Oregon
Tina Kotek, Governor

Department of Environmental Quality
Northwest Region Portland Office/Water Quality
700 NE Multnomah Street, Suite 600
Portland, OR 97232
(503) 229-5696
FAX (503) 229-6124
TTY 711

March 11, 2025

Mark Schacher
Sundown Sanitary Sewer District
P.O. Box 97
Warrenton, OR 97146-0097

Re: NPDES Permit Public Notice Period
Comments Due: April 15, 2025, 5 p.m.
File no. 88436
Permit no. 100905
EPA no. OR0027219
Facility: Sundown WWTP, 36245 Bartoldus Loop, Astoria
Clatsop 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 Sundown Sanitary Sewer District 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 April 15, 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

Trinh Hansen
Water Quality Permit Coordinator
Western Region, Salem Office

ec: NPDES Permit Issuance E-File, Water Quality Division, DEQ
Mike Pinney, Portland, DEQ
ORMS

PUBLIC NOTICE

Date posted: 3/11/25

DEQ Requests Comments on Sundown Sanitary Sewer District's Proposed Water Quality Permit Renewal

HOW TO PROVIDE PUBLIC COMMENT

Facility name: Sundown Sanitary District
Permit type: NPDES, Domestic – minor
Comments due by: Tuesday, April 15, 2025 at 5 p.m.

Send written comments to: Trinh Hansen, Oregon DEQ, Water Quality 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 Sundown Sanitary Sewer District'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 Sundown wastewater treatment plant to discharge wastewater to the Youngs River in Astoria.

About the facility

The Sundown Sanitary Sewer District has applied for a water quality permit renewal for the Sundown wastewater treatment plant located at 36245 Bartoldus Loop in Astoria. DEQ last issued this permit on March 9, 2020. The facility collects and treats domestic wastewater before discharging to the Youngs River, year-round, in accordance with NPDES Permit number 100905. The permit limits the discharge of five-day biological oxygen demand, total suspended solids, pH, and bacteria (*E. coli)*.

The facility is privately owned and serves a residential community with a service population of approximately 450 individuals and no industrial contributors.

The facility discharges to the Youngs River in Astoria. The Youngs River 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 best available technology.

The most recent DEQ inspection of the Sundown wastewater treatment plant was on Dec. 11, 2024. DEQ did not identify violations during this inspection. Sundown wastewater treatment plant has had no water quality violations in the past permit term. The facility is currently operating in full compliance.

The facility holds no other permits from DEQ.

Translation or other formats

Español | 한국어 | 繁體中文 | Русский | Tiếng Việt | العربية
800-452-4011 | TTY: 711 | deqinfo@deq.oregon.gov

State of Oregon
DEQ Department of Environmental Quality

What types of pollutants does the permit regulate?

This permit sets conditions for how the facility deals with the following pollutants: five-day biochemical oxygen demand, total suspended solids, pH, and bacteria (*E. coli)*.

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

Yes. The existing permit limits for total suspended solids, both for concentration and for mass loading, have been increased to less stringent limits.

Pollutant	Change
Total suspended solids – concentration (mg/L)	Less restrictive limit
Total suspended solids – mass loading (lb/day)	Less restrictive limit

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 Sundown Sanitary District's water quality permit renewal application, the North Coast Subbasins (Lower Columbia-Youngs) TMDL, discharge monitoring reports and facility design reports. In addition, DEQ evaluated ambient water quality monitoring data collected by Sundown Sanitary District at a location upstream from their facility on the Youngs River in Astoria. These materials may be viewed in person at the DEQ Northwest Region offices located at: 700 NE Multnomah Street, Suite 600 in Portland.

DEQ relied solely on these documents and made no other discretionary decisions for the permit action.

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 503-804-6594 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 Civil Rights and Environmental Justice page.

Translation or other formats

Español | 한국어 | 繁體中文 | Русский | Tiếng Việt | العربية

800-452-4011 | TTY: 711 | deqinfo@deq.oregon.gov

State of Oregon
DEQ Department of Environmental Quality

State of Oregon Department of Environmental Quality

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM WASTE DISCHARGE PERMIT

Oregon Department of Environmental Quality
Northwest Region – Portland Office
700 NE Multnomah St., Suite 600
Portland, OR 97232
Telephone: 503-229-5263

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

ISSUED TO:

Sundown Sanitary Sewer District
PO Box 97
Warrenton, OR 97146

SOURCES COVERED BY THIS PERMIT:

Type of Waste	Outfall Number	Outfall Location
Treated wastewater	Outfall 001	46.143013, -123.811415

FACILITY LOCATION:

Sundown WWTP
36245 Bartoldus Loop
Astoria, OR 97103
County: Clatsop
EPA Permit Type: Minor

RECEIVING STREAM INFORMATION:

Receiving stream/NHD name: Youngs River
USGS 12-Digit HUC: 170800060205
OWRD Administrative Basin: North Coast
NHD Reach Code & % along reach: 17080006001536, 84.0%
ODEQ LLID & RM: 1238373461686, RM 2.7
Integrated Report AU ID: OR_SR_1708000602_05_100322

Issued in response to Application No. 948058 received August 21, 2024. This permit is issued based on the land use findings in the permit record.

DRAFT	DRAFT	DRAFT
Tiffany Yelton-Bram, WQ Manager, Northwest Region	Issuance Date	Effective Date

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.

Public Notice

TABLE OF CONTENTS

Note: Schedules C (Compliance Schedule) and E (Pretreatment Activities) are not part of this permit.

LIST OF TABLES

Public Notice

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
BOD_5 (May 1 – October 31)	mg/L	10	15	-
	lb/day	1.8	2.7	3.6
	% removal	85	-	-
TSS (May 1 – October 31)	mg/L	20	30	-
	lb/day	3.7	5.6	7.4
	% removal	85	-	-
BOD_5 (November 1 – April 30)	mg/L	10	15	-
	lb/day	1.8	2.7	3.6
	% removal	85	-	-
TSS (November 1 – April 30)	mg/L	30	45	-
	lb/day	5.5	8.3	11
	% removal	85	-	-
pH	SU	Instantaneous limit between a daily minimum of 6.0 and a daily maximum of 9.0		
E. coli (See note a.)	#/100 mL	Must not exceed a monthly geometric mean of 126, no single sample may exceed 406		

Note:

a. If a single sample exceeds 406 organisms/100 mL, the permittee may take at least 5 consecutive re-samples 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.

2. Regulatory Mixing Zone

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

The Regulatory Mixing Zone (RMZ) is that portion of Youngs River within a rectangle extending 20 ft upstream and downstream from the end of pipe with a width of 5 feet on either side. The Zone of Initial Dilution (ZID) is that portion of Youngs River within a 2 ft radius from the end of pipe.

3. Use of Recycled Water

This permit prohibits facility personnel from distributing treated wastewater for beneficial reuse without a DEQ-approved Recycled Water Use Plan.

Public Notice

4. Chlorine Usage

The permittee is prohibited from using chlorine or chlorine compounds for effluent disinfection purposes. Chlorine residual in effluent resulting from chlorine or chlorine-containing chemicals used for maintenance or other purposes is also prohibited.

