



Oregon

Tina Kotek, Governor

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

May 23, 2024

Matthew Harrell
Forest Park MHP, LLC
659 NW Pacific Grove Drive
Beaverton, OR 97006-8377

Re: NPDES Permit Public Notice Period
Comments Due: July 1, 2024, 5 p.m.

File no. 30554
Permit no. 102323
EPA no. OR0031267
Facility: Forest Park Mobile Village, 18830 South Hwy 99E, Oregon City
Clackamas County

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

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

Your comments **must be received by 5 p.m. on July 1, 2024**. DEQ will hold a public hearing if DEQ receives written requests for a hearing during the public comment period from at least 10 people, or from an organization representing 10 or more people. DEQ gives equal weight to written and oral comments. When the public participation period has ended, DEQ will take final action on your application.

Please contact me at 503-378-5055 with any questions about permitting processing.

Sincerely,

Trinh Hansen
Water Quality Permit Coordinator
Western Region, Salem Office

cc: Source File, Portland Office, DEQ
Randy Bailey, Portland, DEQ
ORMS



PUBLIC NOTICE

Date posted: 5/23/24

DEQ Requests Comments on Proposed Forest Park MHP, LLC Water Quality Permit Renewal

HOW TO PROVIDE PUBLIC COMMENT

Facility name: Forest Park MHP, LLC

Permit type: NPDES Domestic Minor

Comments due by: Monday, July 1, 2024 at 5 p.m.

Send written comments to:

By mail: Trinh Hansen, Oregon DEQ

Water Quality Permit Coordinator

4026 Fairview Industrial Drive SE, Salem, OR 97302

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

The Oregon Department of Environmental Quality invites the public to provide written comments on the conditions of Forest Park MHP, LLC's proposed water quality permit, known officially as a National Pollutant Discharge Elimination System (NPDES) permit.

Summary

Subject to public review and comment, DEQ intends to renew the proposed water quality permit, which allows Forest Park Mobile Village to discharge wastewater to the Willamette River near Oregon City.

About the facility

Forest Park MHP, LLC has applied for a water quality permit renewal for Forest Park Mobile Village located at 18830 South Highway 99E in Clackamas County. DEQ last renewed this permit on May 10, 2010. The facility collects and treats domestic wastewater before discharging to the Willamette River, in accordance with NPDES Permit Number 102323. The permit limits the discharge of five-day biochemical oxygen demand, total suspended solids, pH, and *E. Coli* bacteria.

The facility is privately owned by Forest Park MHP, LLC and currently serves a mobile home park with a population of approximately 85 people. No industrial users are connected to the collection system. DEQ has concluded that the discharge from the Forest Park Mobile Village wastewater facility will not cause unreasonable degradation to the Willamette River and will protect the beneficial uses of the Willamette River Basin.

The facility initially discharges to an intermittent stream that flows several hundred meters before emptying into the Willamette River at river mile 28.1, between the mouth of the Tualatin River and Willamette Falls. DEQ updated the existing mixing zone for the facility to include this intermittent stream. The Willamette River is listed as impaired (Category 4 or 5) for several pollutants according to the most recent U.S. Environmental Protection Agency-approved integrated report for Oregon. The proposed permit reflects effluent limits established through reasonable potential analysis, best available technology, and the Willamette Basin Total Maximum Daily Load, or TMDL, for bacteria.

Translation or other formats

[Español](#) | [한국어](#) | [繁體中文](#) | [Русский](#) | [Tiếng Việt](#) | [العربية](#)

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



State of Oregon
Department of Environmental Quality

The most recent DEQ inspection of the facility was on Nov. 2, 2023. DEQ did not identify violations during this inspection. Forest Park Mobile Village has had two water quality violations in the past permit term. These compliance issues have been resolved and the facility is currently operating in full compliance.

The facility holds no other permits from DEQ.

What types of pollutants does the permit regulate?

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

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

No. The draft permit would not change the amount of pollution the facility is allowed to release.

How did DEQ determine permit requirements?

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

For this proposed permit action, DEQ evaluated Forest Park Mobile Village's water quality permit renewal application, the Willamette Basin TMDL, discharge monitoring reports and facility design reports. In addition, DEQ evaluated water quality data from several DEQ monitoring stations located along the Willamette River. These materials may be viewed in person at the DEQ Northwest Region Offices located at: 700 NE Multnomah Street, Suite 600 in Portland

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

How does DEQ monitor compliance with the permit requirements?

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

What happens next?

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

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

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

For more information

Find more information by reviewing draft permit documents attached to this notice or contact Trinh Hansen at 503-804-6594 or trinh.hansen@deq.oregon.gov with questions or to view documents in person at a DEQ office.

Non-discrimination statement

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



NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM WASTE DISCHARGE PERMIT

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

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

ISSUED TO:

Forest Park MHP, LLC
659 NW Pacific Grove Dr
Beaverton, OR 97006

SOURCES COVERED BY THIS PERMIT:

Type of Waste	Outfall Number	Outfall Location
Treated wastewater	001	45.33787°, -122.64303°

FACILITY LOCATION:

Forest Park Mobile Village
18830 South Hwy 99E
Oregon City, OR 97045
County: Clackamas
EPA Permit Type: Minor

RECEIVING STREAM INFORMATION:

Receiving stream/NHD name: Willamette River
USGS 12-Digit HUC: 170900070405
OWRD Administrative Basin: Willamette basin
NHD Reach Code & % along reach: 17090007000036 - 70%
ODEQ LLID & RM: 1227618456580 - 28.1
Integrated Report AU ID: OR_SR_1709000704_88_104020

Issued in response to Application No. 959907 received June 4, 2014. This permit is issued based on the land use findings in the permit record.

	DRAFT	DRAFT
	Issuance Date	Effective Date
Tiffany Yelton-Bram, Water Quality Source Control Manager, Northwest region		

PERMITTED ACTIVITIES

Until this permit expires or is modified or revoked, the permittee is authorized to: 1) operate a wastewater collection, treatment, control and disposal system; and 2) discharge treated wastewater to waters of the state only from the authorized discharge point or points in Schedule A in conformance with the requirements, limits, and conditions set forth in this permit.

Unless specifically authorized by this permit, by another NPDES or Water Pollution Control Facility permit, or by Oregon statute or administrative rule, any other direct or indirect discharge of pollutants to waters of the state is prohibited.

