other landscapes accessible to the public.</li> <li>Commercial car washing or fountains when the water is not intended for human consumption.</li> <li>Water supply source for non-restricted recreational impoundments.</li> </ul>
В	Class B recycled water must be oxidized and disinfected. Total coliform may not exceed:  • A median of 2.2 organisms per 100 mL, based on the last 7 days that analyses have been completed.  • 23 total coliform organisms per 100 mL in any single sample.	<ul> <li>Class B recycled water may be used for:</li> <li>Class C, Class D, and non-disinfected uses.</li> <li>Stand-alone fire suppression systems in commercial and residential building, non-residential toilet or urinal flushing, or floor drain trap priming.</li> <li>Water supply source for restricted recreational impoundments.</li> </ul>
С	Class C recycled water must be oxidized and disinfected. Total coliform may not exceed:  • A median of 23 total coliform organisms per 100 mL, based on results of the last 7 days that analyses have been completed.  • 240 total coliform organisms per 100 mL in any two consecutive samples.	<ul> <li>Class C recycled water may be used for:</li> <li>Class D and non-disinfected uses.</li> <li>Irrigation of processed food crops; irrigation of orchards or vineyards if an irrigation method is used to apply recycled water directly to the soil.</li> <li>Landscape irrigation of golf courses, cemeteries, highway medians, or industrial or business campuses.</li> <li>Industrial, commercial, or construction uses limited to: industrial cooling, rock crushing, aggregate washing, mixing concrete, dust control, nonstructural firefighting using aircraft, street sweeping, or sanitary sewer flushing.</li> </ul>

Permit Number: 101924 File Number: 2772 Page 6 of 38 Pages

Class	Level of Treatment (after disinfection unless otherwise specified)	Beneficial Uses
D	<ul> <li>Class D recycled water must be oxidized and disinfected. <i>E. coli</i> may not exceed:</li> <li>A 30-day geometric mean of 126 organisms per 100 mL.</li> <li>406 organisms per 100 mL in any single sample.</li> </ul>	<ul> <li>Class D recycled water may be used for:</li> <li>Non-disinfected uses.</li> <li>Irrigation of firewood, ornamental nursery stock, Christmas trees, sod, or pasture for animals.</li> </ul>

#### 4. Biosolids

The permittee may land apply or provide biosolids for sale or distribution, subject to the following conditions:

- a. Biosolids Management Plan The permittee must manage biosolids in accordance with a DEQ-approved Biosolids Management Plan and Land Application Plan (see Schedule D).
- b. Agronomic Rates for Nutrient Loading The permittee must apply biosolids at or below the agronomic rates approved by DEQ to minimize potential groundwater degradation. At the time of sale or distribution of the exceptional quality biosolids, the origin must be identified and biosolids analyses must be available to appliers or users of the biosolids.
- c. Land Application Site Authorization The permittee must obtain written site authorization from DEQ for each land application site prior to land application (see Schedule D) and follow the site-specific management conditions in the DEQ-issued site authorization letter. This requirement does not apply for exceptional quality biosolids, which may be land applied as any other fertilizer or soil amendment.
- d. Pathogen and Vector Attraction Reduction Prior to land application, the permittee must ensure that biosolids meet one of the pathogen reduction standards under 40 CFR 503.32 and one of the vector attraction reduction standards under 40 CFR 503.33. For exceptional quality biosolids, the biosolids must meet one of the Class A pathogen reduction requirements in 40 CFR 503.32(a) and one of the vector attraction reduction requirements in 40 CFR 503.33(b)(1) through (b)(8) prior to land application.
- e. Pollutants The permittee must not apply biosolids containing pollutants in excess of the ceiling concentrations shown in Table A3. The permittee may apply biosolids containing pollutants in excess of the pollutant concentrations. However, the total quantity of these pollutant(s) cannot exceed the cumulative pollutant loading rates in Table A3. For biosolids to be managed as exceptional quality biosolids, the biosolids cannot exceed any of the ceiling concentration limits or the pollutant concentration limits in Table A3.
- f. Approval to Apply Cumulative Pollutant Loading Rates If the permittee's biosolids are subject to the cumulative pollutant loading rates as described in section e. above, the permittee must obtain specific approval from DEQ to land apply these biosolids in accordance with their approved Biosolids Management and Land Application Site Authorization (see Schedule D).

Permit Number: 101924 File Number: 2772 Page 7 of 38 Pages

**Table A3: Biosolids Limits** 

Pollutant (See note a.)	Ceiling concentrations (mg/kg)	Pollutant concentrations (mg/kg)	Cumulative pollutant loading rates (kg/ha)
Arsenic	75	41	41
Cadmium	85	39	39
Copper	4300	1500	1500
Lead	840	300	300
Mercury	57	17	17
Molybdenum	75	-	-
Nickel	420	420	420
Selenium	100	100	100
Zinc	7500	2800	2800

## Note:

a. Biosolids pollutant limits are described in 40 CFR 503.13, which uses the terms *ceiling concentrations*, *pollutant concentrations*, and *cumulative pollutant loading rates*.

Permit Number: 101924 File Number: 2772 Page 8 of 38 Pages

## SCHEDULE B: MINIMUM MONITORING AND REPORTING REQUIREMENTS

## 1. Reporting Requirements

The permittee must submit to DEQ monitoring results and reports as listed below.

Table B1: Reporting Requirements and Due Dates

Reporting Requirement	Frequency	Due Date (See note a.)	Report Form (See note b.)	Submit To:
Tables B2, B3, and B4 Influent Monitoring, Effluent Monitoring, and Receiving Stream Monitoring	Monthly	By the 15th of the following month	Specified in Schedule B. Section 2 of this permit	Electronic reporting as directed by DEQ
Inflow and Infiltration Removal Plan (see Schedule D)	One Time	July 15, 2025	Electronic copy in a DEQ- approved format	Attached via electronic reporting as directed by DEQ
Inflow and Infiltration Report (see Schedule D)	Annually	February 15	Electronic copy in a DEQ- approved format	Attached via electronic reporting as directed by DEQ
Lagoon Leak Test (See Schedule D)	One Time	December 15, 2026	Electronic copy in a DEQ- approved format	Attached via electronic reporting as directed by DEQ
Recycled Water Annual Report (see Schedule D)	Annually	January 15	Electronic copy in the DEQ- approved format	Attached via electronic reporting as directed by DEQ  Electronic copy to DEQ Western Region Water Reuse Coordinator
Recycled Water Use Plan (see Schedule D)	One Time	Prior to irrigating recycled water	Electronic copy in the DEQ- approved format	Electronic copy to DEQ Water Reuse Program Coordinator
Biosolids annual report (see Schedule D)	Annually	By February 19 of the following year	Electronic copy in the DEQ- approved form	Attached via electronic reporting as directed by DEQ  DEQ Biosolids Program Coordinator
Hauled Waste Control Plan (see Schedule D)	One time	Prior to accepting hauled waste	Electronic copy in a DEQ- approved format	Attached via electronic reporting as directed by DEQ

Permit Number: 101924 File Number: 2772 Page 9 of 38 Pages

Reporting Requirement	Frequency	Due Date (See note a.)	Report Form (See note b.)	Submit To:
Hauled Waste Annual Report (see Schedule D) - Only required if facility has a Hauled Waste Control Plan, or otherwise accepts hauled waste.	Annually	January 15	Electronic copy in a DEQ- approved format	Attached via electronic reporting as directed by DEQ
Sludge Depth Survey Report (see Schedule D – Lagoon Solids)	One Time	Submit by 12/15/2025	Electronic copy in a DEQ- approved format	Attached via electronic reporting as directed by DEQ
Industrial User Survey (see Schedule D)	Once per permit cycle	Submit by no later than 24 months after permit's effective date	1 electronic copy and 1 hard copy in a DEQ- approved format	<ul> <li>1 Hard copy to DEQ Pretreatment Coordinator</li> <li>1 Electronic copy to Compliance Officer</li> </ul>
Outfall Inspection Report (see Schedule D)	Once per permit cycle	Submit by 12/15/2025	Electronic copy in a DEQ- approved format	Attached via electronic reporting as directed by DEQ

## Notes:

- a. For submittals that are provided to DEQ by mail, the postmarked date must not be later than the due date.
- b. All reporting requirements are to be submitted in a DEQ-approved format, unless otherwise specified in writing.

## 2. Monitoring and Reporting Protocols

a. Electronic Submissions

The permittee must submit to DEQ the results of monitoring indicated in Schedule B in an electronic format as specified below.

- i. The permittee must submit monitoring results required by this permit via DEQ-approved web-based Discharge Monitoring Report (DMR) forms to DEQ via electronic reporting. Any data used to calculate summary statistics must be submitted as a separate attachment approved by DEQ via electronic reporting.
- ii. The reporting period is the calendar month.
- iii. The permittee must submit monitoring data and other information required by this permit for all compliance points by the 15th day of the month following the reporting period unless specified otherwise in this permit or as specified in writing by DEQ.

#### b. Test Methods

The permittee must conduct monitoring according to test procedures in 40 CFR 136 and 40 CFR 503 for biosolids or other approved procedures as per Schedule F.

Permit Number: 101924 File Number: 2772 Page 10 of 38 Pages

#### c. Detection and Quantitation Limits

- i. Detection Level (DL) The DL is defined as the minimum measured concentration of a substance that can be distinguished from method blank results with 99% confidence.
   The DL is derived using the procedure in 40 CFR 136 Appendix B and evaluated for reasonableness relative to method blank concentrations to ensure results reported above the DL are not a result of routine background contamination. The DL is also known as the Method Detection Limit (MDL) or Limit of Detection (LOD).
- ii. Quantitation Limits (QLs) The QL is the minimum level, concentration or quantity of a target analyte that can be reported with a specified degree of confidence. It is the lowest level at which the entire analytical system gives a recognizable signal and acceptable calibration for the analyte. It is normally equivalent to the concentration of the lowest calibration standard adjusted for sample weights, volumes, preparation and cleanup procedures employed. The QL as reported by a laboratory is also sometimes referred to as the Method Reporting Limit (MRL) or Limit of Quantitation (LOQ).
- d. Sufficient Sensitivity of Quantitation Limits
  - i. The Laboratory QLs (adjusted for any dilutions) for analyses performed to demonstrate compliance with permit limits or as part of effluent characterization, must meet at least one of the requirements below:
    - (A) The QL is at or below the level of the water quality criterion for the measured parameter.
    - (B) The QL is above the water quality criterion but the amount of the pollutant in a facility's discharge is high enough that the method detects and quantifies the level of the parameter in the discharge.
    - (C) The QL has the lowest sensitivity of the analytical methods procedure specified in 40 CFR 136.
    - (D) The QL is at or below those defined in Oregon DEQ list of quantitation limits posted online at DEQ permitting website.
- e. Quality Assurance and Quality Control
  - i. Quality Assurance Plan The permittee must develop and implement a written Quality Assurance Plan that details the facility sampling procedures, equipment calibration and maintenance, analytical methods, quality control activities and laboratory data handling and reporting. The QA/QC program must conform to the requirements of 40 CFR 136.7.
  - ii. If QA/QC requirements are not met for any analysis, the permittee must re-analyze the sample. If the sample cannot be re-analyzed, the permittee must re-sample and analyze at the earliest opportunity. If the permittee is unable to collect a sample that meets QA/QC requirements, then the permittee must include the result in the discharge monitoring report (DMR) along with a notation (data qualifier). In addition, the permittee must explain how the sample does not meet QA/QC requirements. With the exception of BOD<sub>5</sub>/CBOD<sub>5</sub>, the permittee may not use the result that failed the QA/QC requirements in any calculation required by the permit unless authorized in writing by DEQ. For BOD<sub>5</sub>/CBOD<sub>5</sub>, the permittee may not use the result that failed the QA/QC requirement in any calculation except as follows:

Permit Number: 101924 File Number: 2772 Page 11 of 38 Pages

- (A) When the glucose-glutamic acid, dilution water, and/or seed control check are not met, the values are reported with the "E" (estimate) data qualifier. The estimated values are not used in the calculations.
- (B) When the minimum DO depletion or the minimum residual DO is not met, the values are reported with the "<" or ">" data qualifiers as appropriate. The data must be used in the calculations. It is not acceptable to report "non-detect" on the discharge monitoring report. The data qualifiers carry to the summary statistic. For example, when calculating the loading, the data qualifiers are added to the value.
- iii. Flow measurement, field measurement, and continuous monitoring devices The permittee must:
  - (A) Establish verification and calibration frequency for each device or instrument in the quality assurance plan that conforms to the frequencies recommended by the manufacturer.
  - (B) Verify at least once per year that flow-monitoring devices are functioning properly according to manufacturer's recommendation. Calibrate as needed according to manufacturer's recommendations.
  - (C) Verify at least weekly that the continuous monitoring instruments are functioning properly according to manufacturer's recommendation unless the permittee demonstrates a longer period is sufficient and such longer period is approved by DEQ in writing.
- iv. The permittee must develop a receiving water sampling and analysis plan that incorporates QA/QC prior to sampling. This plan must be kept at the facility and made available to DEQ upon request.

