

## **Department of Environmental Quality**

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

April 23, 2024

Scott Nay City of Myrtle Point 424 5<sup>th</sup> Street Myrtle Point, OR 97452

**Re:** NPDES Permit Public Notice Period

Comments Due: May 29, 2024, 5 p.m.

File no. 59742 Permit no. 101192 EPA no. OR0020435

Facility: Myrtle Point STP, 220 River Rd., Myrtle Point

Coos County

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

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

Your comments **must be received by 5 p.m. on May 29, 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

Water Quality Permit Coordinator Western Region, Salem Office

Trink Hansen

ec: Source File, Portland Office, DEQ Andy Ullrich, Medford, DEQ

ORMS



# DEQ Requests Comments on Proposed Myrtle Point Water Quality Permit Renewal

## **HOW TO PROVIDE PUBLIC COMMENT**

Facility name: City of Myrtle Point

Permit type: National Pollution Discharge

Elimination System (NPDES)

Comments due by: Wednesday, May 29, 2024

at 5 p.m.

Send written comments to: Trinh Hansen, Oregon

DEQ, Permit Coordinator

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

97302

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

The Oregon Department of Environmental Quality invites the public to provide written comments on the conditions of the City of Myrtle Point'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 Myrtle Point to discharge wastewater to the South Fork Coquille River.

## About the facility

The City of Myrtle Point has applied for a water quality permit renewal for the City of Myrtle Point Treatment Plant located at 220 River Road in Myrtle Point. DEQ last renewed this permit on Dec. 17, 2010. The facility collects domestic wastewater from within the municipality and treats it before year-round discharge to the South Fork Coquille River at river mile 0.8. The plant treats the following pollutants: carbonaceous biochemical oxygen demand, total suspended solids, *E. coli* bacteria, pH, excess thermal load, and ammonia as nitrogen.

The facility discharges to the South Fork Coquille River near Lampa Lane. The South Fork Coquille River is listed as impaired (category 4 or 5) for one pollutant 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 Final Draft Coquille River Subbasin Total Maximum Daily Load. The TMDL is a water pollution control plan for five-day carbonaceous biochemical oxygen demand, or CBOD<sub>5</sub>; ammonia as nitrogen; total nitrogen; and total phosphorous.

Myrtle Point has had seven 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 under a Mutual Agreement and Order with DEQ.

The facility holds no other permits from DEQ.





## What types of pollutants does the permit regulate?

This permit sets conditions for how the facility deals with the following pollutants: CBOD<sub>5</sub>, total suspended solids, *E. coli* bacteria, excess thermal load, ammonia as nitrogen, total nitrogen, and total phosphorous.

The plant currently disposes all biosolids at the Beaver Hill Transfer Site which Coos County operates.

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

Yes. The draft permit would reduce the CBOD<sub>5</sub> mass load limit for the month of October when the river flow at the Powers gauge is less than 100 cubic feet per second.

## Other changes are:

- Adding mass load limits for ammonia as nitrogen, total nitrogen and total phosphorous.
- Removing the concentration limit for ammonia as nitrogen (replaced with mass load limits).
- Providing excess thermal load limit options for May through October, depending on the month and river flow, as measured at the Powers gage.
- Increasing the Summer Total Suspended Solids (TSS) limit to reflect the basin design criteria.

Pollutant	Change
Ammonia as Nitrogen (Mass)	New
Total Nitrogen	New
Total Phosphorous	New
Ammonia as Nitrogen (Concentration)	Replaced
Excess Thermal Load	-
Total Suspended Solids (TSS) (Summer)	+

## How did DEQ determine permit requirements?

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

For this proposed permit action, DEQ evaluated the permit renewal application, monthly discharge monitoring reports, the current permit and evaluation report, and a 2009 mixing zone study, using CORMIX modeling software. These materials may be viewed at 4026 Fairview Industrial Drive SE in Salem. In addition to the review and assessment of materials noted above, DEQ has exercised discretion in establishing monitoring/reporting requirements and identifying applicable data for analyses.

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

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

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

## What happens next?

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

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

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

### For more information

Find more information by reviewing draft permit documents attached to this notice or contact Trinh Hansen at 503-378-5055 or <a href="mailto:trinh.hansen@deq.oregon.gov">trinh.hansen@deq.oregon.gov</a> 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.

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# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM WASTE DISCHARGE PERMIT

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

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

ISSUED TO:	SOURCES COVERED BY THIS PERMIT:				
City of Myrtle Point	Type of Waste	Outfall Number	Outfall Location		
424 Fifth Street Myrtle Point, OR 97458	Treated Wastewater	001	43.069389 / -124.148009		
myrate I ama, are y 100	Recycled Water Reuse	N/A	N/A		
	Biosolids	N/A	Specified in Biosolids Management/Land Application Plan		
FACILITY LOCATION:		RECEIVING STREAM	I INFORMATION:		
City of Myrtle Point		WRD Basin: Southern Oregon Coast			
220 River Road		USGS Sub-Basin: Coqu			
Myrtle Point, OR 97458 County: Coos		NHD Reach Code: 1710	: South Fork Coquille River		
EPA Permit Type: Minor		LLID: 1241417430803,			
Issued in response to Applicat use findings in the permit reco		Dec. 23, 2014. This permi	t is issued based on the land		
	7				
DRAFT	DRA		DRAFT		
Ranei Nomura, Water Manaş Western Region	ger	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.

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## SCHEDULE A: WASTE DISCHARGE LIMITS

## 1. Outfall 001 - Permit Limits

During the term of this permit, the permittee must comply with the limits in Tables A1, A2 and A3 below.

**Table A1: Permit Limits (Seasonal)** 

Parameter	Units	Season	River Flow Monthly Average (See note a.)	Average Monthly	Average Weekly	Daily Maximum		
	mg/L	May 1 – Oct 31	All	10	15	-		
	mg/L	Nov 1 – Apr 30	All	25	40	-		
		May 1 – Jun 30	All	31	47	62		
CBOD <sub>5</sub>		Jul 1 – Sep 30	All	18	47	62		
CDODS	lb/day	Oct 1 – Oct 31	< 100 cfs	18	47	62		
	10/day	Oct 1 – Oct 31	≥ 100 cfs	31	47	62		
		Nov 1 – Apr 30	All	150	230	300		
	mg/L	May 1 – Oct 31	All	20	30	-		
TOG		Nov 1 – Apr 30	All	30	45	-		
TSS	lb/day	May 1 – Oct 31	All	63	95	130		
		Nov 1 – Apr 30	All	180	270	360		
		May 1 – Jun 30	All	8.3	-	-		
Ammonia as	11, / 1,	Jul 1 – Sep 30	All	1.8	-	-		
N	lb/day	0.41 0.421	< 100 cfs	1.8	-	-		
					Oct 1 – Oct 31	≥ 100 cfs	8.3	-
		May 1 – Jun 30	All	42	-	-		
Total	11, / 4,	Jul 1 – Sep 30	All	18	-	-		
Nitrogen	lb/day	Oat 1 Oat 21	< 100 cfs	18	-	-		
		Oct 1 – Oct 31	≥ 100 cfs	42	-	-		
Total		May 1 – Jun 30	All	17	-	-		
Phosphorus	lb/day	Jul 1 – Sep 30	All	1.5	-	-		
(Final)	10/day	Oat 1 Oat 21	< 100 cfs	1.5	-	-		
(See note b.)	,	Oct 1 – Oct 31	≥ 100 cfs	17	-	-		

## Notes:

- a. South Fork Coquille River flow at Powers gage (USGS stream gage 14325000).
- b. The final Total Phosphorous limits are effective after completion of the compliance schedule in Schedule C.

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**Table A2: Permit Limits (Year-Round)** 

Parameter	Units	Average Monthly	Average Weekly	Daily Maximum	
CBOD <sub>5</sub>	% removal	85	1	-	
TSS	% removal	85	1	-	
рН	SU	Instantaneous limit between a daily minimum of 6.0 an a daily maximum of 9.0			
E. coli (See note a.)	#/100 mL	Must not exceed a monthly geometric mean of 126, no single sample may exceed 406			

#### Note:

a. If a single sample exceeds 406 organisms/100 mL, the permittee may take at least 5 consecutive resamples at 4-hour intervals beginning within 28 hours after the original sample was taken. A geometric mean of the 5 re-samples that is less than or equal to 126 *E. coli* organisms/100 mL demonstrates compliance with the limit.

**Table A3: Excess Thermal Load Limits** 

Parameter	Month	Units	Option A (7-day rolling average)	Option B (7-day rolling average) (See note a.)	Option B Minimum River Flow, cfs (7Q10)
	May		94.9	0.99 x Q <sub>R</sub>	96.2
	June		67.2	$1.3 \times Q_R$	51.4
Excess	July	million	24.6	$0.89 \times Q_R$	27.7
Thermal Load	August	kcal/day	15.3	$0.83 \times Q_R$	18.5
Loud	September		10.4	0.81 x Q <sub>R</sub>	12.8
	October		10.3	$0.80 \times Q_R$	12.8

#### Note:

a. The permittee may demonstrate compliance with the excess thermal load (ETL) limits by complying with either Option A or Option B. To demonstrate compliance with Option B, the permittee must calculate the daily ETL values using the above equation and then calculate the limits as 7-day rolling averages from the daily ETL values. If the actual river flow is less than the Option B minimum river flow (above), use the 7Q10 river flow for the daily ETL value calculation. Compliance is demonstrated if the 7-day rolling average ETL discharged is equal to, or less than, the 7-day rolling average ETL limit for each 7-day period within each month.

Q<sub>R</sub> = South Fork Coquille River flow at Powers gage, cfs (USGS stream gage 14325000).

## 2. Regulatory Mixing Zone

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

The allowable mixing zone is that portion of the South Fork Coquille River extending from a point 10 feet upstream of the outfall to a point 90 feet downstream from the outfall. The Zone of Immediate Dilution (ZID) shall be defined as that portion of the allowable mixing zone that is within 9 feet of the point of discharge.

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## 3. Biosolids

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

- a. The permittee must manage biosolids in accordance with its DEQ-approved Biosolids Management Plan and Land Application Plan.
- b. The permittee must apply biosolids at or below the agronomic rates approved by DEQ in order to minimize potential groundwater degradation.
- c. The permittee must obtain written site authorization from DEQ for each land application site prior to land application (see Schedule D) and follow the site-specific management conditions in the DEQ-issued site authorization letter.
- d. Prior to application, the permittee must ensure that biosolids meet one of the pathogen reduction standards under 40 CFR 503.32 and one of the vector attraction reduction standards under 40 CFR 503.33.
  - i. The permittee must not apply biosolids containing pollutants in excess of the ceiling concentrations shown in the table below. The permittee may apply biosolids containing pollutants in excess of the pollutant concentrations, but below the ceiling concentrations, however, the total quantity of biosolids applied cannot exceed the cumulative pollutant loading rates in the table below.

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**Table A4: Biosolids Limits** 

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

#### Note:

## 4. Chlorine Usage

This permit prohibits the permittee from using chlorine or chlorine compounds for effluent disinfection purposes. This permit prohibits chlorine residual in the effluent resulting from chlorine or chlorine-containing chemicals used for maintenance or other purposes.

## 5. Peracetic Acid Usage

This permit prohibits the permittee from using peracetic acid for effluent disinfection purposes.

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

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## SCHEDULE B: MINIMUM MONITORING AND REPORTING REQUIREMENTS

## 1. Reporting Requirements

The permittee must submit to DEQ monitoring results and reports listed in Table B1 below.