TABLE OF CONTENTS

SCHEDULE A: WASTE DISCHARGE LIMITS..... 3

1. Outfall 001 – Permit Limits 3

2. Regulatory Mixing Zone 3

3. Biosolids..... 4

SCHEDULE B: MINIMUM MONITORING AND REPORTING REQUIREMENTS..... 6

1. Reporting Requirements..... 6

2. Monitoring and Reporting Protocols 7

3. Monitoring and Reporting Requirements 10

4. Biosolids Monitoring Requirements 14

SCHEDULE D: SPECIAL CONDITIONS..... 16

1. Inflow and Infiltration 16

2. Chlorine Management Plan..... 16

3. Emergency Response and Public Notification Plan 16

4. Exempt Wastewater Reuse at the Treatment System 17

5. Wastewater Solids Annual Report 17

6. Biosolids Management Plan..... 17

7. Wastewater Solids Transfers 18

8. Operator Certification 18

9. Outfall Inspection..... 19

SCHEDULE F: NPDES GENERAL CONDITIONS..... 21

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

LIST OF TABLES

Table A1: Permit Limits..... 3

Table A2: Biosolids Limits 5

Table B1: Reporting Requirements and Due Dates 6

Table B2: Influent Monitoring Requirements 10

Table B3: Effluent Monitoring Requirements 11

Table B4: Biosolids Monitoring..... 14

Table B5: Biosolids Minimum Monitoring Frequency..... 14

SCHEDULE A: WASTE DISCHARGE LIMITS

1. Outfall 001 – Permit Limits

During the term of this permit, the permittee must comply with the limits in the following table:

Table A1: Permit Limits

Parameter	Units	Average Monthly	Average Weekly	Daily Maximum
BOD ₅ (May 1 – October 31)	mg/L	10	15	-
	lb/day	0.4	0.6	0.8
	%	85	-	-
TSS (May 1 – October 31)	mg/L	10	15	-
	lb/day	0.4	0.6	0.8
	%	70	-	-
BOD ₅ (November 1 – April 30)	mg/L	20	30	-
	lb/day	0.8	1.3	1.7
	%	85	-	-
TSS (November 1 – April 30)	mg/L	20	30	-
	lb/day	0.8	1.3	1.7
	%	70	-	-
pH	SU	Instantaneous limit between a daily minimum of 6.0 and a daily maximum of 9.0		
<i>E. coli</i> bacteria (See note a.)	#/100 mL	Shall not exceed 126 organisms per 100 mL monthly geometric mean. No single sample shall exceed 406 organisms per 100 mL.		
Note:				
a. If a single sample exceeds 406 organisms/100 mL, the permittee may take at least 5 consecutive re-samples at 4-hour intervals beginning within 28 hours after the original sample was taken. A geometric mean of the 5 re-samples that is less than or equal to 126 <i>E. coli</i> organisms/100 mL demonstrates compliance with the limit.				

2. Regulatory Mixing Zone

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

The allowable mixing zone extends from the outfall to that portion of the Willamette River contained within five feet downstream from the culvert outfall. The allowable zone of initial dilution extends from the outfall to that portion of the Willamette River contained within two feet downstream from the culvert outfall.

3. Biosolids

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

- a. Biosolids Management Plan - The permittee must manage biosolids in accordance with its DEQ-approved Biosolids Management Plan and Land Application Plan (see Schedule D).
- b. Agronomic Rates for Nutrient Loading - The permittee must apply biosolids at or below the agronomic rates approved by DEQ to minimize potential groundwater degradation. At the time of sale or distribution of the exceptional quality biosolids, the origin must be identified and biosolids analyses must be available to applicators or users of the biosolids.
- c. Land Application Site Authorization - The permittee must obtain written site authorization from DEQ for each land application site prior to land application (see Schedule D) and follow the site-specific management conditions in the DEQ-issued site authorization letter. This requirement does not apply for exceptional quality biosolids, which may be land applied as any other fertilizer or soil amendment.
- d. Pathogen and Vector Attraction Reduction - Prior to land application, the permittee must ensure that biosolids meet one of the pathogen reduction standards under 40 CFR 503.32 and one of the vector attraction reduction standards under 40 CFR 503.33. For exceptional quality biosolids, the biosolids must meet one of the Class A pathogen reduction requirements in 40 CFR 503.32(a) and one of the vector attraction reduction requirements in 40 CFR 503.33(b)(1) through (b)(8) prior to land application.
- e. Pollutants - The permittee must not apply biosolids containing pollutants in excess of the ceiling concentrations shown in Table A3. The permittee may apply biosolids containing pollutants in excess of the pollutant concentrations. However, the total quantity of these pollutant(s) cannot exceed the cumulative pollutant loading rates in Table A3. For biosolids to be managed as exceptional quality biosolids, the biosolids cannot exceed any of the ceiling concentration limits or the pollutant concentration limits in Table A3.
- f. Approval to Apply Cumulative Pollutant Loading Rates - If the permittee's biosolids are subject to the cumulative pollutant loading rates as described in section e. above, the permittee must obtain specific approval from DEQ to land apply these biosolids in accordance with their approved Biosolids Management and Land Application Site Authorization (see Schedule D).

Table A2: Biosolids Limits

Pollutant (See note a.)	Ceiling concentrations (mg/kg)	Pollutant concentrations (mg/kg)	Cumulative pollutant loading rates (kg/ha)
Arsenic	75	41	41
Cadmium	85	39	39
Copper	4300	1500	1500
Lead	840	300	300
Mercury	57	17	17
Molybdenum	75	—	—
Nickel	420	420	420
Selenium	100	100	100
Zinc	7500	2800	2800
Note: a. Biosolids pollutant limits are described in 40 CFR 503.13, which uses the terms <i>ceiling concentrations</i> , <i>pollutant concentrations</i> , and <i>cumulative pollutant loading rates</i> .			

SCHEDULE B: MINIMUM MONITORING AND REPORTING REQUIREMENTS

1. Reporting Requirements

The permittee must submit to DEQ monitoring results and reports as listed below.

Table B1: Reporting Requirements and Due Dates

Reporting Requirement	Frequency	Due Date (See note a.)	Report Form (See note b.)	Submit To:
Tables B2 and B3 Influent Monitoring and Effluent Monitoring	Monthly	By the 15th of the following month	Specified in Schedule B. Section 2 of this permit	Electronic reporting as directed by DEQ
Inflow and infiltration report (see Schedule D)	Annually	February 15 of following years	Electronic copy in a DEQ- approved format	Attached via electronic reporting as directed by DEQ
Wastewater solids annual report (see Schedule D)	Annually	By February 19 of the following year	Electronic copy in a DEQ- approved format	Attached via electronic reporting as directed by DEQ Electronic copy to DEQ Biosolids Program Coordinator
Biosolids annual report (see Schedule D)	Annually	By February 19 of the following year	Electronic copy in a DEQ- approved form	Attached via electronic reporting as directed by DEQ Biosolids Program Coordinator
Outfall Inspection Report (see Schedule D)	Once per permit cycle	Submit by XX/15/20XX In the 3 rd year of the permit.	Electronic copy in a DEQ- approved format	Attached via electronic reporting as directed by DEQ
Chlorine Management Plan	Once per permit cycle	Submit by XX/15/XXX (within six months of permit issuance)	Electronic copy in a DEQ- approved format	Attached via electronic reporting as directed by DEQ
Tank inspection (Dosing, Septic & Recirculation)	Annually	As requested by DEQ	Maintain records on site	Attached via electronic reporting as directed by DEQ
Inspect equalization pump screens	Quarterly	As requested by DEQ	Maintain records on site	Attached via electronic reporting as directed by DEQ
Test pumps and alarms at Recirculation and Equalization tanks and chlorine contact chamber	Quarterly	As requested by DEQ	Maintain records on site	Attached via electronic reporting as directed by DEQ

Reporting Requirement	Frequency	Due Date (See note a.)	Report Form (See note b.)	Submit To:
Notes: a. For submittals that are provided to DEQ by mail, the postmarked date must not be later than the due date. b. All reporting requirements are to be submitted in a DEQ-approved format, unless otherwise specified in writing.				

