



State of Oregon
Department of
Environmental
Quality

National Pollutant Discharge Elimination System Permit Fact Sheet Westport Sewer Service District

Final: August 2, 2024

Permittee	Westport Sewer Service District Westport Sewer Service District STP 91291 Westport Boat Ramp Road Westport, OR 97016
Existing Permit Information	File Number: 94225 Permit Number: 101520 EPA Reference Number: OR0031496 Category: Domestic Class: Minor Expiration Date: 8/31/2024
Permittee Contact	Colin Phillips Plant Operator 503-319-8208 1100 Olney Avenue Astoria, OR 97103
Receiving Water Information	Receiving stream/NHD name: NHD Reach Code & % along reach: 17080003000763 & 30.04% USGS 12-digit HUC: 170800030801 OWRD Administrative Basin: North Coast ODEQ LLID & River Mile: 1233829461486 & RM 1.1 Assessment Unit ID: OR_SR_1708000308_05_103693
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NPDES Permit Fact Sheet

Westport Sewer Service District

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NPDES Permit Renewal Fact Sheet

Westport Sewer Service District

1. Introduction

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

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

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

- The influent BOD₅ and TSS concentrations will no longer be assumed as 200 mg/L for calculation of the percent removal efficiency. Instead, the percent removal efficiency for TSS will be reduced to 60%.
- Effluent monitoring requirements for temperature in Schedule B will decrease from daily to 3/week.
- Effluent monitoring requirements for alkalinity in Schedule B will increase to quarterly on an annual basis.
- Excess Thermal load, UV Intensity, and UV Transmittance will be included in the effluent monitoring requirements.
- Receiving stream monitoring requirements in Westport Slough for pH, temperature, and Alkalinity will be added to Schedule B of the permit.

2. Facility Description

2.1 Wastewater Facility

The Westport sewer service district (WSSD) operates a wastewater treatment plant at 91291 Westport Boat Ramp Road and serves a population of approximately 330. Outfall 001 discharges into the Westport Slough, which is a tributary of the Columbia River.

The Westport wastewater treatment facility was originally placed into operation in 1985. In early 2007, the facility completed a plant upgrade on most of the treatment plant components but did not incorporate changes to the collection system. The treatment plant upgrade involved installing an Orenco Systems® Advantex® system. This treatment facility can be described as having three components. Primary treatment occurs in several septic tanks within the community. The

effluent is either pumped from these tanks or flows by gravity through a collection system to the treatment plant.

The treatment plant has an initial screening vault to capture any materials that may escape from the septic tanks. From there it enters the recirculating textile filter system. A recirculation tank holds the plant influent (septic tank effluent). A dosing pump vault sends the wastewater to spray over the textile filters. This plant has 24 separate pods containing the textile filter media. This filter material grows a biological film breaking down the waste materials carried to the plant in the wastewater. This media also acts as a physical filter capturing particulates in the waste stream. The filtrate from the pods enters a flow splitting manhole where a portion is sent to the discharge pump station and the remaining water is returned back to the recirculation tank. The plant is designed so that 80% of the flow leaving the textile filter pods is recirculated. The other 20% of the flow is chemically treated with sodium bicarbonate and then enters the effluent pump station manhole which pumps the final effluent through UV disinfection and out to the Westport Slough outfall about 1000 feet from the pump station.

The design peak flow for the facility is 0.054 MGD. Treated wastewater is discharged to the Westport Slough at about river mile 1.1. The only outfall (Outfall 001) is at approximately latitude 46.136, longitude -123.373. It is about 30 feet downstream from the Westport Boat Ramp.

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

Figure 2-1: Westport WWTP Location and Outfall



On September 21, 2023, DEQ issued a Notice of Civil Penalty Assessment and Order (CASE NO. WQ/M-NWR-2023-018) and Mutual Agreement and Orders (MAO) regarding the multiple permit limit exceedances mentioned above.