Public Notice

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 report (see Schedule D)	Annually	February 15	Electronic copy in a DEQ-approved format	Attached via electronic reporting as directed by DEQ
Mixing Zone Study (see Schedule D)	One time	Submit by XX/15/2029	Electronic copy in a DEQ-approved format	Attached via electronic reporting as directed by DEQ
Wastewater solids annual report (see Schedule D)	Annually	By February 19 of the following year	Electronic copy in a DEQ-approved format	Attached via electronic reporting as directed by DEQ Electronic copy to DEQ Biosolids Program Coordinator
Outfall Inspection Report (see Schedule D)	Once per permit cycle	Submit by XX/15/2028	Electronic copy in a DEQ-approved format	Attached via electronic reporting as directed by DEQ
Industrial User Survey (see Schedule D)	One time	Submit by XX/XX/XXX (no later than 24 months after permit's effective date)	1 electronic copy in a DEQ approved format	Attached via electronic reporting as directed by DEQ
Hauled Waste Control Plan (see Schedule D)	One time	Submit by XX/15/20XX (insert date two months after permit's effective date)	Electronic copy in a DEQ-approved format	Attached via electronic reporting as directed by DEQ
Hauled Waste Annual Report (following approval of Hauled Waste Control Plan, see Schedule D)	Annually	January 15	Electronic copy in a DEQ-approved format	Attached via electronic reporting as directed by DEQ

Public Notice

Reporting Requirement	Frequency	Due Date (See note a.)	Report Form (See note b.)	Submit To:

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.

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.

Public Notice

(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_5/$CBOD_5$, 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_5/$CBOD_5$, the permittee may not use the result that failed the QA/QC requirement in any calculation except as follows:

(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.

Public Notice

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 µg/l, the QL is 3.0 µg/L and the result is estimated to be between the DL and QL, the permittee must report "E1.0 µg/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.

g. Calculating and Reporting Mass Loads

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

Example calculation: 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 µg/L, report "<0.017 lb/day" for mass load on the DMR (1.0 µg/L x 2 MGD x conversion factor = 0.017 lb/day).

Public Notice

3. Monitoring and Reporting Requirements

a. The permittee must monitor influent upstream of recycle/return pipe connections for return activated sludge and report results in accordance with Table B1 and 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_5 (00310)	mg/L	May 1 – October 31	1/month	24-hour composite	Monthly Average
BOD_5 (00310)	mg/L	November 1 – April 30	2/month	24-hour composite	Monthly Average
TSS (00530)	mg/L	Year-round	1/month	24-hour composite	Monthly Average
pH (00400)	SU	Year-round	3/week	Grab	1. Monthly Maximum 2. Monthly Minimum

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.

Public Notice

b. The permittee must monitor effluent at Outfall 001 after the ultraviolet disinfection unit 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	1. Monthly Average 2. Daily Maximum
BOD_5 (00310)	mg/L	May 1 – October 31	1/month	24-hour composite	1. Monthly Average 2. Maximum Weekly Average
BOD_5 (00310)	lb/day	May 1 – October 31	1/month	Calculation	1. Daily Maximum 2. Monthly Average 3. Maximum Weekly Average
BOD_5 (00310)	mg/L	November 1 – April 30	2/month	24-hour composite	1. Monthly Average 2. Maximum Weekly Average
BOD_5 (00310)	lb/day	November 1 – April 30	2/month	Calculation	1. Daily Maximum 2. Monthly Average 3. Maximum Weekly Average
BOD_5 percent removal (81010) (See note c.)	%	Year-round	Monthly	Calculation based on monthly average BOD_5 concentration values	Monthly Average
TSS (00530)	mg/L	Year-round	1/month	24-hour composite	1. Monthly Average 2. Maximum Weekly Average

Public Notice

Item or Parameter	Units	Time Period	Minimum Frequency	Sample Type/ Required Action (See note a.)	Report Statistic (See note b.)
TSS (00530)	lb/day	Year-round	1/month	Calculation	1. Daily Maximum 2. Monthly Average 3. Maximum Weekly Average
TSS percent removal (81011) (See note c.)	%	Year-round	Monthly	Calculation based on monthly average TSS concentration values	Monthly Average
pH (00400)	SU	Year-round	3/week	Grab	1. Daily Maximum 2. Daily Minimum
Temperature (00010)	ºC	Year-round	3/week	Grab	1. Daily Maximum 2. Monthly Average 3. 7-day Rolling Average of Daily Maximum
E. coli (51040)	#/100 mL	Year-round	1/month	Grab	1. Daily Maximum 2. Monthly Geometric Mean
Alkalinity as $CaCO_3$ (00410)	mg/L	Year-round	Quarterly	24-hour composite	Quarterly Maximum
UV transmittance	%	Year-round	Daily	Continuous	Maintain records on-site
Dissolved Oxygen (00300)	mg/L	Year-round	Quarterly	Grab	Quarterly Minimum
Dissolved Oxygen (00301)	% saturation	Year-round	Quarterly	Grab	Quarterly Minimum

Public Notice

Item or Parameter	Units	Time Period	Minimum Frequency	Sample Type/ Required Action (See note a.)	Report Statistic (See note b.)
Salinity (480PS)	psu	Third year of permit cycle [2028]	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 collect one grab sample daily between 12 PM and 5 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. CFR 122.21 requires that Dissolved Oxygen be collected as a 24-hour composite for permit application purposes. CFR 136.3(e) specifies that if a composite measurement is required but a composite sample would compromise sample integrity, that individual grab samples must be collected. 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 Youngs River 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 (Youngs River)

Item or Parameter	Units	Time Period	Minimum Frequency	Sample Type / Required Action	Report Statistic (See note a.)
pH (00400)	SU	Year-round	Monthly	Grab	Monthly Maximum
Temperature (00010)	ºC	Year-round	Monthly	Grab	Monthly Maximum
Alkalinity as $CaCO_3$ (00410)	mg/L	Year-round	Monthly	Grab	Monthly Maximum
Salinity (480PS)	psu	Year-round	Monthly	Grab	Monthly Maximum

Public Notice

Item or Parameter	Units	Time Period	Minimum Frequency	Sample Type / Required Action	Report Statistic (See note a.)
Dissolved Oxygen (00300)	mg/L	Year-round	Quarterly	Grab	Quarterly Minimum
Dissolved Oxygen (00301)	% saturation	Year-round	Quarterly	Grab	Quarterly Minimum

Note:

a. 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. Additional Receiving Stream and Effluent Characterization Monitoring

If additional ambient or effluent monitoring is needed, DEQ will notify the permittee through a request for supplemental information/data.

Public Notice

SCHEDULE C: COMPLIANCE SCHEDULE

A compliance schedule is not part of this permit.

Public Notice

SCHEDULE D: SPECIAL CONDITIONS

1. Inflow and Infiltration

The permittee must submit to DEQ an annual inflow and infiltration report on a DEQ-approved form as directed in Table B1. The report must include the following:

a. An assessment of the facility's I/I issues based on a comparison of summer and winter flows to the plant.

b. Details of activities performed in the previous year to identify and reduce inflow and infiltration.

c. Details of activities planned for the following year to identify and reduce inflow and infiltration.

d. A summary of sanitary sewer overflows that occurred during the previous year. This should include the following: date of the SSO, location, estimated volume, cause, follow-up actions and if performed, the results of receiving stream monitoring.

