**National Pollutant Discharge Elimination System**

**Permit Fact Sheet**

**[Facility Legal Name]**

|  |  |
| --- | --- |
| **Permittee** | {Legal Name}  {Common Name}  {Physical Address}  {City, State ZIP} |
| **Existing Permit Information** | File Number:  Permit Number:  EPA Reference Number:  Category: Choose an item.  Class: Choose an item.  Expiration Date: |
| **Permittee Contact** | {Name}  {Title}  {Telephone}  {Address}  {City, State ZIP} |
| **Receiving Water Information** | Receiving stream/NHD name:  NHD Reach Code & % along reach:  USGS 12-digit HUC:  OWRD Administrative Basin:  ODEQ LLID & River Mile:  Assessment Unit ID: |
| **Proposed Action** | Choose an item.  Application Number:  Date Application Received: |
| **Permit Writer** | {Name}  {Telephone}  Date Prepared: (final date prior to PN) |

**NPDES Permit Fact Sheet**

**[Facility Legal Name]**

**Table of Contents**

[1. Introduction 3](#_Toc138855743)

[2. Facility Description 3](#_Toc138855744)

[2.1 Wastewater Facility 3](#_Toc138855745)

[2.2 Compliance History 4](#_Toc138855746)

[2.3 Stormwater 4](#_Toc138855747)

[2.4 Industrial Pretreatment 5](#_Toc138855748)

[2.5 Wastewater Classification 5](#_Toc138855749)

[2.6 Industrial Rating 5](#_Toc138855750)

[3. Schedule A: Effluent Limit Development 6](#_Toc138855751)

[3.1 Existing Effluent Limits 6](#_Toc138855752)

[3.2 Technology-Based Effluent Limit Development 7](#_Toc138855753)

[3.3 Water Quality-Based Effluent Limit Development 11](#_Toc138855754)

[3.4 Antibacksliding 25](#_Toc138855755)

[3.5 Antidegradation 25](#_Toc138855756)

[3.6 Whole Effluent Toxicity 25](#_Toc138855757)

[3.7 Groundwater 26](#_Toc138855758)

[4. Schedule A: Other Limitations 26](#_Toc138855759)

[4.1 Mixing Zone 26](#_Toc138855760)

[4.2 Biosolids 27](#_Toc138855761)

[4.3 Recycled Water or Irrigation of Industrial Wastewater 27](#_Toc138855762)

[4.4 Chlorine Usage 28](#_Toc138855763)

[5. Schedule B: Monitoring and Reporting Requirements 28](#_Toc138855764)

[6. Schedule C: Compliance Schedule 28](#_Toc138855765)

[7. Schedule D: Special Conditions 29](#_Toc138855766)

[7.1 Inflow Removal 29](#_Toc138855767)

[7.2 Inflow and Infiltration 29](#_Toc138855768)

[7.3 Mixing Zone Study 29](#_Toc138855769)

[7.4 Emergency Response and Public Notification Plan 29](#_Toc138855770)

[7.5 Recycled Water Use Plan 29](#_Toc138855771)

[7.6 Exempt Wastewater Reuse at the Treatment System 30](#_Toc138855772)

[7.7 Wastewater Solids Annual Report 30](#_Toc138855773)

[7.8 Biosolids Management Plan 30](#_Toc138855774)

[7.9 Wastewater Solids Transfers 30](#_Toc138855775)

[7.10 Hauled Waste Control Plan 30](#_Toc138855776)

[7.11 Hauled Waste Annual Report 30](#_Toc138855777)

[7.12 Lagoon Solids 31](#_Toc138855778)

[7.13 Whole Effluent Toxicity Testing 31](#_Toc138855779)

[7.14 Operator Certification 31](#_Toc138855780)

[7.15 Spill/Emergency Response Plan 31](#_Toc138855781)

[7.16 Industrial User Survey 31](#_Toc138855782)

[7.17 Outfall Inspection 31](#_Toc138855783)

[8. Schedule F: NPDES General Conditions 31](#_Toc138855784)

[Appendix A: insert title 32](#_Toc138855785)

[Appendix B: insert title 33](#_Toc138855786)

**List of Tables**

[Table 2‑1: List of Outfalls 6](#_Toc138855789)

[Table 3‑1: Existing Effluent Limits 8](#_Toc138855790)

[Table 3‑2: Comparison of TBELs for Federal Secondary Treatment Standards and Oregon Basin-Specific Design Criteria 9](#_Toc138855791)

[Table 3‑3: Design Flows and Concentrations Limits 12](#_Toc138855792)

[Table 3‑4: Technology Based Effluent Limits 12](#_Toc138855793)

[Table 3‑5: 303d and TMDL Parameters 14](#_Toc138855794)

[Table 3‑6: Applicable WLAs 14](#_Toc138855795)

[Table 3‑7: Domestic Toxic Pollutants of Concern 15](#_Toc138855796)

[Table 3‑8: Pollutants of Concern 16](#_Toc138855797)

[Table 3‑9: pH Reasonable Potential Analysis 17](#_Toc138855798)

[Table 3‑10: Temperature Criteria Information 18](#_Toc138855799)

[Table 3‑11: Temperature Criterion Effluent Limits 18](#_Toc138855800)

[Table 3‑12: Thermal Plume Effluent Limit 20](#_Toc138855801)

[Table 3‑13: Proposed E. coli Limits 20](#_Toc138855802)

[Table 3‑14: Proposed Enterococcus Limits 20](#_Toc138855803)

[Table 3‑15: Proposed Fecal Coliform Limits 21](#_Toc138855804)

[Table 3‑16: Proposed Chlorine Limits 21](#_Toc138855805)

