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

May 15, 2024

Gordon Whitehead
Hebo Joint Water & Sanitary Authority
P.O. Box 328
Hebo, OR 97122-0328

Re: NPDES Permit Public Notice Period
Comments Due: June 21, 2024, 5 p.m.
File no. 100058
Permit no. 101524
EPA no. OR0031461
Facility: Hebo JWSA, 30960 Highway 101 South, Hebo
Tillamook 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 Hebo Joint Water & Sanitary Authority 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 June 21, 2024**. 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: Source File, Portland Office, DEQ
Randy Bailey, Portland, DEQ
ORMS

PUBLIC NOTICE

Date posted: 5/15/24

DEQ Requests Comments on Proposed Hebo Joint Water & Sanitary Authority Water Quality Permit Renewal

HOW TO PROVIDE PUBLIC COMMENT

Facility name: Hebo Joint Water & Sanitary Authority

Permit type: Water Quality, Minor Domestic

Comments due by: Friday, June 21, 2024 at 5 p.m.

Send written comments to:

By mail: Trinh Hansen, WQ Permit Coordinator, Oregon DEQ
4026 Fairview Industrial Dr. 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 Hebo Joint Water & Sanitary Authority'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 Hebo Joint Water & Sanitary Authority to discharge wastewater to the Three Rivers.

About the facility

Hebo Joint Water & Sanitary Authority has applied for a water quality permit renewal for its wastewater treatment facility located at 30960 Hwy 101 in South Hebo. DEQ last renewed this permit on Oct. 24, 2019.

The facility receives influent wastewater from a 100% Septic Tank Effluent Pumped collection system. Treatment begins with several community septic tanks before flowing to the treatment facility. Influent wastewater then gravity flows to a 60,000-gallon recirculation and blend tank. Wastewater is pumped from the recirculation and blend tank by eight dosing pumps to 24 recirculating textile filter units. The textile filter units provide the secondary treatment of the wastewater. Following that, treated effluent wastewater is further treated with a UV disinfection unit and discharged into the Three Rivers. The permit regulates the following pollutants coming from the facility: five-day biochemical oxygen demand (BOD_5), total suspended solids (TSS), pH, *E. coli*, and temperature.

The facility discharges to the Three Rivers near the North Bank of the river in Hebo. Three Rivers is listed as impaired (category 4 or 5) for several pollutants according to the most recent U.S. Environmental Protection Agency-approved integrated report for Oregon. The proposed permit reflects effluent limits established through reasonable potential analysis, best available technology, or the North Coast Basin Total Maximum Daily Load, or TMDL, for temperature and *E. coli*.

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

The most recent DEQ inspection of the treatment facility was on April 4, 2023. DEQ did not identify violations during this inspection. Hebo Joint Water & Sanitary Authority has had four water quality violations in the past permit term. The issues related to these past compliance issues are being addressed and the facility is currently operating in full compliance.

The facility holds no other permits from DEQ.

What types of pollutants does the permit regulate?

This permit sets conditions for how the facility deals with the following pollutants: BOD_5, TSS, pH, *E. coli*, and temperature.

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

No.

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.

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) 378-5055 or trinh.hansen@deq.oregon.gov with questions or to view documents in person at a DEQ office.

Non-discrimination statement

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

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:

Hebo Joint Water & Sanitary Authority
PO Box 328
Hebo, OR 97122

SOURCES COVERED BY THIS PERMIT:

Type of Waste	Outfall Number	Outfall Location
Treated Wastewater	001	45.230550, -123.863136

FACILITY LOCATION:

Hebo JWSA
30960 Hwy 101 South
Hebo, OR 97122
County: Tillamook
EPA Permit Type: Minor

RECEIVING STREAM INFORMATION:

Receiving stream/NHD name: Three Rivers
USGS 12-Digit HUC: 171002030208
OWRD Administrative Basin: North Coast
NHD Reach Code & % along reach: 17100203000317 (28.77%)
ODEQ LLID & RM: 1238734452348 & 0.63
Integrated Report AU ID: OR_SR_1710020302_05_105881

Issued in response to Application No. 948141 received March 11, 2024. This permit is issued based on the land use findings in the permit record.

DRAFT	DRAFT	DRAFT
Tiffany Yelton-Bram, Water Quality Program Manager Northwestern 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.

TABLE OF CONTENTS

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

LIST OF TABLES

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	mg/L	10	15	-
	lb/day	2.1	3.1	4.2
	% removal	85	-	-
TSS	mg/L	10	15	-
	lb/day	2.1	3.1	4.2
	% removal	70	-	-
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 78, no more than 10% of the samples may exceed 252		
Temperature	ºC	25 (as a 7-day rolling average of daily maximum)		

Note:

a. The re-sampling must be taken at four-hour intervals beginning within 28 hours after the original sample was taken. If a single sample exceeds 252 *E. coli* per 100 mL, then the permittee must evaluate the previous 9 sample results to see if the 10% requirement has been exceeded.

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 is defined as 25% of the Three Rivers flow. The zone of initial dilution is defined as 10% of the Three Rivers flow.

3. 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.

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
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
Industrial User Survey (see Schedule D)	Once per permit cycle	Submit by no later than 24 months after permit effective date	1 electronic copy and 1 hard copy in a DEQ approved format	• 1 Hard copy to DEQ Pretreatment Coordinator • 1 Electronic copy to Compliance Officer
Outfall Inspection Report (see Schedule D)	Once per permit cycle	Submit by XX/15/2027 In the 3rd year of the permit.	Electronic copy in a DEQ-approved format	Attached via electronic reporting as directed by DEQ

Notes:

a. For submittals that are provided to DEQ by mail, the postmarked date must not be later than the due date.

b. All reporting requirements are to be submitted in a DEQ-approved format, unless otherwise specified in writing.