## f. Reporting Sample Results

- i. The permittee must report the laboratory DL and QL as defined above for each analyte, with the following exceptions: pH, temperature, BOD, CBOD, TSS, Oil & Grease, hardness, alkalinity, bacteria, and nitrate-nitrite. For temperature and pH, neither the QL nor the DL need to be reported. For the other parameters listed above, the permittee is only required to report the QL and only when the result is ND.
- ii. The permittee must report the same number of significant digits as the permit limit for a given parameter.
- iii. (For Discharge Monitoring Reports) If a sample result is above the DL but below the QL, the permittee must report the result as the DL preceded by DEQ's data code "E". For example, if the DL is  $1.0~\mu g/l$ , the QL is  $3.0~\mu g/L$  and the result is estimated to be between the DL and QL, the permittee must report "E1.0  $\mu g/L$ " on the DMR. This requirement does not apply in the case of parameters for which the DL does not have to be reported.
- iv. (For Discharge Monitoring Reports) If the sample result is below the DL, the permittee must report the result as less than the specified DL. For example, if the DL is 1.0 µg/L and the result is ND, report "<1.0" on the discharge monitoring report (DMR). This requirement does not apply in the case of parameters for which the DL does not have to be reported.

Permit Number: 101924 File Number: 2772 Page 12 of 38 Pages

## g. Calculating and Reporting Mass Loads

The permittee must calculate mass loads on each day the parameter is monitored using the following equation:

Flow (in MGD) X Concentration (in mg/L) X 8.34 = Pounds per day

- i. Mass load limits all have two significant figures unless otherwise noted.
- ii. When concentration data are below the DL: To calculate the mass load from this result, use the DL. Report the mass load as less than the calculated mass load. For example, if flow is 2 MGD and the reported sample result is  $<1.0 \mu g/L$ , report "<0.017 lb/day" for mass load on the DMR  $(1.0 \mu g/L \times 2 \text{ MGD} \times 2 \text{ conversion factor} = 0.017 \text{ lb/day})$ .

Permit Number: 101924 File Number: 2772 Page 13 of 38 Pages

## 3. Monitoring and Reporting Requirements

a. The permittee must monitor influent at the building housing the samplers at the cross section of Oak Street and Trade Street sewer lines and report results in accordance with the table below.

**Table B2: Influent Monitoring Requirements** 

Item or Parameter	Units	Time Period	Minimum Frequency	Sample Type / Required Action (See note a.)	Report Statistic (See note b.)
BOD <sub>5</sub> (00310)	mg/L	Year-round	1/week	24-hour composite	Monthly Average
TSS (00530)	mg/L	Year-round	1/week	24-hour composite	Monthly Average
pH (00400)	SU	Year-round	3/week	Grab	<ol> <li>Monthly Maximum</li> <li>Monthly Minimum</li> </ol>

#### Notes:

- a. In the event of equipment failure or loss, the permittee must notify DEQ and deploy new equipment to minimize interruption of data collection. If new equipment cannot be immediately deployed, the permittee must perform grab measurements.
- b. When submitting DMRs electronically, the permittee must submit all data used to determine summary statistics in a DEQ-approved format as a spreadsheet via electronic reporting unless otherwise directed by DEQ.

Permit Number: 101924 File Number: 2772 Page 14 of 38 Pages

b. The permittee must monitor effluent at Outfall 001 from the sampling station next to the public works office downstream from the chlorination chambers and report results in accordance with Table B1 and the table below:

**Table B3: Effluent Monitoring Requirements** 

Item or Parameter	Units	Time Period	Minimum Frequency	Sample Type/ Required Action (See note a.)	Report Statistic (See note b.)
Flow (50050)	MGD	Year-round	Daily	Metered	<ol> <li>Monthly Average</li> <li>Daily Maximum</li> </ol>
BOD <sub>5</sub> (00310)	mg/L	November- April	1/week	24-hour composite	<ol> <li>Monthly Average</li> <li>Maximum         Weekly Average</li> </ol>
BOD <sub>5</sub> (00310)	lb/day	November- April	1/week	Calculation	<ol> <li>Daily Maximum</li> <li>Monthly Average</li> <li>Maximum         Weekly Average     </li> </ol>
BOD <sub>5</sub> percent removal (81010) (See note c.)	%	November- April	Monthly	Calculation based on monthly average BOD <sub>5</sub> concentration values	Monthly Average
TSS (00530)	mg/L	November- April	1/week	24-hour composite	Monthly Average     Maximum     Weekly Average
TSS (00530)	lb/day	November- April	1/week	Calculation	<ol> <li>Daily Maximum</li> <li>Monthly Average</li> <li>Maximum         Weekly Average     </li> </ol>
TSS percent removal (81011) (See note c.)	%	November- April	Monthly	Calculation based on monthly average TSS concentration values	Monthly Average

Permit Number: 101924 File Number: 2772 Page 15 of 38 Pages

Item or Parameter	Units	Time Period	Minimum Frequency	Sample Type/ Required Action (See note a.)	Report Statistic (See note b.)
pH (00400)	SU	November- April	3/week	Grab	<ol> <li>Daily Maximum</li> <li>Daily Minimum</li> </ol>
Chlorine, Total Residual (50060)	mg/L	November- April	Daily	Grab	<ol> <li>Daily Maximum</li> <li>Monthly Average</li> </ol>
Temperature (00010)	°C	November- April	3/week	Continuous or Grab	<ol> <li>Daily Maximum</li> <li>Monthly Average</li> <li>7-day Rolling         Average of Daily         Maximum     </li> </ol>
E. coli (51040)	#/100 mL	November- April	2/week	Grab	Daily Maximum     Monthly     Geometric Mean
Total ammonia (as N) (00610)	mg/L	November- April	1/week	24-hour composite	<ol> <li>Daily Maximum</li> <li>Monthly Average</li> </ol>
Alkalinity as CaCO <sub>3</sub> (00410)	mg/L	November- April	1/quarter	Grab	Monthly Maximum
Chlorine used (81400)	lb/day	November- April	Daily	Scale reading	<ol> <li>Daily Maximum</li> <li>Monthly Average</li> </ol>
Chlorine, Total Residual prior to dechlorination	mg/L	November- April	Daily	Grab	Maintain records on- site
Dissolved Oxygen (00300)	mg/L	Third and fourth year of permit cycle [year]	Quarterly	24-hour composite (See note d.)	Quarterly Minimum
Total Kjeldahl Nitrogen (TKN) (00625)	mg/L	Third and fourth year of permit cycle [year]]	Quarterly,	24-hour composite	Quarterly Maximum
Nitrate (NO3) Plus Nitrite (NO2) Nitrogen (00630)	mg/L	Third and fourth year of permit cycle [year]	Quarterly	24-hour composite	Quarterly Maximum
Oil and Grease (00556)	mg/L	Third and fourth year of permit cycle [year]	Quarterly	Grab	Quarterly Maximum
Total Phosphorus (00665)	mg/L	Third and fourth year of permit cycle [year]	Quarterly	24-hour composite	Quarterly Maximum

Permit Number: 101924 File Number: 2772 Page 16 of 38 Pages

Item or Parameter	Units	Time Period	Minimum Frequency	Sample Type/ Required Action (See note a.)	Report Statistic (See note b.)
Total Dissolved Solids (70295)	mg/L	Third and fourth year of permit cycle [year]	Quarterly	24-hour composite	Quarterly Maximum

#### Notes:

- a. In the event of equipment failure or loss, the permittee must notify DEQ and deploy new equipment to minimize interruption of data collection. If new equipment cannot be immediately deployed, the permittee must perform grab measurements. If the failure or loss is for continuous temperature monitoring equipment, the permittee must perform grab measurements daily between 2 PM and 4 PM until continuous monitoring equipment is redeployed.
- b. When submitting DMRs electronically, all data used to determine summary statistics must be submitted in a DEQ-approved format as a spreadsheet via electronic reporting unless otherwise directed by DEQ.
- c. Percent Removal must be calculated on a monthly basis using the following formula:

$$Percent \ Removal = \frac{[Influent \ Concentration] - [Effluent \ Concentration]}{[Influent \ Concentration]} \times 100$$

#### Where:

Influent Concentration = Corresponding Monthly average influent concentration based on the analytical results of the reporting period.

Effluent Concentration = Corresponding Monthly average effluent concentration based on the analytical results of the reporting period.

- d. For Dissolved Oxygen, the permittee must collect and analyze at least four discrete grab samples over the operating day with samples collected no less than one hour apart. The analytical results for all samples in a day must be averaged for reporting purposes.
  - c. The permittee must monitor Salt Creek and report the results in accordance with Table B1 and the table below. The permittee must collect samples such that the effluent does not impact the samples (e.g., upstream for riverine discharges).

Table B4: Receiving Stream Monitoring (Salt Creek)

Item or Parameter	Units	Time Period	Minimum Frequency	Sample Type / Required Action (See note a.)	Report Statistic (See note b.)
pH (00400)	SU	November- April	1/month	Grab	Monthly Maximum
Temperature (00010)	°C	November- April	1/month	Grab	Monthly Maximum
Total ammonia (as N) (00610)	mg/L	November- April	1/month	Grab	Monthly Maximum
Alkalinity as CaCO <sub>3</sub> (00410)	mg/L	November- April	1/quarter	Grab	Monthly Maximum

Permit Number: 101924 File Number: 2772 Page 17 of 38 Pages

Item or Parameter	Units Time Period	Minimum Frequency	Sample Type / Required Action (See note a.)	Report Statistic (See note b.)
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#### Notes:

- a. In the event of equipment failure or loss, the permittee must notify DEQ and deploy new equipment to minimize interruption of data collection. If new equipment cannot be immediately deployed, the permittee must perform grab measurements. If the failure or loss is for continuous temperature monitoring equipment, the permittee must perform grab measurements daily between 2 PM and 4 PM until continuous monitoring equipment is redeployed.
- b. When submitting DMRs electronically, all data used to determine summary statistics must be submitted in a DEQ-approved format as a spreadsheet via electronic reporting unless otherwise directed by DEQ.

## 4. Recycled Water Monitoring Requirements: Outfall 002

The permittee must monitor recycled water for Outfall 002 as listed below. The samples must be representative of the recycled water delivered for beneficial reuse after chlorination or at a location after chlorination as identified in the Recycled Water Use Plan.

Table B5: Recycled Water Monitoring (When discharging)

Item or Parameter	Time Period	Minimum Frequency	Sample Type/ Required Action	Report (See note a, b, c, d)
Total flow (50050) (MGD)	See Recycled Water Use Plan	Daily	Measurement	Monthly Total
Quantity Irrigated (51789) (inches/acre)	See Recycled Water Use Plan	Daily	Calculation	Monthly Total
Chlorine, Total Residual (mg/L)	See Recycled Water Use Plan	Daily	Grab	Monthly Minimum
pH (00400)	See Recycled Water Use Plan	2/Week	Grab	Monthly     Minimum     Monthly     Maximum
Turbidity, (00070) (NTU)	See Recycled Water Use Plan	Hourly (Class A)	Measure, Calculate	<ol> <li>Daily Average</li> <li>Daily Maximum</li> </ol>
Turbidity, % of time above 5 NTU limit (61736) (%)	See Recycled Water Use Plan	Daily (Class A)	Calculate	Daily Maximum
Total coliform (See note a.) (#/100 mL)	See Recycled Water Use Plan	<ul><li>Daily (Class A)</li><li>3/Week (Class B)</li><li>Weekly (Class C)</li></ul>	Grab	<ol> <li>Median of the last 7 days of analysis</li> <li>Maximum Single Sample</li> </ol>
E. coli (51040) (#/100 mL)	See Recycled Water Use Plan	Weekly (Class D)	Grab	Monthly     Geometric Mean     Maximum     Single Sample

Permit Number: 101924 File Number: 2772 Page 18 of 38 Pages

Item or Parameter	Time Period	Minimum Frequency	Sample Type/ Required Action	Report (See note a, b, c, d)
Nitrogen Loading Rate (lbs/acre-year)	See Recycled Water Use Plan	Annually	Calculation	Value
Nutrients (TKN, NO <sub>2</sub> +NO <sub>3</sub> -N, Total Ammonia (as N), Total Phosphorus)	See Recycled Water Use Plan	Quarterly (Q2: April- June, Q3: July-Sept, Q4: Oct-Dec)	Grab	Value

#### Notes:

- a. All data collected should be included in the Recycled Water Annual Report in addition to monthly reporting as indicated.
- b. Total residual chlorine, UV dosage, Turbidity need to be reported only if listed as a treatment for recycled water in the recycled water use plan.
- c. Turbidity must not exceed five (5) Ntu's more than five percent of the time during a 24-hour period.
- d. Calculations of the median total coliform levels in Classes A C are based on the results of the last seven days that analyses have been completed.