2. Mixing Zone Study

By no later than the date specified in Schedule B1, permittee must submit a level 1 mixing zone study for Outfall 001. (Level 1 mixing zone study requirements are described in DEQ's Mixing Zone Internal Management Directive).

3. Emergency Response and Public Notification Plan

The permittee must develop an Emergency Response and Public Notification Plan ("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. 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.

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.

5. Wastewater Solids Annual Report

The permittee must submit a Wastewater Solids Annual Report by February 19 each year documenting removal of wastewater solids from the facility during the previous calendar year. The permittee must use DEQ-approved wastewater solids annual report form. This report must include the volume of material removed and the name of the permitted facility that received the solids.

Public Notice

6. 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.

7. 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.

8. 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.

9. 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.

Public Notice

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 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 DEQ Operator Certification Program. Current system classifications are publicized on DEQ Supervisory Wastewater Operator Status Report found on DEQ Wastewater Operator Certification Homepage.

c. The permittee must have its system supervised on a part-time or full-time basis by one or more operators who hold a valid certificate for the type of wastewater treatment or wastewater collection system the operator is supervising 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.

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 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.

10. 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.

Public Notice

b. Should 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.

11. 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 all ports are intact, clear and fully functional. The inspection must verify the latitude and longitude of the outfall end pipe and/or diffuser ports. 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.

Public Notice

SCHEDULE E: PRETREATMENT ACTIVITIES

A pretreatment program is not part of this permit.

Public Notice

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.

Public Notice

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.

Public Notice

(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.

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

Public Notice

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

(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

Public Notice

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.

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.

Public Notice

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 ± 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 (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.

Public Notice

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(l)(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.

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.

Public Notice

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.

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;

Public Notice

ii. The period of noncompliance, including exact dates and times;
iii. The estimated time noncompliance is expected to continue if it has not been corrected;
iv. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; and
v. Public notification steps taken, pursuant to General Condition B**7.**

(4) 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.

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.

Public Notice

SECTION E. DEFINITIONS

E1. *BOD* or *BOD_5* means five-day biochemical oxygen demand.
E2. *CBOD* or *$CBOD_5$* 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. *µg/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.
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.

Public Notice

State of Oregon
Department of
Environmental
Quality

National Pollutant Discharge Elimination System
Permit Fact Sheet
Sundown Sanitary Sewer District

Permittee	Sundown Sanitary Sewer District Sundown WWTP 36245 Bartoldus Loop Astoria, OR 97103
Existing Permit Information	File Number: 88436 Permit Number: 100905 EPA Reference Number: OR0027219 Category: Domestic Class: Minor Expiration Date: February 28, 2025
Permittee Contact	Kyle Sharpsteen District Operator 360-701-6384 PO Box 634 Warrenton, OR 97146
Receiving Water Information	Receiving stream/NHD name: Youngs River NHD Reach Code & % along reach: 17080006001536, 84.0% USGS 12-digit HUC: 170800060205 OWRD Administrative Basin: North Coast ODEQ LLID & River Mile: 1238373461686, RM 2.7 Assessment Unit ID: OR_SR_1708000602_05_100322
Proposed Action	Permit Renewal Application Number: 948058 Date Application Received: August 21, 2024
Permit Writer	Matthew Schult 971-806-4857 Date Prepared: March 5, 2025

Public Notice

NPDES Permit Fact Sheet
Sundown Sanitary Sewer District

Table of Contents

Public Notice

List of Tables

List of Figures

Public Notice

NPDES Permit Renewal Fact Sheet
Sundown Sanitary Sewer District

1. Introduction

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

Below is a summary of the major changes to the permit:

Schedule A

- Less stringent set of limits for TSS concentration and mass loading, for summer and winter.

Schedule B

- Removed monitoring requirement for influent flow.
- Removed effluent monitoring requirement for: Total Kjeldahl Nitrogen (TKN), nitrate (NO_3) plus nitrite (NO_2) nitrogen, oil and grease, total phosphorous, and total dissolved solids.
- Added requirement to monitor effluent dissolved oxygen and salinity.
- Added requirement to monitor salinity and dissolved oxygen for the receiving water, Youngs River (Table B-4).

Schedule D

- Added requirement to submit an updated level 1 mixing zone study.

2. Facility Description

2.1 Wastewater Facility

Sundown Sanitary's treatment plant is situated about two miles south of Astoria, on the east bank of Youngs River (Figures 2-1 and 2-2) that flows into Youngs Bay, a component of the lower Columbia River estuary. The original wastewater treatment facility began operations in 1944 to treat wastewater from a military hospital. The current facility began operating in 2009 and was designed for an average dry weather design flow of 0.022 mgd, which is less than the original

Public Notice

facility's design flow rate. A lower design flow appears reasonable, based on existing and projected future residential connections to the sanitary collection system. The Sundown Sanitary Sewer District wastewater treatment facility receives residential sewage from the River Point neighborhood and the River Grove Apartments. The collections system is gravity based, with a distribution of thirty collection point manholes. The treatment facility is a Package Orenco® Advantex Textile Recirculating Filter System (Figure 2-3).

Wastewater flows into a 20,000-gallon primary tank where grit and scum are intercepted before flowing into a 69,000-gallon aeration tank and then pumped into a 30,000-gallon recirculation tank. From this tank the wastewater is continuously recirculated through four trains of Orenco® Advantex Filters. From there it flows through a 6,000-gallon ultraviolet dosing tank, pumped through a UV Pure disinfection system at a rate of 50 GPM with one pump and 75 GPM with two pumps. The treated effluent flows through a discharge pipe into Youngs Bay (Youngs River) at river mile 2.7. Solids are primarily contained in the 20,000-gallon primary tank. A hauler company is contracted to haul the wastewater solids to other treatment facilities for final processing.