[Table 3‑17: Ammonia Analysis Information - Summer 23](#_Toc138855806)

[Table 3‑18: Ammonia Analysis Information - Winter 24](#_Toc138855807)

[Table 3‑19: Toxic Pollutants Analyzed 24](#_Toc138855808)

**List of Figures**

[Figure 2‑1: {insert site map} 6](#_Toc138855787)

[Figure 2‑2: {insert line drawing of wastewater treatment} 6](#_Toc138855788)

**NPDES Permit Renewal Fact Sheet**

**[Facility Legal Name]**

# Introduction

[For any section that does not apply, Delete body of section and indicate “Not applicable”]

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:

[Changes in effluent limits, changes in outfall location/operation/function, significant monitoring additions or reductions are examples of major changes – permit writer discretion is used to make this determination]

* Xxxx
* Xxxxx

If no major changesNo major changes have been made to the proposed permit.

# Facility Description

## Wastewater Facility

* Describe the facility (POTW, pulp and paper, etc).
* Brief description of the wastewater treatment facility including:
* Type of waste treated.
* Description of wastewater treatment process.
* Description wastewater solids treatment and handling including biosolids or industrial solids process if applicable and the land application of the material – refer to the BMP or industrial solids land application plan for the reader to find more detailed information.
* Briefly describe hauled waste acceptance if allowed
* Discuss if they have a recycled water system and where the irrigation occurs – refer to the RWUP for the reader to find more detailed information
* [no discussion of collection system unless related to a permit requirement]
* Outfall description including recycled water outfalls.
* Line drawing of wastewater treatment if available.
* Highlight any major changes to the facility.
* Type of wastes discharged.
* Site map showing facility and outfall(s) locations – Google Earth works well for this

Figure 2‑1: {insert site map}

Figure 2‑2: {insert line drawing of wastewater treatment}

Table 2‑1: List of Outfalls

| **Outfall Number** | **Type of Waste** | **Lat/Long** | **Design Flow1**  **(mgd)** | **Existing Flow2**  **(mgd)** |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  |  |  |  |  |
| 1. Design Flow = design average dry weather flow (modify as needed, design flow may not be applicable for industrial facilites) 2. Existing Flow = existing average monthly dry weather flow (modify as needed – e.g. if it’s a winter only discharge) | | | | |

## Compliance History

[Compliance history is required only if it’s related to an assessment of future control needs (i.e. if a compliance schedule is needed or if there is an existing MAO.]

## Stormwater

Need to differentiate between domestic versus industrial activities. Below is for domestic facilities.

[Facilities with a design flow > 1.0 mgd and that have a 1200Z permit] General NPDES permits for stormwater are required for wastewater treatment facilities with a design flow of greater than 1 MGD when stormwater is collected and discharged from the plant site. Stormwater from this site is regulated under a General 1200Z NPDES Permit assigned to this facility.

[Facilities with a design flow > 1.0 mgd without 1200Z permit that treat their own SW] General NPDES permits for stormwater are not required for wastewater treatment facilities with a design flow of greater than 1 MGD when stormwater is collected, treated, and discharged as part of its treated wastewater.

[Facilities with a design flow < 1.0 mgd] 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.

## Industrial Pretreatment

[Choose one of the following]

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

[MAJOR WITH NO IPP PROGRAM – example]The city conducted an Industrial User Survey during the last permit cycle and determined that a DEQ-approved industrial pretreatment program is not needed. No categorical industrial users were identified in the IU survey update submitted with the city’s permit renewal application. [Include if relevant] The proposed permit requires the permittee to conduct and submit to DEQ an updated Industrial User Survey (Survey) within one year of permit issuance. DEQ will review the Survey results and, if DEQ determines that a pretreatment program is required, the permit may be reopened and modified to require development of a pretreatment program.

[MAJOR or MINOR WITH IPP PROGRAM – example]The city implements an industrial pretreatment program that was approved by DEQ. The current NPDES permit includes federal and state pretreatment requirements. [Include description of program, number of industrial users, recent audits, changes to program incorporated by this permit action, etc.]

The city currently permits a total of XX significant industrial users (SIUs) of which X are federally designated categorical industrial users. The City has submitted annual pretreatment program reports including updated industrial waste surveys. DEQ conducted a Pretreatment Compliance Audit of the industrial pretreatment program on XX. The primary focus of the audit was to assess the core pretreatment program functions including legal authorities, inter-jurisdictional agreements, industrial waste survey methods, permitting, and compliance oversight activities. As a result of this audit, DEQ identified several minor program deficiencies and is working with the permittee to address deficiencies. [Typical example language, modify as needed]

## Wastewater Classification

[Domestics only and industrial facilities treating their own domestic wastewater]

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.

## Industrial Rating

[Industrial facilities only – use the industrial rating worksheet]

DEQ uses EPA’s non-municipal rating system to classify a permittee as a major or a minor facility. EPA developed a rating worksheet that considers factors such as type of facility, relative flow rate, potential to impact human health and other water quality factors. DEQ completed the rating worksheet and determined the permittee is a major/minor facility. The rating sheet is part of the administrative record.

# 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.

## Existing Effluent Limits

The table(s) below show the limits contained in the existing permit.