## 5. Biosolids Monitoring Requirements

The permittee must monitor biosolids land applied or produced for sale or distribution as listed below. The samples must be representative of the quality and quantity of biosolids generated and undergo the same treatment process used to prepare the biosolids. Results must be reported as required in the biosolids management plan described in Schedule D.

Table B6: Biosolids Monitoring (required if distributing, provided for sale, or land applying biosolids)

Item or Parameter	Minimum Frequency	Sample Type
Nutrient and conventional parameters (% dry weight unless otherwise specified): Total Kjeldahl Nitrogen (TKN) Nitrate-Nitrogen (NO <sub>3</sub> -N) Total Ammoniacal Nitrogen (NH-N) Total Phosphorus (P) Potassium (K) pH (S.U.) Total Solids Volatile Solids	As described in the DEQ-approved Biosolids Management Plan, but not less than the frequency in Table B7.	As described in the DEQ-approved Biosolids Management Plan.
Pollutants: As, Cd, Cu, Hg, Pb, Mo, Ni, Se, Zn, mg/kg dry weight	As described in the DEQ-approved Biosolids Management Plan, but not less than the frequency in Table B7.	As described in the DEQ-approved Biosolids Management Plan.
Pathogen reduction	As described in the DEQ-approved Biosolids Management Plan, but not less than the frequency in Table B7.	As described in the DEQ-approved Biosolids Management Plan.

Permit Number: 101924 File Number: 2772 Page 19 of 38 Pages

Item or Parameter	Minimum Frequency	Sample Type
Vector attraction reduction	As described in the DEQ-approved Biosolids Management Plan, but not less than the frequency in Table B7.	As described in the DEQ-approved Biosolids Management Plan.
Record of biosolids land application: date, quantity, location.	Each event	Record the date, quantity, and location of biosolids land applied on site location map or equivalent electronic system, such as GIS.

Table B7: Biosolids Minimum Monitoring Frequency

Quantity of biosolids lar for sale or distribution		Minimum Sampling Frequency
(dry metric tons)	(dry U.S. tons)	illining i roquonoy
Less than 290	Less than 320	Once per year
290 to 1,500	320 to 1,653	Once per quarter (4x/year)
1,500 to 15,000	1,653 to 16,535	Once per 60 days (6x/year)
15,000 or more	16,535 or more	Once per month (12x/year)

Permit Number: 101924 File Number: 2772 Page 20 of 38 Pages

## **SCHEDULE C: COMPLIANCE SCHEDULE**

## 1. Compliance Schedule to Meet Final Effluent Limits

The permittee must comply with the following schedule:

Table C1: Compliance Schedule for Chlorine, pH and Ammonia

Table of Compilation Concadio for Chieffine, pri and Annifolia			
Compliance Date:	Requirement:		
Within 6 months of permit effective date By XX/XX/XXXX	If not already submitted, the permittee must submit to DEQ a draft Facility Plan that evaluates several alternatives and identifies the permittee's preferred alternative to comply with the chlorine, pH and ammonia final effluent limits. Permittee must revise documents in affordance with DEQ comments within 60 days of receiving DEQ comments.		
	And;		
	The permittee must submit a Level 2 Mixing Zone Study Plan along with a report detailing progress made in obtaining funding for any design and environmental studies associated with the Mixing Zone Study and Outfall Improvement Concept Design or alternative design to meet permit limits.		
Within 14 months of permit effective date By XX/XX/XXXX	The permittee must submit to DEQ the Level 2 Mixing Zone Study and Outfall Improvement Concept Design. Permittee must revise documents in accordance with DEQ comments within 60 days of receiving DEQ comments.		
Within 2 years of permit effective date By XX/XX/XXXX	The permittee must notify DEQ of the preferred treatment option to meet the final effluent limits for chlorine, pH and ammonia. This notification must include a feasibility/environmental impact study including life cycle cost comparisons and application/permitting information as well as final design documents for either outfall improvements or treatment system improvements.		
	And;		
	The permittee must submit a report detailing progress made in obtaining funding for any facility upgrades or construction projects associated with the preferred treatment option to meet the final effluent limits for chlorine, pH and ammonia contained in Schedule A of this permit.		
Within 3 years of permit effective date By XX/XX/XXXX	The permittee must submit to DEQ a report on progress made in construction of the permittees preferred treatment option to comply with the chlorine, pH and ammonia final effluent limits.		
Within 4 years of permit effective date By XX/XX/XXXX	The permittee must submit to DEQ a report on progress made in construction of the permittees preferred treatment option to comply with the chlorine, pH and ammonia final effluent limits.		
Within 5 years of permit effective date By XX/XX/XXXX	The permittee must submit a report verifying completion of construction of the permittees preferred treatment option to comply with the chlorine, pH and ammonia final effluent limits. This report must also detail a start-up and testing program for the preferred treatment option to be implemented in advance of the final effluent limits for chlorine, pH and ammonia becoming effective.		

Permit Number: 101924 File Number: 2772 Page 21 of 38 Pages

Compliance Date:	Requirement:
Within 5 years 6 months of	The permittee must achieve compliance with the final effluent limits for
permit effective date	chlorine, pH, and ammonia in Schedule A of this permit.
By XX/XX/XXXX	

## 2. Responsibility to Meet Compliance Dates

No later than 14 days following each compliance date listed in the table above, the permittee must notify DEQ in writing of its compliance or noncompliance with the requirements. Any reports of noncompliance must include the cause of noncompliance, any remedial actions taken, and a discussion of the likelihood of meeting the next scheduled requirement(s).

Permit Number: 101924 File Number: 2772 Page 22 of 38 Pages

## SCHEDULE D: SPECIAL CONDITIONS

## 1. Inflow and Infiltration Management

- a. Inflow and Infiltration Removal Plan
  - By the date in Table B1, the permittee must submit to DEQ for approval an Inflow and Infiltration Removal Plan. At a minimum, the plan must include the following:
    - (A) A schedule for inspection of the collection system. Smoke testing and video to identify inflow and infiltration sources must be performed for every section of the collection system that has not been tested in the last five (5) years.

DEQ recommends an analysis of flow to each basin using a flow meter in the upstream manhole prior to each lift station. The flow data can be used to determine effectiveness of the inflow and infiltration reduction and help to target reduction efforts.

Inflow is the water which enters the sewer through direct connections such as roof leaders, direct connections from storm drains or yards, area, and foundation drains, the holes in and around the rim of manhole covers, etc. It may also include the direct entrance of creeks or streams into the collection system.

Infiltration is the seepage of groundwater into pipes or manholes through defects such as cracks, broken joints, etc.

- (B) Identification of inflow and infiltration sources. Infiltration deficiencies must be rated using the National Association of Sewer Service Companies (NASSCO) system or equivalent. Priority 1 infiltration sources are defined as any structural or operation and maintenance defects that receive a defect score of 4 or higher using the NASSCO Pipeline Assessment Certification Program. Typical examples of these defects include collapsed or broken pipes or pipelines with significant root balls within the pipes.
- (C) A schedule for repair of inflow and Priority 1 infiltration sources, including justification for the schedule.
- i. Within 60 days of receiving written DEQ comments, the permittee must submit a final approvable plan and schedule.
- ii. Upon DEQ approval of the final plan, the permittee must implement the plan.

## b. Inflow and Infiltration Annual Report

An annual inflow and infiltration report must be submitted to DEQ by the date included in Table B1. The report must include the following:

- Details of activities performed in the previous year to identify and reduce inflow and infiltration.
- ii. Details of activities planned for the following year to identify and reduce inflow and infiltration.
- iii. An assessment of the permittee's I/I issues based on a comparison of summer and winter flows to the treatment plant.

Permit Number: 101924 File Number: 2772 Page 23 of 38 Pages

iv. A summary of sanitary sewer overflows or other discharges related to I&I that are not allowed by this permit that occurred during the previous year. This should include the following: date of the SSO or unpermitted discharge, location, estimated volume of SSO, cause, follow-up actions, and, if the overflow or discharge was to surface waters, the results of receiving stream monitoring if performed or required by DEO.

## 2. Lagoon Leak Test

The permittee must perform a lagoon leak test and submit the results by the date specified in Table B1. The lagoon leak test must confirm the lagoon leak rate. The lagoon leak test must be conducted in accordance with DEQ's *Guidelines for Estimating Leakage from Existing Sewage Lagoons*. For lagoons that are unable to demonstrate a leak test rate less than ½ inch per day, a Preliminary Groundwater Assessment must be conducted and submitted to DEQ in writing. The Preliminary Groundwater Assessment must be conducted in accordance with DEQ's *Preliminary Groundwater Assessment Guidelines*.

## 3. Emergency Response and Public Notification Plan

The permittee must develop an Emergency Response and Public Notification Plan or ensure the facility's existing plan is current and accurate, per Schedule F, Section B, and Condition 8 within 6 months of permit effective date. The permittee must update the plan annually to ensure all information contained in the plan, including telephone and email contact information for applicable public agencies, is current and accurate. An updated copy of the plan must be kept on file at the facility for DEQ review. The latest plan revision date must be listed on the plan cover along with the reviewer's initials or signature.

## 4. Recycled Water Use Plan

The permittee must update and submit a Recycled Water Use Plan by the date specified in Table B1 for DEQ-approval. The permittee must maintain a DEQ-approved Recycled Water Use Plan meeting the requirements in OAR 340-055-0025. The permittee must submit this plan or any significant modifications to DEQ for review and approval with sufficient time to clear DEQ review and a public notice period prior to implementing changes to the recycled water program. The permittee must keep the plan updated. All plan revisions require written authorization from DEQ and are effective upon permittee's receipt of DEQ written approval. No significant modifications can be made to a plan for an administratively extended permit (after the permit expiration date). Conditions in the plan are enforceable requirements under this permit. DEQ will provide an opportunity for public review and comment on any significant plan modifications prior to approving or denying. Public review is not required for minor modifications, changes to utilization dates or changes in use within the recycled water class.

a. Recycled Water Annual Report – The permittee must submit a recycled water annual report by the date specified in Table B1: Reporting Requirements and Due Dates. The permittee must use the DEQ approved recycled water annual report form. This report must include the monitoring data and analytical laboratory reports for the previous year's monitoring required under Schedule B.

## 5. Exempt Wastewater Reuse at the Treatment System

Recycled water used for landscape irrigation within the property boundary or in-plant processes at the wastewater treatment system is exempt from the requirements of OAR 340-055 if all of the following conditions are met:

a. The recycled water is an oxidized and disinfected wastewater.

Permit Number: 101924 File Number: 2772 Page 24 of 38 Pages

- b. The recycled water is used at the wastewater treatment system site where it is generated or at an auxiliary wastewater or sludge treatment facility that is subject to the same NPDES or WPCF permit as the wastewater treatment system.
- c. Spray and/or drift from the use does not migrate off the site.
- d. Public access to the site is restricted.

## 6. Biosolids Management Plan

Prior to distributing biosolids to the public, the permittee must develop and maintain a Biosolids Management Plan and Land Application Plan meeting the requirements in OAR 340-050-0031. The permittee must submit these plans and any significant modification of these plans to DEQ for review and approval with sufficient time to clear DEQ review and a public notice period prior to removing biosolids from the facility. The permittee must keep the plans updated. All plan revisions require written authorization from DEQ and are effective upon permittee's receipt of DEQ written approval. No significant modifications can be made to a plan for an administratively extended permit (after the permit expiration date). Conditions in the plans are enforceable requirements under this permit.