2. Monitoring and Reporting Protocols

a. Electronic Submissions

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

i. The permittee must submit monitoring results required by this permit via DEQ-approved web-based Discharge Monitoring Report (DMR) forms to DEQ via electronic reporting. Any data used to calculate summary statistics must be submitted as a separate attachment approved by DEQ via electronic reporting.

ii. The reporting period is the calendar month.

iii. The permittee must submit monitoring data and other information required by this permit for all compliance points by the 15th day of the month following the reporting period unless specified otherwise in this permit or as specified in writing by DEQ.

b. Test Methods

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

c. Detection and Quantitation Limits

i. Detection Level (DL) – The DL is defined as the minimum measured concentration of a substance that can be distinguished from method blank results with 99% confidence. The DL is derived using the procedure in 40 CFR 136 Appendix B and evaluated for reasonableness relative to method blank concentrations to ensure results reported above the DL are not a result of routine background contamination. The DL is also known as the Method Detection Limit (MDL) or Limit of Detection (LOD).

ii. Quantitation Limits (QLs) – The QL is the minimum level, concentration or quantity of a target analyte that can be reported with a specified degree of confidence. It is the lowest level at which the entire analytical system gives a recognizable signal and acceptable calibration for the analyte. It is normally equivalent to the concentration of the lowest calibration standard adjusted for sample weights, volumes, preparation, and cleanup procedures employed. The QL as reported by a laboratory is also sometimes referred to as the Method Reporting Limit (MRL) or Limit of Quantitation (LOQ).

d. Sufficient Sensitivity of Quantitation Limits

i. The Laboratory QLs (adjusted for any dilutions) for analyses performed to demonstrate compliance with permit limits or as part of effluent characterization, must meet at least one of the requirements below:

(A) The QL is at or below the level of the water quality criterion for the measured parameter.

(B) The QL is above the water quality criterion but the amount of the pollutant in a facility's discharge is high enough that the method detects and quantifies the level of the parameter in the discharge.

(C) The QL has the lowest sensitivity of the analytical methods procedure specified in 40 CFR 136.

(D) The QL is at or below those defined in Oregon DEQ list of quantitation limits posted online at DEQ permitting website.

e. Quality Assurance and Quality Control

i. Quality Assurance Plan – The permittee must develop and implement a written Quality Assurance Plan that details the facility sampling procedures, equipment calibration and maintenance, analytical methods, quality control activities and laboratory data handling and reporting. The QA/QC program must conform to the requirements of 40 CFR 136.7.

ii. If QA/QC requirements are not met for any analysis, the permittee must re-analyze the sample. If the sample cannot be re-analyzed, the permittee must re-sample and analyze at the earliest opportunity. If the permittee is unable to collect a sample that meets QA/QC requirements, then the permittee must include the result in the discharge monitoring report (DMR) along with a notation (data qualifier). In addition, the permittee must explain how the sample does not meet QA/QC requirements. 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. If these method criteria are not met for BOD_5, the permittee must: 1) report the daily BOD_5 values with data qualifiers; 2) include these BOD_5 values in the summary statistic calculations (e.g., weekly averages, monthly averages, % removal); and 3) report the BOD_5 summary statistics with data qualifiers.

iii. Flow measurement, field measurement, and continuous monitoring devices - The permittee must:

(A) Establish verification and calibration frequency for each device or instrument in the quality assurance plan that conforms to the frequencies recommended by the manufacturer.

(B) Verify at least once per year that flow-monitoring devices are functioning properly according to manufacturer's recommendation. Calibrate as needed according to manufacturer's recommendations.

(C) Verify at least weekly that the continuous monitoring instruments are functioning properly according to manufacturer's recommendation unless the permittee demonstrates a longer period is sufficient and such longer period is approved by DEQ in writing.

iv. The permittee must develop a receiving water sampling and analysis plan that incorporates QA/QC prior to sampling. This plan must be kept at the facility and made available to DEQ upon request.

f. Reporting Sample Results

i. The permittee must report the laboratory DL and QL as defined above for each analyte, with the following exceptions: pH, temperature, BOD, CBOD, TSS, Oil & Grease, hardness, alkalinity, bacteria, and nitrate-nitrite. For temperature and pH, neither the QL nor the DL need to be reported. For the other parameters listed above, the permittee is only required to report the QL and only when the result is ND.

ii. The permittee must report the same number of significant digits as the permit limit for a given parameter.

iii. (For Discharge Monitoring Reports) If 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

3. Monitoring and Reporting Requirements

a. The permittee must monitor influent at the flume manhole, after the influent flow measurement device and report results in accordance with Table B1 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.)
Flow (50050)	MGD	Year-round	Daily	Continuous	Monthly Average
BOD_5 (00310)	mg/L	Year-round	2/Month	24-hour composite	Monthly Average
TSS (00530)	mg/L	Year-round	2/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.

b. The permittee must monitor effluent at Outfall 001 at the discharge end of the UV 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	Year-round	2/Month	24-hour composite	1. Monthly Average 2. Maximum Weekly Average
BOD_5 (00310)	lb/day	Year-round	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	2/Month	24-hour composite	1. Monthly Average 2. Maximum Weekly Average
TSS (00530)	lb/day	Year-round	2/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