2. Monitoring and Reporting Protocols

a. Electronic Submissions

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

- i. The permittee must submit monitoring results required by this permit via DEQ-approved web-based Discharge Monitoring Report (DMR) forms to DEQ via electronic reporting. Any data used to calculate summary statistics must be submitted as a separate attachment approved by DEQ via electronic reporting.
- ii. The reporting period is the calendar month.
- iii. The permittee must submit monitoring data and other information required by this permit for all compliance points by the 15th day of the month following the reporting period unless specified otherwise in this permit or as specified in writing by DEQ.

b. Test Methods

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

c. Detection and Quantitation Limits

- i. **Detection Level (DL)** – The DL is defined as the minimum measured concentration of a substance that can be distinguished from method blank results with 99% confidence. The DL is derived using the procedure in 40 CFR 136 Appendix B and evaluated for reasonableness relative to method blank concentrations to ensure results reported above the DL are not a result of routine background contamination. The DL is also known as the Method Detection Limit (MDL) or Limit of Detection (LOD).
- ii. **Quantitation Limits (QLs)** – The QL is the minimum level, concentration or quantity of a target analyte that can be reported with a specified degree of confidence. It is the lowest level at which the entire analytical system gives a recognizable signal and acceptable calibration for the analyte. It is normally equivalent to the concentration of the lowest calibration standard adjusted for sample weights, volumes, preparation, and cleanup procedures employed. The QL as reported by a laboratory is also sometimes referred to as the Method Reporting Limit (MRL) or Limit of Quantitation (LOQ).

d. Sufficient Sensitivity of Quantitation Limits

- i. The Laboratory QLs (adjusted for any dilutions) for analyses performed to demonstrate compliance with permit limits or as part of effluent characterization, must meet at least one of the requirements below:
 - (A) The QL is at or below the level of the water quality criterion for the measured parameter.

- (B) The QL is above the water quality criterion but the amount of the pollutant in a facility's discharge is high enough that the method detects and quantifies the level of the parameter in the discharge.
 - (C) The QL has the lowest sensitivity of the analytical methods procedure specified in 40 CFR 136.
 - (D) The QL is at or below those defined in Oregon DEQ list of quantitation limits posted online at [DEQ permitting website](#).
- e. Quality Assurance and Quality Control
- i. Quality Assurance Plan – The permittee must develop and implement a written Quality Assurance Plan that details the facility sampling procedures, equipment calibration and maintenance, analytical methods, quality control activities and laboratory data handling and reporting. The QA/QC program must conform to the requirements of 40 CFR 136.7.
 - ii. If QA/QC requirements are not met for any analysis, the permittee must re-analyze the sample. If the sample cannot be re-analyzed, the permittee must re-sample and analyze at the earliest opportunity. If the permittee is unable to collect a sample that meets QA/QC requirements, then the permittee must include the result in the discharge monitoring report (DMR) along with a notation (data qualifier). In addition, the permittee must explain how the sample does not meet QA/QC requirements. The permittee may not use the result that failed the QA/QC requirements in any calculation required by the permit unless authorized in writing by DEQ. If these method criteria are not met for BOD₅, the permittee must: 1) report the daily BOD₅ values with data qualifiers; 2) include these BOD₅ values in the summary statistic calculations (e.g., weekly averages, monthly averages, % removal); and 3) report the BOD₅ summary statistics with data qualifiers.
 - iii. Flow measurement, field measurement, and continuous monitoring devices - The permittee must:
 - (A) Establish verification and calibration frequency for each device or instrument in the quality assurance plan that conforms to the frequencies recommended by the manufacturer.
 - (B) Verify at least once per year that flow-monitoring devices are functioning properly according to manufacturer's recommendation. Calibrate as needed according to manufacturer's recommendations.
 - (C) Verify at least weekly that the continuous monitoring instruments are functioning properly according to manufacturer's recommendation unless the permittee demonstrates a longer period is sufficient and such longer period is approved by DEQ in writing.
- f. Reporting Sample Results
- i. The permittee must report the laboratory DL and QL as defined above for each analyte, with the following exceptions: pH, temperature, BOD, CBOD, TSS, Oil & Grease, hardness, alkalinity, bacteria, and nitrate-nitrite. For temperature and pH, neither the QL nor the DL need to be reported. For the other parameters listed above, the permittee is only required to report the QL and only when the result is ND.
 - ii. The permittee must report the same number of significant digits as the permit limit for a given parameter.

- iii. (For Discharge Monitoring Reports) If a sample result is above the DL but below the QL, the permittee must report the result as the DL preceded by DEQ's data code "E". For example, if the DL is 1.0 µg/l, the QL is 3.0 µg/L and the result is estimated to be between the DL and QL, the permittee must report "E1.0 µg/L" on the DMR. This requirement does not apply in the case of parameters for which the DL does not have to be reported.
- iv. (For Discharge Monitoring Reports) If the sample result is below the DL, the permittee must report the result as less than the specified DL. For example, if the DL is 1.0 µg/L and the result is ND, report "<1.0" on the discharge monitoring report (DMR). This requirement does not apply in the case of parameters for which the DL does not have to be reported.

g. Calculating and Reporting Mass Loads

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

Example calculation: Flow (in MGD) X Concentration (in mg/L) X 8.34 = Pounds per day

- i. Mass load limits all have two significant figures unless otherwise noted.
- ii. When concentration data are below the DL: To calculate the mass load from this result, use the DL. Report the mass load as less than the calculated mass load. For example, if flow is 2 MGD and the reported sample result is <1.0 µg/L, report "<0.017 lb/day" for mass load on the DMR (1.0 µg/L x 2 MGD x conversion factor = 0.017 lb/day).

3. Monitoring and Reporting Requirements

- a. The permittee must monitor influent at the sampling location after the septic tanks, just prior to chlorination and report results in accordance with Table B1 and Table B2 below.

Table B2: Influent Monitoring Requirements

Item or Parameter	Units	Time Period	Minimum Frequency	Sample Type / Required Action (See note a.)	Report Statistic (See note b.)
BOD ₅ (00310)	mg/L	May 1 – October 31	2/month	Grab	Monthly Average
TSS (00530)	mg/L	May 1 – October 31	2/month	Grab	Monthly Average
BOD ₅ (00310)	mg/L	November 1 – April 30	1/month	Grab	Monthly Average
TSS (00530)	mg/L	November 1 – April 30	1/month	Grab	Monthly Average
pH (00400)	SU	Year-round	3/week	Grab	1. Monthly Maximum 2. Monthly Minimum
Notes: a. In the event of equipment failure or loss, the permittee must notify DEQ and deploy new equipment to minimize interruption of data collection. If new equipment cannot be immediately deployed, the permittee must perform grab measurements. b. When submitting DMRs electronically, the permittee must submit all data used to determine summary statistics in a DEQ-approved format as a spreadsheet via electronic reporting unless otherwise directed by DEQ.					