Table B1: Reporting Requirements and Due Dates

		•	1	
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 DEQ directs
Inflow and infiltration report (see Schedule D)	Annually	February 15	Electronic copy in a DEQ- approved format	Attached via electronic reporting as DEQ directs
Mixing Zone Study (see Schedule D)	One time	Submit by XX/15/20XX	Electronic copy in a DEQ- approved format	Attached via electronic reporting as DEQ directs
Wastewater solids annual report (see Schedule D)	Annually (if Biosolids Management Plan not developed and approved)	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
Biosolids annual report (see Schedule D)	Annually (if Biosolids Management Plan developed and approved)	By February 19 of the following year	Electronic copy in the DEQ- approved form	Attached via electronic reporting as DEQ directs  DEQ Biosolids Program Coordinator
Hauled Waste Control Plan (see Schedule D)	One time if the permittee decides to accept hauled waste	Approved by DEQ prior to accepting hauled waste.	Electronic copy in a DEQ- approved format	Attached via electronic reporting as DEQ directs
Hauled Waste Annual Report (see Schedule D)	Annually (if hauled waste control plan developed and approved)	January 15	Electronic copy in the DEQ- approved format	Attached via electronic reporting as DEQ directs

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Reporting Requirement	Frequency	Due Date (See note a.)	Report Form (See note b.)	Submit To:
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	<ul> <li>1 Hard copy to DEQ Pretreatment Coordinator</li> <li>1 Electronic copy to Compliance Officer</li> </ul>
Outfall Inspection Report (see Schedule D)	Once per permit cycle	Submit by XX/15/20XX In the 3 <sup>rd</sup> year of the permit.	Electronic copy in a DEQ- approved format	Attached via electronic reporting as DEQ directs

#### Notes:

- a. For submittals that the permittee provides to DEQ by mail, the postmarked date must not be later than the due date.
- b. The permittee must submit all reporting requirements 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.

- e. 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).

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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 the 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 permittee cannot re-analyze the sample, then the permittee must resample 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 DEQ authorizes in writing. If quality control checks are not met for CBOD5, the permittee must: 1) report the daily CBOD5 values with data qualifiers; 2) include these CBOD5 values in the summary statistic calculations (e.g., weekly averages, monthly averages, % removal); and 3) report the CBOD5 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.

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- (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 DEQ approves such longer period in writing.
- iv. The permittee must develop a receiving water sampling and analysis plan that incorporates QA/QC before sampling. The permittee must keep this plan at the facility and made available to DEQ upon request.

## f. Reporting Sample Results

- i. The permittee must report the laboratory DL and QL as defined above for each analyte, with the following exceptions: pH, temperature, BOD, CBOD, TSS, Oil & Grease, hardness, alkalinity, bacteria, and nitrate-nitrite. For temperature and pH, neither the QL nor the DL need to be reported. For the other parameters listed above, the permittee is only required to report the QL and only when the result is ND.
- ii. The permittee must report the same number of significant digits as the permit limit for a given parameter.
- iii. (For Discharge Monitoring Reports) If a sample result is above the DL but below the QL, the permittee must report the result as the DL preceded by DEQ's data code "e". For example, if the DL is  $1.0~\mu g/l$ , the QL is  $3.0~\mu g/L$  and the result is estimated to be between the DL and QL, the permittee must report "e1.0  $\mu g/L$ " on the DMR. This requirement does not apply in the case of parameters for which the DL does not have to be reported.
- iv. (For Discharge Monitoring Reports) If the sample result is below the DL, the permittee must report the result as less than the specified DL. For example, if the DL is  $1.0~\mu g/L$  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 facility personnel monitor the parameter, 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  $\mu$ g/L, report "<0.02 lb/day" for mass load on the DMR (1.0  $\mu$ g/L x 2 MGD x conversion factor = 0.017 lb/day, round off to 0.02 lb/day).
- iii. When concentration data are above the DL, but below the QL: To calculate the mass load from this result, use the detection level. Report the mass load as the calculated mass load preceded by "e". For example, if flow is 2 MGD and the reported sample result is e1.0  $\mu$ g/L, report "e0.02 lb/day" for mass load on the DMR (1.0  $\mu$ g/L x 2 MGD x conversion factor = 0.017 lb/day, round off to 0.02 lb/day).

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## 3. Monitoring and Reporting Requirements

a. The permittee must monitor influent at the composite sampler, immediately upstream from the influent pump station, and report results according to Table B2 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	Metered	<ol> <li>Monthly Average</li> <li>Daily Maximum</li> </ol>
CBOD <sub>5</sub> (80082)	mg/L	Year-round	2/week	24-hour composite	Monthly Average
TSS (00530)	mg/L	Year-round	2/week	24-hour composite	Monthly Average
pH (00400)	SU	Year-round	3/week	Grab	<ol> <li>Monthly Maximum</li> <li>Monthly Minimum</li> </ol>

#### Notes:

- a. In the event of equipment failure or loss, the permittee must notify DEQ and deploy new equipment to minimize interruption of data collection. If the permittee cannot deploy new equipment immediately, 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 DEQ directs otherwise.

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b. The permittee must monitor effluent at the composite sampler immediately upstream from the UV disinfection system, and report results according to Table B1 and Table B3 below. The permittee must collect *E. coli* bacteria grab samples immediately downstream from the UV disinfection system.

**Table B3: Effluent Monitoring Requirements** 

Item or Parameter	Units	Time Period	Minimum Frequency	Sample Type/ Required Action (See note a.)	Report Statistic (See note b.)
Flow (50050)	MGD	Year-round	Daily	Metered	<ol> <li>Monthly Average</li> <li>Daily Maximum</li> </ol>
CBOD <sub>5</sub> (80082)	mg/L	Year-round	2/week	24-hour composite	Monthly Average     Maximum     Weekly Average
CBOD <sub>5</sub> (80082)	lb/day	Year-round	2/week	Calculation	<ol> <li>Daily Maximum</li> <li>Monthly Average</li> <li>Maximum         Weekly Average     </li> </ol>
CBOD <sub>5</sub> percent removal (81383) (See note c.)	%	Year-round	Monthly	Calculation based on monthly average CBOD <sub>5</sub> concentration values	Monthly Average
TSS (00530)	mg/L	Year-round	2/week	24-hour composite	Monthly Average     Maximum     Weekly Average
TSS (00530)	lb/day	Year-round	2/week	Calculation	<ol> <li>Daily Maximum</li> <li>Monthly Average</li> <li>Maximum</li> <li>Weekly Average</li> </ol>
TSS percent removal (81011) (See note c.)	%	Year-round	Monthly	Calculation based on monthly average TSS concentration values	Monthly Average

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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	<ol> <li>Daily Maximum</li> <li>Daily Minimum</li> </ol>
Temperature (00010)	°C	Year-round	Daily	Continuous	<ol> <li>Daily Maximum</li> <li>Monthly Average</li> <li>Maximum 7-day</li> <li>Rolling Average</li> </ol>
Excess Thermal Load (51405)	Million kcal/day	May – Oct.	Daily	Calculation (See note d.)	Maximum 7-day Rolling Average
Excess Thermal Load Limit	Million kcal/day	May – Oct.	Daily	Calculation (See note e below and note a in Table A3)	Report on daily data attachment only. (See note e.)
Excess Thermal Load Compliance Option	NA	May – Oct.	Daily	Narrative	Compliance Option A or B
E. coli (51040)	#/100 mL	Year-round	2/week	Grab	<ol> <li>Daily Maximum</li> <li>Monthly         <ul> <li>Geometric Mean</li> </ul> </li> </ol>
Total Ammonia (as N) (00610)	mg/L	May – Oct.	1/week	24-hour composite	<ol> <li>Daily Maximum</li> <li>Monthly Average</li> </ol>
Total Ammonia (as N) (00610)	mg/L	Nov. – Apr.	1/month	24-hour composite	<ol> <li>Daily Maximum</li> <li>Monthly Average</li> </ol>
Total Ammonia (as N) (00610)	lb/day	May – Oct.	1/week	Calculation	1. Monthly Average
Total Nitrogen (00600)	mg/L	May – Oct.	1/week	24-hour composite	<ol> <li>Daily Maximum</li> <li>Monthly Average</li> </ol>
Total Nitrogen (00600)	lb/day	May – Oct.	1/week	Calculation	Daily Maximum     Monthly Average
Total Phosphorus (00665)	mg/L	May – Oct.	1/week	24-hour composite	<ol> <li>Daily Maximum</li> <li>Monthly Average</li> </ol>
Total Phosphorus (00665)	lb/day	May – Oct.	1/week	Calculation	Daily Maximum     Monthly Average
UV intensity	mW/cm <sup>2</sup>	Year-round	Daily	Continuous	Maintain records on- site
UV dose	mJ/cm <sup>2</sup>	Year-round	Daily	Calculation OR from manufacturer's table	Maintain records on- site

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Item or Parameter	Units	Time Period	Minimum Frequency	Sample Type/ Required Action (See note a.)	Report Statistic (See note b.)
UV transmittance	%	Year-round	Daily	Continuous	Maintain records on- site
Alkalinity as CaCO <sub>3</sub> (00410)	mg/L	Year-round	1/quarter	Grab	Quarterly Maximum
Dissolved Oxygen (00300)	mg/L	Third year of permit cycle [2026]	Quarterly	24-hour composite (See note f.)	Quarterly Minimum
Total Kjeldahl Nitrogen (TKN) (00625)	mg/L	Third year of permit cycle [2026]	Quarterly	24-hour composite	Quarterly Maximum
Nitrate (NO <sub>3</sub> ) Plus Nitrite (NO <sub>2</sub> ) Nitrogen (00630)	mg/L	Third year of permit cycle [2026]	Quarterly	24-hour composite	Quarterly Maximum
Oil and Grease (00556)	mg/L	Third year of permit cycle [2026]	Quarterly	Grab	Quarterly Maximum
Total Phosphorus (00665)	mg/L	Third year of permit cycle [2026]	Quarterly	24-hour composite	Quarterly Maximum
Total Dissolved Solids (70295)	mg/L	Third year of permit cycle [2026]	Quarterly	24-hour composite	Quarterly Maximum

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

#### Notes:

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

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

#### Where:

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

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

d. The daily excess thermal load (ETL) discharged must be calculated using the daily maximum effluent temperature and the corresponding daily average effluent flow using the formula below.

The 7-day rolling average is then calculated from the daily ETLs.

The daily ETL is calculated as follows: ETL=  $3.785 * Qe *\Delta T$ 

Where:

ETL = Excess Thermal Load (million kcal/day)

Q<sub>e</sub> = Daily Average Effluent flow (MGD)

 $\Delta T =$  Daily Maximum Effluent temperature (°C) minus ambient criterion (18°C)

- e. If the permittee selects Excess Thermal Load Limit (ETLL) Option B from Table A2, the permittee must calculate the ETLL (million kcal/day) each day the permittee uses this option. The permittee must use the equations and procedure noted in Table A3.
- f. 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.

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c. The permittee must monitor the South Fork Coquille River and report the results according to Table B1 and Table B4 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 (South Fork Coquille River)

Item or Parameter	Units	Time Period	Minimum Frequency	Sample Type / Required Action	Report Statistic (See note a.)
Stream Flow (00056) (See note c.) (Required for CBOD, NH <sub>3</sub> , TN and TP)	CFS	May 1 – Oct 1	Monthly	Measured	Monthly Average
Stream Flow (00056) (See note b. and c.) (Required for Excess Thermal Load)	CFS	May 1 – Oct 1	Daily	Measured	Monthly Average

#### Notes:

- a. When submitting DMRs electronically, all data used to determine summary statistics must be submitted in a DEQ-approved format as a spreadsheet via electronic reporting unless DEQ otherwise directs.
- b. Reporting is only required if option B is used to determine the thermal load limits.
- c. Flow must be reported from the South Fork Coquille River flow at Powers gage (USGS stream gage 14325000). If data from this gage becomes unavailable, the permittee must receive written approval from DEQ to use another gage or other method for determining stream flow.