Public Notice

Figure 2-1: Sundown Sanitary facility location

Figure 2-2: Sundown Sanitary facility close-up

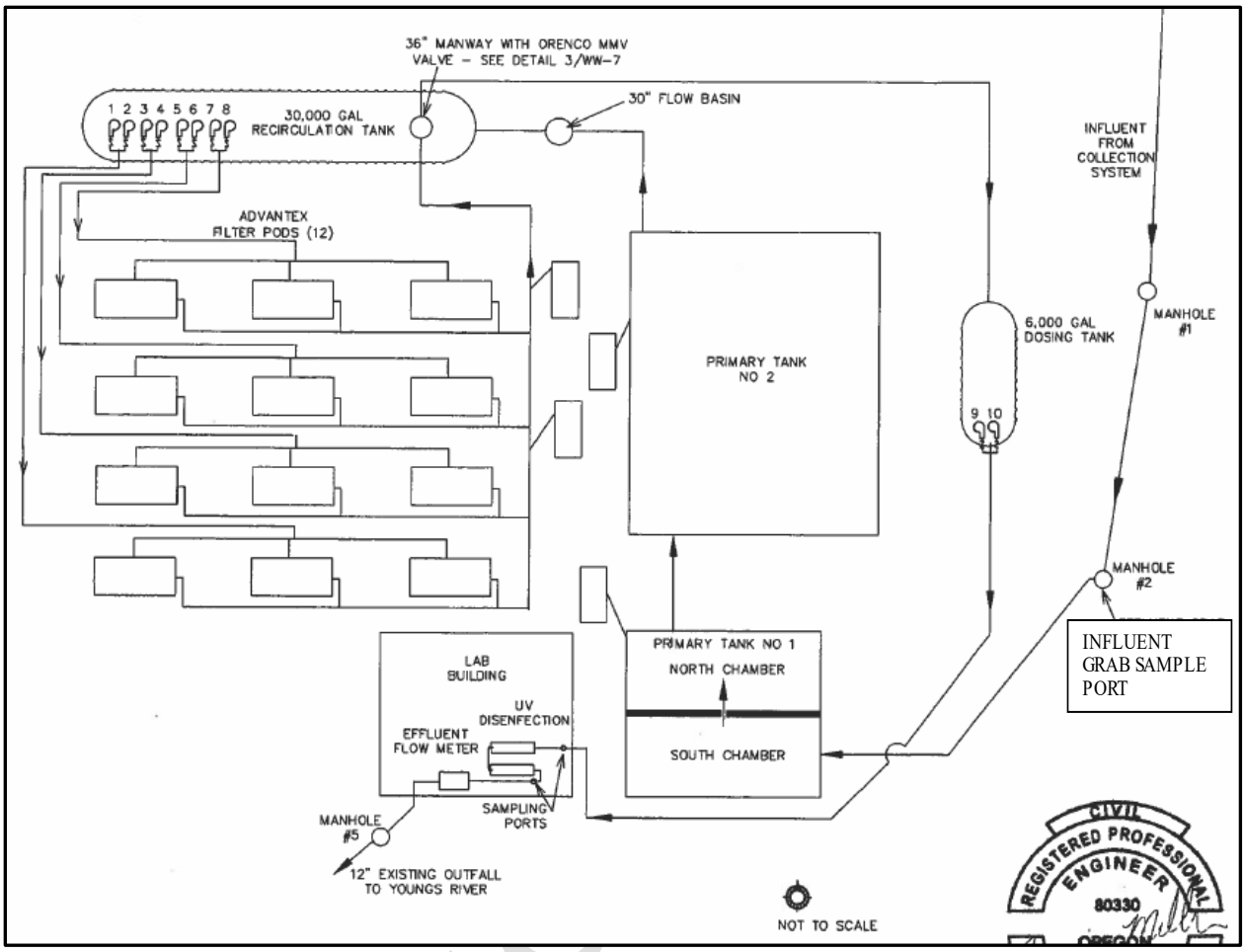

Figure 2-3: Line drawing of Sundown Sanitary wastewater treatment facility

Table 2-1: List of Outfalls

Outfall Number	Type of Waste	Lat/Long
Outfall 001	Treated wastewater	46.143013, -123.811415

2.2 Stormwater

Stormwater is not addressed in this permit. A 1200-Z Industrial Stormwater permit is not required for facilities with a design flow of less than 1 MGD.

2.3 Industrial Pretreatment

The permittee does not have a DEQ-approved industrial pretreatment program. Based on current information, no industrial pretreatment program is needed.

Public

2.4 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 are based on both the available technology to control the pollutants and the water quality standards applicable to 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 water, DEQ must include a WQBEL in the permit.

3.1 Existing Effluent Limits

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

Table 3-1: Existing Effluent Limits

Parameter	Units	Average Monthly	Average Weekly	Daily Maximum
BOD_5 (Year-round)	mg/L	10	15	-
	lb/day	1.8	2.7	3.6
	% removal	85	-	-
TSS (Year-round)	mg/L	10	15	-
	lb/day	1.8	2.7	3.6
	% removal	85	-	-
pH	SU	Instantaneous limit between a daily minimum of 6.0 and a daily maximum of 9.0		
E. coli (See note a.)	#/100 mL	Must not exceed a monthly geometric mean of 126, no single sample may exceed 406		

Note:

a. The permittee may take at least 5 consecutive re-samples at 4-hour intervals beginning within 28 hours after the original sample was taken and the geometric mean of the 5 re-samples is less than or equal to 126 *E. coli* organisms/100 mL to demonstrate compliance with the limit.

Public Notice

3.2 Technology-Based Effluent Limit Development

40 CFR 122.44(a)(1) requires that all NPDES permits include technology-based effluent limits (TBELs). DEQ uses best professional judgement, as allowed under federal rule (40 CFR 125.3), to apply the federal secondary treatment standards as TBELs for domestic wastewater treatment facilities that are not publicly owned treatment works (POTWs). These secondary standards are specific TBELs for five-day biochemical oxygen demand (BOD_5), total suspended solids (TSS) and pH. Substitution of five-day carbonaceous biochemical oxygen demand ($CBOD_5$) for BOD_5 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_5 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 implemented as design criteria for new or expanded wastewater treatment plants. Table 3-2 below shows a comparison of the federal secondary treatment standards and the basin-specific design criteria for the North Coast basin.

Table 3-2: Comparison of TBELs for Federal Secondary Treatment Standards and Oregon Basin-Specific Design Criteria

Parameter	Federal Secondary Treatment Standards		North Coast Basin-Specific Design Criteria (OAR 340-041-0235)
	30-Day Average	7-Day Average	Monthly Average
BOD_5 (mg/L)	30	45	20 mg/L during defined summer months (May 1 – Oct. 31). Equivalent to federal secondary treatment standards during defined winter months (Nov. 1 – Apr. 30).
TSS (mg/L)	30	45	20 mg/L during defined summer months (May 1 – Oct. 31). Equivalent to federal secondary treatment standards during defined winter months (Nov. 1 – Apr. 30).
pH (S.U.)	6.0 – 9.0. (instantaneous)		Not applicable
BOD_5 and TSS % Removal	85%	Not applicable	Not applicable

3.2.1 Mass Based Limits

The limits for BOD_5 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. When available, DEQ uses the maximum monthly design flow to calculate the mass load limits as shown below for the dry and wet weather seasons.

Public Source

Design plans for Sundown Sanitary's treatment works provide the annual average monthly flow of 0.022 mgd, used to calculate the mass loading limits below. This design flow is the same as that used to calculate mass load limits in the previous permit.

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

* Design flow is the design average monthly dry weather flow (DAMDWF) or design average monthly wet weather flow (DAMWWF).

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

Table 3-3: Design Flows and Concentrations Limits

Season	Design Flow (mgd)	Monthly TSS Concentration Limit (mg/L)	Monthly BOD_5 Concentration Limit (mg/L)
Dry Weather	0.022	20	20
Wet Weather	0.022	30	30
Design flow comments: The design flow is based on design average dry weather flow (DADWF).			

BOD and TSS Dry Weather Mass Load Calculations:

Monthly Average: 0.022 mgd x 20 mg/L x 8.34 = 3.7 lb/day (Two significant figures)

Weekly Average: 3.7 lb/day monthly average x 1.5 = 5.6 lb/day (Two significant figures)

Daily Maximum: 3.7 lb/day monthly average x 2 = 7.4 lb/day

BOD and TSS Wet Weather Mass Load Calculations:

Monthly Average: 0.022 mgd x 30 mg/L x 8.34 = 5.5 lb/day (Two significant figures)

Weekly Average: 5.5 lb/day monthly average x 1.5 = 8.3 lb/day (Two significant figures)

Daily Maximum: 5.5 lb/day monthly average x 2 = 11.0 lb/day

The proposed BOD_5 and TSS limits are listed in the following table.