Item or Parameter	**Units**	**Time Period**	**Minimum Frequency**	**Sample Type/ Required Action** (See note a.)	**Report Statistic** (See note b.)
pH (00400)	SU	Year-round	3/Week	Grab	1. Daily Maximum 2. Daily Minimum
Temperature (00010)	ºC	Year-round	3/Week	Grab (See note d.)	1. Daily Maximum 2. Monthly Average 3. 7-day Rolling Average of Daily Maximum
E. coli (51040)	#/100 mL	Year-round	2/Month	Grab	1. Daily Maximum 2. Monthly Geometric Mean
E. coli Exceedances (51617)	%	Year-round	Monthly	Calculated	Total (10% of the samples may not exceed 252 #/100 mL)
Alkalinity as $CaCO_3$ (00410)	mg/L	Year-round	Quarterly	24-hour composite	Monthly Maximum
UV intensity	mW/cm^2	Year-round	Daily	Continuous	Maintain records on-site
UV dose	mJ/cm^2	Year-round	Daily	Calculation	Maintain records on-site
UV transmittance	%	Year-round	Daily	Continuous	Maintain records on-site
Dissolved Oxygen (00300)	mg/L	Third year of permit cycle [2027]	Quarterly	24-hour composite (See note e.)	Quarterly Minimum

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

Notes:

a. In the event of equipment failure or loss, the permittee must notify DEQ and deploy new equipment to minimize interruption of data collection. If new equipment cannot be immediately deployed, the permittee must perform grab measurements. If the failure or loss is for continuous temperature monitoring equipment, the permittee must perform grab measurements daily between 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. The permittee must perform temperature grab measurements daily between 12 PM and 5 PM.

e. 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 Three Rivers 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 (Three Rivers)

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

Notes:

a. In the event of equipment failure or loss, the permittee must notify DEQ and deploy new equipment to minimize interruption of data collection. If new equipment cannot be immediately deployed, the permittee must perform grab measurements. If the failure or loss is for continuous temperature monitoring equipment, the permittee must perform grab measurements daily between 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.

SCHEDULE C: COMPLIANCE SCHEDULE

A compliance schedule is not part of this permit.

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. 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.

3. 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.

4. 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.

5. 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.

6. Operator Certification

a. Definitions

i. "Supervise" means to have full and active responsibility for the daily on site technical operation of a wastewater treatment system or wastewater collection system.

ii. "Supervisor" or "designated operator", means the operator delegated authority by the permittee for establishing and executing the specific practice and procedures for operating the wastewater treatment system or wastewater collection system in accordance with the policies of the owner of the system and any permit requirements.

iii. "Shift Supervisor" means the operator delegated authority by the permittee for executing the specific practice and procedures for operating the wastewater treatment system or wastewater collection system when the system is operated on more than one daily shift.

iv. "System" includes both the collection system and the treatment systems.

b. The permittee must comply with OAR Chapter 340, Division 49, "Regulations Pertaining to Certification of Wastewater System Operator Personnel" and designate a supervisor whose certification corresponds with the classification of the collection and/or treatment system as specified in 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.

When compliance with 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.

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.

7. Industrial User Survey

a. By the date listed in Table B1, the permittee must conduct an industrial user survey as described in 40CFR 403.8(f)(2)(i-iii) to determine the presence of any industrial users discharging wastewaters subject to pretreatment and submit a report on the findings to DEQ. The purpose of the survey is to identify whether there are any industrial users discharging to the POTW and ensure regulatory oversight of these discharges to state waters.

b. Should 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.

8. Outfall Inspection

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

SCHEDULE E: PRETREATMENT ACTIVITIES

Pretreatment program is not part of this permit.

SCHEDULE F: NPDES GENERAL CONDITIONS

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.

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.
    (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 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 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.

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.

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.

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;
      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.

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.

State of Oregon
Department of
Environmental
Quality

National Pollutant Discharge Elimination System
Permit Fact Sheet
Hebo Joint Water & Sanitary Authority

Permittee	Hebo Joint Water & Sanitary Authority Hebo JWSA 30960 Hwy 101 South Hebo, OR 97122
Existing Permit Information	File Number: 100058 Permit Number: 101524 EPA Reference Number: OR0031461 Category: Domestic Class: Minor Expiration Date: 9/30/2024
Permittee Contact	Gordon Whitehead Facility President 503-801-8713 PO Box 328 Hebo, OR 97122
Receiving Water Information	Receiving stream/NHD name: Three Rivers NHD Reach Code & % along reach: 17100203000317 (28.77%) USGS 12-digit HUC: 171002030208 OWRD Administrative Basin: North Coast ODEQ LLID & River Mile: 1238734452348 & 0.63 Assessment Unit ID: OR_SR_1710020302_05_105881
Proposed Action	Permit Renewal Application Number: 948141 Date Application Received: 3/11/2024
Permit Writer	Helen Sanders 541-241-0152 Date Prepared: 5/14/2024

NPDES Permit Fact Sheet
Hebo Joint Water & Sanitary Authority

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NPDES Permit Renewal Fact Sheet
Hebo Joint Water & Sanitary Authority

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 – Not Applicable
Schedule D – Special conditions
Schedule E – Not Applicable
Schedule F – General conditions

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

- Influent and effluent monitoring requirements for BOD_5 and TSS in Schedule B will increase from monthly to 2/month.
- Influent and effluent monitoring requirements for pH in Schedule B will increase from 2/week to 3/week.
- Effluent monitoring requirements for temperature in Schedule B will increase from 2/week to 3/week.
- Effluent monitoring requirements for *E. coli* in Schedule B will increase from monthly to 2/month.
- UV intensity and UV transmittance will be added as a continuous monitoring requirement in Schedule B.
- Receiving stream monitoring in the Three Rivers for pH, temperature, and alkalinity will be added as a monitoring requirement in Schedule B.

2. Facility Description

2.1 Wastewater Facility

The Hebo Joint Water & Sanitary Authority wastewater treatment facility serves the City of Hebo. The facility is located at 30960 Hwy 101 S, Hebo, Oregon, Tillamook County. This permit allows and regulates the discharge of treated municipal wastewater to the Three Rivers at river mile 0.63.