2.3 Stormwater

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

2.4 Wastewater Classification

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

3. Schedule A: Effluent Limit Development

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

3.1 Existing Effluent Limits

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

Table 3-1: Existing Effluent Limits

Parameter	Units	Average Monthly	Average Weekly	Daily Maximum
BOD ₅ (April 1 to October 31)	mg/L	20	30	
	lb/day	9	14	18
	% removal (See note a.)	85	-	-
TSS (April 1 to October 31)	mg/L	20	30	
	lb/day	9	14	18
	% removal (See note a.)	85	-	-

Parameter	Units	Average Monthly	Average Weekly	Daily Maximum
BOD ₅ (November 1 to March 30)	mg/L	30	45	
	lb/day	14	21	28
	% removal (See note a.)	85	-	-
TSS (November 1 – March 30)	mg/L	30	45	
	lb/day	14	21	28
	% removal (See note a.)	85	-	-
pH	SU	Instantaneous limit between a daily minimum of 6.0 and a daily maximum of 9.0		
<i>E. coli</i>	#/100 mL	Must not exceed a monthly geometric mean of 126, no single sample may exceed 406		
Note:				
a. Due to preliminary treatment that occurs within the septic tanks, the influent BOD ₅ and TSS concentrations are assumed to be 200 mg/L for calculation of the percent removal efficiency.				

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 (BOD₅), total suspended solids (TSS) and pH (i.e., federal secondary treatment standards). Substitution of 5-day carbonaceous oxygen demand (CBOD₅) for BOD₅ is allowed. The numeric standards for these pollutants are contained in 40 CFR 133.102. In addition, DEQ has developed minimum design criteria for BOD₅ and TSS that apply to specific watershed basins in Oregon. These are listed in the basin-specific criteria sections under OAR 340-041-0101 to 0350. During the summer low flow months as defined by OAR, these design criteria are more stringent than the federal secondary treatment standards. The basin-specific criteria are not effluent limits but are implemented as design criteria for new or expanded wastewater treatment plants. The table below shows a comparison of the federal secondary treatment standards and the basin-specific design criteria for the North Coast basin.

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

Parameter	Federal Secondary Treatment Standards		North Coast Basin-Specific Design Criteria (OAR 340-041-0235)
	30-Day Average	7-Day Average	Monthly Average
BOD ₅ (mg/L)	30	45	20 mg/L during April 1 – October 31
TSS (mg/L)	30	45	20 mg/L during April 1 – October 31

Parameter	Federal Secondary Treatment Standards		North Coast Basin-Specific Design Criteria (OAR 340-041-0235)
	30-Day Average	7-Day Average	Monthly Average
pH (S.U.)	6.0 – 9.0. (instantaneous)		Not applicable
BOD ₅ and TSS % Removal	85%	Not applicable	Not applicable

Adjustments to Percent Removal Requirements

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

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

DEQ has determined the facility meets all three conditions above since there is primary treatment via the septic tank prior to the flow entering the wastewater treatment facility. Therefore, DEQ is proposing TSS percent removal limits of 60%. The removal limit was calculated based on average monthly influent and effluent data from 2019 - 2023. The percent removal for each month was calculated from the reported monthly average influent and effluent. This shows the actual performance of the facility over the last five years. The lowest percent removal during that time period was 61%. The lowest percent removal for BOD₅ was 86% as such, the 85% percent removal limit will remain. The following calculation was used to determine the TSS percent removal limit of 60%:

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

The new percent removal limit is replacing the previous permit removal limit to be consistent with federal regulation (40 CFR 133.103(d)), which specifically applies to an adjustment of the % removal efficiency, but not the influent concentration. The primary treatment from the septic tank results in a dilute influent entering the wastewater treatment facility. The new percent removal limits are effectively equivalent to the existing limits and are not considered a relaxation of limits. Therefore, an anti-backsliding analysis (CWA 402(o)) is not required.

The limits for BOD₅ and TSS shown in the table above are concentration-based limits. Mass-based limits are required in addition to the concentration-based limits per OAR 340-041-0061(9). For any new facility or any facility that has expanded its dry weather treatment capacity after June 30, 1992, OAR 340-041-0061(9)(b) requires that the mass load limits be calculated based on the proposed treatment facility capabilities and the highest and best practicable treatment to minimize the discharge of pollutants. The permittee's facility has been engineered to achieve BOD₅ and TSS monthly average concentrations of 20 mg/L during the dry weather season and 30 mg/L during the wet weather season. DEQ uses the maximum monthly design flow to calculate the mass load limits as shown below for the dry and wet weather seasons.

$$\text{Monthly Avg Mass Load} = \text{Design Flow}^* \times \text{Monthly Concentration Limit} \times \text{Unit Conversion factor}$$

$$\text{Weekly Average Mass Load} = 1.5 \times \text{Monthly Average Mass Load Limit}$$

$$\text{Daily Maximum Mass Load} = 2 \times \text{Monthly Average Mass Load Limit}$$

* Design flow is the design maximum monthly dry weather flow (DMMDWF)

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

Table 3-3: Design Flows and Concentrations Limits

Season	Design Flow (mgd)	Monthly TSS Concentration Limit (mg/L)	Monthly BOD ₅ Concentration Limit (mg/L)
Dry Weather	0.054	20	20
Wet Weather	0.054	30	30
Design flow comments: Design flow based on daily average dry weather design flow.			