[copy and paste limit table(s) from the existing permit – see example below]

Table 3‑1: Existing Effluent Limits

| Parameter | Units | Average Monthly | Average Weekly | **Daily Maximum** |
| --- | --- | --- | --- | --- |
| Effluent Flow  (May 1 to Oct 31) | MGD | No discharge (Daily max limit = 0 MGD) | | |
| BOD5 (November 1 to April 30) | mg/L | 30 | 45 |  |
| lb/day | 18 | 27 | 36 |
| % removal | 85 | - | - |
| TSS (November 1 – April 30) | mg/L | 30 | 45 |  |
| lb/day | 18 | 27 | 36 |
| % removal | 85 | - | - |
| Chlorine, Total Residual  (November 1 to April 30)  See note a. | mg/L | 0.04 | - | 0.10 |
| pH (November 1 to April 30) | SU | Instantaneous limit between a daily minimum of 6.0 and a daily maximum of 9.0 | | |
| *E. coli*  (November 1 to April 30)  See note b. | #/100 mL | Must not exceed a monthly geometric mean of 126, no single sample may exceed 406 | | |
| Excess Thermal Load Limit (ETLL)  (April 1 to April 30)  See note c. | million kcal/day (Mkcal/day) | Option A: ETLL = 17.4 as a 7-day rolling average | | |
| Option B: ETLL = 0.3°C x (Qe + Qr\*0.646) x 3.785 as a 7-day rolling average, where:  Qe = Daily average effluent flow rate (MGD)  Qr = 25% of receiving stream daily average flow rate (cfs) | | |

## Technology-Based Effluent Limit Development

[Domestic Facilities]

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 XXX basin.

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

| **Parameter** | **Federal Secondary Treatment Standards** | | | **XXX Basin-Specific Design Criteria**  **(OAR 340-041-XXXX)** |
| --- | --- | --- | --- | --- |
|  | **30-Day Average** | | **7-Day Average** | **Monthly Average** |
| BOD5 or CBOD5 (mg/L) | 30 or 25 | | 45 or 40 | [Insert criteria for basin such as 10, 20 or 30 mg/L during defined summer months, 30 mg/L during winter] |
| TSS (mg/L) | 30 | | 45 |  |
| pH (S.U.) | 6.0 – 9.0. (instantaneous) | | | Not applicable |
| BOD5 or CBOD5 and TSS  % Removal | 85% | Not applicable | | Not applicable |

[Equivalent to secondary treatment standards]

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

To be eligible for discharge limitations based on equivalent to secondary standards, a POTW must meet all three of the following criteria:

The effluent must consistently exceed secondary treatment standards;

2. The principal treatment process must be a trickling filter or a waste stabilization pond; and

3. The POTW must provide significant biological treatment of the wastewater.

DEQ has evaluated these criteria and has determined that the facility meets all three.

[Adjustments to equivalent to secondary standards: Waste stabilization ponds/lagoons]

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

[Adjustments for Industrial Contributions – when industrial contributions exceed 10% of the flow/load]

Under 40 CFR 133.103(b), treatment works receiving wastes from industrial categories with effluent limitations guidelines and standards (effluent guidelines) requirements or new source performance standards for BOD5 or TSS, which are less stringent than the secondary treatment standards or, if applicable, the equivalent to secondary treatment standards in Part 133, can qualify to have their 30-day BOD5 or TSS limitations adjusted upward provided that the following are true:

* The adjusted 30-day limitations are not greater than the limitations in effluent guidelines or new source performance standards, as applicable, for the industrial category.
* The flow or loading of BOD5 or TSS introduced

[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. Therefore, DEQ is proposing BOD and TSS percent removal limits of XX%.

[The following section discusses the mass load limit development. Pick one of the options below and delete the one that doesn’t apply. The equations below may not be applicable if limits were based on an engineering analysis of the treatment plant capabilities. In this case, explain how the limits were derived]

[1. Use this section for facilities that have not expanded their average dry weather treatment capacity after June 30, 1992]

The limits for BOD5/CBOD5 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).*The basin-specific design criteria included in the table above apply to new or expanded facilities (after June 30, 1992).  This facility is not new or expanded, so these criteria do not apply.* For any facility that has not expanded their average dry weather treatment capacity after June 30, 1992, OAR 340-041-0061(9)(a) requires that the mass load limits be calculated using the following equations:

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

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

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

\* Design flow is the design average dry weather flow (DADWF) or the design average wet weather flow (DAWWF)

OAR 340-041-0061(9)(a)(C) allows an exception to the daily maximum mass load when the daily flow exceeds the lesser hydraulic capacity of the secondary treatment portion of the facility or twice the design average dry weather flow, the daily mass load limit does not apply.

[2. Use this section for new facilities or facilities that have expanded their average dry weather treatment capacity after June 30, 1992]

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/CBOD5 and TSS monthly average concentrations of XX mg/L during the dry weather season and XX 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.

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

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

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

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

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 BOD5 Concentration Limit**  **(mg/L)** |
| --- | --- | --- | --- |
| **Dry Weather** |  |  |  |
| **Wet Weather** |  |  |  |
| Design flow comments: [indicate what the design flow basis is – DADWF, DMMDWF, etc] | | | |

Example: Mass Load Calculations:

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

Weekly Average: XX lbs/day monthly average x 1.5 = XX lbs/day

Daily Maximum: XX lbs/day monthly x 2 = XX lbs/day

The proposed BOD5/CBOD5 and TSS limits are listed in the following table.