## 7. Wastewater Solids Transfers

- a. Within state. The permittee may transfer wastewater solids including Class A and Class B biosolids, to another facility permitted to process or dispose of wastewater solids, including but not limited to: another wastewater treatment facility, landfill, or incinerator. The permittee must satisfy the requirements of the receiving facility. The permittee must report the name of the receiving facility, and the quantity of material transferred in the wastewater solids or biosolids annual report identified in Schedule B.
- b. Out of state. If wastewater solids, including Class A and Class B biosolids, are transferred out of state for use or disposal, the permittee must obtain written authorization from DEQ, meet Oregon requirements for the use or disposal of wastewater solids, notify in writing the receiving state of the proposed use or disposal of wastewater solids, and satisfy the requirements of the receiving state.

#### 8. Hauled Waste Control Plan

The permittee may accept hauled wastes at discharge points designated by the POTW after receiving written DEQ approval of a Hauled Waste Control Plan. Hauled wastes may include wastewater solids from another wastewater treatment facility, septage, grease trap wastes, portable and chemical toilet wastes, landfill leachate, groundwater remediation wastewaters and commercial/industrial wastewaters. A Hauled Waste Control Plan is not required in the event biological seed must be added to the process at the POTW to facilitate effective wastewater treatment.

## 9. Hauled Waste Annual Report

If the permittee has a Hauled Waste Control Plan, or otherwise accepts hauled waste, the permittee must submit an annual report of hauled waste received by the POTW. This report, if required, must be submitted as described in Table B1. This report must include the date, time, type, and amount received each time the POTW accepts hauled waste. Hauled waste must be described in the permittee's Hauled Waste Control Plan.

Permit Number: 101924 File Number: 2772 Page 25 of 38 Pages

## 10. Lagoon Solids

By the date listed in Table B1, the permittee must submit to DEQ a sludge depth survey and report. The report must include the sludge depths throughout the lagoons and an evaluation of the impact of sludge on treatment efficiency and odors. If the evaluation finds that the sludge is impacting the treatment efficiency and causing odors, the permittee must submit a plan to reduce or remove the sludge. See Schedule D, conditions 7, 8 and 9, for sludge removal requirements.

## 11. Operator Certification

- a. Definitions
  - i. "Supervise" means to have full and active responsibility for the daily on-site technical operation of a wastewater treatment system or wastewater collection system.
  - ii. "Supervisor" or "designated operator", means the operator delegated authority by the permittee for establishing and executing the specific practice and procedures for operating the wastewater treatment system or wastewater collection system in accordance with the policies of the owner of the system and any permit requirements.
  - iii. "Shift Supervisor" means the operator delegated authority by the permittee for executing the specific practice and procedures for operating the wastewater treatment system or wastewater collection system when the system is operated on more than one daily shift.
  - iv. "System" includes both the collection system and the treatment systems.
- b. The permittee must comply with OAR Chapter 340, Division 49, "Regulations Pertaining to Certification of Wastewater System Operator Personnel" and designate a supervisor whose certification corresponds with the classification of the collection and/or treatment system as specified in the DEQ Supervisory Wastewater Operator Status Report. DEQ may revise the permittee's classification in writing at any time to reflect changes in the collection or treatment system. This reclassification is not considered a permit modification and may be made after the permit expiration date provided the permit has been administratively extended by DEQ. If a facility is re-classified, a certified letter will be mailed to the system owner from the DEQ Operator Certification Program. Current system classifications are publicized on the DEQ Supervisory Wastewater Operator Status Report found on the DEQ Wastewater Operator Certification Homepage.
- c. The permittee must have its system supervised full-time by one or more operators who hold a valid certificate for the type of wastewater treatment or wastewater collection system, and at a grade equal to or greater than the wastewater system's classification.
- d. The permittee's wastewater system may be without the designated supervisor for up to 30 consecutive days if another person supervises the system, who is certified at no more than one grade lower than the classification of the wastewater system. The permittee must delegate authority to this operator to supervise the operation of the system.
- e. If the wastewater system has more than one daily shift, the permittee must have another properly certified operator available to supervise operation of the system. Each shift supervisor must be certified at no more than one grade lower than the system classification.
- f. The permittee is not required to have a supervisor on site at all times; however, the supervisor must be available to the permittee and operator at all times.

Permit Number: 101924 File Number: 2772 Page 26 of 38 Pages

g. The permittee must notify DEQ in writing of the name of the system supervisor by completing and submitting the Supervisory Wastewater System Operator Designation Form. The most recent version of this form may be found on the DEQ Wastewater Operator Certification homepage \*NOTE: This form is different from the Delegated Authority form. The permittee may replace or re-designate the system supervisor with another properly certified operator at any time and must notify DEQ in writing within 30 days of replacement or re-designation of the operator in charge. As of this writing, the notice of replacement or re-designation must be sent to Water Quality Division, Operator Certification Program, 700 NE Multnomah St, Suite 600, Portland, OR 97232-4100. This address may be updated in writing by DEQ during the term of this permit.

h. When compliance with item (d) of this section is not possible or practicable because the system supervisor is not available or the position is vacated unexpectedly, and another certified operator is not qualified to assume supervisory responsibility, the Director may grant a time extension for compliance with the requirements in response to a written request from the system owner. The Director will not grant an extension longer than 120 days unless the system owner documents the existence of extraordinary circumstances.

## 12. Industrial User Survey

Industrial User Survey

- a. By the date listed in Table B1, the permittee must conduct an industrial user survey as described in 40CFR 403.8(f)(2)(i-iii) to determine the presence of any industrial users discharging wastewaters subject to pretreatment and submit a report on the findings to DEQ. The purpose of the survey is to identify whether there are any industrial users discharging to the POTW and ensure regulatory oversight of these discharges to state waters.
- b. Should the DEQ determine that a pretreatment program is required, the permit must be reopened and modified in accordance with 40 CFR 403.8(e)(1) to incorporate a compliance schedule for development of a pretreatment program. The compliance schedule must be developed in accordance with the provisions of 40 CFR 403.12(k), and must not exceed twelve (12) months.

## 13. Outfall Inspection

The permittee must inspect Outfall 001 including the submerged portion of the outfall line and diffuser to document its integrity and to determine whether it is functioning as designed. The inspection must determine whether diffuser ports are intact, clear and fully functional. The inspection must verify the latitude and longitude of the diffuser. The permittee must submit a written report to DEQ regarding the results of the outfall inspection by the date in Table B1. The report must include a description of the outfall as originally constructed, the condition of the current outfall and identify any repairs needed to return the outfall to satisfactory condition.

Permit Number: 101924 File Number: 2772 Page 27 of 38 Pages

## **SCHEDULE E: PRETREATMENT ACTIVITIES**

A pretreatment program is not part of this permit.



Permit Number: 101924 File Number: 2772 Page 28 of 38 Pages

## SCHEDULE F: NPDES GENERAL CONDITIONS

## DOMESTIC FACILITIES October 1, 2015 Version

#### SECTION A. STANDARD CONDITIONS

#### A1. 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 DEQ to terminate, modify and reissue, revoke, or deny renewal of a permit.

#### A2. 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 of 33 USC § 1365. DEQ enforcement is generally based on provisions of state statutes and Environmental Quality Commission (EQC) rules, and EPA enforcement is generally based on provisions of federal statutes and EPA regulations.

ORS 468.140 allows DEQ to impose civil penalties up to \$25,000 per day for violation of a term, condition, or requirement of a permit.

Under ORS 468.943, unlawful water pollution in the second degree, is a Class A misdemeanor and 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.

Under ORS 468.946, unlawful water pollution in the first degree is a Class B felony and is punishable by a fine of up to \$250,000, imprisonment for not more than 10 years, or both.

The Clean Water Act provides that any person who violates permit condition, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation.

The Clean Water Act provides that any person who negligently violates any condition, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than 1 year, or both.

In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both.

Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than 3 years, or both.

In the case of a second or subsequent conviction for a 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.

Any person who knowingly violates section any permit condition, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both.

Permit Number: 101924 File Number: 2772 Page 29 of 38 Pages

In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both.

An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.

Any person may be assessed an administrative penalty by the Administrator for violating any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act.

Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000.

Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000.

#### A3. 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. In addition, upon request of DEQ, 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.

## A4. 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.

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

#### A5. 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 for CSOs that is adopted or promulgated subsequent to the effective date of this permit.

Permit Number: 101924 File Number: 2772 Page 30 of 38 Pages

- (2) If new information that was 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.

#### A6. Toxic Pollutants

The permittee must comply with any applicable effluent standards or prohibitions established under Oregon Administrative Rule (OAR) 340-041-0033 and section 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 federal 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.

## A7. 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.

#### A8. 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 federal Clean Water Act, all rules and statutes referred to in this permit are those in effect on the date this permit is issued.

#### A9. Permit Fees

The permittee must pay the fees required by OAR.

## SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

#### B1. 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.

## B2. 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.

Permit Number: 101924 File Number: 2772 Page 31 of 38 Pages

## B3. 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 DEQ 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 B3.c.
- (2) DEQ may approve an anticipated bypass, after considering its adverse effects and any alternatives to bypassing, if DEQ determines that it will meet the three conditions listed above in General Condition B3.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 DEQ 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 D5.

#### B4. 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 B4.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 D5, hereof (24-hour notice); and

Permit Number: 101924 File Number: 2772 Page 32 of 38 Pages

- (4) The permittee complied with any remedial measures required under General Condition A3 hereof.
- d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

#### B5. 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 federal Clean Water Act effluent discharge pollutant parameter. A single operational upset does not include federal 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.

## B6. Overflows from Wastewater Conveyance Systems and Associated Pump Stations

- a. Definition. "Overflow" means any spill, release or diversion of sewage including:
  - (1) An overflow that results in a discharge to waters of the United States; and
  - (2) 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. Reporting required. All overflows must be reported orally to DEQ within 24 hours from the time the permittee becomes aware of the overflow. Reporting procedures are described in more detail in General Condition D5.

#### B7. 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 (for example, public water systems) about the extent and nature of the discharge in accordance with the notification procedures developed under General Condition B8. 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.

## B8. 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.

Permit Number: 101924 File Number: 2772 Page 33 of 38 Pages

#### B9. 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

#### C1. Representative Sampling

Sampling and measurements taken as required herein must 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 must be taken, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points must not be changed without notification to and the approval of DEQ. Samples must be collected in accordance with requirements in 40 CFR part 122.21 and 40 CFR part 403 Appendix E.

#### C2. 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  $\pm$  10 percent from true discharge rates throughout the range of expected discharge volumes.

#### C3. Monitoring Procedures

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

For monitoring of recycled water with no discharge to waters of the state, monitoring must be conducted according to test procedures approved under 40 CFR part 136 or as specified in the most recent edition of Standard Methods for the Examination of Water and Wastewater unless other test procedures have been specified in this permit or approved in writing by DEQ.

#### C4. Penalties for Tampering

The federal 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.

#### C5. Reporting of Monitoring Results

Monitoring results must be summarized each month on a discharge monitoring report form approved by DEQ. 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.

#### C6. 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 (biosolids) use and disposal, approved 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

Permit Number: 101924 File Number: 2772 Page 34 of 38 Pages

(for example, total residual chlorine), only the average daily value must be recorded unless otherwise specified in this permit.

#### C7. Averaging of Measurements

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

#### C8. Retention of Records

Records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities must be retained for a period of at least 5 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 must 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 DEQ at any time.

#### C9. 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.

#### C10.Inspection and Entry

The permittee must allow DEQ 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.

#### C11. 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 are not classified as confidential [40 CFR § 122.7(b)].

#### SECTION D. REPORTING REQUIREMENTS

#### D1. Planned Changes

The permittee must comply with OAR 340-052, "Review of Plans and Specifications" and 40 CFR § 122.41(I)(1). Except where exempted under OAR 340-052, 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 DEQ. The permittee must give notice to DEQ as soon as possible of any planned physical alternations or additions to the permitted facility.

Permit Number: 101924 File Number: 2772 Page 35 of 38 Pages

#### D2. Anticipated Noncompliance

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

#### D3. 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 EQC rules. No permit may be transferred to a third party without prior written approval from DEQ. DEQ 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 § 122.61. The permittee must notify DEQ when a transfer of property interest takes place.