## 4. Biosolids Monitoring Requirements

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

**Table B5: Biosolids Monitoring** 

Item or Parameter	Minimum Frequency	Sample Type
Nutrient and conventional parameters (% dry weight unless otherwise specified): Total Kjeldahl Nitrogen (TKN) Nitrate-Nitrogen (NO <sub>3</sub> -N) Total Ammoniacal Nitrogen (NH-N) Total Phosphorus (P) Potassium (K) pH (S.U.) Total Solids Volatile Solids	As described in the DEQ-approved Biosolids Management Plan, but not less than the frequency in Table B6.	As described in the DEQ-approved Biosolids Management Plan

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Item or Parameter	Minimum Frequency	Sample Type
Pollutants: As, Cd, Cu, Hg, Pb, Mo, Ni, Se, Zn, mg/kg dry weight	As described in the DEQ-approved Biosolids Management Plan, but not less than the frequency in Table B6	As described in the DEQ-approved Biosolids Management Plan
Pathogen reduction	As described in the DEQ-approved Biosolids Management Plan, but not less than the frequency in Table B6.	As described in the DEQ-approved Biosolids Management Plan
Vector attraction reduction	As described in the DEQ-approved Biosolids Management Plan, but not less than the frequency in Table B6.	As described in the DEQ-approved Biosolids Management Plan
Record of biosolids land application: date, quantity, location.	Each event	Record the date, quantity, and location of biosolids land applied on site location map or equivalent electronic system, such as GIS.

**Table B6: Biosolids Minimum Monitoring Frequency** 

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

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## **SCHEDULE C: COMPLIANCE SCHEDULE**

## 1. Compliance Schedule to Meet Final Effluent Limitation

The permittee must comply with the following schedule:

**Table C1: Phosphorus Compliance Schedule** 

Compliance Date:	Requirement:
By December 31, 2024	The permittee must submit to DEQ a written Progress Report detailing the progress made towards achieving the final effluent limitations for total phosphorus. The progress report must include a table with all the effluent total phosphorus data collected and a chart representation of this data. The report must also include information about what operational changes have been made (coagulant dose and dosing location(s)) to improve phosphorus removal.
By December 31, 2025	The permittee must submit to DEQ a written Progress Report detailing the progress made towards achieving the final effluent limitations for total phosphorus. The progress report must include a table with all the effluent total phosphorus data collected and a chart representation of this data. The report must also include information about what operational changes have been made (coagulant dose and dosing location(s)) to improve phosphorus removal. The report must include a statement on whether or not chemical addition alone is capable of meeting the final effluent limits.
	2/31/2025 states that chemical addition alone is capable of meeting the final eschedule is terminated, and the final effluent limits are effective.
By December 31, 2026	Submit a progress report detailing steps that have been completed in the last 12 months to comply with the final effluent limits for total phosphorous.
By April 30, 2027	The permittee must submit a draft Facilities Plan that includes revised flow, population, and load projections and a proposed wastewater treatment plant upgrade to meet the final effluent limits for total phosphorus. Within 3 months of receiving DEQ comments, permittee must revise documents in accordance with DEQ comments and submit a final document.
By July 31, 2028	The permittee must submit a draft Pre-Design Report for the recommended wastewater treatment alternative identified in the Facilities Plan to comply with the effluent limits for total phosphorus to DEQ for review and approval. Permittee must revise documents in accordance with DEQ comments within 60 days of receiving DEQ comments.
By July 31, 2029	The permittee must submit a draft Final Design for recommended wastewater treatment alternative identified in the Facilities Plan to DEQ for review and approval. Permittee must revise documents in accordance with DEQ comments within 60 days of receiving DEQ comments.
By September 1, 2030	Complete construction of projects identified in the Facilities Plan to comply with the final effluent limits for total phosphorous.

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## 2. Responsibility to Meet Compliance Dates

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

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## **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 Table B1 directs. The report must include the following:

- a. An assessment of the facility's I/I issues based on a comparison of summer and winter flows to the plant.
- b. Details of activities performed in the previous year to identify and reduce inflow and infiltration.
- c. Details of activities planned for the following year to identify and reduce inflow and infiltration.
- d. A summary of sanitary sewer overflows that occurred during the previous year. This should include the following: date of the SSO, location, estimated volume, cause, follow-up actions and if performed, the results of receiving stream monitoring.

## 2. Mixing Zone Study

The permittee must perform and submit to DEQ a level 1 mixing zone study with the next permit renewal application.

## 3. Emergency Response and Public Notification Plan

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

## 4. Exempt Wastewater Reuse at the Treatment System

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

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

## 5. Wastewater Solids Annual Report

The permittee must submit a Wastewater Solids Annual Report by February 19 each year documenting removal of wastewater solids from the facility during the previous calendar year. The permittee must use the 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.

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## 6. Biosolids Management Plan

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

#### a. Annual Report

The permittee must submit a Biosolids Annual Report by February 19 each year documenting biosolids management activities of the previous calendar year as described in OAR 340-050-0035(6). The permittee must use the DEQ-approved Biosolids Annual report form. This report must include the monitoring data and analytical laboratory reports for the previous year's monitoring specified under Schedule B.

#### b. Site Authorization

The permittee must obtain written authorization from DEQ for each land application site prior to its use. Conditions in site authorizations are enforceable requirements under this permit. The permittee is prohibited from land applying biosolids to a DEQ-approved site except in accordance with the site authorization, while this permit is effective and with the written approval of the property owner. DEQ may modify or revoke a site authorization following the procedures for a permit modification described in OAR 340-045-0055.

#### c. Public Participation

- i. DEQ will provide an opportunity for public review and comment on any significant plan modifications prior to approving or denying. Public review is not required for minor modifications or changes to utilization dates.
- ii. No DEQ-initiated public notice is required for continued use of sites identified in the DEQ-approved biosolids management plan.
- iii. For new sites that fail to meet the site selection criteria in the biosolids management plan or that DEQ deems to be sensitive with respect to residential housing, runoff potential, or threat to groundwater, DEQ will provide an opportunity for public comment as OAR 340-050-0030(2) directs.
- iv. For all other new sites, the permittee must provide for public participation following procedures in its DEQ-approved land application plan.

## d. Exceptional Quality Biosolids

The permittee is exempt from the requirements in condition 6.b above, if:

- i. Pollutant concentrations of biosolids are less than the pollutant concentration limits in Schedule A, Table A4;
- ii. Biosolids meet one of the Class A pathogen reduction alternatives in 40 CFR 503.32(a); and
- iii. Biosolids meet one of the vector attraction reduction options in 40 CFR 503.33(b)(1) through (8).

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## 7. Wastewater Solids Transfers

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

## 8. Hauled Waste Control Plan

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

## 9. Hauled Waste Annual Report

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

## 10. 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.

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- b. The permittee must comply with OAR Chapter 340, Division 49, "Regulations Pertaining to Certification of Wastewater System Operator Personnel" and designate a supervisor whose certification corresponds with the classification of the collection and/or treatment system as specified in the DEQ Supervisory Wastewater Operator Status Report. DEQ may revise the permittee's classification in writing at any time to reflect changes in the collection or treatment system. This reclassification is not considered a permit modification and may be made after the permit expiration date provided the permit has been administratively extended by DEQ. If a facility is re-classified, a certified letter will be mailed to the system owner from the DEQ Operator Certification Program. Current system classifications are publicized on the DEQ Supervisory Wastewater Operator Status Report found on the DEQ Wastewater Operator Certification Homepage.
- c. The permittee must have its system supervised full-time by one or more operators who hold a valid certificate for the type of wastewater treatment or wastewater collection system, and at a grade equal to or greater than the wastewater system's classification.
- d. The permittee's wastewater system may be without the designated supervisor for up to 30 consecutive days if another person supervises the system, who is certified at no more than one grade lower than the classification of the wastewater system. The permittee must delegate authority to this operator to supervise the operation of the system.
  - 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 the DEQ Wastewater Operator Certification homepage \*NOTE: This form is different from the Delegated Authority form. The permittee may replace or re-designate the system supervisor with another properly certified operator at any time and must notify DEQ in writing within 30 days of replacement or re-designation of the operator in charge. As of this writing, the notice of replacement or re-designation must be sent to Water Quality Division, Operator Certification Program, 700 NE Multnomah St, Suite 600, Portland, OR 97232-4100. This address may be updated in writing by DEQ during the term of this permit.

## 11. 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.

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b. Should the DEQ determine that a pretreatment program is required, the permit must be reopened and modified in accordance with 40 CFR 403.8(e)(1) to incorporate a compliance schedule for development of a pretreatment program. The compliance schedule must be developed in accordance with the provisions of 40 CFR 403.12(k), and must not exceed twelve (12) months.

## 12. 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.

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## **SCHEDULE E: PRETREATMENT ACTIVITIES**

A pretreatment program is not part of this permit.



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## SCHEDULE F: NPDES GENERAL CONDITIONS

## NPDES GENERAL CONDITIONS – DOMESTIC FACILITIES October 1, 2015 Version

#### SECTION A. STANDARD CONDITIONS

## A1. Duty to Comply with Permit

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

#### A2. Penalties for Water Pollution and Permit Condition Violations

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

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

Under ORS 468.943, unlawful water pollution in the second degree, is a Class A misdemeanor and is punishable by a fine of up to \$25,000, imprisonment for not more than one year, or both. Each day on which a violation occurs or continues is a separately punishable offense.

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

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

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

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

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

In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both.

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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.

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## 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.

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## 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

#### 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

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- 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
- 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.

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## 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.

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#### 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 ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected must be capable of measuring flows with a maximum deviation of less than  $\pm$  10 percent from true discharge rates throughout the range of expected discharge volumes.

#### C3. Monitoring Procedures

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

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

#### C4. Penalties for Tampering

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

#### C5. Reporting of Monitoring Results

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

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#### 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.

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#### 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(1)(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;

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- (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 B7.
  - (4) DEQ may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

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#### 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.

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#### **SECTION E. DEFINITIONS**

- E1. BOD or BOD<sub>5</sub> means five-day biochemical oxygen demand.
- E2. CBOD or CBOD<sub>5</sub> means five-day carbonaceous biochemical oxygen demand.
- E3. TSS means total suspended solids.
- E4. *Bacteria* means but is not limited to fecal coliform bacteria, total coliform bacteria, *Escherichia coli* (*E. coli*) bacteria, and *Enterococcus* bacteria.
- E5. FC means fecal coliform bacteria.
- E6. Total residual chlorine means combined chlorine forms plus free residual chlorine
- E7. Technology based permit effluent limitations means technology-based treatment requirements as defined in 40 CFR § 125.3, and concentration and mass load effluent limitations that are based on minimum design criteria specified in OAR 340-041.
- E8. *mg/l* means milligrams per liter.
- E9.  $\mu g/l$  means microgram per liter.
- E10.kg means kilograms.
- $E11.m^3/d$  means cubic meters per day.
- E12. MGD means million gallons per day.
- E13. Average monthly effluent limitation as defined at 40 CFR § 122.2 means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
- E14. Average weekly effluent limitation as defined at 40 CFR § 122.2 means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.
- E15. Daily discharge as defined at 40 CFR § 122.2 means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge must be calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge must be calculated as the average measurement of the pollutant over the day.
- E16.24-hour composite sample means a sample formed by collecting and mixing discrete samples taken periodically and based on time or flow.
- E17. Grab sample means an individual discrete sample collected over a period of time not to exceed 15 minutes.
- E18. *Quarter* means January through March, April through June, July through September, or October through December.
- E19. Month means calendar month.
- E20. Week means a calendar week of Sunday through Saturday.
- E21. POTW means a publicly-owned treatment works.