- b. The permittee must monitor effluent for Outfall 001 at the effluent sampling port just prior to the discharge location at the receiving channel. Results must be reported in accordance with Table B1 and Table B3 below:

Table B3: Effluent Monitoring Requirements

Item or Parameter	Units	Time Period	Minimum Frequency	Sample Type/ Required Action (See note a.)	Report Statistic (See note b.)
Flow (50050)	MGD	Year-round	Daily	Metered	1. Monthly Average 2. Daily Maximum
BOD ₅ (00310)	mg/L	May 1 – October 31	2/month	Grab	1. Monthly Average 2. Maximum Weekly Average
BOD ₅ (00310)	lb/day	May 1 – October 31	2/month	Calculation	1. Daily Maximum 2. Monthly Average 3. Maximum Weekly Average
TSS (00530)	mg/L	May 1 – October 31	2/month	Grab	1. Monthly Average 2. Maximum Weekly Average
TSS (00530)	lb/day	May 1 – October 31	2/month	Calculation	1. Daily Maximum 2. Monthly Average 3. Maximum Weekly Average
BOD ₅ (00310)	mg/L	November 1 – April 30	1/month	Grab	1. Monthly Average 2. Maximum Weekly Average
BOD ₅ (00310)	lb/day	November 1 – April 30	1/month	Calculation	1. Daily Maximum 2. Monthly Average 3. Maximum Weekly Average
TSS (00530)	mg/L	November 1 – April 30	1/month	Grab	1. Monthly Average 2. Maximum Weekly Average
TSS (00530)	lb/day	November 1 – April 30	1/month	Calculation	1. Daily Maximum 2. Monthly Average 3. Maximum Weekly Average
BOD ₅ percent removal (81010) (See note c.)	%	Year-round	Monthly	Calculation based on monthly average BOD ₅ concentration values	Monthly Average

Item or Parameter	Units	Time Period	Minimum Frequency	Sample Type/ Required Action (See note a.)	Report Statistic (See note b.)
TSS percent removal (81011) (See note c.)	%	Year-round	Monthly	Calculation based on monthly average TSS concentration values	Monthly Average
pH (00400)	SU	Year-round	3/week	Grab	1. Daily Maximum 2. Daily Minimum
Chlorine, Total Residual (50060)	mg/L	Year-round	Daily	Grab	1. Daily Maximum 2. Monthly Average
Chlorine used (81400)	lb/day	Year-round	Daily	Scale reading	Monthly Average
Chlorine, Total Residual prior to dechlorination	mg/L	Year-round	Daily	Grab	Maintain records on-site
Temperature (00010)	°C	Year-round	3/week	Grab (See note d.)	1. Daily Maximum 2. Monthly Average 3. 7-day Rolling Average of Daily Maximum
<i>E. coli</i> (51040)	#/100 mL	Year-round	1/month	Grab	1. Daily Maximum 2. Monthly Geometric Mean
Alkalinity as CaCO ₃ (00410)	mg/L	Year-round	Quarterly	Grab	Quarterly Maximum

Item or Parameter	Units	Time Period	Minimum Frequency	Sample Type/ Required Action (See note a.)	Report Statistic (See note b.)
Notes: a. In the event of equipment failure or loss, the permittee must notify DEQ and deploy new equipment to minimize interruption of data collection. If new equipment cannot be immediately deployed, the permittee must perform grab measurements. If the failure or loss is for continuous temperature monitoring equipment, the permittee must collect one grab sample daily between 12 PM and 5 PM until continuous monitoring equipment is redeployed. b. When submitting DMRs electronically, all data used to determine summary statistics must be submitted in a DEQ-approved format as a spreadsheet via electronic reporting unless otherwise directed by DEQ. c. Percent Removal must be calculated on a monthly basis using the following formula: $\text{Percent Removal} = \frac{[\text{Influent Concentration}] - [\text{Effluent Concentration}]}{[\text{Influent Concentration}]} \times 100$ Where: Influent Concentration = Corresponding Monthly average influent concentration based on the analytical results of the reporting period. Effluent Concentration = Corresponding Monthly average effluent concentration based on the analytical results of the reporting period. d. The permittee must perform temperature grab measurements between 12 PM and 5 PM.					

4. Biosolids Monitoring Requirements

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

Table B4: Biosolids Monitoring

Item or Parameter	Minimum Frequency	Sample Type
Nutrient and conventional parameters (% dry weight unless otherwise specified): Total Kjeldahl Nitrogen (TKN) Nitrate-Nitrogen (NO ₃ -N) Total Ammoniacal Nitrogen (NH ₃ -N) Total Phosphorus (P) Potassium (K) pH (S.U.) Total Solids Volatile Solids	As described in DEQ-approved Biosolids Management Plan, but not less than the frequency in Table B5.	As described in DEQ-approved Biosolids Management Plan
Pollutants: As, Cd, Cu, Hg, Pb, Mo, Ni, Se, Zn, mg/kg dry weight	As described in DEQ-approved Biosolids Management Plan, but not less than the frequency in Table B5	As described in DEQ-approved Biosolids Management Plan
Pathogen reduction	As described in DEQ-approved Biosolids Management Plan, but not less than the frequency in Table B5.	As described in DEQ-approved Biosolids Management Plan
Vector attraction reduction	As described in DEQ-approved Biosolids Management Plan, but not less than the frequency in Table B5.	As described in DEQ-approved Biosolids Management Plan
Record of biosolids land application: date, quantity, location.	Each event	Record the date, quantity, and location of biosolids land applied on site location map or equivalent electronic system, such as GIS.

Table B5: Biosolids Minimum Monitoring Frequency

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

SCHEDULE C: COMPLIANCE SCHEDULE

A compliance schedule is not part of this permit.

Public Notice Draft

SCHEDULE D: SPECIAL CONDITIONS

1. Inflow and Infiltration

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

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

2. Chlorine Management Plan

The permittee must develop and submit for DEQ approval a Chlorine Management Plan ("Plan") as directed in Table B1. The permittee must implement the Plan once it has been approved by DEQ.

- a. The Plan must include the following:
 - i. Proposed measures to be implemented by the permittee designed to reduce the effluent total residual chlorine concentration to the benchmark target value (see below),
 - ii. A proposed implementation timeline, and
 - iii. Proposed corrective actions to be taken if the benchmark target value is exceeded for any single sample. These actions must be taken within 30 days of receiving monitoring results.
- b. The permittee must notify DEQ within 30 days of fully implementing the proposed measures designed to reduce the effluent total residual chlorine concentration.

Benchmark Target: The benchmark target of this plan is the DEQ established Quantitation Limit of 0.05 mg/L for total residual chlorine. Any analysis done for total residual chlorine must have a quantitation limit that is either equal to or less than 0.05 mg/L. The reporting statistic for this benchmark is the Daily Maximum.

3. Emergency Response and Public Notification Plan

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

4. Exempt Wastewater Reuse at the Treatment System

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

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

5. Wastewater Solids Annual Report

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

6. Biosolids Management Plan

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

a. Annual Report

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

b. Site Authorization

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

c. Public Participation

- i. DEQ will provide an opportunity for public review and comment on any significant plan modifications prior to approving or denying. Public review is not required for minor modifications or changes to utilization dates.