#### D4. 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.

#### D5. 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 the DEQ regional office or 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 the DEQ regional office.
    - (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 (for example, 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 DEQ regional office within 24 hours, or during normal business hours, whichever is earlier:
    - (a) The OERS incident number (if applicable); and
    - (b) A brief description of the event.

#### (2) Written reporting postmarked within 5 days.

- i. The following information must be provided in writing to the DEQ 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.

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

Permit Number: 101924 File Number: 2772 Page 36 of 38 Pages

- 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 DEQ in this permit; and
    - iv. Any noncompliance that may endanger human health or the environment.
  - (2) During normal business hours, the DEQ regional office must be called. Outside of normal business hours, DEQ 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 B7.
  - (4) DEQ may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

#### D6. Other Noncompliance

The permittee must report all instances of noncompliance not reported under General Condition D4 or D5 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.

#### D7. Duty to Provide Information

The permittee must furnish to DEQ within a reasonable time any information that DEQ 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 DEQ, 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 DEQ, it must promptly submit such facts or information.

#### D8. Signatory Requirements

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

Permit Number: 101924 File Number: 2772 Page 37 of 38 Pages

#### D9. 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 \$125,000 per violation and up to 5 years in prison per ORS chapter 161. 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 will, 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.

#### D10. Changes to Indirect Dischargers

The permittee must provide adequate notice to DEQ 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 federal 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 must 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

- E1. BOD or BOD<sub>5</sub> means five-day biochemical oxygen demand.
- E2. CBOD or CBOD<sub>5</sub> means five-day carbonaceous biochemical oxygen demand.
- E3. TSS means total suspended solids.
- E4. *Bacteria* means but is not limited to fecal coliform bacteria, total coliform bacteria, *Escherichia coli* (*E. coli*) bacteria, and *Enterococcus* bacteria.
- E5. FC means fecal coliform bacteria.
- E6. Total residual chlorine means combined chlorine forms plus free residual chlorine
- E7. Technology based permit effluent limitations means technology-based treatment requirements as defined in 40 CFR § 125.3, and concentration and mass load effluent limitations that are based on minimum design criteria specified in OAR 340-041.
- E8. mg/l means milligrams per liter.
- E9.  $\mu g/l$  means microgram per liter.
- E10.kg means kilograms.
- $E11.m^3/d$  means cubic meters per day.
- E12. MGD means million gallons per day.
- E13. Average monthly effluent limitation as defined at 40 CFR § 122.2 means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
- E14. Average weekly effluent limitation as defined at 40 CFR § 122.2 means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.
- E15. Daily discharge as defined at 40 CFR § 122.2 means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge must be calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge must be calculated as the average measurement of the pollutant over the day.

Permit Number: 101924 File Number: 2772 Page 38 of 38 Pages

- E16.24-hour composite sample means a sample formed by collecting and mixing discrete samples taken periodically and based on time or flow.
- E17. Grab sample means an individual discrete sample collected over a period of time not to exceed 15 minutes.
- E18. *Quarter* means January through March, April through June, July through September, or October through December.
- E19. Month means calendar month.
- E20. Week means a calendar week of Sunday through Saturday.
- E21. POTW means a publicly-owned treatment works.



# National Pollutant Discharge Elimination System Permit Renewal Fact Sheet City of Amity

Permittee	City of Amity Amity STP PO Box 159
	Amity, OR 97101
Existing Permit Information	File Number: 2772
	Permit Number: 101924
	EPA Reference Number: OR0026212
	Category: Domestic
	Class: Minor
	Expiration Date: June 30, 2015
Permittee Contact	Nathan Frarck
	City Administrator
	503-835-3711
	PO Box 159
	Amity, OR 97101
Receiving Water Information	Receiving stream/NHD name: Salt Creek
	NHD Reach Code & % along reach:
	17090008000169(93.4%)
A	USGS 12-digit HUC: 170900080504
	OWRD Administrative Basin: Willamette
	ODEQ LLID & River Mile: 1232202451614 - 6.5
	Assessment Unit ID: OR_SR_1709000805_02_104050
Proposed Action	Permit Renewal
	Application Number: 959338
	Date Application Received: December 29, 2014
Permit Writer	Phil Sprague
	541.686.7998
	Date Prepared: December 19, 2024

v06/03/2021 Page 1 of 28

## NPDES Permit Renewal Fact Sheet City of Amity

## **Table of Contents**

1.	Intro	oduction	4
2.	Fac	ility Descriptionility Description	5
	2.1	Wastewater Facility	5
	2.2	Compliance History	7
	2.3	Stormwater	8
	2.4	Industrial Pretreatment	
	2.5	Wastewater Classification.	8
3.	Sch	edule A: Effluent Limit Development	8
	3.1	Existing Effluent Limits.	8
	3.2	Technology-Based Effluent Limit Development	10
	3.3	Water Quality-Based Effluent Limit Development	13
	3.4	Antibacksliding	23
	3.5	Antidegradation	23
	3.6	Whole Effluent Toxicity	
	3.7	Groundwater	23
4.	Sch	edule A: Other Limitations	
	4.1	Mixing Zone	
	4.2	Biosolids	24
	4.3	Recycled Water or Irrigation of Industrial Wastewater	24
5.	Sch	edule B: Monitoring and Reporting Requirements	. 24
6.	Sch	edule C: Compliance Schedule	. 25
7.	Sch	edule D: Special Conditions	. 25
	7.1	Inflow and Infiltration Management	25
	7.2	Lagoon Leak Test	25
	7.3	Emergency Response and Public Notification Plan	26
	7.4	Recycled Water Use Plan.	26
	7.5	Exempt Wastewater Reuse at the Treatment System	26
	7.6	Biosolids Management Plan	26
	7.7	Wastewater Solids Transfers	26
	7.8	Hauled Waste Control Plan	26
	7.9	Hauled Waste Annual Report	26
	7.10	Lagoon Solids	26
	7.11	Operator Certification	27

7.12 Industrial User Survey	27
7.13 Outfall Inspection	27
8. Schedule F: NPDES General Conditions	27
Appendix A: Temperature RPA	
List of Tables	
Table 2-1: List of Outfalls	7
Table 3-1: Comparison of TBELs for Federal Secondary Treatment Standards and Or	egon Basin-
Specific Design Criteria	11
Table 3-2: Design Flows and Concentrations Limits	12
Table 3-3: Technology Based Effluent Limits	13
Table 3-4: 303d and TMDL Parameters	
Table 3-5: Domestic Toxic Pollutants of Concern	
Table 3-6: Pollutants of Concern	
Table 3-7: pH Reasonable Potential Analysis	17
Table 3-8: Temperature Criteria Information	18
Table 3-9: Temperature Criterion Effluent Limits	18
Table 3-10: Thermal Plume Effluent Limit	19
Table 3-11: Proposed <i>E. coli</i> Limits	
Table 3-12: Proposed Chlorine Limits	21
Table 3-13: Ammonia Analysis Information - Winter	22
List of Figures	
Figure 2-1: City of Amity Site Map	6
Figure 2-2: WWTP Flow Schematic	

v06/03/2021 p. 3 of 28

## NPDES Permit Renewal Fact Sheet City of Amity

### 1. Introduction

The City of Amity operates its wastewater treatment facility located in Amity, Oregon. Wastewater is treated and discharged to Salt Creek in accordance with National Pollutant Discharge Elimination System (NPDES) Permit number 101924. The facility's permit was last issued on September 2, 2010, and expired on June 30, 2015. The Oregon Department of Environmental Quality (DEQ) received a renewal application 180 days prior to the expiration of the current permit. Since the City of Amity has made a timely application for renewal of the permit and pursuant OAR 340-045-0040 the permit will not expire until final action has been taken on the renewal application to issue or deny the permit.

DEQ received a renewal application on December 19, 2014. A renewal permit is necessary to discharge to state waters pursuant to provisions of Oregon Revised Statutes (ORS) 468.B.050 and the Federal Clean Water Act. DEQ proposes to renew the permit.

As required by Oregon Administrative Rule 340-045-0035, this fact sheet describes the basis and methodology used in developing the permit. The permit is divided into several sections:

Schedule A – Waste discharge limitations

Schedule B – Minimum monitoring and report requirements

Schedule C – Compliance conditions and schedules

Schedule D – Special conditions

Schedule E – Pretreatment conditions

Schedule F – General conditions

A summary of the major changes to the permit are listed below:

- More stringent chlorine limits
- New ammonia limits
- More stringent pH limit
- Increase in effluent monitoring
- New effluent monitoring parameters
- Receiving stream monitoring
- Compliance schedule for chlorine, pH and ammonia limits

v06/03/2021 p. 4 of 28

## 2. Facility Description

## 2.1 Wastewater Facility

The City of Amity wastewater treatment facility is a minor domestic facility first constructed in 1967. The WWTP is a lagoon system with an average dry weather design flow of 0.21 MGD.

Major improvements were made to the system in 1971, 1979 and more recently in 2013. The current treatment works include two lined, aerated primary lagoon cells (cells 1 and 2), one bentonite-lined polishing cell, and chlorination/dechlorination facilities. In 2005 the city upgraded the plant by deepening, lining and aerating cells 1 and 2 and adding a tertiary filter (suspended solids filter), new chlorination/dechlorination equipment, and new influent/effluent composite samplers. The tertiary filter is not in use at this time. An existing pre-aeration tank was not incorporated into the upgrade and was removed. This upgrade was completed under a 1999 Mutual Agreement and Order (MAO) between DEQ and the city.

Wastewater is treated by three lagoon cells, a tertiary filter, and chlorination/dechlorination equipment. From the headworks, water flows to aerated cells 1 and 2, which operate in series. Wastewater then flows from cell 2 to non-aerated cell 3. Cell 3 is utilized for polishing and storage prior to the discharge entering the tertiary filter. After the filter, discharge flows through the chlorine contact chamber and dechlorination facilities, then to the outfall which discharges to river mile 6.5 of Salt Creek. This is the winter in-plant flow and treatment, during the summer (irrigation season), the tertiary filter and dechlorination system are not used, and the chlorinated effluent is irrigated onto 17 acres on the adjacent field.

v06/03/2021 p. 5 of 28

**Amity WWTP** Dollar General Outfall 001 Chevron Amity Amity High School Amity City Park 5th St Amity Winsome Homes Blue Raeven Farmstand Anderson Reservoir Google

Figure 2-1: City of Amity Site Map

v06/03/2021 p. 6 of 28

Polishing/ Holding Cell #1 Cell #4 Gravity Sewers Pump Sta Solids Settle to Botton Typical Wet Weather Operation (November 1 - April 30) Trade Basin North Basin Oak Basin Jellison Basir South Basi Cell #3 Gravity Sewers Polishing Holding Cell #1 Cell #4 Typical Dry Weather Operation (May 1 - October 30)

Figure 2-2: WWTP Flow Schematic

Table 2-1: List of Outfalls

Outfall Number	Type of Waste	Lat/Long	Design Flow <sup>1</sup> (mgd)	Existing Flow <sup>2</sup> (mgd)
001	Treated Domestic Wastewater	45.12, -123.21	0.21	0.39
002	Recycled Water	NA	NA	NA

- 1. Design Flow = average dry weather design flow
- 2. Existing Flow = average wet weather design flow (winter discharge only)

## 2.2 Compliance History

October 23, 2024, the City of Amity was issued a Pre-Enforcement Notice (2023-PEN-8768) for permit limit violations and Schedule B violations. Prior to that the City of Amity was issued a Pre-Enforcement Notice (2018-PEN-3532) for prohibited discharge, permit limit violations, sanitary sewer overflows, failure to monitor, monitoring quality control violations, failure to have an Emergency Response and Public Notification Plan, incomplete report, and failure to timely submit reports.

v06/03/2021 p. 7 of 28

#### 2.3 Stormwater

Stormwater is not addressed in this permit. General NPDES permits for stormwater are not required for facilities with a design flow of less than 1 MGD.

#### 2.4 Industrial Pretreatment

The permittee does not have a DEQ-approved industrial pretreatment program. Based on current information, no industrial pretreatment program is needed. Schedule D of the proposed permit requires the permittee to perform an industrial user survey.

## 2.5 Wastewater Classification

OAR 340-049 requires all permitted municipal wastewater collection and treatment facilities receive a classification based on the size and complexity of the systems. DEQ evaluated the classifications for the treatment and collection system, which are publicly available at: https://www.deq.state.or.us/wq/opcert/Docs/OpcertReport.pdf.