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

D!#	C'. CM d P :			
Permittee	City of Myrtle Point			
	220 River Road			
	Myrtle Point, OR 97458			
<b>Existing Permit Information</b>	File Number: 59742			
	Permit Number: 101192			
	EPA Reference Number: OR0020435			
	Category: Domestic			
	Class: Minor			
	Expiration Date: June 30, 2015			
Permittee Contact	Scott Nay			
	City Manager			
	541-572-2626			
	424 Fifth Street			
	Myrtle Point, OR 97458			
Receiving Water Information	Water Body Name: South Fork Coquille River			
	River Mile: 0.8			
	Assessment Unit ID: OR_SR_1710030502_02_104970			
	Sub Basin Name: Coquille			
	Basin Name: Southern Oregon Coast			
Proposed Action	Permit Renewal			
	Application Number: 959345			
	Date Application Received: Dec. 23, 2014			
Permit Writer	Phillip Sprague			
	541.686.7998			
	Date Prepared: Apr. 22, 2024			

## NPDES Permit Renewal Fact Sheet City of Myrtle Point

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## NPDES Permit Renewal Fact Sheet City of Myrtle Point

## 1.Introduction

As Oregon Administrative Rule 340-045-0035 requires, this fact sheet describes the basis and methodology DEQ used to develop the permit. The permit is divided into the following sections:

- Schedule A Waste discharge limitations.
- Schedule B Minimum monitoring and report requirements.
- Schedule C Compliance conditions and schedules.
- Schedule D Special conditions.
- Schedule E Pretreatment conditions.
- Schedule F General conditions.

The following list summarizes the major changes to the permit:

- Schedule A:
  - Added seasonal CBOD5 limits, based on the Final Draft 2022 Coquille Sub-basin TMDL.
  - Removed chlorine limits (the facility uses UV for disinfection).
  - Added ammonia as nitrogen limits, based on the Final Draft 2022 Coquille Sub-basin TMDL waste load allocations.
  - Added Total Nitrogen limits, based on the Final Draft 2022 Coquille Sub-basin TMDL waste load allocations.
  - Added Total Phosphorous limits, based on the Final Draft 2022 Coquille Sub-basin TMDL waste load allocations.
  - Added numeric and flow-based Excess Thermal Load limits, based on the Final Draft 2022 Temperature TMDL.
  - Added a regulatory mixing zone condition.
  - Added a chlorine usage condition.
- Schedule B:
  - Removed chlorine sampling and reporting requirements.
  - Added hauled waste control plan requirements.
  - Added an industrial user survey requirement.
  - Added an outfall inspection report requirement.
  - Updated monitoring and reporting protocols.
  - Added UV monitoring and reporting requirements.
  - Added alkalinity, dissolved oxygen and total dissolved solids monitoring and reporting requirements.

- Added stream monitoring and reporting requirements.
- Schedule D:
  - Added a mixing zone study requirement.
  - Added an Emergency Response and Public Notification Plan.
  - Added an Exempt Wastewater Reuse at the Treatment System condition.
  - Added a hauled waste control plan condition.
  - Added an industrial user survey condition.
  - Added an outfall inspection condition.

## 2. Facility Description

## 2.1 Wastewater Facility

In 1954 the city constructed a wastewater treatment system for primary wastewater treatment. Since then, the city has constructed significant upgrades. A large upgrade project was completed on September 27, 2016, resulting in the current configuration of the treatment plant. The treatment plant is an extended aeration lagoon system with a design average dry-weather flow of 0.37 MGD primarily from domestic sources. Wastewater enters the plant through a trench style self-cleaning influent pump station with 5 submersible pumps. The headworks includes a fine mechanical screen and grit chamber. The headworks also includes a manual bypass to a bar screen for instances of high flow. Secondary treatment occurs in two extended aeration basins, each with a capacity of 490,000 gallons. The facility employs UV disinfection on the treated wastewater prior to routing it through a Parshall Flume and discharging to the Coquille River. Solids are removed from the aeration basins by air lift pumps and routed either back to the front of the aeration basin or to the on-site biosolids facility.

Figure 2-1 is an aerial view showing the facility and outfall locations. Figure 2-2 is a process flow diagram for the facility.



Figure 2-1: Aerial view showing location of facility and outfall.

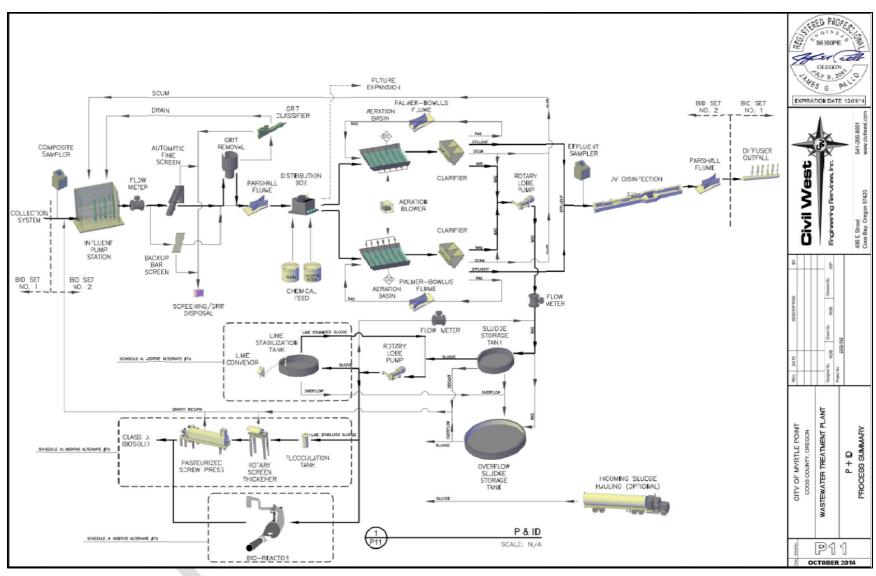


Figure 2-2: Process flow diagram for the facility

Table 2-1: List of Outfalls

Outfall Number	Type of Waste	Lat/Long	Design Flow <sup>1</sup> (mgd)	Existing Flow <sup>2</sup> (mgd)
001	Domestic	43.069389 / - 124.148009	0.38	0.717

- 1. Design Flow = average dry weather design flow.
- 2. Existing Flow = existing average monthly wet weather flow (period of record: Sep. 2019 Dec. 2021).

## 2.2 Compliance History

The city's sewage treatment plant has a long history of violating permit discharge limits and conditions. Most of these are due to excessive volumes of inflow and infiltration that occur during large storm events. The plant also has a long history of other permit violations such as total suspended solids exceedances, biochemical oxygen demand exceedances, bacteria exceedances, failure to monitor, and improper plant supervision. In 2004 DEQ and the city entered into a mutual agreement and order to help the plant address these multiple compliance issues. The following table summarizes the most recent enforcement actions DEQ has taken to address the issues with the city.

DATE	TYPE	DESCRIPTION
03/18/2004	MAO	MAO.
01/24/2014	MAO	Amendment #3.
03/26/2014	Penalty Demand	MAO violation.
01/08/2015	Penalty Demand	MAO violation.
02/19/2015	MAO	Amendment #2.
06/02/2015	WL	Warning Letter for BOD % removal violations.
10/17/2016	PEN	Preliminary Enforcement Notice for Failure to report SSO within 24 hours.
08/08/2017	WLOTC	Warning Letter with Opportunity to Correct for TSS & CBOD violations.
01/29/2018	PEN	Preliminary Enforcement Notice for limits violations, failure to report, improper supervision.
04/25/2018	Penalty	Limits violations, failure to monitor, lacking certified operator.

## 2.3 Stormwater

This permit does not address stormwater. General NPDES permits for stormwater are not required for facilities with a design flow of less than 1 MGD.

#### 2.4 Industrial Pretreatment

The permittee does not have a DEQ-approved industrial pretreatment program. Based on current information, this facility does not need an industrial pretreatment program. Schedule D of the proposed permit requires the permittee to perform an industrial user survey.

#### 2.5 Wastewater Classification

OAR 340-049 requires all permitted municipal wastewater collection and treatment facilities receive a classification based on system size and complexity. DEQ evaluated the classifications for the treatment and collection system, which are publicly available at the following website: 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. DEQ can base effluent limitations on either the technology available to control the pollutants, or limits that protect the water quality standards for the receiving water. DEQ refers to these two types of permit limits as technology-based effluent limitations (TBELs), and water quality-based effluent limits (WQBELs), respectively. When a TBEL is not restrictive enough to protect the receiving stream, DEQ must include a WQBEL in the permit.

## 3.1 Existing Effluent Limits

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

a. Treated Effluent Outfall 001

(1) November 1 - April 30:

Parameter	Average Effluent Concentrations		Monthly* Average	Weekly* Average	Daily* Maximum
	Monthly	Weekly	lb/day	lb/day	lbs
CBOD <sub>5</sub> (See note 1.)	25 mg/L	40 mg/L	146	219	292
TSS	30 mg/L	45 mg/L	175	263	350

<sup>\*</sup> Winter mass load limits based upon average wet weather design flow to the facility equaling 0.700 MGD. The daily mass load limit is suspended on any day in which the flow to the treatment facility exceeds 0.74 MGD (twice the design average dry weather flow).

#### (2) May 1 - October 31:

_	Average Effluent Concentrations		Monthly*	Weekly*	Daily* Maximum
Parameter	Monthly	Weekly	Average lb/day	Average lb/day	lbs
CBOD <sub>5</sub> (See note 1.)	10 mg/L	15 mg/L	31	47	62
TSS	10 mg/L	15 mg/L	31	47	62

<sup>\*</sup> Average dry weather design flow to the facility equals 0.37 MGD. The summer mass load limits for the facility are based on the Total Maximum Daily Load (TMDL) waste load allocation for design conditions to assure future growth and development of the facility. The TMDL uses a projected design flow for the facility of 0.37 MGD.

#### (3) Other Parameters

Year-round (except as noted)	Limitations
E. coli Bacteria	Shall not exceed 126 organisms per 100 mL monthly geometric mean. No single sample shall exceed 406 organisms per 100 mL. (See note 2.)
рН	Shall be within the range of 6.0 to 9.0 Standard Units.
CBOD <sub>5</sub> and TSS Removal Efficiency	Shall not be less than 85% monthly average for CBOD <sub>5</sub> and 85% monthly for TSS.
Total Residual Chlorine: May 1-October 31	Shall not exceed .06 mg/L daily maximum and an average monthly concentration of .02 mg/L. (See note 3.)
Total Residual Chlorine: Nov. 1-April 30	Shall not exceed .09 mg/L daily maximum and an average monthly concentration of .03mg/L. (See note 3).
Excess Thermal Load: May 1- October 31	12.5 Million kcals/day weekly average. (See note 4.)
Ammonia-N: June 1- October 31	Daily maximum effluent concentration shall not exceed 7 mg/l.