Table 3‑4: Technology Based Effluent Limits

| **Parameter** | **Units** | **Average Monthly** | **Average Weekly** | **Daily Maximum** |
| --- | --- | --- | --- | --- |
| BOD5 for CBOD5 (enter seasonal range e.g. May 1 – October 31) | mg/L | 30/25 | 45/40 | NA |
| lbs/day |  |  |  |
| % removal | 85 | 85 | NA |
| TSS (enter seasonal range e.g. May 1 – October 31) | mg/L | 30/25 | 45/40 | NA |
| lbs/day |  |  |  |
| % removal | 85 | 85 | NA |
| BOD5 for CBOD5 (enter seasonal range e.g. November 1 – April 1) | mg/L | 30/25 | 45/40 | NA |
| lbs/day |  |  |  |
| % removal | 85 | 85 | NA |
| TSS (enter seasonal range e.g. November 1 – April 1) | mg/L | 30/25 | 45/40 | NA |
| lbs/day |  |  |  |
| % removal | 85 | 85 | NA |

[Industrial Facilities]

EPA is required to develop technology-based effluent limits for categories of industrial facilities. These limits are called effluent limitation guidelines (ELGs). EPA established these based on available treatment technologies for facilities within an industrial category or subcategory.

EPA developed ELGs for the XXX point source category at 40 CFR XXX. [Describe the TBELs for this facility, show any needed calculations and insert a proposed limit table]

## 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.

### Designated Beneficial Uses

NPDES permits issued by DEQ must protect the following designated beneficial uses of the{receiving water body}. These uses are listed in OAR-340-041-XXXX for {basin}.

[List below includes all beneficial uses, delete as necessary.]

* 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
* Commercial navigation and transportation

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

The following table lists the parameters that are on the 2022 303(d) list (Category 5) within the discharge’s stream reach. The table also lists any parameters with a TMDL wasteload allocation assigned to the facility (Category 4). [copy and paste the information into the table below from the integrated report interactive mapping tool. For listed parameters without a TMDL, explain how these listings are addressed for this renewal (can just cite other section if addressed there)]

Table 3‑5: 303d and TMDL Parameters

|  |  |
| --- | --- |
| **Water Quality Limited Parameters (Category 5)** | |
| AU ID: | Type or paste text here. |
| AU Name: | Type or paste text here. |
| AU Status: | Type or paste text here. |
| Year Listed | Type or paste text here. |
| Year Last Assessed | Type or paste text here. |
| 303d Parameters (Category 5) | Type or paste text here. |
| **TMDL Parameters (Category 4)** | |
| Type or paste text here. | |

### TMDL Wasteload Allocations

DEQ issued a TMDL for the XXX river/basin/stream. WLAs from this TMDL that are applicable to the permittees are listed in the following table.

Table 3‑6: Applicable WLAs

| **Parameter** | **WLA** | **Time Period** |
| --- | --- | --- |
|  |  |  |
|  |  |  |

[provide additional discussion including how the WLAs are being applied in the proposed permit or cite location of this discussion if elsewhere in this fact sheet]

### Ocean Discharge Findings

Federal rules (40 CFR §125.120 – 40 CFR §125.124) require that a discharge into territorial seas that is to be permitted under the NPDES program be evaluated as to whether the discharge will cause unreasonable degradation of the marine environment. Goals 6 and 19 of Oregon’s Statewide Planning Goals and Guidelines and Oregon’s Territorial Seas Plan require that the State’s marine resources be conserved. DEQ believes that the intent of these criteria is to reduce or prevent the discharge of those persistent pollutants that bio-accumulate in the marine food chain. Pollutants found in sewage that are amenable to treatment by typical wastewater treatment facilities include Biochemical Oxygen Demand (BOD), Total Suspended Solids (TSS), pH, bacteria, nutrients, and potentially toxic substances, such as chlorine, which is used for disinfection of pathogenic organisms.BOD, TSS, and pH are not discrete substances that can accumulate in living organisms. BOD is a measure of the oxygen used by microorganisms when they break down organic matter. TSS is a measure of organic and inorganic solid materials that are suspended in the water column, and pH is a measure of the amount of hydrogen ions in solution.

Residual chlorine in treated wastewater, if any, immediately reacts with bromide naturally present in seawater to produce other oxidants that are toxic to living organisms. These other oxidants are referred to as chlorine produced oxidants. Chlorine, which is still present in the reaction products, is too reactive to be bioavailable from soil, water, or other environmental media and too reactive to bio-accumulate in the food chain. [Permit], however, uses ultraviolet light for disinfection, and chlorine compounds are prohibited in the discharge.

Bacteria do not bio-accumulate in other living organisms. Nutrients, (e.g., nitrogen and phosphorus), can have deleterious effects on the marine environment by stimulating algal blooms. These algal blooms have the potential to cause turbidity problems and fluctuations in dissolved oxygen and pH. However, nutrients do not bio-accumulate in the tissues of living organisms and do not bio-magnify in the trophic levels of marine food chains.

DEQ has concluded that the discharge from [Permit] wastewater treatment plant will not cause unreasonable degradation of the marine environment.

### 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.

[Delete this sentence and the Domestic Toxic Pollutants of Concern table if this is an industrial permit] Based on EPA’s NPDES permit application requirements, toxic pollutants of concern for domestic facilities are listed in the following table.

Table 3‑7: 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 |
| > 1.0 mgd | Total Residual Chlorine, Total Ammonia Nitrogen, Metals, Volatile Organic Compounds, Acid Extractable Compounds, Base Neutral Compounds |

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

Table 3‑8: Pollutants of Concern

| **Pollutant** | **How was pollutant identified?** |
| --- | --- |
| pH | Effluent Monitoring |
| Temperature | Effluent Monitoring |
| Fecal Coliform | Effluent Monitoring |
| E. coli | Effluent Monitoring |
| Enterococcus | Effluent Monitoring |
| Total Residual Chlorine | Effluent Monitoring |
| Total Ammonia Nitrogen | Application Requirement |
| Metals | Application Requirement |
| Volatile Organic Compounds | Application Requirement |
| Acid Extractable Compounds | Application Requirement |
| Base-Neutral Compounds | Application Requirement |
| Base-Neutral Compounds | Application Requirement |
| Add additional if needed | Application Requirement |

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.