The NPDES permit was initially issued, and construction began in 1986 for a recirculating gravel filter system in response to a sanitary survey that showed several homes in the community with individual septic systems had failing drainfields. A complete replacement of the original facility was completed in February 2003. The HJWSA facility receives influent from a 100% Septic Tank Effluent Pumped (STEP) collection system. The treatment facility utilizes Orenco

recirculating textile filter modules (AdvanTex) to treat the wastewater. At the head of the facility, STEP influent flow is measured, and a flow-proportional composite sample is taken. Influent then gravity flows to a 60,000-gallon recirculation and blend tank. Wastewater is pumped from the recirculation and blend tank by 8 dosing pumps to 12 recirculating textile filter modules. Each of the AdvanTex modules contains vertical sheets of filter fabric, which act as a substrate for the aquatic biota necessary for treating the wastewater.

Typically, 80% of the flow that exits the filter modules is directed back to the recirculation and blend tank. The remaining 20% is pumped via the effluent pump station (4 pumps) to the Ultra-Violet (UV) disinfection unit. The disinfected effluent gravity flows to a single-port outfall located on the north bank of Three Rivers and is discharged approximately 1.5 feet from the bank.

The facility's Design Average Dry Weather Flow (DADWF) is 0.022 million gallons/day (MGD). The maximum monthly dry weather design flow (MMDWDF) is 0.025 MGD. The only outfall (Outfall 001) is at approximately latitude 45.230550, longitude -123.863136 in water 25 feet in depth and 1 foot from shore.

Biosolids accumulations from the Hebo treatment system are regularly pumped out and transported to the Port of Tillamook Bay treatment plant for further treatment and beneficial use as biosolids. The permittee reports the volume of materials removed from the septic tank and the Orenco unit on the monthly monitoring report and in an annual report. The facility does not store sewage sludge outside of the treatment system and does not land apply biosolids, nor intends to do so during the permit period. The permittee does not currently operate a recycled water program and does not intend to do so during the term of this permit.