- ii. No DEQ-initiated public notice is required for continued use of sites identified in DEQ-approved biosolids management plan.
- iii. For new sites that fail to meet the site selection criteria in the biosolids management plan or that are deemed by DEQ to be sensitive with respect to residential housing, runoff potential, or threat to groundwater, DEQ will provide an opportunity for public comment as directed by OAR 340-050-0030(2).
- iv. For all other new sites, the permittee must provide for public participation following procedures in its DEQ-approved land application plan.

7. Wastewater Solids Transfers

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

8. Operator Certification

- a. Definitions
 - i. “Supervise” means to have full and active responsibility for the daily on-site technical operation of a wastewater treatment system or wastewater collection system.
 - ii. “Supervisor” or “designated operator”, means the operator delegated authority by the permittee for establishing and executing the specific practice and procedures for operating the wastewater treatment system or wastewater collection system in accordance with the policies of the owner of the system and any permit requirements.
 - iii. “Shift Supervisor” means the operator delegated authority by the permittee for executing the specific practice and procedures for operating the wastewater treatment system or wastewater collection system when the system is operated on more than one daily shift.
 - iv. “System” includes both the collection system and the treatment systems.
- b. The permittee must comply with OAR Chapter 340, Division 49, “Regulations Pertaining to Certification of Wastewater System Operator Personnel” and designate a supervisor whose certification corresponds with the classification of the collection and/or treatment system as specified in DEQ Supervisory Wastewater Operator Status Report. DEQ may revise the permittee’s classification in writing at any time to reflect changes in the collection or treatment system. This reclassification is not considered a permit modification and may be made after the permit expiration date provided the permit has been administratively extended by DEQ. If a facility is re-classified, a certified letter will be mailed to the system owner from DEQ Operator Certification Program. Current system classifications are publicized on DEQ Supervisory Wastewater Operator Status Report found on [DEQ Wastewater Operator Certification Homepage](#).

- c. The permittee must have its system supervised on a part-time or full-time basis by one or more operators who hold a valid certificate for the type of wastewater treatment or wastewater collection system the operator is supervising and at a grade equal to or greater than the wastewater system's classification.

When compliance with this section is not possible or practicable because the system supervisor is not available or the position is vacated unexpectedly, and another certified operator is not qualified to assume supervisory responsibility, the Director may grant a time extension for compliance with the requirements in response to a written request from the system owner. The Director will not grant an extension longer than 120 days unless the system owner documents the existence of extraordinary circumstances.

- d. The permittee's wastewater system may be without the designated supervisor for up to 30 consecutive days if another person supervises the system, who is certified at no more than one grade lower than the classification of the wastewater system. The permittee must delegate authority to this operator to supervise the operation of the system.
- e. If the wastewater system has more than one daily shift, the permittee must have another properly certified operator available to supervise operation of the system. Each shift supervisor must be certified at no more than one grade lower than the system classification.
- f. The permittee is not required to have a supervisor on site at all times; however, the supervisor must be available to the permittee and operator at all times.
- g. The permittee must notify DEQ in writing of the name of the system supervisor by completing and submitting the Supervisory Wastewater System Operator Designation Form. The most recent version of this form may be found on [DEQ Wastewater Operator Certification homepage](#) *NOTE: This form is different from the Delegated Authority form. The permittee may replace or re-designate the system supervisor with another properly certified operator at any time and must notify DEQ in writing within 30 days of replacement or re-designation of the operator in charge. As of this writing, the notice of replacement or re-designation must be sent to Water Quality Division, Operator Certification Program, 700 NE Multnomah St, Suite 600, Portland, OR 97232-4100. This address may be updated in writing by DEQ during the term of this permit.

9. Outfall Inspection

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

SCHEDULE E: PRETREATMENT ACTIVITIES

A pretreatment program is not part of this permit.

Public Notice Draft

SCHEDULE F: NPDES GENERAL CONDITIONS

DOMESTIC FACILITIES October 1, 2015, Version

SECTION A. STANDARD CONDITIONS

A1. Duty to Comply with Permit

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

A2. Penalties for Water Pollution and Permit Condition Violations

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

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

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

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

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

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

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

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

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

Any person who knowingly violates section any permit condition, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both.

In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both.

An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.

Any person may be assessed an administrative penalty by the Administrator for violating any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act.

Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000.

Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000.

A3. Duty to Mitigate

The permittee must take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit. In addition, upon request of DEQ, the permittee must correct any adverse impact on the environment or human health resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

A4. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and have the permit renewed. The application must be submitted at least 180 days before the expiration date of this permit.

DEQ may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date.

A5. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

- a. Violation of any term, condition, or requirement of this permit, a rule, or a statute.
- b. Obtaining this permit by misrepresentation or failure to disclose fully all material facts.
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- d. The permittee is identified as a Designated Management Agency or allocated a wasteload under a total maximum daily load (TMDL).
- e. New information or regulations.
- f. Modification of compliance schedules.
- g. Requirements of permit reopener conditions
- h. Correction of technical mistakes made in determining permit conditions.
- i. Determination that the permitted activity endangers human health or the environment.
- j. Other causes as specified in 40 CFR §§ 122.62, 122.64, and 124.5.
- k. For communities with combined sewer overflows (CSOs):
 - (1) To comply with any state or federal law regulation for CSOs that is adopted or promulgated subsequent to the effective date of this permit.

- (2) If new information that was not available at the time of permit issuance indicates that CSO controls imposed under this permit have failed to ensure attainment of water quality standards, including protection of designated uses.
- (3) Resulting from implementation of the permittee's long-term control plan and/or permit conditions related to CSOs.

The filing of a request by the permittee for a permit modification, revocation or reissuance, termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

A6. Toxic Pollutants

The permittee must comply with any applicable effluent standards or prohibitions established under Oregon Administrative Rule (OAR) 340-041-0033 and section 307(a) of the federal Clean Water Act for toxic pollutants, and with standards for sewage sludge use or disposal established under section 405(d) of the federal Clean Water Act, within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

A7. Property Rights and Other Legal Requirements

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege, or authorize any injury to persons or property or invasion of any other private rights, or any infringement of federal, tribal, state, or local laws or regulations.

A8. Permit References

Except for effluent standards or prohibitions established under section 307(a) of the federal Clean Water Act and OAR 340-041-0033 for toxic pollutants, and standards for sewage sludge use or disposal established under section 405(d) of the federal Clean Water Act, all rules and statutes referred to in this permit are those in effect on the date this permit is issued.

A9. Permit Fees

The permittee must pay the fees required by OAR.

SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

B1. Proper Operation and Maintenance

The permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

B2. Need to Halt or Reduce Activity Not a Defense

For industrial or commercial facilities, upon reduction, loss, or failure of the treatment facility, the permittee must, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until the facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced or lost. It is not a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B3. Bypass of Treatment Facilities

a. Definitions

- (1) "Bypass" means intentional diversion of waste streams from any portion of the treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be

exceeded, provided the diversion is to allow essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs b and c of this section.