Public Notice

Table 3-4: BOD_5 and TSS Calculated Technology Based Effluent Limits

Parameter	Units	Average Monthly	Average Weekly	Daily Maximum
BOD_5 (May 1 – October 31)	mg/L	20	30	-
	lb/day	3.7	5.6	7.4
	% removal	85	-	-
BOD_5 (November 1 – April 30)	mg/L	30	45	-
	lb/day	5.5	8.3	11
	% removal	85	-	-
TSS (May 1 – October 31)	mg/L	20	30	-
	lb/day	3.7	5.6	7.4
	% removal	85	-	-
TSS (November 1 – April 30)	mg/L	30	45	-
	lb/day	5.5	8.3	11
	% removal	85	-	-

The permittee has requested that the proposed permit include BOD_5 and TSS limits to be based on the basin criteria listed in OAR 340-041-0235(3), detailed in Table 3-2 above. The existing TBELs for BOD_5 and TSS were based on the engineering design of the facility when it was built in 2009. The existing limits were monthly concentrations of 10 mg/L for both BOD_5 and TSS, along with mass load limits calculated from this concentration.

Because the calculated TBELs are less stringent than the previous limits, antibacksliding (see section 3.4) and antidegradation (see section 3.5) regulations were reviewed to determine if the relaxation is allowed. As a result of this analysis, the limits for BOD_5 from the previous permit were retained for both the summer and winter season. The calculated limits for TSS are included in the proposed permit. The proposed TBELs are included in the table below.

Public Notice

Table 3-5: BOD_5 and TSS Proposed Technology Based Effluent Limits

Parameter	Units	Average Monthly	Average Weekly	Daily Maximum
BOD_5 (May 1 – October 31)	mg/L	10	15	-
	lb/day	1.8	2.7	3.6
	% removal	85	-	-
BOD_5 (November 1 – April 30)	mg/L	10	15	-
	lb/day	1.8	2.7	3.6
	% removal	85	-	-
TSS (May 1 – October 31)	mg/L	20	30	-
	lb/day	3.7	5.6	7.4
	% removal	85	-	-
TSS (November 1 – April 30)	mg/L	30	45	-
	lb/day	5.5	8.3	11
	% removal	85	-	-

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 Youngs River. These uses are listed in OAR-340-041-0230 for the North Coast basin.

- Industrial water supply
- Fish and aquatic life (including salmonid rearing, migration and spawning)
- Wildlife and hunting
- Fishing
- Boating
- Water contact recreation
- Aesthetic quality
- Commercial navigation and transportation

Public Notice

3.3.2 303(d) Listed Parameters and Total Maximum Daily Loads

The following table lists the parameters that are on the 2022 303(d) list (Category 5) and also parameters with an approved TMDL (Category 4A) 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 (Category 4A). If a parameter is listed under Category 4A, TMDLs that will result in attainment of water quality standards and support beneficial use have been approved by EPA.

Table 3-6: Category 5 and Category 4A Parameters

Water Quality Limited Parameters (Category 5)	
AU ID:	OR_SR_1708000602_05_100322
AU Name:	Youngs River
AU Status:	Impaired
Year Listed	2004
Year Last Assessed	2022
Category 5 Parameters	Fecal coliform, dissolved oxygen cold water (year-round), dissolved oxygen spawning, alkalinity
Category 4A Parameters	
None.	

For Category 5 parameters, dissolved oxygen is assessed in section 3.3.9. Regarding alkalinity, facility effluent monitoring showed a maximum value of 37 mg/L, well above the alkalinity criteria of 20 mg/L.[1] Based on this data, the discharge is not likely to contribute to an exceedance of the alkalinity criteria, which is presented as a minimum. Sundown Sanitary is unlikely to contribute to the impairment for Fecal coliform, as the discharge is not located in a reach designated for the protection of shellfish harvesting.

3.3.3 TMDL Wasteload Allocations

DEQ issued a TMDL for the North Coast and North Coast subbasins, including the Lower Columbia-Youngs subbasin. The TMDL states that Youngs River is not listed as water quality limited for temperature in the reach that includes Sundown Sanitary's discharge, Sundown Sanitary did not receive a temperature allocation. There are no WLAs from this TMDL that are applicable to the permittee.

Table 3-7: Applicable WLAs

Parameter	WLA	Time Period
NA	NA	NA

[1] From OAR 340-041-8033 Table 30: Aquatic Life Water Quality Criteria for Toxic Pollutants.

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

Table 3-8: Pollutants of Concern

Pollutant	How was pollutant identified?
pH	Effluent Monitoring
Temperature	Effluent Monitoring
E. coli	Effluent Monitoring

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 regulatory mixing zone from the existing permit is described as:

> *The allowable mixing zone is a 100-foot radius from the end of pipe. The zone of immediate dilution is a 10-foot radius from the end of pipe.*

Satellite imagery shows that this mixing zone extends onto land and also completely encompasses a tributary to the Young's River that has a designated use of Salmon and Trout Rearing and Migration (Figure 3-1). OAR 340-041-0053(2)(c)(C) states that mixing zones should not block the free passage of aquatic life. Therefore, the RMZ will be reduced to ensure that the tributary is not blocked (Figure 3--2). The ZID will be resized to 10% of the new RMZ to maintain consistency with ZID sizing. The RMZ will be redefined as an upstream and downstream distance to ensure it does not encroach on land and will be described as:

> *The Regulatory Mixing Zone (RMZ) is that portion of Young's River within a rectangle extending 20 ft upstream and downstream from the end of pipe with a width of 5 feet on either side. The Zone of Initial Dilution (ZID) is that portion of Young's River within a 2 ft radius from the end of pipe.*

Public Notice

Figure 3-1: Outfall 001 with original ZID (red circle) and RMZ (yellow circle)

Publ

Figure 3-2: Updated RMZ (yellow rectangle) and ZID (red circle) for Outfall 001

Outfall 001 is a 12-inch diameter pipe with no diffusers located approximately 10 ft from the bank (46.143013, -123.811415 (WGS84)).

The dilution factors at the edge of the Regulatory Mixing Zone (RMZ) and Zone of Initial Dilution (ZID) are shown in Table 3-9. These dilutions are based on an October 7, 2024, mixing zone memo by DEQ which is part of the administrative record. A mixing zone study was conducted for this outfall by DEQ in 2003, but only a summary of the analysis is available, and was completed prior to the Mixing Zone IMD. For this memo, it was determined that the outfall is very likely exposed during mean lower low water for more than an hour and therefore no dilution is granted for acute aquatic life criteria. For the chronic aquatic life analysis, it was determined that the outfall is likely under 4 ft of water during mean tide based on information from the NOAA station 9438772 Cathcart Landing. A velocity of 0.1 m/s was used as a likely estimate of velocity. Modeling was done with recent effluent flow and temperature data as well as ambient temperature data.