Figure 2-1: Hebo JWSA Wastewater Treatment Location and Outfall

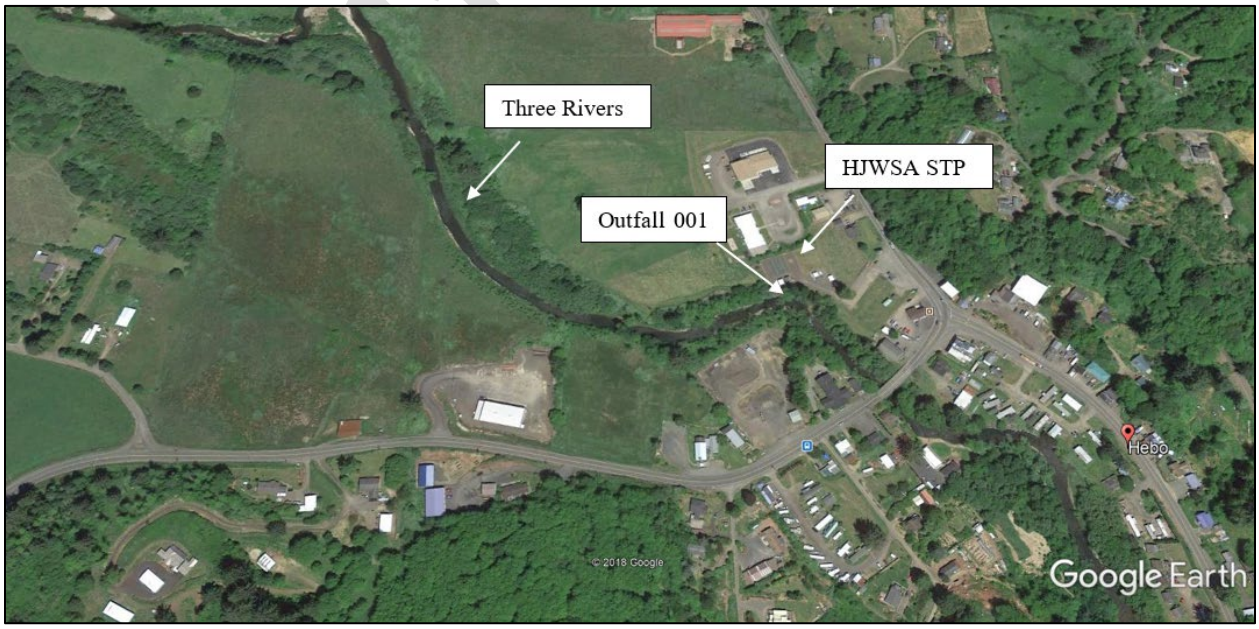

Figure 2-2: Hebo JWSA Wastewater Treatment Diagram

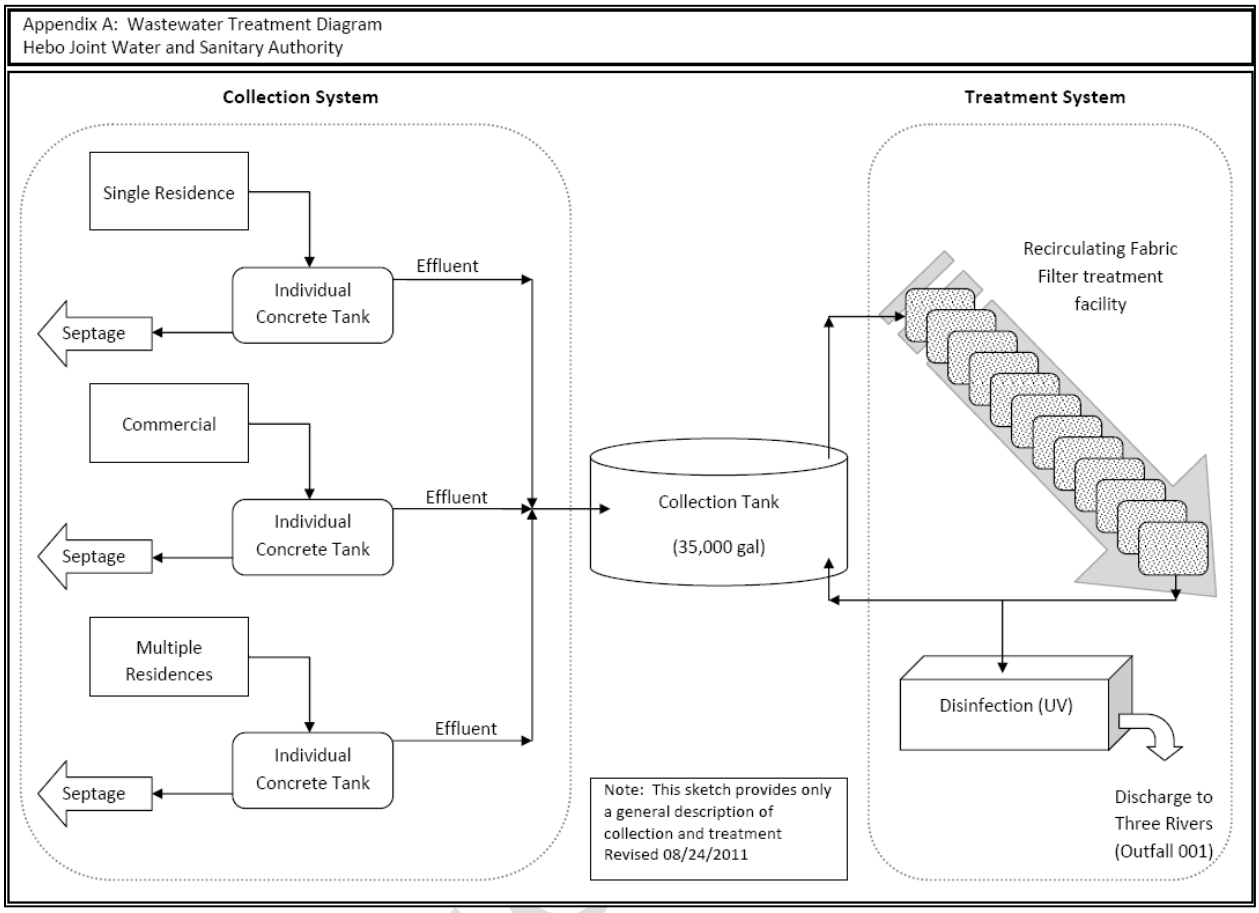

Table 2-1: List of Outfalls

Outfall Number	Type of Waste	Lat/Long
001	Treated Wastewater	45.230550, -123.863136

2.2 Compliance History

On July 14, 2020, DEQ issued a Pre-Enforcement Notice (PEN-5623) for exceedances of BOD_5, TSS, and E. coli limits. On Feb. 4, 2021, DEQ issued a Warning Letter (WL-6077) for BOD_5 exceedances. On July 7, 2021, DEQ issued a Warning Letter (WL-6399) for TSS and *E. coli* limit exceedances. On March 30, 2022, DEQ issued another Warning Letter (WL-6999) for exceeding the permit's TSS limit.

2.3 Stormwater

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

2.4 Wastewater Classification

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

3. Schedule A: Effluent Limit Development

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

3.1 Existing Effluent Limits

The 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	2.1	3.1	4.2
	% removal	85		
TSS (Year-Round)	mg/L	10	15	
	lb/day	2.1	3.1	4.2
	% removal	70		
pH	SU	Instantaneous limit between a daily minimum of 6.0 and a daily maximum of 9.0		
E. coli	#/100 mL	Must not exceed a monthly geometric mean of 78, no more than 10% of the samples may exceed 252 organisms per 100 mL.		
Temperature	˚C	Maximum 7-Day Rolling Average Effluent Temperature shall not exceed 25 ˚C		

3.2 Technology-Based Effluent Limit Development

40 CFR 122.44(a)(1) requires publicly owned treatment works (POTW) to meet technology-based effluent limits, for five-day biochemical oxygen demand (BOD_5), total suspended solids (TSS) and pH (i.e., federal secondary treatment standards). Substitution of 5-day carbonaceous 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 not effluent limits but are implemented as design criteria for new or expanded wastewater treatment plants. The table below shows a comparison of the federal secondary treatment standards and the basin-specific design criteria for the 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 April 1 – Oct. 31.
TSS (mg/L)	30	45	20 mg/L during April 1 – Oct. 31.
pH (S.U.)	6.0 – 9.0. (instantaneous)		Not applicable
BOD_5 and TSS % Removal	85%	Not applicable	Not applicable

Federal regulations (40 CFR 133.103(d)) include special considerations for less concentrated influent wastewater from separate sewers. The rule allows substitution of either a lower percent removal requirement or a mass loading limit for the percent removal requirements provided that the permittee satisfactorily demonstrates that:

- The treatment works is consistently meeting, or will consistently meet, its permit effluent concentration limits, but its percent removal requirements cannot be met due to less concentrated influent wastewater;
- To meet the percent removal requirements, the treatment works would have to achieve significantly more stringent limits (defined as at least 5 mg/l more stringent than the otherwise applicable concentration-based limits) than would otherwise be required by the concentration-based standards; and,
- The less concentrated influent wastewater is not the result of excessive infiltration and inflow (I/I).

DEQ has determined the facility meets all three conditions above. Therefore, DEQ will continue with the current permit's TSS percent removal limit of 70%. This reduced percent removal limit was determined in 2019 with the following equation:

$$\text{Percent Removal} = \frac{\text{Monthly Avg Influent Concentration} - \text{Monthly Avg Effluent Concentration}}{\text{Monthly Avg Influent Concentration}} \times 100$$

The limits for BOD_5 and TSS shown in Table 3-2 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. DEQ uses the maximum monthly design flow to calculate the mass load limits as shown below for the dry and wet weather seasons.