### Regulatory Mixing Zone

[Cut and paste fact sheet language from MZ memo here]

### pH

The pH criterion for this basin is 6.5 – 8.5 per OAR 340-041-XXXX. DEQ determined there is no reasonable potential for the discharge to exceed the pH criterion at the edge of the mixing zone. [State the proposed pH limit and whether it’s a TBEL or WQBEL] The following provides a summary of the data used for the analysis. [copy and paste data from spreadsheet into table – see video tutorial in pH RPA spreadsheet]

Table 3‑9: pH Reasonable Potential Analysis

|  |  |  |
| --- | --- | --- |
| **INPUT** | **Lower pH**  **Criteria** | **Upper pH**  **Criteria** |
| 1. Dilution at mixing zone boundary |  |  |
| 2. Upstream characteristics |  |  |
| a. Temperature (deg C) |  |  |
| b. pH |  |  |
| c. Alkalinity (mg CaCO3/L) |  |  |
| 3. Effluent characteristics |  |  |
| a. Temperature (° C) |  |  |
| b. pH (S.U.) |  |  |
| c. Alkalinity (mg CaCO3/L) |  |  |
| 4. Applicable pH criteria |  |  |
| **pH at mixing zone boundary** |  |  |
| **Is there reasonable potential?** |  |  |
| **Proposed effluent limits** |  |  |
| Effluent data source:  For example, DMRs 2015-2020 | | |
| Ambient data source:  For example, Station 34098 | | |

### Temperature

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

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

Table 3‑10: Temperature Criteria Information

|  |  |
| --- | --- |
| **Applicable Temperature Criterion** | Choose an item. |
| Applicable dates: | |
| **Salmon/Steelhead Spawning 13°C?**  OAR 340-041-0028(4)(a) | Yes No |
| Applicable dates: | |
| **WQ-limited?** | Yes No |
| **TMDL wasteload allocation assigned?** | Yes No |
| Applicable dates: | |
| TMDL based on natural conditions criterion? | Yes No |
| **Cold water summer protection criterion applies?** | Yes No |
| **Cold water spawning protection applies?** | Yes No |
| Comments: | |

[Describe your analysis, data sources and any proposed effluent limits and complete the table below]

[Example language] DEQ conducted a temperature reasonable potential analysis for the spawning season (Oct 15 – May 15). The applicable temperature criterion is 13ºC. Since a TMDL has not been developed to address the water quality limited listing associated with this criterion, this analysis is based on the portion of Oregon’s temperature rule for implementing the criterion prior to the development of a TMDL. The effluent temperature value used in this analysis is X°C. This value was taken from the facility’s DMRs for the period from X to X and represents the maximum 7-day average of the daily maximums for the spawning season. The results of this RPA indicate that there is no potential for the facility’s discharge to exceed the temperature standard (see Appendix X).

DEQ also performed a temperature reasonable potential analysis for the rearing and migration season (May 16 - Oct 14). The criterion is 18ºC. The effluent temperature value used in this analysis is X°C and represents the maximum 7-day average of the daily maximum effluent temperatures for the rearing and migration season. The results of this analysis also indicate that there is no potential for the facility’s discharge to exceed the temperature standard (see Appendix x).

Based on these analyses, 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 3‑11: Temperature Criterion Effluent Limits

| **Effluent limit needed?** Yes No |
| --- |
| **TMDL WLA Limit:** Limit |
| Applicable time period: Dates NA |
| **Temperature Criterion Limit:** Limit |
| Applicable time period: Dates NA |
| Comments: |

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

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

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

[Provide evaluation language here]

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

[Provide evaluation language here]

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

[Provide evaluation language here]

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

[Provide evaluation language here]

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

Table 3‑12: Thermal Plume Effluent Limit

| **Effluent limit needed?** Yes No |
| --- |
| **Calculated limit**: Limit |
| **Applicable timeframe:** Dates |
| Comments: |

[If analysis resulted in limits needed to comply with the standard and the thermal plume requirements, discuss which one is being applied in the permit as the most conservative one.]

### Bacteria

[Choose 1 or more that apply – if a TMDL WLA applies, include that in the narrative below and change the effluent limits in the table if needed]

[Freshwater contact recreation]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 3‑13: Proposed E. coli Limits

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

[Coastal water contact recreation]OAR 340-041-0009(6)(a) requires discharges of bacteria into coastal waters meet a monthly geometric mean of 35 enterococcus organisms per 100 mL, with no more than 10 percent of samples exceeding 130 enterococcus organisms per 100 mL. The following table includes the proposed permit limits and apply year round.

Table 3‑14: Proposed Enterococcus Limits

| **Enterococcus**  **(#/100 ml)** | **Geometric**  **Mean** | **No more than 10% exceed** |
| --- | --- | --- |
| Existing Limit |  |  |
| Proposed Limit | 35 | 130 |

[Shellfishing]The proposed permit contains limits based on the fecal coliform standard in OAR 340-041-0009(1)(c) for the protection of shellfishing. The proposed limits are a monthly median concentration of 14 organisms per 100 milliliters, with no more than ten percent of the samples exceeding 43 organisms per 100 ml and apply year round. The following table includes the proposed permit limits and apply year round. [Limits can be greater than these values for some situations where a mixing zone is allowed]

Table 3‑15: Proposed Fecal Coliform Limits

| **Fecal Coliform**  **(#/100 ml)** | **Median** | **No more than 10% exceed** |
| --- | --- | --- |
| Existing Limit |  |  |
| Proposed Limit |  |  |

### Toxic Pollutants

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

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

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

#### Total Residual Chlorine

[Required for all facilities that use chlorine or have the potential to have chlorine in their final effluent]

[If existing permit contains chlorine limits]The existing permit contains chlorine limits. New chlorine limits were calculated based on updated information. [Pick one that applies] The newly calculated limits are more stringent than the existing limits so the new limits are being proposed. The newly calculated limits are less stringent than the existing limits so the existing limits are being retained. Proposed limits are listed in the following table.