Public

Table 3-9: Summary of mixing zone dilutions for Sundown Sanitary

Dilution Summary – Outfall 001 – Year-Round						
Water Quality Standard	**Velocity (m/s)**		**Effluent Flow (mgd)**		**Dilution Factor**	**Location**
	Statistic	**Flow**	**Statistic**	**Flow**		
Aquatic Life, Acute	NA	NA	☐ ADWDF x PF ☐ Max Daily Avg ☐ Other	NA	1	ZID (2 ft)
Aquatic Life, Chronic	50th percentile	0.1	☐ ADWDF ☒ Max Monthly Avg ☐ Other	0.014	71	RMZ (20 ft)
ADWDF = Average dry weather design flow *PF = Peaking factor (1.5)*						
Comments: No ambient flow data in area, assumed 0.1 m/s tidal velocity. 7Q10 for thermal plumes analysis estimated to be 3,280 cfs based on stream morphology and assumed velocity.						

3.3.6 pH

The pH criterion for this basin is 6.5 – 8.5 per OAR 340-041-0235. Following a reasonable potential analysis of the existing permit limits and facility performance, DEQ determined there is no reasonable potential for the discharge to exceed the pH criterion at the edge of the mixing zone. The existing pH limits – an instantaneous limit between a daily minimum of 6.0 and a daily maximum of 9.0 – will be retained in this permit renewal, these limit values are both TBELs. The following provides a summary of the data used for the analysis.

Public Notice

Table 3-10: pH Reasonable Potential Analysis

INPUT	Lower pH Criteria	Upper pH Criteria
1. Dilution at mixing zone boundary	71	71
2. Upstream characteristics		
a. Temperature (°C)	19.4	9.5
b. pH	6.6	7.4
c. Alkalinity (mg $CaCO_3$/L)	47.0	47.0
3. Effluent characteristics		
a. Temperature (°C)	23.0	7.3
b. pH (S.U.)	6.0	9.0
c. Alkalinity (mg $CaCO_3$/L)	54.6	54.6
4. Applicable pH criteria	6.5	8.5
pH at mixing zone boundary	6.6	7.4
Is there reasonable potential?	No	No
Proposed effluent limits	6.0	9.0
Effluent data source: Facility-submitted ICIS data (April-2020 to July-2024)		
Ambient data source: Facility-submitted ICIS data for Youngs River monitoring (April-2020 to July-2024)		

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.

Public Notice

Table 3-11: Temperature Criteria Information

Applicable Temperature Criterion	Rearing/Migration 18ºC (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: October 15 – May 15	
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:	

Sundown Sanitary discharges to the Youngs River at river mile 2.7. Youngs River is designated as a salmon and trout rearing and migration waterbody, according to the Fish Use Designation map for the North Coast basin, found in OAR 340-041-0230, Figure 230A. OAR 340-041-0028(4)(c) states that the criterion for this designation is 18 ºC as a 7-day average maximum temperature. As indicated in Table 3-11 above, this section of Youngs River is not listed as water quality limited for temperature on the most recent 303(d) list, and consequently, the North Coast temperature TMDL does not apply to this facility. An examination of available temperature data for Youngs River (DEQ stations 12187 and 13553, and permittee-submitted ambient monitoring) indicate that water temperatures can exceed the 18 ºC criterion at times. Taking a conservative approach, DEQ used the Pre-TMDL Human Use Allowance reasonable potential analysis (RPA) spreadsheet to determine if the facility's discharge has the potential to adversely affect rearing and migration. The analytical results showed the modeled temperature increase at the edge of the regulatory mixing zone is 0.08 ºC, well below the allowed regulatory threshold of 0.3 ºC. Therefore, the facility's discharge has no reasonable potential to adversely affect salmonid rearing and migration (see Appendix A, Figure A-1).

Following OAR 340-041-0230 (Figure 230B) this section of Youngs River is designated for salmon and trout spawning for the period from October 15 to May 15. DEQ also performed a Pre-TMDL Human Use Allowance temperature RPA for the spawning season. The applicable temperature criterion is 13 ºC. 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 is 20.1 °C. This value represents the maximum effluent temperature recorded in the facility monitoring from April 2020 to May 2024 for the spawning season. The results of this RPA indicate that there is no potential for the

Public Notice

facility's discharge to cause or contribute to an exceedance of the spawning temperature standard (see Appendix A, Figure A-2).

Based on these analyses, no temperature limit associated with the applicable temperature criteria is included in the proposed permit.

Table 3-12: 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:

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 ºC or more for salmon and steelhead, and 9 ºC or more for bull trout.

  Sundown Sanitary discharge: DEQ reviewed the Fish Use maps for the North Coast Basin and found that the reach of the Youngs River where the discharge occurs is designated as Salmon and Trout Rearing and Migration. However, discussions with Oregon Department of Fish and Wildlife indicate that active spawning redds are not likely to be located in the vicinity of the outfall due to tidal influence. Since spawning does not occur in this area, there is no spawning redds impairment issue to consider. DEQ did not add a temperature limit or condition as a result of this RPA.

- 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 ºC or more to less than 2 seconds.

  Sundown Sanitary discharge: The maximum measured effluent temperature from the Sundown facility since April 2020 was 23.8 ºC (August 2023), well below the temperature expected to cause acute impairment or instantaneous lethality. Therefore, the facility's discharge does not have the potential for acute impairment or instantaneous lethality. DEQ did not add a temperature limit or condition as a result of this analysis.

Public Notice

- 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 ºC or more to less than 5% of the cross-section of 100% of the 7Q10 flow of the water body.

  Sundown Sanitary discharge: The maximum measured effluent temperature from the Sundown facility since April 2020 was 23.8 ºC, lower than the 25 ºC temperature that may cause thermal shock. Therefore, impairment due to thermal shock caused by the facility's discharge is prevented or minimized and this provision is met. DEQ did not add a temperature limit or condition as a result of this RPA.

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

  Sundown Sanitary discharge: The maximum measured effluent temperature from the Sundown facility since April 2020 was 23.8 ºC. The maximum river temperature recorded from 2010 through 2023 was 20.5 ºC. DEQ ran a thermal plumes RPA analysis for migration blockage using permittee monitoring data (Appendix A, Figure A-3). The change in temperature at 25% of stream flow as a result of the discharge is essentially zero. The discharge therefore does not have the potential to cause migration blockage. DEQ did not add a temperature limit or condition as a result of this RPA.

Based on these analyses, no temperature limit associated with the applicable temperature criteria is included in the proposed permit.

Table 3-13: Thermal Plume Effluent Limit

Effluent limit needed? ☐Yes ☒No
Calculated limit: NA
Applicable timeframe: NA
Comments:

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.

Public Notice

Table 3-14: Proposed *E. coli* Limits

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

3.3.9 Dissolved Oxygen

Sundown Sanitary discharges to a reach of Youngs River that is on the 303(d) list for dissolved oxygen, year-round for cold water protection, and for the spawning season (October 15 – May 15) as well. No TMDL has been developed for this listing. DEQ has determined that adequate data is not available to complete a full evaluation of the impact of this discharge to the dissolved oxygen criteria in the receiving stream. The proposed permit includes requirements to monitor, and report dissolved oxygen levels in the effluent and ambient streams. This monitoring is included in the proposed permit for use in development of a future TMDL.

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 permit limits are the same or more stringent than the existing permit limits except for the less stringent BOD_5 and TSS concentration-based limits and mass load limitations as described in Table 3-4: BOD_5 and TSS Calculated Technology Based Effluent Limits. Although antibacksliding provisions generally do not allow relaxation of effluent limits in permit renewals, these proposed permit modifications are allowed under the antibacksliding provisions as noted below.