Dry Weather Mass Load Calculations:

$$\text{Monthly Average: } 0.054[\text{design flow}] \text{ mgd} \times 20 [\text{concentration}] \text{ mg/L} \times 8.34 = 9.0 \text{ lbs/day}$$

$$\text{Weekly Average: } 9 \text{ lbs/day monthly average} \times 1.5 = 14 \text{ lbs/day}$$

$$\text{Daily Maximum: } 9 \text{ lbs/day monthly average} \times 2 = 18 \text{ lbs/day}$$

Wet Weather Mass Load Calculations:

$$\text{Monthly Average: } 0.054[\text{design flow}] \text{ mgd} \times 30 [\text{concentration}] \text{ mg/L} \times 8.34 = 13.5 \text{ lbs/day (Two significant figures)} = 14$$

$$\text{Weekly Average: } 14 \text{ lbs/day monthly average} \times 1.5 = 21 \text{ lbs/day}$$

$$\text{Daily Maximum: } 14 \text{ lbs/day monthly average} \times 2 = 28 \text{ lbs/day}$$

The proposed BOD₅ and TSS limits are listed in the following table.

Table 3-4: BOD₅ and TSS Technology Based Effluent Limits

Parameter	Units	Average Monthly	Average Weekly	Daily Maximum
BOD ₅ (April 1- October 31)	mg/L	20	30	
	lbs/day	9	14	18
	% removal	85		
TSS (April 1- October 31)	mg/L	20	30	
	lbs/day	9	14	18
	% removal	60		
BOD ₅ (November 1 – March 31)	mg/L	30	45	
	lbs/day	14	21	28
	% removal	85		
TSS (November 1 – March 31)	mg/L	30	45	
	lbs/day	14	21	28
	% removal	60		

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 Westport Slough. These uses are listed in OAR-340-041-0230 for North Coast basin.

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

- Water contact recreation
- Aesthetic quality

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

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

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

Water Quality Limited Parameters (Category 5)	
AU ID:	OR_SR_1708000308_05_103693
AU Name:	Westport Slough
AU Status:	Insufficient data
Year Listed	N/A
Year Last Assessed	2018
Category 5 Parameters	N/A
Category 4A Parameters	
N/A	

3.3.3 TMDL Wasteload Allocations

DEQ issued a TMDL for the North Coast basin. There was insufficient data to determine whether the Westport Slough would require a WLA and is not featured in the basin’s TMDL.

3.3.4 Pollutants of Concern

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

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

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

Table 3-6: Pollutants of Concern

Pollutant	How was pollutant identified?
pH	Effluent Monitoring
Temperature	Effluent Monitoring
<i>E. coli</i>	Effluent Monitoring

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

3.3.5 Regulatory Mixing Zone

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

The regulatory mixing zone is that portion of the Westport Slough within 25 feet of the outfall. The zone of initial dilution is that portion of Westport Slough within 3 feet of the outfall.

This mixing zone description will be retained in the renewed permit and is shown in the figure below.

Figure 3-1: Outfall Location with ZID and Mixing Zone Identified



WSSD discharges to Westport Slough at 46.136959, -123.373134 via a 3-inch diameter pipe that extends about 20 feet into the slough at low water conditions. DEQ performed a mixing zone analysis based on information from a 2003 and a 2011 mixing zone study. This information was used to estimate the hydraulic geometry data of Westport Slough. CORMIX v12.0 was used to simulate the discharge into the slough. Effluent flows were based on the past 3 years of effluent flow data.

The dilution factors at the edge of the Regulatory Mixing Zone and Zone of Initial Dilution are shown in Table 3-7. These dilutions are based on a 2024 mixing zone analysis conducted by DEQ. The mixing zone memo documenting this analysis is in a March 2024 Mixing Zone Memo which is part of the administrative record.