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 maximum monthly dry weather flow (DMMDWF)

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	0.025	20	20
Wet Weather	0.025	30	30
Design flow comments: DMMDWF			

Dry Weather Mass Load Calculations:

Monthly Average: 0.025 [design flow] mgd x 20 [concentration] mg/L x 8.34 = 4.17 lbs/day (Two significant figures) = 4.0 lbs/day

Weekly Average: 4 lbs/day monthly average x 1.5 = 6.0 lbs/day

Daily Maximum: 4 lbs/day monthly average x 2 = 8.0 lbs/day

Wet Weather Mass Load Calculations:

Monthly Average: 0.025 [design flow] mgd x 30 [concentration] mg/L x 8.34 = 6.26 lbs/day (Two significant figures) = 6.0 lbs/day

Weekly Average: 6 lbs/day monthly average x 1.5 = 9.0 lbs/day

Daily Maximum: 6 lbs/day monthly average x 2 = 12 lbs/day

The HJWSA's current permit limits for BOD_5 and TSS concentration of 10 mg/L are lower than the federal secondary standards and Oregon's North Coast Basin standards. These lower limits have been in place at least since the NDPES permit issued to HJWSA in 2004. The existing permit limits of 10 mg/L are being maintained to comply with antidegradation and antibacksliding requirements.

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

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

Parameter	Units	Average Monthly	Average Weekly	Daily Maximum
BOD_5 (Year – Round)	mg/L	10	15	-
	lbs/day	2.1	3.1	4.2
	% removal	85	85	-
TSS (Year – Round)	mg/L	10	15	-
	lbs/day	2.1	3.1	4.2
	% removal	70	70	-

3.3 Water Quality-Based Effluent Limit Development

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

3.3.1 Designated Beneficial Uses

NPDES permits issued by DEQ must protect the following designated beneficial uses of the Three Rivers. These uses are listed in OAR-340-041-0230 for North Coast Basin

- Public and private domestic water supply
- Industrial water supply
- Irrigation and livestock watering
- Fish and aquatic life (including salmonid rearing, migration, and spawning)
- Wildlife and hunting

- Fishing
- Boating
- Water contact recreation
- Aesthetic quality

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

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

Water Quality Limited Parameters (Category 5)	
AU ID:	OR_SR_1710020302_05_105881
AU Name:	Three Rivers
AU Status:	Impaired
Year Listed	2002
Year Last Assessed	2022
Category 5 Parameters	E. coli, temperature, sedimentation
Category 4A Parameters	
E. coli and Temperature	

3.3.3 TMDL Wasteload Allocations

DEQ issued a TMDL for the North Coast basin. WLAs from this TMDL that are applicable to the permittees are listed in the following table. The North Coast basin TMDL was issued in 2002 and the temperature section was modified in 2006. The TMDL requires the permittee to meet specific WLAs for temperature and bacteria. The current permit includes limits based on these allocations.

For the temperature WLA, the critical period is the entire year for migration and rearing, and from September through July for salmon spawning by various species in combination. The temperature WLA was established in Addendum #1 to the Nestucca Bay Watershed TMDL. The *E. coli* WLA is associated with which the Three Rivers is a tributary of the Nestucca River, that then flows into Nestucca Bay. The loading capacity was set to meet shellfish criteria for the Bay and low concentrations of bacteria in the rivers. For each season and flow, the WLA was calculated based on effluent concentration that would decay to the geometric mean criterion. Fall through spring is the critical period for the lowest decay rate in the Three Rivers.

Table 3-6: Applicable WLAs

Parameter	WLA	Time Period
Temperature	25 ºC	Year – Round
E. coli	Must not exceed a monthly geometric mean of 78 per 100 mL.	October – May
E. coli	Must not exceed a monthly geometric mean of 126 per 100 mL.	June – September

See Sections 3.3.7 and 3.3.8 of the factsheet for further discussion of the temperature and *E. coli* WLAs.

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.

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

Table 3-7: 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 that portion of Three Rivers contained within a band extending out 8 feet from the north bank of the river and extending from a point 5 feet upstream of the outfall to a point 33 feet downstream from the outfall. The ZID is defined as that portion of the allowable mixing zone that is within 3 feet of the point of discharge.

The Three Rivers is shallow and contains riffles, as shown in images taken during the MZ study and in aerial imagery (see figure 2-1 above). CORMIX is not designed to model these conditions. Considering both this and the model sensitivity at the RMZ, it is proposed that the mixing zone be revised to be 25% of stream flow and the ZID to be 10% of stream flow. The updated mixing zone is described as:

> The regulatory mixing zone is defined as 25% of the Three Rivers flow. The zone of initial dilution is defined as 10% of the Three Rivers flow.

The permittee discharges to the Three Rivers at 45.230560, -123.863136 (Google Earth). The outfall is a single 6-inch pipe with a duckbill valve that extends approximately 1 ft from the right bank of the river when looking downstream.

The dilution factors at the edge of the Regulatory Mixing Zone are shown in Table 3-8. These dilutions are based on a 2011 mixing zone study reviewed by DEQ. The mixing zone memo documenting this review is in a February 28, 2024 Mixing Zone Memo which is part of the administrative record. For this memo, DEQ determined that the Three Rivers is not conducive to modeling and revised the RMZ to be 25% of river flow. The dilutions were calculated using the 7Q10 flow determined in the 2011 MZ study and the max monthly average effluent flow.