Both the concentration based and mass load limits proposed are State TBELs for the purposes of the antibacksliding analysis.

3.4.1 BOD_5 Limit Antibacksliding

The permittee discharges to assessment unit OR_SR_1708000602_05_100322 which is the Youngs River from the confluence of North Fork Klaskanine River and South Fork Klaskanine River to Youngs Bay. The assessment unit is listed as impaired for the dissolved oxygen cold-water criteria year-round, and for the dissolved oxygen spawning criteria. Because the assessment unit is impaired for dissolved oxygen, a parameter affected by the relaxation of BOD_5, a relevant exception in Clean Water Act section 402(o)(2) must be met if backsliding is to be allowed for BOD_5. As discussed in Section 3.2, the previous permit included limits based on the designed performance of the facility. However, the permit should have included limits based on the basin criteria at the time of development. The relevant exception is 402(o)(2)(B)(ii) – 'the Administrator determines that technical mistakes or mistaken interpretations of law were made in issuing the permit under subsection (a)(1)(B) of this section'. As a result, backsliding could be permitted for both the summer and winter BOD_5 increases, if antidegradation is met. A discussion of antidegradation is included in Section 3.5.

Public Notice

3.4.2 TSS Limit Antibacksliding

TSS does not have a water quality criteria assessed by the Integrated Report. As a result, backsliding can be allowed if antidegradation is met. Additionally, the same relevant exception is 402(o)(2)(B)(ii) – 'the Administrator determines that technical mistakes or mistaken interpretations of law were made in issuing the permit under subsection (a)(1)(B) of this section' applies, also allowing backsliding in this case. A discussion of antidegradation is included in Section 3.5

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.

As described in Section 3.2 and 3.4, less stringent BOD_5 and TSS concentration based, and mass load limits were calculated in the proposed permit. Since the proposed discharge includes pollutant loads that are less stringent than those in the existing permit, DEQ performed an antidegradation review. The first step in this review was to determine if the proposed increased loads would likely result in any measurable change in water quality. If a measurable change in water quality is likely to occur, then an in-depth antidegradation analysis is required. If it is determined that no measurable change is likely to occur, then no further anti-degradation review is required, and the proposed limits may be included in the new permit.

3.5.1 BOD_5 antidegradation analysis

Regarding BOD_5, the assessment unit to which the facility discharges (Youngs River, OR_SR_1708000602_05_100322, see section 3.3.2) is impaired (Category 5) for dissolved oxygen, year-round, without a TMDL in place to address this impairment. DEQ cannot approve an increased discharge of pollutants to a water quality limited stream in absence of a completed plan (TMDL) for the water body to achieve water quality standards. This restriction is based on Federal Clean Water Act case law, in particular the Pinto Creek decision in the Federal Ninth Circuit Court – October 4, 2007. As a result, no mass load increases for BOD_5, which is a parameter that contributes to dissolved oxygen deficits, can be permitted year-round (the impaired period). As a result, the BOD_5 concentration and mass load limits from the current permit will be retained.

3.5.2 TSS antidegradation analysis

As outlined in DEQ's April 30, 2024, Memo *Total Suspended Solids Antidegradation Review Determination - Procedure to determine if a new or increased Total Suspended Solids load would be considered a de minimis lowering of water quality (applies to major domestic facilities),* for minor domestic wastewater facilities, BOD_5 and TSS are associated parameters, therefore, the TSS antidegradation determination may be based on the BOD_5 finding. However, because the BOD_5 finding is based on the impairment and not on a numeric antidegradation analysis, TSS was evaluated separately to determine if the increase would result in a de minimis lowering of water quality.

Public Notice

Ambient data for summer period from May 27, 2010 through Sep 11, 2023, at stations 12187-ORDEQ and 13553-ORDEQ were pulled from AWQMS (n=40). The summer period average TSS was 1.7 mg/L. Ambient data for winter period from Jan 13, 2010 to Nov 8, 2023, at stations 12187-ORDEQ and 13553-ORDEQ was pulled from AWQMS (n=41). The winter period average TSS was 4.93 mg/L. The ambient flow used at the site was the pseudo-7Q10 determined in the 2024 mixing zone memo of 3,280 cfs based on stream morphology and assumed velocity. A 30Q5 was not determined for the site, so the 7Q10 was used as a conservative estimate. Table 3-15: TSS Antidegradation Analysis shows a summary of the analysis, which uses the following formulas:

$$C_{mixed} = \frac{Q_e \cdot C_e + Q_a \cdot C_a}{Q_e + Q_a} = \frac{\frac{ML_e}{8.34} + Q_a \cdot C_a}{Q_e + Q_a}$$

Where:

Q_e is the effluent design flow used to calculate the mass load limit (mgd)
Q_a is the upstream ambient flow (mgd)
C_e is the effluent TSS concentration based limit used in the mass load limit calculation (mg/L)
C_a is the upstream TSS concentration (mg/L)
ML_e is the effluent mass load (lb/day) where:

$$[ML_e\ lb/day = Q_e\ million\ gallons/day \cdot C_e mg/liter \cdot 8.34\ \frac{lb \cdot liter}{milligram \cdot millions\ of\ gallons}]$$

C_{mixed} is the downstream TSS concentration (mg/L, at full mix)
8.34 = conversion factor $\frac{lb \cdot liter}{milligram \cdot millions\ of\ gallons}$

The percent increase in the downstream TSS concentration is:

$$\%\ \text{Increase}\ C_{mixed} = \frac{C_{mixed\ 2} - C_{mixed\ 1}}{C_{mixed\ 1}} \cdot 100$$

Where: "$C_{mixed\ 1}$" is the initial downstream TSS concentration and "$C_{mixed\ 2}$" is the downstream TSS concentration after the increased or new load

Table 3-15: TSS Antidegradation Analysis

Time Period	Design Flow (mgd)	Monthly Average TSS Concentration Limit (mg/L)	Ambient Conditions				% Increase
			River Flow (cfs)	TSS concentration (mg/L)	7Q10 Flow (mgd)	Dilution 100% mix	Average Monthly
Summer Existing	0.022	10	3280	1.7	2119	96314	
Summer Proposed		20	3280	1.7	2119	96314	0.0061%
Winter Existing	0.022	10	3280	4.93	2119	96314	
Winter Proposed		30	3280	4.93	2119	96314	0.0042%

Public Notice

For the summer period, the average monthly increase in downstream TSS is 0.006%. For the winter period, the average monthly increase in downstream TSS is 0.004%. As a result, the increase is determined to be de minimis (<2.5% downstream increase in TSS as a result of the discharge) and can proceed for inclusion in the proposed permit without further antidegradation review.

3.5.3 Summary

Excluding TSS limits as discussed above, the proposed permit contains the same or lower discharge loadings as the existing permit. Permit renewals with the same or slightly lower discharge loadings as the previous permit are not considered to lower water quality from the existing condition.

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 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.

4. Schedule A: Other Limitations

4.1 Mixing Zone

Schedule A describes the regulatory mixing zone as discussed above in section 3.

4.2 Chlorine Usage

Schedule A of the permit prohibits the permittee from using chlorine or chlorine compounds for effluent disinfection purposes.