Table 3-7: Mixing Zone Dilutions

Dilution Summary – Year round						
Water Quality Standard	Velocity (ft/s)		Effluent Flow (mgd)		Dilution Factor	Location
	Statistic	Velocity	Statistic	Flow		
Aquatic Life, Acute	10 th %	0.05	<input type="checkbox"/> ADWDF x PF <input checked="" type="checkbox"/> Max Daily Avg <input type="checkbox"/> Other	0.03	5.5	ZID
Aquatic Life, Chronic	50 th %	0.2	<input type="checkbox"/> ADWDF <input checked="" type="checkbox"/> Max Monthly Avg <input type="checkbox"/> Other	0.02	59	RMZ
Human Health, Non-Carcinogen	50 th %	0.2	<input type="checkbox"/> ADWDF <input checked="" type="checkbox"/> Max Monthly Avg <input type="checkbox"/> Other	0.02	59	RMZ
<i>ADWDF = Average dry weather design flow</i> <i>PF = Peaking factor (1.5)</i>						
Comments: Westport slough is tidally influenced. Velocity values are conservatively estimated based on best professional judgment.						

3.3.6 pH

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

Table 3-8: pH Reasonable Potential Analysis

INPUT	Lower pH Criteria	Upper pH Criteria
1. Dilution at mixing zone boundary	59.0	59.0
2. Upstream characteristics		
a. Temperature (deg C)	20.2	7.5
b. pH	7.2	7.8
c. Alkalinity (mg CaCO3/L)	12.6	12.6
3. Effluent characteristics		
a. Temperature (°C)	24.7	10.2
b. pH (S.U.)	6.0	9.0
c. Alkalinity (mg CaCO3/L)	134.6	134.6
4. Applicable pH criteria	6.5	8.5
pH at mixing zone boundary	6.7	7.8
Is there reasonable potential?	No	No
Proposed effluent limits	6.0	9.0
Effluent data source: ICIS Summary Data 2019-2023		
Ambient data source: September 2022- December 2023 Westport Slough Ambient DMRs. Data collected by permittee.		

3.3.7 Temperature

3.3.7.1 Temperature Criteria OAR 340-041-0028

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

Table 3-9: 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)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Applicable dates: N/A	
WQ-limited?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
TMDL wasteload allocation assigned?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Applicable dates: N/A	
TMDL based on natural conditions criterion?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Cold water summer protection criterion applies?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Cold water spawning protection applies?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Comments:	

DEQ conducted a temperature reasonable potential analysis for the rearing and migration criteria which applies year – round. The applicable temperature criterion is 18 °C. Since there was insufficient data to determine whether the Westport Slough is impaired for temperature, this analysis is based on the portion of Oregon’s temperature rule for analysis situations where the criterion is met or undetermined in this circumstance. The applicable criteria in the analysis is 18 °C for rearing and migration. The effluent temperature value used in this analysis is 26.3 °C and represents the maximum 7-day average of the daily maximum effluent temperatures for rearing and migration. The result of this analysis indicates that there is no potential for the facility’s discharge to exceed the temperature standard (see Appendix A).

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

Final effluent limits are listed in the following table.

Table 3-10: Temperature Criterion Effluent Limits

Effluent limit needed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
TMDL WLA Limit: N/A
Applicable time period: Dates <input checked="" type="checkbox"/> NA
Temperature Criterion Limit: N/A
Applicable time period: Dates <input checked="" type="checkbox"/> NA
Comments:

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

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

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

Westport STP: Spawning is not a designated beneficial use in the segment of the river; therefore, this is not applicable.

- 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.

Westport STP: The daily maximum-recorded temperature of the discharge to the Westport Slough for the 2019 to Dec. 2023 period was 26.3 °C, well below the 32 °C criterion. Therefore, the discharge does not have the potential to cause acute impairment or instantaneous lethality due to the thermal plume.

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

Westport STP: The maximum daily recorded temperature of the discharge for the 2019 to 2023 period was 26.3 °C, slightly above the 25 °C criterion. With the effluent temperature at this value, the calculated temperature at 5% of the cross section is 20.9 °C and as such, the effluent discharge does not have the potential to result in thermal shock within the Westport Slough. See Appendix B.

- 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.