Table 3-8: Mixing Zone Dilutions

Dilution Summary – Outfall 001 – Year-Round						
Water Quality Standard	**Stream Flow (cfs)**		**Effluent Flow (mgd)**		**Dilution Factor**	**Location**
	Statistic	**Flow**	**Statistic**	**Flow**		
Aquatic Life, Acute	1Q10	14.9	☐ ADWDF x PF ☒ Max Daily Avg ☐ Other	0.028	31	ZID (10%)
Aquatic Life, Chronic	7Q10	15.6	☐ ADWDF ☒ Max Monthly Avg ☐ Other	0.016	130	RMZ (25%)
ADWDF = Average dry weather design flow *PF = Peaking factor (1.5)*						
Comments: 7Q10 calculated by taking the ratio of flow between USGS gauge 14303600 (Nestucca River near Beaver, OR) and using the ratio to convert the 7Q10 from USGS gauge 14303600 to a 7Q10 for Three Rivers.						

3.3.6 pH

The pH criterion for this basin is 6.5 – 8.5 per OAR 340-041-0235. The current permit pH limits were 6.0 to 9.0. DEQ determined there is no reasonable potential for the discharge to exceed the pH criterion at the edge of the mixing zone. The proposed limits are a lower limit of 6.0 and an upper limit of 9.0, both of which are TBELs. The following provides a summary of the data used for the analysis.

Table 3-9: pH Reasonable Potential Analysis

INPUT	Lower pH Criteria	Upper pH Criteria
1. Dilution at mixing zone boundary	130.0	130.0
2. Upstream characteristics		
a. Temperature (deg C)	13.6	3.5
b. pH	7.4	7.7
c. Alkalinity (mg CaCO3/L)	40.0	40.0
3. Effluent characteristics		
a. Temperature (°C)	21.1	11.0
b. pH (S.U.)	6.0	9.0
c. Alkalinity (mg CaCO3/L)	134.6	134.6
4. Applicable pH criteria	6.5	8.5
pH at mixing zone boundary	7.2	7.7
Is there reasonable potential?	No	No
Proposed effluent limits	6.0	9.0
Effluent data source: ICIS Summary Data 2019 – Feb 2024.		
Ambient data source: Alkalinity, temperature, and pH data collected by permittee upstream of outfall from 2022 – Feb. 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.

Table 3-10: Temperature Criteria Information

Applicable Temperature Criterion	Core Cold Water 16ºC (OAR 340-041-0028(4)(b)
Applicable dates: June 16 – August 31	
Salmon/Steelhead Spawning 13 °C? OAR 340-041-0028(4)(a)	☒Yes ☐No
Applicable dates: September 1 – June 15	
WQ-limited?	☒Yes ☐No
TMDL wasteload allocation assigned?	☒Yes ☐No
Applicable dates: Year-round	
TMDL based on natural conditions criterion?	☒Yes ☐No
Cold water summer protection criterion applies?	☐Yes ☒No
Cold water spawning protection applies?	☐Yes ☒No
Comments: Salmon/steelhead spawning use dates differ from the EPA-approved beneficial use, see discussion below.	

Hebo JWSA discharges to the Three Rivers in the Nestucca Basin, which serves as core cold water habitat from June 16 – Sept. 14 (OAR 340-041-0230, Figure 230A). In addition, the EPA-approved salmonid spawning beneficial use is from Sept. 15 – June 15. However, a recent DEQ adopted rule identifies the salmonid spawning as starting on September 1 (OAR 340-041-0230, Figure 230B). This change to the beneficial use in Figure 230B is still awaiting EPA approval. Despite that, since spawning has been identified as an existing use beginning on Sept. 1, it will be assessed for protection in this permit renewal. OAR 340-041-0028(4)(b) states that the 7-day average maximum temperature of a stream identified as cold wore water habitat may not exceed 16 ºC. OAR 340-041-0028(4)(a) states that the 7-day average maximum temperature of a stream identified as salmonid spawning may not exceed 13 ºC. This segment of the Three Rivers is listed as being water quality limited for temperature (year-round). A temperature TMDL Addendum #1 for the Nestucca Basin, which addresses this listing, was approved by the EPA in November 2006. This TMDL includes a wasteload allocation, applicable year-round, in the form of an allowable effluent temperature limit. The TMDL WLA also allows for a limit to be expressed as an excess thermal load. For simplicity, the WLA is addressed in this permit as a temperature limit.

The North Coast Basin TMDL addendum states that WLAs may be recalculated using an updated heat load allocation if stream flow rates or effluent temperatures differ. Subsequent permit renewals or modifications may instead use an excess thermal load limit that considers ambient temperature and flow in its calculation.

Since the TMDL did not address the spawning use for the September 1 – 14 period, an assessment was performed to determine if an additional limit was needed during this period. This assessment, presented in Appendix A found that the TMDL temperature limit of 25 °C will ensure the criterion associated with the spawning use will be met.

The final effluent limit is listed in the following table.

Table 3-11: Temperature Criterion Effluent Limits

Effluent limit needed? ☒Yes ☐No
TMDL WLA Limit: 25 ºC
Applicable time period: Year – Round ☐NA
Temperature Criterion Limit: N/A
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 13ºC or more for salmon and steelhead, and 9ºC or more for bull trout.

  Hebo JWSA: Though the Three Rivers is listed as possible spawning habitat for salmonid species (OAR 340-041-0230, Figure 230A) there are no known spawning redds documented within the HJWSA's mixing zone to the Three Rivers, and the bank where the outfall is located is heavily riprapped. Additionally, as the approved mixing zone only extends 8 feet from the north bank of the river, the remainder of the stream is available for passage and potential spawning. As noted above, DEQ performed an analysis of the discharge related to the spawning criterion. The result of this analysis indicates that the discharge does not have a reasonable potential to heat the receiving stream above the spawning criterion by more than an insignificant amount at the edge of the mixing zone. Therefore, the discharge is not expected to impair an active spawning area. See Appendix B.