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

Public Notice

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. The permittee is required to monitor Youngs River (the receiving waters) monthly for pH, alkalinity, temperature, dissolved oxygen, and salinity. This data is required to inform the RPA process because there are no nearby ambient monitoring stations representative of the environmental conditions in Youngs River where the Sundown Sanitary discharge is located.

The permittee requested a reduction in BOD_5, TSS, and bacteria (*E. coli*) monitoring frequencies to be less than the standard frequencies specified in DEQ's monitoring matrix. Using EPA's 1996 Interim Guidance for Performance-Based Reductions of NPDES Permit Monitoring Frequencies, it was determined that the monitoring frequencies for TSS and *E. coli* could be reduced to 1/month, year-round. BOD_5 was eligible for a reduction to 1/month during the summer months (May 1 – October 31), but the data review showed that no reductions were available for BOD_5 loading (lb/day) in the winter. The monitoring frequency for BOD_5 in the winter months (November 1 – April 30) is maintained at 2/month.

6. Schedule C: Compliance Schedule

The permittee is expected to meet all effluent limits once the permit becomes effective and therefore a compliance schedule is not needed.

7. Schedule D: Special Conditions

The proposed permit contains the following special conditions:

7.1 Inflow and Infiltration

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

7.2 Mixing Zone Study

A requirement to submit an updated mixing zone study.

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 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.

Public Notice

7.5 Hauled Waste Control Plan

A condition that allows the acceptance of hauled waste according to a DEQ-approved hauled waste plan. The hauled waste plan ensures waste is not accepted that could negatively impact the treatment capabilities of the facility.

7.6 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.

7.7 Wastewater Solids Annual Report

This condition requires the permittee to submit a Wastewater Solids Annual Report each year documenting removal of wastewater solids from the facility during the previous calendar year.

7.8 Wastewater Solids Transfers

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

7.9 Operator Certification

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

7.10 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.

7.11 Outfall Inspection

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

Public Notice

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

Public Notice

Appendix A: Reasonable Potential Analysis for Temperature

Human Use Allowance - Stream Exceeds Water Quality Criterion (OAR 340-041-0028(12)(b)(A))

For situations where the criterion is exceeded, but a TMDL has not yet been developed. Analysis is at Edge of Mixing Zone and 25% Stream Flow

Section 5.3 of the Temperature IMD

Facility Name: SUNDOWN SANITARY **Date:** 11/1/2024

Applicable Criterion and Season: Rearing and Migration (18 oC), Year-round. D. Cole ran this RPA in 2020 due to no TMDL and warm temps, not sure it applies. Followed guidelines to do "Numeric" & "CW - Spawn" RPAs.

Enter data into white cells below:

			Data Metric/Source
Mixing Zone Dilution =	71		2024 Aquatic Life, Chronic MZ dilution (at
7Q10 =	3,280	cfs	7Q10 value derived for 2024 MZ Memo
Effluent Flow =	0.033	mgd	Average Dry Weather Design Flow *(1.5)
Applicable Temperature Criterion	18	°C	
Effluent Temperature	23.8	°C	DMR max temp (Aug-2023)
Allowable increase =	0.3	°C	

Dilution at 25% Stream Flow = **16063** dilution = (Qr*0.25)/Qe + 1

ΔT at edge of MZ=	**0.08**	**°C**
ΔT at 25% Stream Flow=	**0.00**	**°C**

No Reasonable Potential

Thermal Load Limit = N/A Million Kcals (7-day Rolling Avg.)

Pre-TMDL Thermal Load Limit

2.66076469 Million Kcals (7-day Rolling Avg.)

This box is provided for when there is a TMDL based on NTP and an explicit WLA is presented requiring a limit for the permitee. In such cases, a permit limit must be developed even when analysis shows no RP. The permit limit must be the most stringent of the WLA or the pre-TMDL thermal load limit.

Equation used to calculate ΔT at edge of MZ

$$\Delta T_{mz} = \frac{T_e + (S-1)T_a}{S} - T_a$$

Equation used to calculate thermal load limit

$$TLL = 3.7854 Q_e S \Delta T_{all} C_p \rho$$

Where:

- Qe = Effluent Flow in mgd
- S = Dilution
- ΔT_{all} = Allowable temperature increase at edge of MZ (°C)
- Cp = Specific Heat of Water (1 cal/g °C)
- ρ = Density of Water (1 g/cm^3)
- 3785.41 = Flow conversion from mgd to m^3/day

Figure A-1: Temperature RPA for Human Use Allowance (Rearing and Migration)

Public

Facility Name:	SUNDOWN SANITARY	Date:	11/21/2024
Applicable Criterion and Season:	Salmonid Spawning (Oct 15 - May 15), 13 oC criteria		

Enter data into white cells below:

			Data Metric/Source
Mixing Zone Dilution =	71		2024 Aquatic Life, Chronic MZ dilution (at
7Q10 =	3,280	cfs	7Q10 value derived for 2024 MZ Memo
Effluent Flow =	0.033	mgd	Average Dry Weather Design Flow *(1.5)
Applicable Temperature Criterion	13	°C	
Effluent Temperature	20.1	°C	DMR max temp (Aug-2023)
Allowable increase =	0.3	°C	

Dilution at 25% Stream Flow = 16063 dilution = (Qr*0.25)/Qe + 1

ΔT at edge of MZ=	0.10	°C	No Reasonable Potential
ΔT at 25% Stream Flow=	0.00	°C	

Thermal Load Limit = N/A Million Kcals (7-day Rolling Avg.)

Equation used to calculate ΔT at edge of MZ

$$\Delta T_{mz} = \frac{T_e + (S-1)T_a}{S} - T_a$$

Equation used to calculate thermal load limit

$$TLL = 3.7854 Q_e S \Delta T_{all} C_p \rho$$

Where:

- Qe = Effluent Flow in mgd
- S = Dilution
- ΔT_{all} = Allowable temperature increase at edge of MZ (°C)
- Cp = Specific Heat of Water (1 cal/g °C)
- ρ = Density of Water (1 g/cm^3)
- 3785.41 = Flow conversion from mgd to m^3/day

Figure A-2: Temperature RPA for Human Use Allowance (Spawning)

Facilty Name	**Sundown Sanitary**	**Date:**	**11/4/2024**

OAR 340-041-0053(2)(d)(D): Migration Blockage
21 deg C at 25% of the stream cross section

Enter data into white cells below:

			Data Metric/Source
7Q10 =	3280	cfs	7Q10 value derived for 2024 Mixing Zone memo
Ambient Temperature =	20.5	ºC	Max ambient temperature (2010-2023) in AWQMS
Effluent Flow =	0.033	mgd	0.22 MGD (ADWDF) * 1.5 peaking factor
Max 7dAM Effluent Temperature =	23.8	ºC	Max effluent temperature (2020-2024) in DMRs

25% of 7Q10 =	820.0	cfs	
25% dilution =	16063	dilution = (Qr*0.25)/Qe + 1	

Temperature at 25% cross section =	**20.5**	**ºC**	**No Reasonable Potential**
ΔT at 25% Stream Flow=	**0.00021**	**ºC**	

Figure A-3: Temperature RPA for Thermal Plumes (Migration Blockage)