#### **NOTES:**

- 1. The CBOD<sub>5</sub> concentration limits are considered equivalent to the minimum design criteria for BOD<sub>5</sub> specified in Oregon Administrative Rules (OAR) 340-41. These limits and CBOD<sub>5</sub> mass limits may be adjusted (up or down) by permit action if more accurate information regarding CBOD<sub>5</sub>/BOD<sub>5</sub> becomes available.
- 2. If a single sample exceeds 406 organisms per 100 mL, then five consecutive re-samples may be taken at four-hour intervals beginning within 72 hours after the original sample was taken. If the log mean of the five re-samples is less than or equal to 126 organisms per 100 mL, a violation shall not be triggered.

- 3. When the total residual chlorine limitation is lower than 0.10 mg/L, the Department will use 0.10 mg/L as the compliance evaluation level (i.e. daily maximum concentrations below 0.10 mg/L will be considered in compliance with the limitation).
- 4. The thermal load limit was calculated using the average dry weather design flow and the estimated maximum weekly effluent temperature. This permit may be re-opened, and the maximum allowable thermal load modified, when more accurate effluent data becomes available. In addition, this permit may be re-opened and new temperature and/or thermal load limits assigned.

## 3.2 Technology-Based Effluent Limit Development

40 CFR 122.44(a)(1) requires publicly owned treatment works (POTW) to meet technology-based effluent limits, for five-day biochemical oxygen demand (BOD<sub>5</sub>), total suspended solids (TSS) and pH (i.e., federal secondary treatment standards). Federal and state rules allow substituting 5-day carbonaceous oxygen demand (CBOD<sub>5</sub>) for BOD<sub>5</sub>. 40 CFR 133.102 contains the numeric standards for these pollutants. In addition, DEQ has developed minimum design criteria for BOD<sub>5</sub> and TSS that apply to specific Oregon watershed basins. OAR 340-041-0101 to 0350 lists these criteria in the basin-specific sections. During the summer low flow months as OAR defines, 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. Table 3-1 below shows a comparison of the federal secondary treatment standards and the basin-specific design criteria for the South Coast Basin.

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

Parameter	Federal Second Stand		South Coast Basin- Specific Design Criteria (OAR 340-041-0305)
	30-Day Average	7-Day Average	Monthly Average
CBOD <sub>5</sub> (mg/L)	25	40	During defined periods of
TSS (mg/L)	30	45	low stream flow: 20 mg/L BOD <sub>5</sub> and TSS. During defined periods of high stream flow: Minimum of secondary treatment
pH (S.U.)	6.0 – 9.0. (ins	tantaneous)	6.5 – 8.5 (instantaneous) Note: basin standards for pH do not have to be met at the outfall and can instead be met at the edge of the mixing zone.
BOD <sub>5</sub> or CBOD <sub>5</sub> and TSS % Removal	85%	Not applicable	Not applicable

As noted above, federal and state rules allow substituting 5-day carbonaceous oxygen demand (CBOD<sub>5</sub>) for BOD<sub>5</sub>. The allowable amount under federal rules is provided in the table above. The amount of CBOD<sub>5</sub> allowed under state policy for design criteria is equal to 0.8 times the BOD<sub>5</sub> concentration (20 mg/L), which gives 16 mg/L as a monthly average for this facility during the period of low stream flow (when the state criteria apply). The 7-day average CBOD<sub>5</sub> limit under the policy is calculated by multiplying the BOD<sub>5</sub> concentration (20 mg/L) by 1.5 then multiplying the result by a conversion factor of 0.9. This results in a 7-day average CBOD<sub>5</sub> limit of 27 mg/L during the period of low stream flow.

The limits for CBOD<sub>5</sub> and TSS shown in Table 3-1 above are concentration-based limits. Mass-based limits are required in addition to the concentration-based limits per OAR 340-041-0061(9). For any new facility or any facility that has expanded its dry weather treatment capacity after June 30, 1992, OAR 340-041-0061(9)(b) requires that the mass load limits be calculated based on the proposed treatment facility capabilities and the highest and best practicable treatment to minimize the discharge of pollutants. The CBOD<sub>5</sub> and TSS monthly average concentrations used in these calculations are noted in the table below. DEQ uses the design flows 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

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

**Table 3-2: Design Flows and Concentrations Limits** 

Season	Design Flow (mgd)	Monthly TSS Concentration Limit (mg/L)	Monthly CBOD₅ Concentration Limit (mg/L)
Dry Weather	0.38	20	16
Wet Weather	0.70	30	27

Design flow comments: Dry Weather- Average dry weather design flow, Wet Weather - average wet weather design flow

Summer CBOD<sub>5</sub> Mass Load Calculations:

Monthly Average: 0.38 mgd x 16 mg/L x 8.34 = 51 lbs/day (Rounded to two significant figures)

Weekly Average: 51 lbs/day monthly average x 1.5 = 77 lbs/day (Two significant figures)

Daily Maximum: 51 lbs/day monthly x 2 = 100 lbs/day (Two significant figures)

<sup>\*</sup> Design flow is the design average dry weather flow or design average wet weather flow

Winter CBOD<sub>5</sub> Mass Load Calculations:

Monthly Average: 0.70 mgd x 25 mg/L x 8.34 = 150 lbs/day (Rounded to two significant figures)

Weekly Average: 150 lbs/day monthly average x 1.5 = 230 lbs/day (Two significant figures)

Daily Maximum: 150 lbs/day monthly x 2 = 300 lbs/day (Two significant figures)

The technology based CBOD<sub>5</sub> and TSS limits are listed in Table 3-3. In Section 3.4, DEQ compares these limits to the existing limits and the water quality-based limits derived in the following section to determine the final effluent limits in the proposed permit.

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

Parameter	Units	Average Monthly	Average Weekly	Daily Maximum
CBOD <sub>5</sub> (May 1 –	mg/L	16	27	NA
October 31)	lbs/day	51	77	100
	% removal	85	NA	NA
TSS	mg/L	20	30	NA
(May 1 – October 31)	lbs/day	63	95	130
Getober 31)	% removal	85	NA	NA
CBOD <sub>5</sub> (November 1	mg/L	25	40	NA
- April 1)	lbs/day	150	230	300
	% removal	85	NA	NA
TSS	mg/L	30	45	NA
(November 1 – April 1)	lbs/day	180	270	360
прін ту	% removal	85	NA	NA

The TBELs listed in the table above differ from the existing permit limits (see Section 3.1 above). The existing CBOD and TSS limits for the May – October period are more stringent than those in the table above. These differences and the limits in the proposed permit are detailed below. (Additional and/or more stringent water quality-based effluent limits are discussed in the following section.)

#### May - October (Summer) TSS Limits

The summer TSS concentration and TSS mass limits included in the proposed permit are based on the South Coast Basin-Specific Design Criteria (OAR 340-041-0305) of 20 mg/L monthly TSS concentration. The prior permit included a TSS monthly concentration limit of 10 mg/L, along with mass load limits based on this concentration. The permittee has requested that the proposed permit include TSS limits based on the design criteria and applicable design flow.

In order to allow an increase in the summer TSS limits, DEQ must determine if anti-backsliding requirements prohibit the less stringent limits. In accordance with 40 CFR 122.44(l)(2)(i)(B), backsliding is allowed if it is determined that "technical mistakes or mistaken interpretations of law were made in issuing the permit under section 402(a)(1)(b)." DEQ has determined that the inclusion of the 10 mg/L monthly TSS limit and associated load limits was the result of a mistaken interpretation of state rules and therefore meets the antibacksliding exception.

Additionally, to satisfy antidegradation requirements, an antidegradation analysis was performed which shows that the inclusion of the new summer TSS mass load limits represent a deminis lowering of water quality in the assessment unit. Therefore, DEQ considers the adoption of the corrected summer TSS limits to be consistent with antidegradation.

#### May - October (Summer) CBOD Limits

The summer CBOD limits included in the existing permit are water quality based effluent limits. The permittee has not requested an increase in these limits and no analyses related to anti-backsliding or antidegradation have been performed. Therefore, the existing summer CBOD limits are retained in the proposed permit except where they are superseded by the new WQBELs developed in the following section.

## 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 South Fork Coquille River. These uses are listed in OAR-340-041-0300 for the South 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
- Hydro power

#### 3.3.2 Water Quality-Limited Parameters and Total Maximum Daily Loads

The following table lists the parameters in the 2022 303(d) list for which the receiving stream is water quality-limited (Category 5) within the discharge's stream reach. The table also lists any parameters covered by a TMDL.

Table 3-4: WQ-Limited and TMDL Parameters

#### **Water Quality Limited Parameters**

**AU ID:** OR\_SR\_1710030502\_02\_104970. **AU Name:** South Fork Coquille River.

AU Description: Middle Fork Coquille River to confluence with Coquille River (Confluence at North

Fork Coquille River). **Year Last Assessed:** 2022. **AU Status: Impaired.** 

Impaired Uses: Fish and Aquatic Life.

Year Listed: 2004.

Category 5: Temperature- Year Round.

#### **TMDL Parameters**

Chlorophyll a, Dissolved Oxygen, E. coli, Fecal coliform, Temperature.

#### 3.3.3 TMDL Wasteload Allocations

In January and February 2022 DEQ completed the Final Draft TMDLs for the Coquille River Subbasin. The TMDLs addressed temperature, CBOD<sub>5</sub>, ammonia, nitrogen, and phosphorus, and included WLAs for each of these. These WLAs are listed and discussed below (section 3.3.10).

The Final Draft TMDLfor Dissolved Oxygen, pH, and Chlorophyll a for the Coquille River Subbasin targets a dissolved oxygen concentration of 8.0 milligrams per liter (mg/l) where active salmonid rearing and migration occur, and a dissolved oxygen concentration of 11.0 mg/l during active anadromous fish spawning or resident trout spawning.

In order to develop a TMDL to address DO listings in the Coquille River Subbasin, water quality models were developed for the Coquille River and Estuary (CE-QUAL-W2), the South Fork Coquille River (Heat Source and QUAL2Kw), and the Middle Fork Coquille River which is a major tributary to the South Fork (Heat Source). These models evaluate the impacts of thermal loads and other pollutant loads on temperature and dissolved oxygen (CE-QUAL-W2 and QUAL2Kw) in the rivers. In addition, multiple regression statistical models that correlate DO with explanatory variables including flow, temperature, nutrients, and organic matter were developed for the South Fork, North Fork, and Middle Fork. The primary purpose of the models is to develop TMDLs to address Integrated Report Category 5 listings for water temperature, dissolved oxygen, pH, total organic carbon, and chlorophyll a (nutrients). Waterbodies that

exceed protective water quality standards are identified as impaired, (which is also referred to as the "303(d) List").

Loading capacities for pollutants such as phosphorus are provided in terms of pollutant mass load per day (kg/day or lb/day). Pollutant loads in kg/day for given concentrations and flow rates may be calculated using the following equation:

*Pollutant Load=C*× Q×CF

Where: Pollutant Load=mass load,kgday/C=Concentration,mgL/Q=Flow rate,cfs (cubic ft per second) or cms (cubic meter per second) CF=Conversion factor, 2.45 if Q in cfs or 86.4 if Q in cms

The Final Draft TMDL for Temperature targets the applicable biologically-based numeric criterion, which are as follows:

- 18.0°C as a seven-day-average maximum temperature for a stream identified as having salmon and trout rearing and migration use;
- 16.0°C as a seven-day-average maximum temperature for a stream identified as having core cold water habitat use;
- 13.0°C as a seven-day-average maximum temperature where and when a stream is identified as having salmon and steelhead spawning use.