[If existing permit does not contain chlorine limits]An analysis was conducted to determine if the facility had the reasonable potential to exceed the chlorine criteria. The maximum chlorine concentration of XX ug/L was used for the analysis. [If there is RP]The analysis indicates the discharge has the potential to exceed the chlorine criteria; therefore, chlorine limits are included in the proposed permit. Proposed limits are listed in the following table. [If there is no RP]The analysis indicates the discharge does not have the potential to exceed the chlorine criteria; therefore, no chlorine limits are included in the proposed permit.

Table 3‑16: Proposed Chlorine Limits

|  |  |  |
| --- | --- | --- |
|  | **Chronic (mg/L)** | **Acute (mg/L)** |
| **Chlorine Criteria** | 0.011 | 0.019 |
|  | **Average Monthly Limit (mg/L)** | **Maximum Daily Limit (mg/L)** |
| **Existing Limit** |  |  |
| Calculated Limit |  |  |
| **Proposed Limit** |  |  |
| Effluent data source: | | |
| Receiving water data source:Assumed to be zero | | |

#### Total Ammonia Nitrogen

[Only required for all domestic WWTPs with design flows above 0.1 mgd and any industrial facilities where ammonia is a pollutant of concern]

DEQ’s ammonia criteria vary with changes in pH and temperature. DEQ performed a reasonable potential analysis that accounts for changes in the effluent and receiving water pH and temperature to determine the appropriate ammonia criteria. The following table provides a summary of the data used for the ammonia analysis and the results of the analysis. [Describe your ammonia analysis including characterization of the effluent and ambient data – pH, temperature and ammonia. Discuss if there are any proposed limits. Include in the discussion if there is an existing limit. Copy and paste the text in the tables from the RPA into the table below – use paste option: text only. If your RPA is year-round, delete one of the tables and changing the table title to indicate it’s year-round.]

Table 3‑17: Ammonia Analysis Information - Summer

|  | **Acute** | **Chronic** | |
| --- | --- | --- | --- |
| **4-day** | **30-day** |
| Dilution |  |  |  |
| Ammonia Criteria |  |  |  |
| Effluent Data Used | | | |
| Ammonia (mg/L) |  |  | |
| pH (SU) |  |  | |
| Temperature (ºC) |  |  | |
| Alkalinity (mg/L CaCO3) |  |  | |
| Receiving Stream Data Used | | | |
| Ammonia (mg/L) |  |  | |
| pH (SU) |  |  | |
| Temperature (ºC) |  |  | |
| Alkalinity (mg/L CaCO3) |  |  | |
| Ammonia Limit Needed? |  | | |
| Calculated Limits | AML | MDL | |
| Ammonia (mg/L) |  |  | |
| Effluent data source | | | |
|  | | | |
|
| Ambient data source | | | |
|  | | | |
|
|

Table 3‑18: Ammonia Analysis Information - Winter

|  | **Acute** | **Chronic** | |
| --- | --- | --- | --- |
| **4-day** | **30-day** |
| Dilution |  |  |  |
| Ammonia Criteria |  |  |  |
| Effluent Data Used | | | |
| Ammonia (mg/L) |  |  | |
| pH (SU) |  |  | |
| Temperature (ºC) |  |  | |
| Alkalinity (mg/L CaCO3) |  |  | |
| Receiving Stream Data Used | | | |
| Ammonia (mg/L) |  |  | |
| pH (SU) |  |  | |
| Temperature (ºC) |  |  | |
| Alkalinity (mg/L CaCO3) |  |  | |
| Ammonia Limit Needed? |  | | |
| Calculated Limits | AML | MDL | |
| Ammonia (mg/L) |  |  | |
| Effluent data source | | | |
|  | | | |
|
| Ambient data source | | | |
|  | | | |
|
|

#### Priority Pollutant Toxics

[Required for all major domestic facilities and select industrial facilities – see RPA IMD for more details or contact an RPA SME]

DEQ conducted a reasonable potential analysis for the group of toxics listed in the following table. A complete list of the pollutants is located in the reasonable potential spreadsheet located in the appendix. [Discuss your toxics RPA including characterization of the effluent and ambient data. Include and discuss any proposed limits.

Table 3‑19: Toxic Pollutants Analyzed

|  |
| --- |
| **Toxic Group** |
| Metals |
| Volatile Organic Compounds |
| Acid Extractable Compounds |
| Base-Neutral Compounds |
| Pesticides |
| Effluent data source: |
| Receiving water data source: |

#### Copper Biotic Ligand Model

[Required for all major domestic facilities. Also required for any industrial facilities or minor domestic facilities where copper is known to be a pollutant of concern]

[Delete this section if only the saltwater copper criterion is applicable]

[Copy language from copper BLM memo and insert here]

#### Aluminum

[Required for all major domestic facilities. Also required for any industrial facilities or minor domestic facilities where aluminum is known to be a pollutant of concern]

[Delete this section if only the saltwater aluminum criterion is applicable]

[Copy language from the aluminum memo and insert here]

#### Mercury – Human Health Criterion

[Pick the applicable language below]

**[1.]** **For Willamette Basin major domestic permits**]

A Willamette Basin Mercury TMDL was established by EPA on December 30, 2019. According to the EPA TMDL and the State of Oregon Water Quality Management Plan, this facility must conduct mercury monitoring and develop and implement a mercury minimization plan tailored to the facility’s potential to discharge mercury.