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

  Hebo JWSA: The daily maximum-recorded temperature of the discharge to Three Rivers for the 2019 to Feb. 2024 period was 23 ºC, well below the 32 ºC criterion. Therefore, the discharge does not have the potential to cause acute impairment or instantaneous lethality due to the thermal plume.

- 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 25ºC or more to less than 5% of the cross-section of 100% of the 7Q10 flow of the water body.

  Hebo JWSA: As mentioned above, the daily maximum-recorded temperature of the discharge for the 2019 to Feb. 2024 period was 23 ºC, well below the 25 ºC criterion. As such, the effluent discharge does not have the potential to result in thermal shock potential within Three Rivers.

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

  Hebo JWSA: The maximum 7-day average recorded temperature of the discharge for the 2019 to Feb. 2024 period was 21.3 ºC, slightly above the 21 ºC criterion. With the effluent temperature at this value, the calculated temperature at 25% of the cross section is 15.7 ºC and as such, the effluent discharge does not have the potential to result in migration blockage within the Three Rivers. See Appendix B.

Effluent limits needed to comply with the thermal plume requirements are shown in the following table.

Table 3-12: Thermal Plume Effluent Limit

Effluent limit needed? ☐Yes ☒No
Calculated limit: N/A
Applicable timeframe: N/A
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. The 2002 TMDL for the Nestucca Bay Watershed of the North Coast Basin assigned a wasteload allocation to Hebo JWSA for *E. coli* due to point source impairment in the Three Rivers. The WLA is more stringent than the OAR 340-041-0009(6)(b) limits and will be applied to this renewal permit.

The WLA for Hebo JWSA is a monthly geometric mean of 78 *E. coli* per 100 mL, with no more than 10% of the samples may exceed 252 organisms/100 mL. If a single sample exceeds 252 *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 78, 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. If a single sample exceeds 252 *E. coli* per 100 mL, then the permittee must evaluate the

previous 9 sample results to see if the 10% requirement has been exceeded. Based on discharge monitoring reports from 2021 – 2023, Hebo JWSA has the capability to continue meeting the *E. coli* permit limits. The following table includes the proposed permit limits and applies year-round.

Table 3-13: Proposed *E. coli* Limits

E. coli **(#/100 ml)**	**Geometric Mean**	**Maximum**
Existing Limit	78	252
Proposed Limit	78	252

3.4 Antibacksliding

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

3.5 Antidegradation

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

DEQ has performed an antidegradation review for this discharge. The proposed permit contains the same or more stringent discharge loadings as the existing permit. Permit renewals with the same or more stringent discharge loadings as the previous permit are not considered to lower water quality from the existing condition. As noted in Section 3.3.7., DEQ determined that salmonid spawning in the receiving stream is an existing beneficial use from September 1 -14 that was not previously identified. The proposed temperature limit is protective of this use as discussed in that section. Other than this, DEQ is not aware of any information that existing limits are not protecting the receiving stream's designated beneficial uses. DEQ is also not aware of any existing uses present within the water body that are not currently protected by standards developed to protect the designated uses. Therefore, DEQ has determined that the proposed discharge complies with DEQ's antidegradation policy. DEQ's antidegradation worksheet for this permit renewal is available upon request.

3.6 Whole Effluent Toxicity

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

3.7 Groundwater

The 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 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.

Receiving stream monitoring is required in the permit to determine accurate representation of upstream ambient conditions during the permit's monitoring period. This stretch of the Three Rivers is only sporadically monitored and may not provide a representative data set for the next renewal period's RPA.

6. Schedule C: Compliance Schedule

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 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.

7.3 Exempt Wastewater Reuse at the Treatment System

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

7.4 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.

7.5 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.

7.6 Operator Certification

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

7.7 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.

7.8 Outfall Inspection

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

8. Schedule F: NPDES General Conditions

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

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

Appendix A: Temperature RPA

Enter data into white cells below:			Data Metric/Source
Mixing Zone Dilution =	130		2024 Mixing Zone Memo
7Q10 =	15.6	cfs	2024 Mixing Zone Memo
Effluent Flow =	0.0375	mgd	ADWDF x 1.5
Applicable Temperature Criterion	13	°C	
Effluent Temperature	25	°C	Current temperature limit
Allowable increase =	0.3	°C	

Dilution at 25% Stream Flow =	68	dilution = (Qr*0.25)/Qe + 1	
ΔT at edge of MZ=	**0.1**	**°C**	**No Reasonable Potential**
ΔT at 25% Stream Flow=	**0.2**	**°C**	
Thermal Load Limit =	**N/A**	**Million Kcals (7-day Rolling Avg.)**	

Appendix B: Thermal Plume RPAs

OAR 340-041-0053(2)(d)(A): Active Spawning Area Impairment 13.0 deg C at location of active spawning area			
Enter data into white cells below:			Data Metric/Source
Dilution at Spawning Area =	130		2024 Mixing Zone Memo
Ambient Temperature =	13	°C	Temperature Criteria
Max. 7dAM Effluent Temperature =	21.3	°C	2019-2024 ICIS summary data
Applicable Temperature Criterion =	13	°C	
ΔT at Spawning Area=	**0.1**	**°C**	**No Reasonable Potential**
Temp. at Spawning Area=	**13.1**	**°C**	

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 =	15.6	cfs	2024 Mixing Zone Memo
Ambient Temperature =	15.6	°C	2022-2023 Permittee collected ambient data
Effluent Flow =	0.0375	mgd	2024 Mixing Zone Memo
Max 7dAM Effluent Temperature =	21.3	°C	2019-2024 ICIS summary data
25% of 7Q10 =	3.9	cfs	
25% dilution =	68	dilution = (Qr*0.25)/Qe + 1	
Temperature at 25% cross section =	**15.7**	**°C**	**No Reasonable Potential**
ΔT at 25% Stream Flow=	**0.1**	**°C**	