- (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- b. Prohibition of bypass.
 - (1) Bypass is prohibited and DEQ may take enforcement action against a permittee for bypass unless:
 - i. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - ii. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventative maintenance; and
 - iii. The permittee submitted notices and requests as required under General Condition B3.c.
 - (2) DEQ may approve an anticipated bypass, after considering its adverse effects and any alternatives to bypassing, if DEQ determines that it will meet the three conditions listed above in General Condition B3.b.(1).
- c. Notice and request for bypass.
 - (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, a written notice must be submitted to DEQ at least ten days before the date of the bypass.
 - (2) Unanticipated bypass. The permittee must submit notice of an unanticipated bypass as required in General Condition D5.

B4. Upset

- a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operation error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.
- b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of General Condition B4.c are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the permittee can identify the causes(s) of the upset;
 - (2) The permitted facility was at the time being properly operated;
 - (3) The permittee submitted notice of the upset as required in General Condition D5, hereof (24-hour notice); and
 - (4) The permittee complied with any remedial measures required under General Condition A3 hereof.
- d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

B5. Treatment of Single Operational Upset

For purposes of this permit, a single operational upset that leads to simultaneous violations of more than one pollutant parameter will be treated as a single violation. A single operational upset is an exceptional incident that causes simultaneous, unintentional, unknowing (not the result of a knowing act or omission), temporary noncompliance with more than one federal Clean Water Act effluent discharge pollutant parameter. A single

operational upset does not include federal Clean Water Act violations involving discharge without a NPDES permit or noncompliance to the extent caused by improperly designed or inadequate treatment facilities. Each day of a single operational upset is a violation.

B6. Overflows from Wastewater Conveyance Systems and Associated Pump Stations

- a. Definition. "Overflow" means any spill, release or diversion of sewage including:
 - (1) An overflow that results in a discharge to waters of the United States; and
 - (2) An overflow of wastewater, including a wastewater backup into a building (other than a backup caused solely by a blockage or other malfunction in a privately owned sewer or building lateral), even if that overflow does not reach waters of the United States.
- b. Reporting required. All overflows must be reported orally to DEQ within 24 hours from the time the permittee becomes aware of the overflow. Reporting procedures are described in more detail in General Condition D5.

B7. Public Notification of Effluent Violation or Overflow

If effluent limitations specified in this permit are exceeded or an overflow occurs that threatens public health, the permittee must take such steps as are necessary to alert the public, health agencies and other affected entities (for example, public water systems) about the extent and nature of the discharge in accordance with the notification procedures developed under General Condition B8. Such steps may include, but are not limited to, posting of the river at access points and other places, news releases, and paid announcements on radio and television.

B8. Emergency Response and Public Notification Plan

The permittee must develop and implement an emergency response and public notification plan that identifies measures to protect public health from overflows, bypasses, or upsets that may endanger public health. At a minimum the plan must include mechanisms to:

- a. Ensure that the permittee is aware (to the greatest extent possible) of such events;
- b. Ensure notification of appropriate personnel and ensure that they are immediately dispatched for investigation and response;
- c. Ensure immediate notification to the public, health agencies, and other affected public entities (including public water systems). The overflow response plan must identify the public health and other officials who will receive immediate notification;
- d. Ensure that appropriate personnel are aware of and follow the plan and are appropriately trained;
- e. Provide emergency operations; and
- f. Ensure that DEQ is notified of the public notification steps taken.

B9. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters must be disposed of in such a manner as to prevent any pollutant from such materials from entering waters of the state, causing nuisance conditions, or creating a public health hazard.

SECTION C. MONITORING AND RECORDS

C1. Representative Sampling

Sampling and measurements taken as required herein must be representative of the volume and nature of the monitored discharge. All samples must be taken at the monitoring points specified in this permit, and must be taken, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points must not be changed without notification to and the approval of DEQ. Samples must be collected in accordance with requirements in 40 CFR part 122.21 and 40 CFR part 403 Appendix E.

C2. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices must be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices must be installed, calibrated and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected must be capable of measuring flows with a maximum deviation of less than ± 10 percent from true discharge rates throughout the range of expected discharge volumes.

C3. Monitoring Procedures

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

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

C4. Penalties for Tampering

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

C5. Reporting of Monitoring Results

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

C6. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR part 136 or, in the case of sludge (biosolids) use and disposal, approved under 40 CFR part 503, or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the discharge monitoring report. Such increased frequency must also be indicated. For a pollutant parameter that may be sampled more than once per day (for example, total residual chlorine), only the average daily value must be recorded unless otherwise specified in this permit.

C7. Averaging of Measurements

Calculations for all limitations that require averaging of measurements must utilize an arithmetic mean, except for bacteria which must be averaged as specified in this permit.

C8. Retention of Records

Records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities must be retained for a period of at least 5 years (or longer as required by 40 CFR part 503). Records of all monitoring information including all calibration and maintenance records, all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit and records of all data used to complete the application for this permit must be retained for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of DEQ at any time.

C9. Records Contents

Records of monitoring information must include:

- a. The date, exact place, time, and methods of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of such analyses.

C10. Inspection and Entry

The permittee must allow DEQ or EPA upon the presentation of credentials to:

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by state law, any substances, or parameters at any location.

C11. Confidentiality of Information

Any information relating to this permit that is submitted to or obtained by DEQ is available to the public unless classified as confidential by the Director of DEQ under ORS 468.095. The permittee may request that information be classified as confidential if it is a trade secret as defined by that statute. The name and address of the permittee, permit applications, permits, effluent data, and information required by NPDES application forms under 40 CFR § 122.21 are not classified as confidential [40 CFR § 122.7(b)].

SECTION D. REPORTING REQUIREMENTS

D1. Planned Changes

The permittee must comply with OAR 340-052, "Review of Plans and Specifications" and 40 CFR § 122.41(l)(1). Except where exempted under OAR 340-052, no construction, installation, or modification involving disposal systems, treatment works, sewerage systems, or common sewers may be commenced until the plans and specifications are submitted to and approved by DEQ. The permittee must give notice to DEQ as soon as possible of any planned physical alternations or additions to the permitted facility.

D2. Anticipated Noncompliance

The permittee must give advance notice to DEQ of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

D3. Transfers

This permit may be transferred to a new permittee provided the transferee acquires a property interest in the permitted activity and agrees in writing to fully comply with all the terms and conditions of the permit and EQC rules. No permit may be transferred to a third party without prior written approval from DEQ. DEQ may require modification, revocation, and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under 40 CFR § 122.61. The permittee must notify DEQ when a transfer of property interest takes place.

D4. Compliance Schedule

Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date. Any reports of noncompliance must include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements.

D5. Twenty-Four Hour Reporting

The permittee must report any noncompliance that may endanger health or the environment. Any information must be provided orally (by telephone) to the DEQ regional office or Oregon Emergency Response System (1-800-452-0311) as specified below within 24 hours from the time the permittee becomes aware of the circumstances.

a. Overflows.

(1) Oral Reporting within 24 hours.

- i. For overflows other than basement backups, the following information must be reported to the Oregon Emergency Response System (OERS) at 1-800-452-0311. For basement backups, this information should be reported directly to the DEQ regional office.