[1.1] If the facility has an existing mercury minimization plan]

This facility has already developed and implemented a mercury minimization plan. Therefore, the facility must review and update the mercury minimization plan during the last year of the permit cycle, and submit the revisions with their next permit application.

[1.2] Willamette Basin major domestic - if the facility does NOT have an existing mercury minimization plan]

Once the plan is submitted to DEQ for review, it must go on public notice for public review and is incorporated into the permit by reference.

**[2.] Willamette Basin minor domestic permits**]

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

**[3.] For major domestic facilities outside of the Willamette Basin, and all industrial facilities in the primary metals; timber products; paper products; chemical products; glass, clay, cement, concrete and gypsum products; fabricated metal products; and electronic instruments categories These categories correspond to SICs 24xx, 26xx, 28xx, 32xx, 33xx, 34xx, and 36xx.]**

Oregon’s human health water quality criterion for mercury is expressed in terms of a fish tissue concentration rather than a water column concentration. Because of this, DEQ’s approach to performing the reasonable potential analysis for mercury is different from that for other parameters. This approach is described in DEQ’s “Implementation of Methylmercury in NPDES Permits” internal management directive.

According to the IMD, “Any facility contributing significant and consistent concentrations of total mercury to the receiving water body is considered to have the reasonable potential to exceed the water quality criterion unless a site-specific survey determines otherwise.” Because the water quality criterion for mercury is a fish tissue-based concentration rather than a water column concentration, permit limits for mercury cannot be expressed in terms of a concentration. Therefore, when mercury is present in treated effluent on a consistent basis, the permit needs to contain mercury monitoring, plus a narrative effluent limit that consists of a Mercury Minimization Plan (MMP).

[3.1] If total mercury is not consistently present in the effluent]

Mercury effluent data indicates that mercury is not consistently present in the discharged effluent. DEQ concludes there is no reasonable potential for the discharge to cause or contribute to elevated mercury levels in fish tissue. No mercury minimization plan is necessary

[3.2] If total mercury is consistently present in the effluent]

A review of effluent monitoring data indicates that total mercury is present in the discharge and therefore there is a reasonable potential to cause or contribute to the exceedance of the water quality standard. Accordingly, the proposed permit requires the facility to monitor for mercury and develop and implement a mercury minimization plan. This requirement is contained in Schedule A of the permit. Once the plan it submitted to DEQ for review, it must go on public notice for public review and is incorporated into the permit by reference.

[3.3] If there is no mercury data, or mercury data are inadequate, contact the mercury SME for guidance.]

**[4.] For minor domestic facilities and industrial facilities NOT in the primary metals; timber products; paper products; chemical products; glass, clay, cement, concrete and gypsum products; fabricated metal products; and electronic instruments categories (SICs 24xx, 26xx, 28xx, 32xx, 33xx, 34xx, and 36xx).]**

DEQ determined that this facility is not a likely source of mercury. Therefore, no additional controls or monitoring will be required.

## Antibacksliding

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

[If any limits are less stringent than the existing permit – provide justification]

## 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.

[Option 1: Use the following language for permits where existing uses are the same as designated uses.]DEQ has performed an antidegradation review for this discharge. The proposed permit contains the same or more stringent discharge loadings as the existing permit. Permit renewals with the same or more stringent discharge loadings as the previous permit are not considered to lower water quality from the existing condition. DEQ is not aware of any information that existing limits are not protecting the receiving stream’s designated beneficial uses. DEQ is also not aware of any existing uses present within the water body that are not currently protected by standards developed to protect the designated uses. Therefore, DEQ has determined that the proposed discharge complies with DEQ’s antidegradation policy. DEQ’s antidegradation worksheet for this permit renewal is available upon request.

[Option 2: Use the following language when existing uses differ from designated uses and require more stringent criteria for protection. Example: DEQ’s Fish Use Maps indicate that the stream supports salmonid migration, however there is evidence (such as information from ODFW) that the stream also supports salmonid spawning and rearing.] DEQ performed an antidegradation review for this discharge. The proposed permit contains the same discharge loadings as the existing permit. Permit renewals with the same discharge loadings as the previous permit are not considered to lower water quality from the existing condition. The designated beneficial uses for the receiving stream are listed in Section 4.0. DEQ determined that salmonid spawning is an existing use that is not currently designated. DEQ’s analysis indicates the discharge will not adversely impact salmonid spawning. [modify as necessary – for example maybe limits were included to protect the use] Therefore, DEQ has determined that the proposed discharge complies with DEQ’s antidegradation policy.

[Option 3: If proposed effluent limits are less stringent than the existing permit, provide the necessary antidegradation findings below.

## Whole Effluent Toxicity

[For most minor domestic facilities]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.

[For industrial facilities DEQ has determined WET testing is not required]DEQ determined that whole effluent toxicity (WET) testing is not warranted due to the low levels of toxics present in the final effluent.

[For facilities where WET testing is required]Whole effluent toxicity (WET) tests are used to determine the treated wastewater’s aggregate toxic effect on aquatic organisms. Wastewater samples are collected and aquatic organisms are subjected to a range of concentrations in controlled laboratory experiments. EPA recommends that WET tests be used in NPDES permits together with requirements based on chemical-specific water quality criteria.

WET tests are used to determine the percentage of effluent that produces an adverse effect on a group of test organisms. The measured effect may be fertilization, growth, reproduction, or survival. EPA’s methodology includes both an acute test and a chronic test. An acute WET test is considered to show toxicity if adverse effects occur at effluent concentrations less than what is found at the edge of the zone of immediate dilution (ZID). A chronic WET test is considered to show toxicity if adverse effects occur at effluent concentration less than what is known to occur at the edge of the mixing zone.