In order to establish a TMDL to address 303(d) listings for temperature, DEQ quantifies the amount of heat energy in the stream in excess of the applicable temperature criteria plus the human use allowance (excess thermal load or ETL) and identifies known anthropogenic sources of stream heating. The TMDL specifies a thermal loading capacity that is equal to the maximum thermal loading that a stream can receive without exceeding the biologically based numeric criteria, plus the allotted human use allowance (HUA). The TMDL distributes the loading capacity among sources of stream heating including background, unidentified sources of heat, known anthropogenic sources of heat, a margin of safety, and reserve capacity.

Thermal load allocations assigned to human activities (LA<sub>HUA</sub>) cannot exceed the loading capacity available for human activities (LC<sub>HUA</sub>). It includes thermal wasteload allocations for point sources (WLA), thermal load allocations for nonpoint sources (LA<sub>NPS</sub>), appropriate margins of safety (MOS), and reserve capacity for future discharges (RC), as follows:

$$LA_{HUA} = LA_{NPS} + WLA + MOS + RC$$

#### 3.3.4 Pollutants of Concern

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

- Effluent monitoring data.
- Knowledge about the permittee's processes.

- Knowledge about the receiving stream water quality.
- Pollutants identified by applicable federal effluent limitation guidelines.

Based on EPA's NPDES permit application requirements, Table 3-5 below lists toxic pollutants of concern for domestic facilities.

Table 3-5: Domestic Toxic Pollutants of Concern

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

Table 3-6 below lists the pollutants of concern for this facility that DEQ identified.

**Table 3-6: Pollutants of Concern** 

Pollutant	How was pollutant identified?
pH	Effluent Monitoring
Temperature	TMDL
E. coli	Effluent Monitoring
CBOD <sub>5</sub>	TMDL
Ammonia as N	TMDL
Total Nitrogen	TMDL
Total Phosphorous	TMDL

The sections below discuss the analyses that DEQ conducted for the pollutants of concern to determine if the permit needs water quality based effluent limits 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 as follows:

The allowable mixing zone is that portion of the South Fork Coquille River extending from a point 10 feet upstream of the outfall to a point 90 feet downstream from the outfall. The Zone of Immediate Dilution (ZID) shall be defined as that portion of the allowable mixing zone that is within 9 feet of the point of discharge.

The table below shows dilutions at the edge of the zone of initial dilution and mixing zone. DEQ bases these dilutions on a 2022 mixing zone analysis DEQ conducted. Environmental mapping demonstrated there are no critical habitat or water recreation uses within the mixing zone. DEQ proposes the permittee submits an updated mixing zone study during the next permit cycle that DEQ will use for the next permit renewal.

	Dil	ution S	Summary - Dry W	leather		
Water Quality	Stream (cfs		Effluent Flow (	mgd)	d) Dilution Loca	
Standard	Statistic	Flow	Statistic	Flow		
Aquatic Life,	1Q10	18	☐ ADWDF x PF	$\Box$ ADWDF x PF 0.89		ZID
Acute						
			☐ Other			
Aquatic Life,	7Q10	22	□ ADWDF	0.45	17	MZ
Chronic						
			Avg			
			☐ Other			
Human Health,	30Q5	33	□ ADWDF	0.45	26	MZ
Non-						
Carcinogen			Avg			
			☐ Other			
ADWDF = Aver PF = Peaking fa Comments: Click	ctor					
	D:I			loothor		
		ution S	Summary - Wet V	Veather		
Water Quality	Dil Stream (cfs	ution S Flow			Dilution	Location
Quality Standard	Stream	ution S Flow	Summary - Wet V Effluent Flow ( Statistic	mgd)	Dilution	Location
Quality Standard Aquatic Life,	Stream (cfs	ution S Flow s)	Summary - Wet V Effluent Flow (	mgd)	<b>Dilution</b>	<b>Location</b> ZID
Quality Standard	Stream (cfs	ution S Flow s) Flow	Summary - Wet V Effluent Flow ( Statistic	mgd)		
Quality Standard Aquatic Life,	Stream (cfs	ution S Flow s) Flow	Effluent Flow ( Statistic  AWWDF x PF	mgd)		
Quality Standard Aquatic Life,	Stream (cfs	ution S Flow s) Flow	Effluent Flow (  Statistic  AWWDF x PF  Max Daily Avg	mgd)		
Quality Standard Aquatic Life, Acute	Stream (cfs Statistic 1Q10	Flow 5) Flow 53	Effluent Flow (  Statistic  AWWDF x PF  Max Daily Avg  Other	mgd) Flow 1.58	9	ZID
Quality Standard Aquatic Life, Acute Aquatic Life,	Stream (cfs Statistic 1Q10	Flow 5) Flow 53	Effluent Flow (  Statistic  AWWDF x PF  Max Daily Avg  Other  AWWDF	mgd) Flow 1.58	9	ZID
Quality Standard Aquatic Life, Acute Aquatic Life,	Stream (cfs Statistic 1Q10	Flow 5) Flow 53	Effluent Flow (  Statistic  AWWDF x PF  Max Daily Avg  Other  AWWDF  Max Monthly	mgd) Flow 1.58	9	ZID
Quality Standard Aquatic Life, Acute Aquatic Life,	Stream (cfs Statistic 1Q10	Flow 5) Flow 53	Effluent Flow (  Statistic  AWWDF x PF  Max Daily Avg  Other  AWWDF  Max Monthly  Avg	mgd) Flow 1.58	9	ZID
Quality Standard  Aquatic Life, Acute  Aquatic Life, Chronic  Human Health, Non-	Stream (cfs Statistic 1Q10	Flow 53 66	Effluent Flow (  Statistic  AWWDF x PF  Max Daily Avg  Other  AWWDF  Max Monthly  Avg  Other	mgd) Flow 1.58  0.70	32	ZID
Quality Standard  Aquatic Life, Acute  Aquatic Life, Chronic  Human Health,	Stream (cfs Statistic 1Q10	Flow 53 66	Effluent Flow (  Statistic  AWWDF x PF  Max Daily Avg Other  AWWDF  Max Monthly Avg Other  Aww	mgd) Flow 1.58  0.70	32	ZID
Quality Standard  Aquatic Life, Acute  Aquatic Life, Chronic  Human Health, Non-	Stream (cfs Statistic 1Q10	Flow 53 66	Effluent Flow (  Statistic  AWWDF x PF  Max Daily Avg  Other  AWWDF  Max Monthly  Avg  Other  AWWDF  Max Monthly  Avg  Max Monthly	mgd) Flow 1.58  0.70	32	ZID
Quality Standard  Aquatic Life, Acute  Aquatic Life, Chronic  Human Health, Non-	Stream (cfs Statistic 1Q10 7Q10 30Q5	Flow 53 66	Effluent Flow (  Statistic  AWWDF x PF  Max Daily Avg Other  AWWDF  Max Monthly  Avg Other  AWWDF  Max Monthly  Avg Other  Other  Other  Other  Other	mgd) Flow 1.58  0.70	32	ZID
Quality Standard  Aquatic Life, Acute  Aquatic Life, Chronic  Human Health, Non- Carcinogen	Stream (cfs Statistic 1Q10 7Q10 30Q5	Flow 5) Flow 53 66 99	Effluent Flow (  Statistic  AWWDF x PF  Max Daily Avg Other  AWWDF  Max Monthly Avg Other  AWWDF  Max Monthly Avg Other  Other  AWWDF  Max Monthly Avg Other  Max Monthly Avg Other	mgd) Flow 1.58  0.70	32	ZID

#### 3.3.6 pH

The pH criterion for this basin is 6.5 - 8.5 per OAR 340-041-0305. DEQ determined there is no reasonable potential for the discharge to exceed the pH criterion at the edge of the mixing zone. As a result, the existing pH limit of 6.0 - 9.0 is being retained as a TBEL in the proposed permit. Table 3-7 below summarizes the data DEQ used for the analysis.

Table 3-7: pH Reasonable Potential Analysis

INPUT	Lower pH Criteria	Upper pH Criteria
1. Dilution at mixing zone boundary	17	17
2. Upstream characteristics		
a. Temperature (deg C)	8.4	23.9
b. pH	7.6	7.9
c. Alkalinity (mg CaCO3/L)	27.0	63.0
3. Effluent characteristics		
a. Temperature (° C)	13.3	26.3
b. pH (S.U.)	6.0	9.0
c. Alkalinity (mg CaCO3/L)	64.0	134.6
4. Applicable pH criteria	6.0	9.0
pH at mixing zone boundary	6.9	7.9
Is there reasonable potential?	No	No
Proposed effluent limits	6.0	9.0

Effluent data source: ICIS summary stats (Data Sept 2019-May 2020). Alkalinity defaults. Temp 10th %ile= min of weekly average, Temp 90th %ile= max of weekly average.

Ambient data source: Station 11486 2015-2020.

#### 3.3.7 Temperature

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

Table 3-8 below 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 the permit needs effluent limits to comply with the temperature criteria.

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

Applicable Temperature Criterion	Rearing/Migration 18°C (OAR 340-041-0028(4)(c)		
Applicable dates: Year-round			
Salmon/Steelhead Spawning 13°C? OAR 340-041-0028(4)(a)	□Yes ⊠No		
Applicable dates: N/A			
WQ-limited?	⊠Yes □No		
TMDL wasteload allocation assigned?	⊠Yes □No		
Applicable dates: May 1 – Oct. 31			
TMDL based on natural conditions criterion?	□Yes ⊠No		
Cold water summer protection criterion applies?	□Yes ⊠No		
Cold water spawning protection applies?	□Yes ⊠No		
Comments: The WLAs vary, based on stream flow. The TMDL specifies WLAs for each month during the critical period (May through October). Table 65, on page 151 of the temperature TMDL lists these specific WLAs.			

While the Coquille TMDL is not finalized, DEQ considers it as a temperature "cumulative effects analysis" that basically conducts a basin-wide reasonable potential analysis and assigns appropriate limits. Oregon's temperature standard (OAR 304-041-0028(12)(b)(B)) authorizes implementing applicable temperature criteria based on a cumulative effects analysis. The following table recreates Table 65 of the Final Draft 2022 Temperature TMDL:

Month	7Q10 at SF Coquille at Powers Gage	Flow Ratio	Thermal WLA Equation (kcal/day)	Thermal WLA when Q <sub>R,Powers</sub> ≤ 7Q10 (million kcal/day)
May	96.2	2.24	0.18 x 2.24 x Q <sub>R,Powers</sub> x C <sub>F</sub>	94.9
June	51.4	2.97	0.18 x 2.97 x Q <sub>R,Powers</sub> x C <sub>F</sub>	67.2
July	27.7	2.02	0.18 x 2.02 x Q <sub>R,Powers</sub> x C <sub>F</sub>	24.6
Aug.	18.5	1.88	0.18 x 1.88 x Q <sub>R,Powers</sub> x C <sub>F</sub>	15.3
Sept.	12.8	1.85	0.18 x 1.85 x Q <sub>R,Powers</sub> x C <sub>F</sub>	10.4
Oct.	12.8	1.82	0.18 x 1.82 x Q <sub>R,Powers</sub> x C <sub>F</sub>	10.3
Nov. – Apr. No thermal WLA is required				
Note: Q <sub>R,Powers</sub> is the South Coquille river flow measured at the Powers Gage in cfs				

DEQ gives the permittee two options for meeting the ETL limits. One is a numeric limit, shown in the last column in the table above. The other is a flow-based limit, using the equations shown in the table above. The TMDL specifies a conversion factor (C<sub>F</sub>) of 2,446,665. Note that this gives the limit in kcal/day. For the usual limit, in million kcal/day, DEQ rounds this number to 2.447 in the calculations. To simplify the flow-based equations in Table A1 of the permit, DEQ has reduced the equations as follows (using the May equation as an example):

May ETL Limit (million kcal/day) =  $0.18 \times 2.24 \times 2.447 \times Q_{R,Powers} = 0.99 \times Q_{R,Powers}$ 

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

Effluent limit needed? ⊠Yes □No			
<b>TMDL WLA Limit:</b> See discussion above for numeric and flow-based limit options.			
Applicable time period: May through October. □NA			
Temperature Criterion Limit: N/A			
Applicable time period: Dates. ⊠NA			
Comments: The TMDL (cumulative effects analysis) does not require a limit from November through April.			