- (a) The location of the overflow;
 - (b) The receiving water (if there is one);
 - (c) An estimate of the volume of the overflow;
 - (d) A description of the sewer system component from which the release occurred (for example, manhole, constructed overflow pipe, crack in pipe); and
 - (e) The estimated date and time when the overflow began and stopped or will be stopped.

- ii. The following information must be reported to the DEQ regional office within 24 hours, or during normal business hours, whichever is earlier:

- (a) The OERS incident number (if applicable); and
 - (b) A brief description of the event.

(2) Written reporting postmarked within 5 days.

- i. The following information must be provided in writing to the DEQ regional office within 5 days of the time the permittee becomes aware of the overflow:

- (a) The OERS incident number (if applicable);
 - (b) The cause or suspected cause of the overflow;
 - (c) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps;
 - (d) Steps taken or planned to mitigate the impact(s) of the overflow and a schedule of major milestones for those steps; and
 - (e) For storm-related overflows, the rainfall intensity (inches/hour) and duration of the storm associated with the overflow.

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

b. Other instances of noncompliance.

(1) The following instances of noncompliance must be reported:

- i. Any unanticipated bypass that exceeds any effluent limitation in this permit;
- ii. Any upset that exceeds any effluent limitation in this permit;
- iii. Violation of maximum daily discharge limitation for any of the pollutants listed by DEQ in this permit; and
- iv. Any noncompliance that may endanger human health or the environment.

(2) During normal business hours, the DEQ regional office must be called. Outside of normal business hours, DEQ must be contacted at 1-800-452-0311 (Oregon Emergency Response System).

(3) A written submission must be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission must contain:

- i. A description of the noncompliance and its cause;

- ii. The period of noncompliance, including exact dates and times;
 - iii. The estimated time noncompliance is expected to continue if it has not been corrected;
 - iv. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; and
 - v. Public notification steps taken, pursuant to General Condition B7.
- (4) DEQ may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

D6. Other Noncompliance

The permittee must report all instances of noncompliance not reported under General Condition D4 or D5 at the time monitoring reports are submitted. The reports must contain:

- a. A description of the noncompliance and its cause;
- b. The period of noncompliance, including exact dates and times;
- c. The estimated time noncompliance is expected to continue if it has not been corrected; and
- d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

D7. Duty to Provide Information

The permittee must furnish to DEQ within a reasonable time any information that DEQ may request to determine compliance with the permit or to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit. The permittee must also furnish to DEQ, upon request, copies of records required to be kept by this permit.

Other Information: When the permittee becomes aware that it has failed to submit any relevant facts or has submitted incorrect information in a permit application or any report to DEQ, it must promptly submit such facts or information.

D8. Signatory Requirements

All applications, reports or information submitted to DEQ must be signed and certified in accordance with 40 CFR § 122.22.

D9. Falsification of Information

Under ORS 468.953, any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, is subject to a Class C felony punishable by a fine not to exceed \$125,000 per violation and up to 5 years in prison per ORS chapter 161. Additionally, according to 40 CFR § 122.41(k)(2), any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit including monitoring reports or reports of compliance or non-compliance will, upon conviction, be punished by a federal civil penalty not to exceed \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

D10. Changes to Indirect Dischargers

The permittee must provide adequate notice to DEQ of the following:

- a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of the federal Clean Water Act if it were directly discharging those pollutants and;
- b. Any substantial change in the volume or character of pollutants being introduced into the POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
- c. For the purposes of this paragraph, adequate notice must include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

SECTION E. DEFINITIONS

- E1. *BOD* or *BOD₅* means five-day biochemical oxygen demand.
- E2. *CBOD* or *CBOD₅* means five-day carbonaceous biochemical oxygen demand.
- E3. *TSS* means total suspended solids.
- E4. *Bacteria* means but is not limited to fecal coliform bacteria, total coliform bacteria, *Escherichia coli* (*E. coli*) bacteria, and *Enterococcus* bacteria.
- E5. *FC* means fecal coliform bacteria.
- E6. *Total residual chlorine* means combined chlorine forms plus free residual chlorine.
- E7. *Technology based permit effluent limitations* means technology-based treatment requirements as defined in 40 CFR § 125.3, and concentration and mass load effluent limitations that are based on minimum design criteria specified in OAR 340-041.
- E8. *mg/l* means milligrams per liter.
- E9. *µg/l* means microgram per liter.
- E10. *kg* means kilograms.
- E11. *m³/d* means cubic meters per day.
- E12. *MGD* means million gallons per day.
- E13. *Average monthly effluent limitation* as defined at 40 CFR § 122.2 means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
- E14. *Average weekly effluent limitation* as defined at 40 CFR § 122.2 means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.
- E15. *Daily discharge* as defined at 40 CFR § 122.2 means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge must be calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge must be calculated as the average measurement of the pollutant over the day.
- E16. *24-hour composite sample* means a sample formed by collecting and mixing discrete samples taken periodically and based on time or flow.
- E17. *Grab sample* means an individual discrete sample collected over a period of time not to exceed 15 minutes.
- E18. *Quarter* means January through March, April through June, July through September, or October through December.
- E19. *Month* means calendar month.
- E20. *Week* means a calendar week of Sunday through Saturday.
- E21. *POTW* means a publicly-owned treatment works.



State of Oregon
Department of
Environmental
Quality

National Pollutant Discharge Elimination System Permit Fact Sheet Forest Park MHP, LLC

Permittee	Forest Park MHP, LLC Forest Park Mobile Village 18830 South Hwy 99E Oregon City, OR 97045
Existing Permit Information	File Number: 30554 Permit Number: 102323 EPA Reference Number: OR-0031267 Category: Domestic Class: Minor Expiration Date: November 30, 2014
Permittee Contact	Matthew Harrell, Owner 971-570-4785 659 NW Pacific Grove Dr. Beaverton, OR 97006
Receiving Water Information	Receiving stream/NHD name: Willamette River NHD Reach Code & % along reach: 17090007000036 - 70% USGS 12-digit HUC: 170900070405 OWRD Administrative Basin: Willamette basin ODEQ LLID & River Mile: 1227618456580 – RM 28.1 Assessment Unit ID: OR_SR_1709000704_88_104020
Proposed Action	Permit Renewal Application Number: 959907 Date Application Received: June 4, 2014
Permit Writer	Matthew Schult 971-806-4857 Date Prepared: May 22, 2024