[Only include additional WET test language if there were any failed WET tests that require additional requirements beyond the standard WET test monitoring – e.g. toxic identification evaluation, additional monitoring ]

## Groundwater

[Include a description of potential impacts to groundwater or summarize existing groundwater issues if there are any (e.g. is this part of a groundwater management area?). Provide a summary of our groundwater review and describe if any monitoring or limits are required. Include GW prioritization worksheet if needed. If there are no potential impacts to GW, then state that. Treatment systems without lagoons (i.e. mechanical treatment plants) typically don’t have GW issues. Facilities that land apply biosolids or effluent are evaluated for GW concerns through the BMP and RWUP.]

[Example language if we’ve determine there’s no potential to impact 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.

# Schedule A: Other Limitations

## Mixing Zone

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

## Biosolids

[Remove this section if the facility does not land apply biosolids]

[Choose 1]

[1]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.

[2]The permit holder currently produces a Class (A or B) biosolids for land application by distribution or sale, and anticipates continuing to do so. DEQ reviewed the biosolids management plan and land application plan. These are available for public review and comment along with the permit. Once approved after public comment, conditions in the biosolids management plan and land application plan become permit conditions.

Schedule A of the permit requires the facility to apply biosolids according to their biosolids management plan. In addition, Schedule A requires the following:

* Apply at or below agronomic rates
* The permittee must have written site authorization for each location from DEQ before land applying and abide by the restrictions for each site
* Prior to application, the permittee must ensure that biosolids meet one of the pathogen reduction standards under 40 CFR 503.32
* The permittee must not apply biosolids containing pollutants in excess of the ceiling concentrations for the nine metals shown in Schedule A of the permit

## Recycled Water or Irrigation of Industrial Wastewater

[Remove this section if the facility does not land apply recycled water or industrial wastewater]

[Work with recycled water coordinator to develop language for land application of industrial wastewater]

[1]The permit holder does not currently operate a recycled water program, but may develop one during the term of this permit. If the permit holder chooses to develop a recycled water program, a comprehensive recycled water use plan meeting the requirements in OAR 340-055 will be submitted to DEQ for review and approval; appropriate actions must also be made to OHA and WRD. The recycled water use plan, including the locations of any proposed irrigation projects will be made available for public comment.

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

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

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

## Chlorine Usage

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

# 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. [Justification for effluent characterization and receiving stream monitoring should be provided here unless already discussed in the RPA section above]

# Schedule C: Compliance Schedule

[Include this language if the permit does not contain a compliance schedule]. The permittee is expected to meet all effluent limits once the permit becomes effective and therefore a compliance schedule is not needed.

[Include this language if the permit contains a compliance schedule] The proposed permit contains a new effluent limit for XXX. The facility is unable to meet this limit 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)).

[Clarify that the limits addressed in the schedule are new (or more restrictive) WQBELs, and that it has been determined that the permittee will not be able to meet these limits upon the permit’s effective date (supporting documentation should be in the file). Add language stating that DEQ has determined that the proposed compliance schedule requires the permittee to meet the final limits as soon as possible, along with a brief description of the supporting rationale for this determination. Add specifics about the milestones being required. Use hard dates for the milestones rather than times relative to permit issuance]

# Schedule D: Special Conditions

The proposed permit contains the following special conditions. The conditions include the following: [add or delete as needed]

## Inflow Removal

[DO not include this condition if the prior permit approved wet weather mass limits based on Design Average Wet Weather Flow (DAWWF). Include only with the first permit renewal that includes DAWWF-based mass limits.]

DEQ approved mass load limits based on the permittee’s wet weather design flows and therefore a condition is included that requires the permittee to submit an updated inflow removal program per OAR 340-041-0061(9)(a)(G).

## Inflow and Infiltration

[Include the following for all municipal permits that do not have the permit condition regarding Inflow Removal above]

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

## Mixing Zone Study

A requirement to submit an updated mixing zone study.

## Emergency Response and Public Notification Plan

[Domestic facilities]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.

[Industrial facilities] A requirement to develop and submit an emergency and spill response plan or ensure the existing one is current per General Condition B.7 in Schedule F.

## Recycled Water Use Plan

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

## Exempt Wastewater Reuse at the Treatment System

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

## 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.

## Biosolids Management Plan

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

## 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.

## Hauled Waste Control Plan

[For domestic facilities that do not have a formal pretreatment program and either have a DEQ approved hauled waste plan or do not currently accept hauled waste]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.

[For domestic facilities that do not have a formal pretreatment program and currently accept hauled waste but do not have a DEQ-approved hauled waste plan]A condition that allows the acceptance of hauled waste after a hauled waste plan is submitted and approved by DEQ. The hauled waste plan ensures waste is not accepted that could negatively impact the treatment capabilities of the facility.

## Hauled Waste Annual Report

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

## Lagoon Solids

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

## Whole Effluent Toxicity Testing

[Only required for domestics majors and select industrial facilities]

The permittee is required to perform WET testing to ensure the aggregate of toxics is not negatively impacting aquatic life. This condition describes the test procedures and requirement for the WET testing. A dilution series has been specified on the basis of the mixing zone analysis.

## 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.

[Include if needed for industrial permits that treat domestic wastewater onsite]

## Spill/Emergency Response Plan

[Include for industrial permits]

The permittee must have an up-to-date spill response plan for prevention and handling of spills and unplanned discharges.

## 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.

## Outfall Inspection

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

# 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: insert title

# Appendix B: insert title