## 3. Schedule A: Effluent Limit Development

Effluent limits serve as the primary mechanism in NPDES permits for controlling discharges of pollutants to receiving waters. Effluent limitations can be based on either the technology available to control the pollutants or limits that are protecting the water quality standards for the receiving water. DEQ refers to these two types of permit limits as technology-based effluent limitations (TBELs) and water quality-based effluent limits (WQBELs) respectively. When a TBEL is not restrictive enough to protect the receiving stream, DEQ must include a WQBEL in the permit.

## 3.1 Existing Effluent Limits

The tables below show the limits contained in the existing permit.

Waste Discharge Limitations not to be exceeded after permit issuance (see Note 1).

- a. Treated Effluent Outfall 001
  - (1) May 1 October 31: No discharge to waters of the State
  - (2) November 1 April 30:

	Average Effluent		Monthly*	Weekly*	Daily*
Parameter	Concent	rations	Average	Average	Maximum
	Monthly	Weekly	lb/day	lb/day	lbs
BOD <sub>5</sub>	30 mg/L	45 mg/L	39	58	78
TSS	50 mg/L	70 mg/L	64	96	130

<sup>\*</sup>Mass load limits based upon the average dry weather design flow of 0.154 MGD.

v06/03/2021 p. 8 of 28

(3)

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 2).
рН	Shall be within the range of 6.4 - 9.0
BOD <sub>5</sub> and TSS Removal Efficiency	Shall not be less than 85% monthly average for BOD <sub>5</sub> and 65% monthly for TSS.
Total Chlorine Residual	Shall not exceed daily maximum concentration of 0.50 mg/l and a monthly average of 0.19 mg/l.

(4) No wastes may be discharged, or activities conducted that cause or contribute to a violation of water quality standards in OAR 340-041 applicable to the Willamette basin except as provided for in OAR 340-045-0080 and the following regulatory mixing zone:

The allowable mixing zone is that portion of Salt Creek contained within a band extending out 20 feet from the east bank of the creek and extending from a point 10 feet upstream of the outfall to a point 100 feet downstream from the outfall. The Zone of Immediate Dilution (ZID) shall be defined as that portion of the allowable mixing zone that is within 10 feet of the point of discharge.

- b. Recycled Wastewater Outfall 002
  - (1) No discharge to state waters is permitted. All recycled water shall be distributed on land, for dissipation by evapotranspiration and controlled seepage by following sound irrigation practices so as to prevent:
    - a. Prolonged ponding of treated recycled water on the ground surface;
    - b. Surface runoff or subsurface drainage through drainage tile;
    - c. The creation of odors, fly and mosquito breeding or other nuisance conditions;
    - d. The overloading of land with nutrients, organics, or other pollutant parameters; and,
    - e. Impairment of existing or potential beneficial uses of groundwater.
  - (2) Prior to land application of the recycled water, it shall receive at least Class C treatment as defined in OAR 340-055 to:

Reduce Total Coliform to 240 organisms per 100 mL in two consecutive samples, and a seven-day median of 23 organisms per 100 mL.

v06/03/2021 p. 9 of 28

- (3) Irrigation shall conform to the Recycled Water Use Plan approved by the DEQ.
- c. Septage shall not be accepted at this facility for treatment or processing without written approval from the Department.
- d. No activities shall be conducted that could cause an adverse impact on existing or potential beneficial uses of groundwater. All wastewater and process related residuals shall be managed and disposed in a manner that will prevent a violation of the Groundwater Quality Protection Rules (OAR 340-040).

#### **NOTES:**

- 1. At the point of discharge, Salt Creek is water quality limited for fecal coliform (fall, winter and spring) and manganese year-round. Upon EPA approval of a TMDL addressing any of these pollutants, this permit may be reopened to include any Waste Load Allocation (WLA), best management practice or any other condition required by the TMDL.
- 2. 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 less than or equal to 126 organisms per 100 mL, a violation shall not be triggered.

## 3.2 Technology-Based Effluent Limit Development

40 CFR 122.44(a)(1) requires publicly owned treatment works (POTW) to meet technology-based effluent limits, for five-day biochemical oxygen demand (BOD<sub>5</sub>), total suspended solids (TSS) and pH (i.e., federal secondary treatment standards). Substitution of 5-day carbonaceous oxygen demand (CBOD<sub>5</sub>) for BOD<sub>5</sub> is allowed. The numeric standards for these pollutants are contained in 40 CFR 133.102. In addition, DEQ has developed minimum design criteria for BOD<sub>5</sub> and TSS that apply to specific watershed basins in Oregon. These are listed in the basin-specific criteria sections under OAR 340-041-0101 to 0350. During the summer low flow months as defined by OAR, these design criteria are more stringent than the federal secondary treatment standards. The basin-specific criteria are not effluent limits but are implemented as design criteria for new or expanded wastewater treatment plants. The table below shows a comparison of the federal secondary treatment standards and the basin-specific design criteria for the Willamette basin.

v06/03/2021 p. 10 of 28

Table 3-1: Comparison of TBELs for Federal Secondary Treatment Standards and Oregon Basin-Specific Design Criteria

Parameter	Federal Secondary Treatment Standards		Willamette Basin-Specific Design Criteria (OAR 340-041-0345)	
	30-Day Average	7-Day Average	Monthly Average	
BOD <sub>5</sub> (mg/L)	30	45	May 1 to October 31: 10	
TSS (mg/L)	30	45	mg/L; November 1 to April 30: a minimum of secondary treatment or equivalent control.	
pH (S.U.)	6.0 - 9.0. (in	stantaneous)	Not applicable	
BOD <sub>5</sub> and TSS % Removal	85%	Not applicable	Not applicable	

#### **Equivalent to Secondary Treatment Standards**

40 CFR 133.105 allows less stringent effluent limits for POTWs using waste stabilization ponds or trickling filters as their method of treatment. These facilities are required to achieve a monthly average BOD and TSS concentrations of 45 mg/L, a weekly average limit of 65 mg/L and a removal efficiency of 65%.

DEQ determined there have not been significant changes to the facility since the last treatment equivalent to secondary treatment evaluation and no additional evaluation is needed at this time.

#### Adjustments to Equivalent to Secondary Standards: Waste Stabilization Ponds

Special considerations for TSS limits from waste stabilization ponds are described in 40 CFR 133.103(c). These allow less stringent TSS limits for waste stabilization ponds. In the early 1980s, DEQ determined that waste stabilization ponds west of the Cascade Mountains are capable of achieving a monthly average concentration of 50 mg/L and east of the Cascade Mountains a monthly average of 85 mg/L. EPA published these approved alternate TSS requirements in 49 Federal Register (FR) 37005, September 20, 1984. DEQ is applying the monthly average TSS limit of 50 mg/L and the weekly limit of 70 mg/L.

#### **Mass Based Limits**

The limits for BOD<sub>5</sub> and TSS shown in the table above are concentration-based limits. Mass-based limits are required in addition to the concentration-based limits per OAR 340-041-0061(9). For any new facility or any facility that has expanded its dry weather treatment capacity after June 30, 1992, OAR 340-041-0061(9)(b) requires that the mass load limits be calculated based on the proposed treatment facility capabilities and the highest and best practicable treatment to minimize the discharge of pollutants. The permittee's facility has been engineered to achieve a BOD<sub>5</sub> monthly average concentration of 30 mg/L and TSS monthly average concentrations of 50 mg/L during the wet weather season. DEQ uses the maximum monthly design flow to calculate the mass load limits as shown below for the dry and wet weather seasons.

v06/03/2021 p. 11 of 28

Monthly Avg Mass Load = Design Flow\* x Monthly Concentration Limit x Unit Conversion factor

Weekly Average Mass Load = 1.5 x Monthly Average Mass Load Limit

Daily Maximum Mass Load = 2 x Monthly Average Mass Load Limit

The following table lists the effluent flows and concentration limits used for the calculations.

Table 3-2: Design Flows and Concentrations Limits

Season	Max Monthly Design Flow (mgd)	Monthly TSS Concentration Limit (mg/L)	Monthly BOD₅ Concentration Limit (mg/L)
Dry Weather	0.21	NA	NA
Wet Weather	0.154	50	30

Design flow comments: Dry weather based on average dry weather design flow and wet weather based on facility's pre-upgrade average dry weather flow.

#### Mass Load Calculations:

#### BOD:

Monthly Average: 0.154 mgd x 30 mg/L x 8.34 = 38.53 lbs/day (39 rounded to two significant figures)

Weekly Average: 1.5 x 39 lbs/day monthly average = 58 lbs/day

Daily Maximum:  $2 \times 39$  lbs/day monthly average = 78 lbs/day

#### TSS:

Monthly Average: 0.154 mgd x 50 mg/L x 8.34 = 64.218 lbs/day (64 rounded to two significant figures)

Weekly Average:  $1.5 \times 64 \text{ lbs/day monthly average} = 96 \text{ lbs/day}$ 

Daily Maximum:  $2 \times 64$  lbs/day monthly average = 130 lbs/day (Two significant figures)

The proposed BOD<sub>5</sub> and TSS limits are listed in the following table.

v06/03/2021 p. 12 of 28

<sup>\*</sup> Design flow is the design maximum monthly dry weather flow (DMMDWF) or design maximum monthly wet weather flow (DMMWWF)

**Table 3-3: Technology Based Effluent Limits** 

Parameter	Units	Average Monthly	Average Weekly	Daily Maximum
BOD <sub>5</sub> (November 1 –	mg/L	30	45	NA
April 1)	lbs/day	39	58	78
	% removal	85	NA	NA
TSS	mg/L	50	70	NA
(November 1 – April 1)	lbs/day	64	96	130
1 1 pm 1 )	% removal	65	NA	NA

## 3.3 Water Quality-Based Effluent Limit Development

40 CFR 122.44(d) requires that permits include limitations more stringent than technology-based requirements where necessary to meet water quality standards. Water quality-based effluent limits may be in the form of a wasteload allocation required as part of a Total Maximum Daily Load (TMDL). They may also be required if a site-specific analysis indicates the discharge has the reasonable potential to cause or contribute to an exceedance of a water quality criterion. DEQ establishes effluent limits for pollutants that have a reasonable potential to exceed a criterion. The analyses are discussed below.

#### 3.3.1 Designated Beneficial Uses

NPDES permits issued by DEQ must protect the following designated beneficial uses of the Salt Creek. These uses are listed in OAR-340-041-0430 for the Willamette Basin.

- Public and private domestic water supply
- Industrial water supply
- Irrigation and livestock watering
- Fish and aquatic life (including salmonid rearing, migration and spawning)
- Wildlife and hunting
- Fishing
- Boating
- Water contact recreation
  - Aesthetic quality
  - Hydro power

v06/03/2021 p. 13 of 28

#### 3.3.2 303d Listed Parameters and Total Maximum Daily Loads

The following table lists the parameters that are on the 2022 303(d) list (Category 5) within the discharge's stream reach. If a parameter is listed under Category 5, the data in the assessment unit (or nearby assessment unit) indicates a designated use is not supported or a water quality standard is not attained and a TMDL is needed. The table also lists any parameters with an approved TMDL for the discharge's stream reach (Category 4A). If a parameter is listed under Category 4A, TMDLs that will result in attainment of water quality standards and beneficial use support have been approved by EPA.

Water Quality Limited Parameters (Category 5)		
AU ID:	OR_SR_1709000805_02_104050	
AU Name:	Salt Creek	
AU Status:	Impaired	
Year Listed	1998	
Year Last Assessed	2018	
303d Parameters (Category 5)	Chlorophyll-a, Dissolved Oxygen- year round, Dissolved Oxygen- spawn, Phosphorous, Temperature- year round	
TMDL Parameters (Category 4)		
Phosphorus- Aquatic Life Toxics		

Table 3-4: 303d and TMDL Parameters

#### 3.3.3 TMDL Wasteload Allocations

DEQ issued a TMDL for the Yamhill River in 1992 for phosphorus loading in the summertime. City of Amity only discharges during the wet season and the facility were not included in the TMDL.

#### 3.3.4 Pollutants of Concern

To ensure that a permit is protecting water quality, DEQ must identify pollutants of concern. These are pollutants that are expected to be present in the effluent at concentrations that could adversely impact water quality. DEQ uses the following information to identify pollutants of concern:

- Effluent monitoring data.
  - Knowledge about the permittee's processes.
  - Knowledge about the receiving stream water quality.
  - Pollutants identified by applicable federal effluent limitation guidelines.