#### 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. DEQ evaluated the discharge for compliance with these provisions as follows:

- OAR 340-041-0053(2)(d)(A): Impairment of an active salmonid spawning area where spawning redds are located or likely to be located. This adverse effect is prevented or minimized by limiting potential fish exposure to temperatures of 13°C or more for salmon and steelhead, and 9°C or more for bull trout.
  - OAR 340-041-0300, Figure 300B, shows that the receiving stream in the vicinity of the facility's outfall does not support salmonid spawning. Therefore, the facility's discharge complies with this rule requirement.
- OAR 340-041-0053(2)(d)(B): Acute impairment or instantaneous lethality is prevented or minimized by limiting potential fish exposure to temperatures of 32°C or more to less than 2 seconds.
  - DEQ reviewed the facility's monthly discharge data from 2018 through 2020. The review showed that the facility's discharge temperature never exceeded 28°C. Therefore, the facility's discharge complies with this rule requirement.

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

Due to a lack of ambient data, DEQ performed a thermal shock RPA, using a conservative approach. DEQ created a spreadsheet showing the days when effluent temperatures were at or above 25°C. The period of record was from September 2019 through October 2021. For those days when ambient temperature data was unavailable, DEQ applied the maximum recorded ambient temperature of 23.7°C as a conservative temperature assumption in the analysis. The RPA results showed the discharge does not have a reasonable potential to adversely affect the receiving stream. Appendix A summarizes the results.

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

DEQ performed an RPA, using ambient data from station 11486 (Jan. 2015 through Mar. 2020), and DMR data from Sept. 2019 through Dec. 2021. The RPA results showed no reasonable potential for the discharge to adversely affect the receiving stream. Appendix B summarizes the RPA results.

**Table 3-100: Thermal Plume Effluent Limits** 

Effluent limit needed? □Yes ⊠No			
Calculated limit: N/A			
Applicable timeframe: N/A			
Comments: No RP, so no thermal plume limits needed.			

#### 3.3.8 Bacteria

OAR 340-041-0009(6)(b) requires discharges of bacteria into freshwaters meet a monthly geometric mean of 126 *E. coli* per 100 mL, with no single sample exceeding 406 *E. coli* per 100 mL. If a single sample exceeds 406 *E. coli* per 100 mL, then the permittee may take five consecutive re-samples. If the log mean of the five re-samples is less than or equal to 126, a violation is not triggered. The permittee must perform re-sampling at four-hour intervals, beginning within 28 hours after the original sample was taken. Table 3-10 below includes the proposed permit limits and apply year-round.

Table 3-111: Proposed E. coli Limits

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

#### 3.3.9 Toxic Pollutants

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

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

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

#### 3.3.9.1 Total Ammonia Nitrogen

(Note: This section addresses ammonia toxicity. The following section addresses ammonia as it relates to impacts on dissolved oxygen.) DEQ's ammonia criteria for ammonia toxicity vary with changes in pH and temperature. DEQ performed a reasonable potential analysis that accounts for changes in the effluent and receiving water pH and temperature to determine the appropriate ammonia criteria. Tables 3-12 and 3-13 below summarize the data used for the ammonia analysis and the results of the analysis. While the RPA results show reasonable potential at the end-of-pipe, there is no reasonable potential at the ZID or edge of the mixing zone, so no ammonia limits are included in the proposed permit to address ammonia toxicity. However, ammonia limits are proposed to address the TMDL wasteload allocations related to the dissolved oxygen criteria (see the discussion in the following section).

Table 3-122: Ammonia Toxicity Analysis Information - Winter

	A	Chr	onic		
	Acute	4-day	30-day		
Dilution	9	32	49		
Ammonia Criteria	14.0	4.8	1.9		
Effluent Data Used	·				
Ammonia (mg/L)	1.74	1.	74		
pH (SU)	6.8	6	.8		
Temperature (°C)	19.5	19	19.5		
Alkalinity (mg/L CaCO3)	64	6	64		
Receiving Stream Data	Used				
Ammonia (mg/L)	0		)		
pH (SU)	7.9	7	7.9		
Temperature (°C)	10.6	10	).6		
Alkalinity (mg/L CaCO3)	40	4	0		
Ammonia Limit Needed?		No			
Calculated Limits	AML	M	DL		
Ammonia (mg/L)	N/A	N	/A		
Effluent data source					

Summary statistic data from ICIS (September 2019-May 2020). Temp 90th %ile= max of average. pH 90th %ile= 90th %ile of maximum. Alkalinity defaults used. Maximum of maximum ammonia used. Ammonia reported monthly in winter, was able to calculate CV

#### Ambient data source

Station 11486, 2015-2020.

Table 3-133: Ammonia Toxicity Analysis Information - Summer

	Acuto	Chronic			
	Acute	4-day	30-day		
Dilution	6	17	26		
Ammonia Criteria	4.3	1.6 0.7			
Effluent Data Used					
Ammonia (mg/L)	3	3			
pH (SU)	7.2	7.2	2		
Temperature (°C)	26.3	26.	.3		
Alkalinity (mg/L CaCO3)	64.0	64.	.0		
Receiving Stream Data Us	sed				
Ammonia (mg/L)	0	0			
pH (SU)	8.0	8.0			
Temperature (°C)	25.0	25.0			
Alkalinity (mg/L CaCO3)	69.4	69.4			
Ammonia Limit Needed?		No			
Calculated Limits	AML	ME	)L		
Ammonia (mg/L)	N/A	N/A			
Eff	luent data source				
Summary statistic data from ICIS (September 2019-May 2020). Temp 90th %ile= max of average. pH 90th %ile= 90th %ile of maximum. Alkalinity defaults used. Maximum of maximum ammonia used. Used 0.99 as default ammonia CV.					
Ambient data source					
Station 11486, 2015-2020.					

## 3.3.10 Non-Temperature TMDL Parameters (Ammonia, Nitrogen, Phosphorus and CBOD₅)

As noted in section 3.3.3 above, in February 2022 DEQ completed the Final Draft TMDL for the Coquille River Subbasin. The TMDL accounts for seasonal variation and critical conditions in stream flow, sensitive beneficial uses, pollutant loading and water quality parameters so that water quality standards will be attained and maintained during all seasons of the year. In addition to temperature (addressed above), the TMDL addressed CBOD<sub>5</sub>, ammonia, nitrogen, and phosphorus, and included WLAs for each of these. These WLAs are listed in the table below. While the TMDL is not yet finalized, since the analyses presented in the TMDL constitute reasonable potential analyses addressing these parameters and associated criteria, the proposed permit includes limits based on these WLAs. Each of the wasteload allocations are applicable as a monthly average and are included in the proposed permit as monthly averages. The information in Table 3-14 (below) is derived from Table 34 of the Final Draft TMDL for the Coquille River Subbasin.

**Table 3-144: Applicable WLAs (Non-Temperature)** 

Parameter	WLA (monthly average)	Time Period
CBOD <sub>5</sub>	42 lbs/day	May 1 – June 30
CBOD <sub>5</sub>	18 lbs/day	July 1 – Sept. 30
CBOD <sub>5</sub>	18 lbs/day (See note a.) 42 lbs/day (See note b.)	Oct. 1 – Oct. 31
Ammonia as N	8.3 lbs/day	May 1 – June 30
Ammonia as N	1.8 lbs/day	July 1 – Sept. 30
Ammonia as N	1.8 lbs/day (See note a.) 8.3 lbs/day (See note b.)	Oct. 1 – Oct. 31
Total Nitrogen	42 lbs/day	May 1 – June 30
Total Nitrogen	18 lbs/day	July 1 – Sept. 30
Total Nitrogen	18 lbs/day (See note a.) 42 lbs/day (See note b.)	Oct. 1 – Oct. 31
Total Phosphorous	17 lbs/day	May 1 – June 30
Total Phosphorous	1.5 lbs/day	July 1 – Sept. 30
Total Phosphorous	1.5 lbs/day (See note a.) 17 lbs/day (See note b.)	Oct. 1 – Oct. 31
NT /		

#### Notes:

- a. Discharge at Powers Gage < 100 cfs.
- b. Discharge at Powers gage  $\geq 100$  cfs.

## 3.4 Limits in Proposed Permit

The preceding three sections of this fact sheet present the existing permit's limits, the technology-based effluent limits (TBELs) and the water quality-based effluent limits (WQBELs). The more stringent of these three sets of limits are generally included in permits. The limits in the proposed permit and their rationale for inclusion are as follows:

- pH and bacteria: pH analysis shown in section 3.3.6 above indicated no reasonable potential for the discharge to exceed the pH criterion at the edge of the mixing zone. As such, the existing TBEL for pH is being retained. Bacteria limits are derived from OAR 340-041-0009(6)(b) and are the same as in the current permit.
- Chlorine: Since the chlorine disinfection system at the facility has been replaced by an ultraviolet (UV) system, the chlorine limit was removed from the proposed permit and replaced by a chlorine use prohibition (see below).
- Temperature (excess thermal load or ETL) limit: The existing permit contains an ETL limit of 12.5 million kcals/day, applicable from May 1 October 31. The ETL limits presented in Section 3.3.7, above, are at times less stringent than the existing limit, and more stringent at other times. Although antibacksliding provisions generally do not allow relaxation of effluent limits in renewal permits, section 303(d)(4)(A) of the Clean Water Act allows relaxation when the receiving water is not in attainment for the limiting or related pollutant. The effluent limit is based on a TMDL wasteload allocation, and it can

be shown that relaxation is consistent with antidegradation requirements. As noted above, the receiving water is water quality limited, and the new limits are based on a TMDL WLA. It also complies with the antidegradation requirement since TMDL wasteload allocation ensures the temperature increase is an insignificant increase according to the Antidegradation Rule, OAR 340-041-0004(3)(c). Therefore, the new excess thermal load limits based on the TMDL wasteload allocations are allowed and are included in the proposed permit.

- Ammonia: The existing maximum daily limit of 7 mg/L (applicable during the June through October period) was developed under the previous permit to address the old TMDL and the associated dissolved oxygen criteria. As noted above, new wasteload allocations (applicable during the May through October period) have been developed under the new draft TMDL. Limits based on these allocations supersede the existing limits and are included in the proposed permit. A comparison was made between the TMDL WLA mass limits and the 7 mg/L concentration limit at design flow and the TMDL WLAs were found to be more stringent than the existing concentration limit.
- CBOD<sub>5</sub>: For the May through October period, the CBOD<sub>5</sub> loads based on the WLAs (presented in Table 3-14) and calculated TBELs are less stringent than the existing permit limits. As such, the existing CBOD<sub>5</sub> limits are included in the proposed permit.
- Phosphorus and Nitrogen: There are no existing phosphorus or nitrogen permit limits, so the ammonia WLAs presented in Table 3-14 are included as effluent limits in the proposed permit.