Westport STP: The maximum 7-day average recorded temperature of the discharge for the 2019 to 2023 period was 23.6 °C, slightly above the 21 °C criterion. With the effluent temperature at this value, the calculated temperature at 25% of the cross section is 20.8 °C and as such, the effluent discharge does not have the potential to result in migration blockage within the Westport Slough. See Appendix B.

Table 3-11: Thermal Plume Effluent Limit

Effluent limit needed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Calculated limit: N/A
Applicable timeframe: N/A
Comments:

3.3.8 Bacteria

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

Table 3-12: Proposed *E. coli* Limits

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

3.4 Antibacksliding

The proposed permit complies with the antibacksliding provisions of CWA sections 402(o) and 303(d)(4) and 40 CFR 122.44(l). Compliance with the antibacksliding provisions related to the BOD₅ and TSS percent reduction limits are discussed below. The other proposed limits are the same or more stringent than those in the existing permit, so the antibacksliding provisions are satisfied for those limits.

The percent removal efficiency limit for TSS have been reduced from 85% to 60% and the previous permit’s provision that influent concentrations are assumed as 200 mg/L has been removed. These changes were made to ensure the proposed permit is consistent with Federal regulations (40 CFR 133.103(d)). As noted in Section 3.2, above, these new effluent limits are considered to be effectively equivalent to the existing limits and are therefore not considered a relaxation of limits that would be subject to an anti-backsliding analysis.

3.5 Antidegradation

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

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

3.6 Whole Effluent Toxicity

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

3.7 Groundwater

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

4. Schedule A: Other Limitations

4.1 Mixing Zone

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

4.2 Chlorine Usage

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

5. Schedule B: Monitoring and Reporting Requirements

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

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

6. Schedule C: Compliance Schedule

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

7. Schedule D: Special Conditions

The proposed permit contains the following special conditions:

7.1 Inflow and Infiltration

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

7.2 Mixing Zone Study

A requirement to submit an updated mixing zone study.

7.3 Emergency Response and Public Notification Plan

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

7.4 Wastewater Solids Annual Report

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

7.5 Wastewater Solids Transfers

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

7.6 Operator Certification

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

7.7 Industrial User Survey

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

7.8 Outfall Inspection

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

8. Schedule F: NPDES General Conditions

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

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

Appendix A: Temperature RPA

Enter data into white cells below:		Data Metric/Source
Mixing Zone Dilution =	59	Mixing Zone Memo
Ambient Temperature =	18 °C	DMRs from 2022-2023
Effluent Temperature =	26.3 °C	ICIS Data summary 2019-2023
Applicable Temperature Criterion =	18 °C	
Effluent Flow =	0.081 mgd	MMDWF in Factsheet
ΔT at MZ edge=	0.1 °C	No Reasonable Potential
Temperature at MZ edge=	18.1 °C	
Thermal Load Limit =	N/A	Million Kcals (7-day Rolling Avg.)
(relative to the ambient temperature used above)		

Appendix B: Thermal Plume RPA

OAR 340-041-0053(2)(d)(C): Thermal Shock	
25 deg C at 5% of the stream cross section	
Enter data into white cells below:	Data Metric/Source
7Q10 = 224 cfs	2019 Mixing Zone Memo
Ambient Temperature = 20.8 °C	2022-2023 ambient collection DMRs
Effluent Flow = 0.081 mgd	ADWDF
Max Daily Effluent Temperature = 26.3 °C	2019-2023 ICIS Summary Data
5% of 7Q10 = 11.2 cfs	
5% dilution = 90	dilution = $(Qr \cdot 0.05) / Qe + 1$
Temperature at 5% cross section = 20.9 °C	No Reasonable Potential

OAR 340-041-0053(2)(d)(D): Migration Blockage	
21 deg C at 25% of the stream cross section	
Enter data into white cells below:	Data Metric/Source
7Q10 = 224 cfs	2019 Mixing Zone Memo
Ambient Temperature = 20.8 °C	2022-2023 ambient collection DMRs
Effluent Flow = 0.081 mgd	ADWDF
Max 7dAM Effluent Temperature = 23.6 °C	2019-2023 DMRs
25% of 7Q10 = 56.0 cfs	
25% dilution = 448	dilution = $(Qr \cdot 0.25) / Qe + 1$
Temperature at 25% cross section = 20.8 °C	No Reasonable Potential
ΔT at 25% Stream Flow = 0.0 °C	No Reasonable Potential