Based on EPA's NPDES permit application requirements, toxic pollutants of concern for domestic facilities are listed in the following table.

v06/03/2021 p. 14 of 28

Table 3-5: Domestic Toxic Pollutants of Concern

Flow Rate	Pollutants
> 0.1 mgd and < 1.0 mgd	Total Residual Chlorine, Total Ammonia Nitrogen

DEQ identified the following pollutants of concern for this facility listed in the following table.

Table 3-6: Pollutants of Concern

Pollutant	How was pollutant identified?
рН	Effluent Monitoring
Temperature	Effluent Monitoring
E. coli	Effluent Monitoring
Total Residual Chlorine	Effluent Monitoring
Total Ammonia Nitrogen	Application Requirement
Dissolved Oxygen	Water Quality Impairment
Chlorophyll-a	Water Quality Impairment

The sections below discuss the analyses that were conducted for the pollutants of concern to determine if water quality based effluent limits are needed to meet water quality standards.

#### 3.3.5 Regulatory Mixing Zone

The proposed permit contains a mixing zone as allowed per OAR 340-041-0053. The proposed mixing zone remains unchanged from the existing permit and is described as follows:

That portion of Salt Creek contained within a band extending out 20 feet from the east bank of the creek and extending from a point 10 feet upstream of the outfall to a point 100 feet downstream from the outfall. The Zone of Immediate Dilution (ZID) shall be defined as that portion of the allowable mixing zone that is within 10 feet of the point of discharge.

The dilutions at the edge of the zone of initial dilution and mixing zone are shown in the table below. These dilutions are based on a 2022 mixing zone analysis conducted by DEQ. The results of the analysis are contained in a September 2022 internal memo that can be made available upon request.

v06/03/2021 p. 15 of 28

Dilution Summary - Wet Weather						
Water Quality	Stream Flow (cfs)		Effluent Flow (mgd)		Dilution	Location
Standard	Statistic	Flow	Statistic	Flow		
Aquatic Life,	1Q10	8.9	☐ ADWDF x PF	0.71	1.7	ZID
Acute			⊠ Max Daily Avg			
			☐ Other			
Aquatic Life,	7Q10	11	□ ADWDF	0.39	2.1	MZ
Chronic						
			Avg			
			☐ Other			
Human Health,	30Q5	17	□ ADWDF	0.39	2.2	MZ
Non-						
Carcinogen			Avg			
			☐ Other			
Human Health,	Harmonic	NA	☐ Annual Avg	NA	NA	MZ
Carcinogen	Mean		Design			
			☐ Annual Avg			
			☐ Other			

#### 3.3.6 pH

The pH criterion for this basin is 6.5 - 8.5 per OAR 340-041-0345. DEQ conducted an analysis using the existing pH limits and determined there is reasonable potential for the discharge to exceed the lower pH criterion at the edge of the mixing zone. The lower limit of 6.5 is a WQBEL and the upper limit of 9.0 is a TBEL. A review of DMR data showed that the permittee is unable to meet the new limits upon permit issuance. A compliance schedule with required milestones to achieve the new pH limits is included in Schedule C of the proposed permit. The existing limits are being retained as an interim limit until the final limits are effective. The following provides a summary of the data used for the analysis.

v06/03/2021 p. 16 of 28

Table 3-7: pH Reasonable Potential Analysis

INPUT	Lower pH Criteria	Upper pH Criteria
1. Dilution at mixing zone boundary	2.1	2.1
2. Upstream characteristics		
a. Temperature (deg C)	22.5	6.7
b. pH	7.3	7.7
c. Alkalinity (mg CaCO3/L)	21.2	21.2
3. Effluent characteristics		
a. Temperature (° C)	16.3	12.0
b. pH (S.U.)	6.4	9.0
c. Alkalinity (mg CaCO3/L)	134.6	134.6
4. Applicable pH criteria	6.5	8.5
pH at mixing zone boundary	6.4	8.4
Is there reasonable potential?	Yes	No
Proposed effluent limits 6.5 9.0		
Effluent data source: Alkalinity defaults used. Temperature data from excel DM	IRs 2019-2024.	
Ambient data source: AWQMS 2013-2022. Station 10948-ORDEQ.		

## 3.3.7 Temperature

#### 3.3.7.1 Temperature Criteria OAR 340-041-0028

The following table summarizes the temperature criteria that apply at the discharge location along with whether the receiving stream is water quality-limited for temperature and whether a TMDL wasteload allocation has been assigned. Using this information, DEQ performed several analyses to determine if effluent limits were needed to comply with the temperature criteria.

v06/03/2021 p. 17 of 28

**Table 3-8: Temperature Criteria Information** 

Applicable Temperature Criterion	Rearing/Migration 18°C (OAR 340-041-0028(4)(c)
Applicable dates: Year-round	
Salmon/Steelhead Spawning 13°C? OAR 340-041-0028(4)(a)	□Yes ⊠No
Applicable dates: NA	
WQ-limited?	⊠Yes □No
TMDL wasteload allocation assigned?	□Yes ⊠No
Applicable dates: NA	
TMDL based on natural conditions criterion?	□Yes □No
Cold water summer protection criterion applies?	□Yes ⊠No
Cold water spawning protection applies?	□Yes ⊠No
Comments:	

DEQ conducted a temperature reasonable potential analysis for the period when the facility discharges during the rearing and migration season (May 16-Oct 14). The applicable temperature criterion is 18°C. Since a TMDL has not been developed to address the water quality limited listing associated with this criterion, this analysis is based on the portion of Oregon's temperature rule for implementing the criterion prior to the development of a TMDL. The effluent temperature value used in this analysis was 18.4°C. This value was taken from the facility's DMRs for the period from 2019 to 2024 and represents the maximum 7-day average of the daily maximums for the discharge season. The results of this RPA indicate that there is no potential for the facility's discharge to exceed the temperature standard (see Appendix A). Based on this analysis, no temperature limit associated with the applicable temperature criterion is included in the proposed permit.

Final effluent limits are listed in the following table.

**Table 3-9: Temperature Criterion Effluent Limits** 

Effluent limit needed? □Yes ⊠No				
TMDL WLA Limit: NA				
Applicable time period: Dates ⊠NA				
Temperature Criterion Limit: NA				
Applicable time period: Dates ⊠NA				
Comments:				

v06/03/2021 p. 18 of 28

#### 3.3.7.2 Thermal Plume OAR 340-041-0053(2)(d)

In addition to compliance with the temperature criteria, OAR 340-041-0053(2)(d) contains thermal plume limitation provisions designed to prevent or minimize adverse effects to salmonids that may result from thermal plumes. The discharge was evaluated for compliance with these provisions as follows:

• OAR 340-041-0053(2)(d)(A): Impairment of an active salmonid spawning area where spawning redds are located or likely to be located. This adverse effect is prevented or minimized by limiting potential fish exposure to temperatures of 13°C or more for salmon and steelhead, and 9°C or more for bull trout.

The Salt Creek is not listed for spawning, so no spawning criterion applies.

• OAR 340-041-0053(2)(d)(B): Acute impairment or instantaneous lethality is prevented or minimized by limiting potential fish exposure to temperatures of 32°C or more to less than 2 seconds.

The permittee's maximum 7-day average of the daily maximum effluent temperature is 18.4°C which is below the criterion, therefore there is no reasonable potential for acute impairment.

• OAR 340-041-0053(2)(d)(C): Thermal shock caused by a sudden increase in water temperature is prevented or minimized by limiting potential fish exposure to temperatures of 25°C or more to less than 5% of the cross-section of 100% of the 7Q10 flow of the water body.

The permittee's maximum 7-day average of the daily maximum effluent temperature is 18.4°C which is below the criterion, therefore there is no reasonable potential for thermal shock.

• OAR 340-041-0053(2)(d)(D): Unless ambient temperature is 21°C or greater, migration blockage is prevented or minimized by limiting potential fish exposure to temperatures of 21°C or more to less than 25% of the cross-section of 100% of the 7Q10 flow of the water body.

The permittee's maximum 7-day average of the daily maximum effluent temperature is 18.4°C which is below the criterion, therefore there is no reasonable potential for migration blockage.

Table 3-10: Thermal Plume Effluent Limit

Effluent limit needed? □Yes ⊠No
Calculated limit: NA
Applicable timeframe: NA
Comments:

v06/03/2021 p. 19 of 28

#### 3.3.8 Bacteria

OAR 340-041-0009(6)(b) requires discharges of bacteria into freshwaters meet a monthly geometric mean of 126 *E. coli* per 100 mL, with no single sample exceeding 406 *E. coli* per 100 mL. If a single sample exceeds 406 *E. coli* per 100 mL, then the permittee may take five consecutive re-samples. If the geometric mean of the five re-samples is less than or equal to 126, a violation is not triggered. The re-sampling must be taken at four-hour intervals beginning within 28 hours after the original sample was taken. The following table includes the proposed permit limits and apply year-round.

<i>E. coli</i> (#/100 ml)	Geometric Mean	Maximum
Existing Limit	126	406
Proposed Limit	126	406

Table 3-11: Proposed E. coli Limits

#### 3.3.9 Toxic Pollutants

DEQ typically performs the reasonable potential analysis for toxics according to EPA guidance provided in the Technical Support Document for Water Quality-Based Toxics Control (TSD) (Office of Water Enforcement and Permits, U.S. EPA, March 1991). The factors incorporated into this analysis include:

- 1. Effluent concentrations and variability
- 2. Water quality criteria for aquatic life and human health
- 3. Receiving water concentrations
- 4. Receiving water dilution (if applicable)

DEQ performs these analyses using spreadsheets that incorporate EPA's statistical methodology. The following sections describe the analyses for various toxic pollutants below.

#### 3.3.9.1 Total Residual Chlorine

The existing permit contains chlorine limits. DEQ evaluated the existing limits to ensure they remained protective of water quality. The analysis showed that the existing limits could result in a reasonable potential for chlorine to exceed water quality criteria, therefore the new limits are being proposed. Proposed limits are listed in the following table. A review of DMR data showed that the permittee is unable to meet the new limits upon permit issuance. A compliance schedule with required milestones to achieve the new chlorine limits is included in Schedule C of the proposed permit. The existing limits are being retained as an interim limit until the final limits are effective.

v06/03/2021 p. 20 of 28

**Table 3-12: Proposed Chlorine Limits** 

	Chronic (mg/L)	Acute (mg/L)
Chlorine Criteria	0.011	0.019
	Average Monthly Limit (mg/L)	Maximum Daily Limit (mg/L)
<b>Existing Limit</b>	0.19	0.50
Calculated Limit	0.01	0.03
Proposed Limit	0.01	0.03
Effluent data source: DMRs 2019-2024		
Receiving water data source: Assumed to be zero		

#### 3.3.9.2 Total Ammonia Nitrogen

DEQ's ammonia criteria vary with changes in pH and temperature. DEQ performed a reasonable potential analysis that accounts for changes in the effluent and receiving water pH and temperature to determine the appropriate ammonia criteria. The following table provides a summary of the data used for the ammonia analysis and the results of the analysis. Effluent data from November 2019 to April 2024 DMRs were used in the analysis. Ambient data from downstream of the point of discharge from 2013-2022 was used in the analysis. The permittee doesn't currently have an ammonia limit. Based off the analysis, there is reasonable potential for the permittee's discharge to exceed the ammonia criteria, therefore permit limits will be incorporated into the renewed permit. A review of DMR data showed that the permittee is unable to comply with the limit upon permit issuance. A compliance schedule with required milestones to achieve the new ammonia limits is included in Schedule C of the proposed permit.

v06/03/2021 p. 21 of 28

Table 3-13: Ammonia Analysis Information - Winter

	Acuto	Chro	Chronic		
	Acute	4-day	30-day		
Dilution	1.7	2.1	2.2		
Ammonia Criteria	7.2	3.6	1.4		
	Effluent Data Used				
Ammonia (mg/L)	7.3	7.	7.3		
pH (SU) 7.9 7.9			9		
Temperature (°C) 16.2 16.2					
Alkalinity (mg/L CaCO3)	134.6	134	134.6		
Receiving Stream Data Used					
Ammonia (mg/L) 0.0		0.	0.0		
pH (SU) 7.6 7.6		6			
Temperature (°C)	11.8	11	11.8		
Alkalinity (mg/L CaCO3)	21	2	1		
Ammonia Limit Needed? Yes					
Calculated Limits	AML	MDL			
Ammonia (mg/L)	4.0	10	10.1		
	Effluent data source				
Excel DMRs Nov 2019-April 2024.	9	e during summer	-only winter		

RPA done. Alkalinity defaults used.