The following table lists the proposed CBOD<sub>5</sub>, phosphorus, nitrogen, and ammonia limits, along with the source of each limit (existing, TBEL or WQBEL).

Table 3-155: Proposed CBOD5, Phosphorous, Nitrogen, and Ammonia Limits

Season	Parameter	Units	Avg. Monthly	Avg. Weekly	Daily Max.	Source of Limit
		mg/L	10	15	-	Existing
May 1 –	$CBOD_5$	% removal	85	-	-	TBEL
Oct. 31		mg/L	20	30	-	TBEL
	TSS	lb/day	63	95	130	TBEL
		% removal	85	-	-	TBEL
May 1 - Jun. 30	$CBOD_5$	lb/day	31	47	62	Existing
Ammonia as N	10/day	8.3	-	-	TMDL	
	Total Nitrogen		42	-	-	TMDL
	Total Phosphorus		17	-	-	TMDL

Season	Parameter		Units	Avg. Monthly	Avg. Weekly	Daily Max.	Source of Limit
Jul. 1 – Sep. 30	CBOD <sub>5</sub>		lb/day	18	-	-	TMDL
				-	47	62	TBEL
	Ammonia as N			1.8	-	-	TMDL
	Total Nitrogen			18	-	-	TMDL
	Total Phosphorus			1.5	-	-	TMDL
Oct. 1 – Oct. 31		CBOD <sub>5</sub>	lb/day	18	-	-	TMDL
	River flow at Powers < 100 cfs			-	47	62	TBEL
		Ammonia as N		1.8	)-(	ì	TMDL
		Total Nitrogen		18		-	TMDL
		Total Phosphorus		1.5		-	TMDL
	River flow at Powers ≥ 100 cfs	CBOD <sub>5</sub>		31	47	62	Existing
		Ammonia as N	lb/day	8.3	-	-	TMDL
		Total Nitrogen		42	-	ı	TMDL
		Total Phosphorus		17	-	-	TMDL
Nov. 1 –	$CBOD_{5}$		mg/L	25	40	-	TBEL
			lb/day	150	230	300	TBEL
			% removal	85	-	-	TBEL
Apr. 30	TSS		mg/L	30	45	1	TBEL
			lb/day	180	270	360	TBEL
			% removal	85	-	-	TBEL

## 3.5 Antibacksliding

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

The proposed permit includes ammonia limits that are expressed as loads, as opposed to the concentration limit in the existing permit. This change may be considered a relaxation of the effluent limit in certain circumstances. Although antibacksliding provisions generally do not allow relaxation of effluent limits in renewal permits, section 303(d)(4)(A) of the Clean Water Act allows relaxation when the receiving water is not in attainment for the limiting or related pollutant, the effluent limit is based on a TMDL wasteload allocation, and it can be shown that relaxation is consistent with antidegradation requirements. As noted above, the receiving water is water quality limited for dissolved oxygen and the new ammonia limits are based on a TMDL WLA associated with dissolved oxygen. Therefore, the new ammonia limits based on the TMDL wasteload allocations are allowed and are included in the proposed permit. As explained in the following section, this change is also consistent with antidegradation requirements.

As noted in Section 3.2, above, the summer TSS concentration and TSS mass limits included in the proposed permit are higher than those in the existing permit. In order to allow an increase in the summer TSS limits, DEQ must determine if anti-backsliding requirements prohibit the less stringent limits. In accordance with 40 CFR 122.44(l)(2)(i)(B), backsliding is allowed if it is determined that "technical mistakes or mistaken interpretations of law were made in issuing the permit under section 402(a)(1)(b)." DEQ has determined that the inclusion of the 10 mg/L monthly TSS limit and associated load limits was the result of a mistaken interpretation of state rules and therefore meets the antibacksliding exception.

## 3.6 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. With the exception of the summer TSS mass load limits, the proposed permit contains the same or more stringent discharge loadings as the existing permit. DEQ does not consider permit renewals with the same or more stringent discharge loadings as the previous permit to lower water quality from the existing condition. The permit does include a change in the ammonia limits in the proposed permit (from a concentration limit to mass load limits as noted in Section 3.4). This change complies with the antidegradation requirement since the TMDL wasteload allocations ensure that any dissolved oxygen decrease is an insignificant decrease according to the Antidegradation Rule, OAR 340-041-0004(3)(d). The TMDL accounts for seasonal variation and critical conditions in stream flow, sensitive beneficial uses, pollutant loading and water quality parameters so that water quality standards will be attained and maintained during all seasons of the year.

For the summer TSS mass load increase and the potential to reduce water quality by a measurable amount, DEQ compares the impact of the discharge on water quality against a *de minimis* threshold. An analysis determined that the increase represents a de minimis, or non-measurable, impact on water quality. Since it was found that there will be no measurable reduction in water quality due to the proposed mass load increase, no further anti-degradation analysis is required.

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.

#### 3.7 Groundwater

The treatment facility does not have any basins, ponds or lagoons that have the potential to leach into the groundwater. The treatment facility is not located in a groundwater management area. The renewal permit does not need any groundwater monitoring or limits.

## 4. Schedule A: Other Limitations

## 4.1 Mixing Zone

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

## 4.2 Biosolids

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

## 4.3 Chlorine Usage

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

## 4.4 Peracetic Acid Usage

Schedule A of the permit prohibits the permittee from using peracetic acid 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, the permittee must monitor other parameters to better characterize the effluent quality and the receiving stream. DEQ will use this data during the next permit renewal. Detailed monitoring frequency and reporting requirements are in Schedule B of the proposed permit. DEQ bases the required monitoring, reporting and frequency for many of the parameters on DEQ's monitoring and reporting matrix guidelines, permit writer judgment, and to ensure the needed data is available for the next permit renewal. Parameters in the proposed permit for which the monitoring frequency would increase are the result of updates to the Oregon DEQ monitoring and reporting matrix since the permit was last renewed in 2010.

## **6.Schedule C: Compliance Schedule**

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

The proposed phosphorous limits are new WQBELs that have not been included in previous NPDES renewals. It has been determined that the permittee will not be able to meet these limits upon the permit effective date and that additional treatment will be required. DEQ has determined that the proposed compliance schedule requires the permittee to meet the final limits as soon as possible. The proposed compliance schedule requires that chemical treatment be initiated, and testing completed by December 31, 2025, in order to achieve reductions in phosphorous loading as quickly as possible. If testing shows that chemical treatment alone is sufficient to comply with the final total phosphorous limits, the compliance schedule will terminate and final effluent limits for phosphorous become effective. Should chemical treatment not result in reductions adequate to comply with the limit, the compliance schedule requires that additional improvement project(s) be completed by September 1, 2030, at which point the final effluent limit for total phosphorous becomes effective.

## 7. Schedule D: Special Conditions

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

## 7.1 Inflow and Infiltration

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

## 7.2 Mixing Zone Study

A requirement to submit an updated mixing zone study.

## 7.3 Emergency Response and Public Notification Plan

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

## 7.4 Exempt Wastewater Reuse at the Treatment System

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

## 7.5 Wastewater Solids Annual Report

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

## 7.6 Biosolids Management Plan

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

#### 7.7 Wastewater Solids Transfers

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

### 7.8 Hauled Waste Control Plan

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

## 7.9 Hauled Waste Annual Report

A condition requiring the permittee to submit an annual hauled waste report summarizing hauled waste accepted at the facility during the previous year.

## 7.10 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.

## 7.11 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.

## 7.12 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.

## 9. Next Steps

DEQ will make the proposed NPDES permit available for public comment for a minimum of 35 days as OAR 340-045-0027 requires. DEQ will post public notice and links to the proposed permit on DEQ's website and sent to subscribers of DEQ's pertinent public notice e-mail lists. DEQ will schedule a public hearing scheduled if 10 or more people request one, or if an authorized person representing an organization of at least 10 people requests one. DEQ will provide a minimum of 30 days' notice for a hearing if one is scheduled.

DEQ will respond to comments received during the comment period. All those providing comment will receive a copy of DEQ's response. Interested parties may also request a copy of DEQ's response. After DEQ receives and evaluates comments, DEQ will decide whether to issue the permit as proposed, make changes to the permit, or deny the permit. DEQ will notify the permittee of DEQ's decision. If DEQ makes substantive changes to the permit, then an additional public notice period may occur. DEQ may also revise this fact sheet or update the fact sheet through memorandum.

## **Appendix A: Reasonable Potential Analysis for Thermal Plume**

OAR 340-041-0053(2)(d)(C): Thermal Shock 25 deg C at 5% of the stream cross section

Date	Eff Temp	Eff Flow	Amb Temp	7Q10 Flow	Dilution	Temp @ 5%			
	(deg. C)	(mgd)	(deg. C)	(cfs)	at 5%	X-Section			
						(deg. C)			
				22			Notes:		
10/27/2021	18.8	0.216	12.5		4.3	14.0	For days where ambient data is missing, the		
9/1/2021	22.5	0.068	20.5		11.5	20.7	maximum measured ambient temperature (23.7)		
8/2/2021	25.1	0.275	23.7		3.6	24.1	was used. These values, along with the resulting		
8/10/2021	25.6	0.115	23.7		7.2	24.0	temperature at 5% of the river's cross-section,		
7/27/2021	25.1	0.146	23.7		5.9	23.9	are noted in red font.		
7/28/2021	25.2	0.147	23.7		5.8	24.0	Using the ambient 7Q10 flow (22 cfs) and, for		
7/29/2021	25.1	0.098	23.7		8.3	23.9	days where ambient temperature is missing, the		
7/30/2021	25.2	0.178	23.7		5.0	24.0	highest measured temperature, results in a		
6/28/2021	25.4	0.167	23.7		5.3	24.0	conservative analysis.		
6/29/2021	25.2	0.121	23.7		6.9	23.9			
6/30/2021	24.5	0.150	23.7		5.7	23.8			
9/5/2020	25.3	0.060	23.7		12.9	23.8			
9/1/2019	24.6	0.087	18.1		9.2	18.8			
9/2/2019	25.0	0.130	23.7		6.5	23.9			
9/3/2019	25.2	0.153	23.7		5.6	24.0			
9/6/2019	25.3	0.116	23.7		7.1	23.9			
9/7/2019	25.5	0.088	23.7		9.1	23.9			
9/10/2019	27.2	0.162	23.7		5.4	24.3			
9/11/2019	26.9	0.158	23.7		5.5	24.3			
9/12/2019	27.5	0.150	23.7		5.7	24.4			
9/13/2019	27.8	0.099	23.7		8.2	24.2			
9/14/2019	28.1	0.089	23.7		9.0	24.2			
9/15/2019	26.1	0.372	23.7		2.9	24.5			
9/16/2019	25.8	0.244	23.7		3.9	24.2			
9/17/2019	26.1	0.199	23.7		4.6	24.2			

## **Appendix B: Reasonable Potential Analysis for Thermal Plume**

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 Met	ric/Source				
7Q	10 =	22	cfs	MZ Memo					
	_								
Ambient Temperatu	ire = `	21	°C	Sta. 11486 (Jan. 2015 -					
	_			Mar. 2020)					
Effluent Flo	ow =	0.57	mgd	ADWDF x 1.5					
Max 7dAM Effluent Temperatu	ire = `	22	°C	DMRs (Nov. 2019 - Dec.					
				2021)					
25% of 7Q	10 =	5.5	cfs						
25% diluti	on =	7	dilution = (0	Qr*0.25)/Qe + 1					
Temperature at 25% cross secti	ion =	21.1	°C						
∆T at 25% Stream F	low=	0.1	°С	No Reasonable Potential					