Ambient data source

AWQMS 2013-2022. Station 10948-ORDEQ.

#### 3.3.9.3 Mercury – Human Health Criterion

A Willamette Basin Mercury TMDL was established by EPA on December 30, 2019. According to the EPA TMDL and the State of Oregon Water Quality Management Plan, the potential mercury load from minor domestic wastewater treatment plant discharges is a very small. The TMDL states that no additional controls or monitoring will be required for minor domestic treatment plants. No mercury requirements are included in this permit.

#### 3.3.9.4 Dissolved Oxygen

Salt Creek is impaired for dissolved oxygen for the period May 1 through October 31. However, discharge is prohibited during this period. Therefore, the permittee has no reasonable potential to cause or contribute to a violation of dissolved oxygen criteria.

p. 22 of 28 v06/03/2021

#### 3.3.9.5 Chlorophyll-a

Salt Creek is listed on the 303(d) list for not meeting the narrative chlorophyll-a criterion. The growth of chlorophyll-a does not in itself indicate deleterious or injurious effects on beneficial uses. Nor does it identify whether a pollutant or which pollutant is causing the impairment and should be addressed by point source or other controls through a Total Maximum Daily Load. DEQ does not know what pollutant(s) are causing the chlorophyll-a impairment. DEQ does not expect that the permittee's discharge is contributing to the impairment considering the facility only discharges during the wet weather season.

## 3.4 Antibacksliding

The proposed permit complies with the antibacksliding provisions of CWA sections 402(o) and 303(d)(4) and 40 CFR 122.44(l). The proposed limits are the same or more stringent than the existing permit so the antibacksliding provision is satisfied.

## 3.5 Antidegradation

DEQ must ensure the permit complies with Oregon's antidegradation policy found in OAR 340-041-0004. This policy is designed to protect water quality by limiting unnecessary degradation from new or increased sources of pollution.

DEQ has performed an antidegradation review for this discharge. The proposed permit contains the same or more stringent discharge loadings as the existing permit. Permit renewals with the same or more stringent discharge loadings as the previous permit are not considered to lower water quality from the existing condition. DEQ is not aware of any information that existing limits are not protecting the receiving stream's designated beneficial uses. DEQ is also not aware of any existing uses present within the water body that are not currently protected by standards developed to protect the designated uses. Therefore, DEQ has determined that the proposed discharge complies with DEQ's antidegradation policy. DEQ's antidegradation worksheet for this permit renewal is available upon request.

## 3.6 Whole Effluent Toxicity

DEQ does not require whole effluent toxicity testing (WET) for minor domestic facilities because concentrations of toxics are typically very low and WET testing is not warranted.

### 3.7 Groundwater

The facility's lagoons do not excessively leak, is not located in a Groundwater Management Area, and is not located within 1,000 feet of an existing public or private drinking water supply well, designated Wellhead Protection Area.

The treatment facility does not have any basins, ponds or lagoons that have the potential to leach into the groundwater. No groundwater monitoring or limits are required.

v06/03/2021 p. 23 of 28

### 4. Schedule A: Other Limitations

## 4.1 Mixing Zone

Schedule A describes the regulatory mixing zone as discussed above in section 3.3.5.

#### 4.2 Biosolids

The permit holder has the capability to develop a new biosolids program to land apply biosolids or produce biosolids for sale and distribution during the term of this permit. The permit holder will develop a comprehensive biosolids management plan and land application plan. DEQ will review the plans and provide an opportunity for public comment on the proposed land application activity. Once approved, conditions in the biosolids management plan and land application plan become permit conditions.

## 4.3 Recycled Water or Irrigation of Industrial Wastewater

The permit holder currently operates a recycled water program to produce a Class (A, B, C, D, or Non-disinfected) recycled water for (irrigation, industrial, other) uses and anticipates continuing to do so. A recycled water use plan was submitted to DEQ for review and is available for public comment with the permit. Once approved after public comment, conditions in the recycled water use plan become permit conditions.

Schedule A of the permit requires the permittee to apply recycled water according to their recycled water use plan. Schedule A also restricts the application of recycled water to prevent the following:

- Irrigating above agronomic rates,
- Adverse impact to groundwater,
- Offsite surface runoff or subsurface drainage through drainage tile,
- Creation of odors, fly and mosquito breeding, or other nuisance conditions

## 5. Schedule B: Monitoring and Reporting Requirements

Schedule B of the permit describes the minimum monitoring and reporting necessary to demonstrate compliance with the proposed effluent limits. In addition, monitoring for other parameters is required to better characterize the effluent quality and the receiving stream. This data will be used during the next permit renewal. Detailed monitoring frequency and reporting requirements are in Schedule B of the proposed permit. The required monitoring, reporting and frequency for many of the parameters are based on DEQ's monitoring and reporting matrix guidelines, permit writer judgment, and to ensure the needed data is available for the next permit renewal.

v06/03/2021 p. 24 of 28

## 6. Schedule C: Compliance Schedule

The proposed permit contains new water quality-based effluent limits for pH, chlorine, and ammonia. The facility is unable to meet these limits upon permit issuance. The proposed permit contains a compliance schedule that allows time for the facility to make facility modifications in order to meet the new limits. This compliance schedule lays out a series of milestones which upon completion, will enable the permittee to meet the permit's water quality-based effluent limits (see 40 CFR 122.47 and OAR 340-041-0061(12)).

The wastewater treatment facility does not currently have adequate treatment units in place to meet the new limits, and the permittee will not immediately be able to meet the new limits upon permit issuance. The compliance schedule also allows the permittee to conduct a mixing zone study to assess the feasibility of redesigning outfall 001. The proposed permit requires the permittee to comply with the new chlorine, pH and ammonia limits after the completion of the compliance schedule in Schedule C of the proposed permit.

With City input, DEQ has developed a Schedule C compliance schedule in the proposed permit to meet the final chlorine, pH ammonia limits. The compliance schedule contains interim compliance dates and a final compliance date. The city has a responsibility to meet the compliance dates and must notify DEQ in writing of its compliance or noncompliance with the interim requirements. Given the complexity of the issues for the overall projects and the financial impacts of the project on the city, DEQ considers the proposed schedule to be reasonable, requires the final effluent limits to be met as soon as possible, and is in compliance with 40 CFR 122.47. Per OAR 340-045-055 an interim compliance date can be modified provided the new date is not more than 120 days after the date in the existing permit and does not interfere with the final compliance date requirement.

## 7. Schedule D: Special Conditions

The proposed permit contains the following special conditions. The conditions include the following:

## 7.1 Inflow and Infiltration Management

A requirement to submit an updated inflow and infiltration plan in order to reduce groundwater and stormwater from entering the collection system.

## 7.2 Lagoon Leak Test

A condition that requires the permittee to conduct a lagoon leak test in accordance with DEQ guidance (<a href="https://www.oregon.gov/deq/FilterRulemakingDocs/div52-estleak.pdf">https://www.oregon.gov/deq/FilterRulemakingDocs/div52-estleak.pdf</a>). If the lagoon is found to be leaking more than ¼ inch per day, then the permittee is required to conduct a preliminary groundwater assessment in accordance with DEQ guidance (<a href="https://www.oregon.gov/deq/wq/Documents/wq-GroundwaterAssessmentGuide.pdf">https://www.oregon.gov/deq/wq/Documents/wq-GroundwaterAssessmentGuide.pdf</a>).

v06/03/2021 p. 25 of 28

## 7.3 Emergency Response and Public Notification Plan

A requirement to develop and submit an emergency and spill response plan or ensure the existing one is current per General Condition B.8 in Schedule F.

## 7.4 Recycled Water Use Plan

A condition requiring the permit holder to develop and maintain a recycled water use plan that meet the requirements in OAR 340-055-0025. The plan must also include location-specific information describing where and how recycled water is managed to protect public health and the environment.

## 7.5 Exempt Wastewater Reuse at the Treatment System

A condition that exempts the permit holder from the recycled water requirements in OAR 340-055, when recycled water is used for landscape irrigation at the treatment facility or for in-plant processes, such as in plant maintenance activities.

## 7.6 Biosolids Management Plan

A requirement to manage all biosolids in accordance with a DEQ-approved biosolids management plan and land application plan. The biosolids management plan and the land application plan must meet the requirements in OAR 340-050-0031 and describe where and how the land application of biosolids is managed to protect public health and the environment.

### 7.7 Wastewater Solids Transfers

A condition that allows the facility to transfer treated or untreated wastewater solids to other instate or out-of-state facilities that are permitted to accept the wastewater solids.

## 7.8 Hauled Waste Control Plan

A condition that allows the acceptance of hauled waste after a hauled waste plan is submitted and approved by DEQ. The hauled waste plan ensures waste is not accepted that could negatively impact the treatment capabilities of the facility.

## 7.9 Hauled Waste Annual Report

A condition requiring submittal of an annual hauled waste report that summarizes hauled waste accepted at the facility during the previous year.

## 7.10 Lagoon Solids

A condition requiring the permittee to submit a sludge depth survey report to ensure lagoon solids are maintained within design standards and accumulations do not negatively affect treatment capabilities.

v06/03/2021 p. 26 of 28

## 7.11 Operator Certification

The permit holder is required to have a certified operator consistent with the size and type of treatment plant covered by the permit per OAR 340-049-0005. This special condition describes the requirements relating to operator certification.

## 7.12 Industrial User Survey

This condition requires the permittee to conduct or update an industrial user survey. The purpose of the survey is to identify whether there are any categorical industrial users discharging to the POTW and ensure regulatory oversight of these discharges.

## 7.13 Outfall Inspection

A condition that requires the permittee to inspect the outfall and submit a report regarding its condition.

## 8. Schedule F: NPDES General Conditions

Schedule F contains the following general conditions that apply to all NPDES permittees. These conditions are reviewed by EPA on a regular basis.

- Section A. Standard Conditions
- Section B. Operation and Maintenance of Pollution Controls
- Section C. Monitoring and Records
- Section D. Reporting Requirements
- Section E. Definitions

v06/03/2021 p. 27 of 28

## **Appendix A: Temperature RPA**

Facility Name:	City of Amity		<b>Date:</b> 10/31/2024	
Applicable Rearin	ng and migratio	n May 16-C	Oct 14	
Enter data into white cells be	low:			
			Data Metric/Source	Equation used to calculate ΔT at edge of MZ
Mixing Zone Dil	ution = 2.	1	MZ Memo 2022	T (G 1) T
	_			$\Delta T_{mz} = \frac{T_e + (S - 1)T_a}{S} - T_a$
7	'Q10 = 1	1 cfs	MZ Memo 2022	S
Effluent	Fla 3 0.4		M7 Marra 2022	
Eπiuent	riow = 0.1	2 mgd	MZ Memo 2022	Equation used to calculate thermal load limit
Applicable Temperature C	riterion 1	3 °C		Equation used to calculate thermal load limit
7 (P P NO CASTO ) CONTROL OF CONT				$TLL=3.7854 \mathcal{Q}_e S\Delta T_{all} C_p \rho$
Effluent Tempe	erature 18.	4 °C	7dAM DMRS 2019-2024	$ILL=3.7834 \mathcal{D}_e S \Delta I_{all} C_p \rho$
Allowable incr	ease = 0.	3 °C		Where:
				Qe = Effluent Flow in mgd S = Dilution
Dilution at 25% Stream	Flow = 1	dilution	= (Qr*0.25)/Qe + 1	$\Delta T_{\text{all}} = \text{Allowable temperature increase}$
Dilution at 25 % Stream	1 10W - I	• Gildtion	- (Q1 0.25)/QE + 1	at edge of MZ (°C)
∆T at edge o	of MZ= 0	2 °C		Cp = Specific Heat of Water (1 cal/g °C)
∧T at 25% Stream		o °C	No Reasonable Potential	$\rho = \text{Density of Water (1 g/cm}^3)$
2. 2. 20% Oli Calli	0.	, ,		3785.41 = Flow conversion from mgd to m <sup>3</sup> /day
Thermal Load I	Limit = N/A	Million k	(cals (7-day Rolling Avg.)	3703.41 - How conversion from friga to I/1 /day
Thermal Load I	IIIIC - IV/A	······································	teals (r-day Rolling Avg.)	

v06/03/2021 p. 28 of 28