NPDES Permit Fact Sheet

Forest Park MHP, LLC

Table of Contents

1. Introduction	4
2. Facility Description	5
2.1 Wastewater Facility	5
2.2 Compliance History	9
2.3 Stormwater	9
2.4 Industrial Pretreatment	9
2.5 Wastewater Classification	9
3. Schedule A: Effluent Limit Development	9
3.1 Existing Effluent Limits	9
3.2 Technology-Based Effluent Limit Development	10
3.3 Water Quality-Based Effluent Limit Development	13
3.4 Antibacksliding	22
3.5 Antidegradation	23
3.6 Whole Effluent Toxicity	23
3.7 Groundwater	23
4. Schedule A: Other Limitations	23
4.1 Mixing Zone	23
4.2 Biosolids	24
4.3 Recycled Water	24
5. Schedule B: Monitoring and Reporting Requirements	24
6. Schedule C: Compliance Schedule	24
7. Schedule D: Special Conditions	25
7.1 Inflow and Infiltration	25
7.2 Chlorine Management Plan	25
7.3 Emergency Response and Public Notification Plan	25
7.4 Exempt Wastewater Reuse at the Treatment System	25
7.5 Wastewater Solids Annual Report	25
7.6 Biosolids Management Plan	25
7.7 Wastewater Solids Transfers	25
7.8 Operator Certification	26
7.9 Outfall Inspection	26
8. Schedule F: NPDES General Conditions	26

List of Tables

Table 2-1: List of Outfalls.....	8
Table 3-1: Existing Effluent Limits	10
Table 3-2: Comparison of TBELs for Federal Secondary Treatment Standards and Oregon Basin-Specific Design Criteria.....	11
Table 3-3: Design Flows and Concentrations Limits	12
Table 3-4: Technology Based Effluent Limits.....	13
Table 3-5: Category 5 and Category 4A Parameters	14
Table 3-6: Domestic Toxic Pollutants of Concern	15
Table 3-7: Pollutants of Concern	15
Table 3-8: FPMV Mixing Zone Dilution Summary	16
Table 3-9: pH Reasonable Potential Analysis	18
Table 3-10: Temperature Criteria Information	19
Table 3-11: Temperature Criterion Effluent Limits.....	20
Table 3-12: Thermal Plume Effluent Limit	21
Table 3-13: Proposed <i>E. coli</i> Limits	22

List of Figures

Figure 2-1: Forest Park Mobile Village, Outfall 001 and discharge to Willamette River.....	7
Figure 2-2: Process flow diagram for Forest Park Mobile Village.....	8
Figure 3-1: FPMV Outfall, Regulatory Mixing Zone (RMZ) and Zone of Initial Dilution (ZID) location.	17

NPDES Permit Renewal Fact Sheet

Forest Park MHP LLC

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:

- DEQ changed the definition of the permittee's Outfall 001 to be the initial discharge point on the permittee's property, where the discharge is to a ditch. The previous permit definition for Outfall 001 was the culvert pipe discharge location at the Willamette River.
- **Schedule B**
 - Removed existing permit Schedule B requirement to monitor effluent ammonia.
 - Added new permit Schedule B monitoring requirement for effluent temperature.
 - Influent and effluent monitoring frequencies have been updated to reflect updates to DEQ's Monitoring Matrix.
- **Schedule D – Special Conditions**
 - Removed existing requirement for permittee to connect to approved area-wide sewerage system when one is made available.
 - Added requirement to submit annual Inflow and Infiltration report, as directed in Table B-1.
 - Added requirement to develop and implement a chlorine management plan, as directed in Table B-1.
 - Added requirement to submit a wastewater solids annual report, as directed in Table B-1.
 - Added section on biosolids management plan.
 - Added section on wastewater solids transfers.
 - Added requirement to conduct and report on an outfall inspection, as directed in Table B-1.

2. Facility Description

2.1 Wastewater Facility

Forest Park Mobile Village (FPMV) is a relatively small (42 home) residential modular home park located in unincorporated Clackamas County about a mile from Oregon City toward Canby on Highway 99E along the Willamette River. The average dry weather design flow for this facility was set at 5000 gallons per day (0.005 MGD) based on the original treatment design. This is the estimated maximum flow during May 1 to October 31 (expressed as a daily average flow), at which the design engineer expected the treatment facility can still consistently meet all effluent limits. There are no separate wet weather design flows. The treatment facility is unchanged from the original design. When facility upgrades were constructed in 1983 an easement was granted for the passage of the treated wastewater across the neighboring property. The owner at the time was the Crown Zellerbach Corporation, but in recent years property ownership has transferred to Metro. The easement requires renewal for each subsequent 5-year period.

The wastewater from FPMV is collected and flows by gravity to five septic tanks, each tank serving multiple dwellings. Wastewater and waste solids from these septic tanks are pumped out based on a schedule and monitoring, then transferred to the Tri-Cities sewage treatment plant for final treatment and disposal, as reported in FPMV's annual biosolids report. In 2023, 13,000 gallons of material were transferred to Tri-Cities. The septic tank effluent then flows to the treatment plant on the northeast side of FPMV, where the collection system drains to two 3000-gallon influent equalization tanks. An intermittent recirculating sand filter (IRSF) treats the wastewater to meet secondary treatment standards. The IRSF system was constructed in 1983 to replace the original sanitary sewage drainfields that were built to serve FPMV wastewater disposal needs when FPMV was constructed in the early 1960s. Dosing pumps send the septic tank effluent to the IRSF, which is enclosed in a pole building. Flow leaving the underdrain from the IRSF enters the recirculation tank that sends one portion back over the IRSF bed and the other portion goes to the chlorine contact chamber (CCC) for disinfection. The disinfected effluent is pumped approximately 300 feet via a park underdrain pipe from the CCC to the discharge point on the western side of FPMV.

Treated wastewater eventually reaches the Willamette River, but the initial discharge is to a small swale channel adjacent to FPMV, several hundred yards from the Willamette River. The swale flows about 250 feet through a heavily wooded adjacent tract of private property where it mixes with several small intermittent streams. The combined stream flows about 100 feet before entering an enclosed culvert that carries the flow (mixed with drainage and surface water) about 150 feet under Oregon state highway 99-E and the Southern Pacific railroad to the Willamette River. Because of the overland travel distance (650 feet or more) from the plant and the relatively small discharge flows observed, during dry weather the effluent tends to soak into the ground and typically does not reach the river. During wet weather, effluent flow mixes with surface water runoff from the forested site adjacent to the mobile home park. Treated wastewater enters the Willamette River from a culvert above the river surface at river mile 28.1. The permit identifies a mixing zone that extends five feet from the bank of the Willamette River. It is unlikely that the final effluent from this facility would be detectable in the river. Monitoring,

sampling, and reporting are conducted by a registered and certified technician, currently from Sep-Tech. Monitoring for effluent pH and chlorine are conducted on site, all other monitoring analyses are performed by a contract laboratory. Reporting and record keeping is done by permittee and consultant.

Ground water seeps are common in FPMV's system, due to the combination of FPMV's location at the base of a steep slope and high groundwater levels in this area. This requires a constant program of sealing leaks in the underground tanks. The owner has had to repair most of the tank risers and pipe joints to keep groundwater out of the treatment plant. The dry weather flows do not include the high levels of infiltration and inflow that are associated with the winter in Oregon. The current actual dry weather (May 1 to October 31) flow from 2018 to 2023 averages 0.003 MGD. The current actual average wet weather (November 1 through April 30) flow for the same time period is 0.0057 MGD. The facility has the capacity to discharge on demand, the effluent flow gauge is located in an enclosure next to the discharge tank. The permit requires that annual calibration records be stored on site.



Figure 2-1: Forest Park Mobile Village, Outfall 001 and discharge to Willamette River

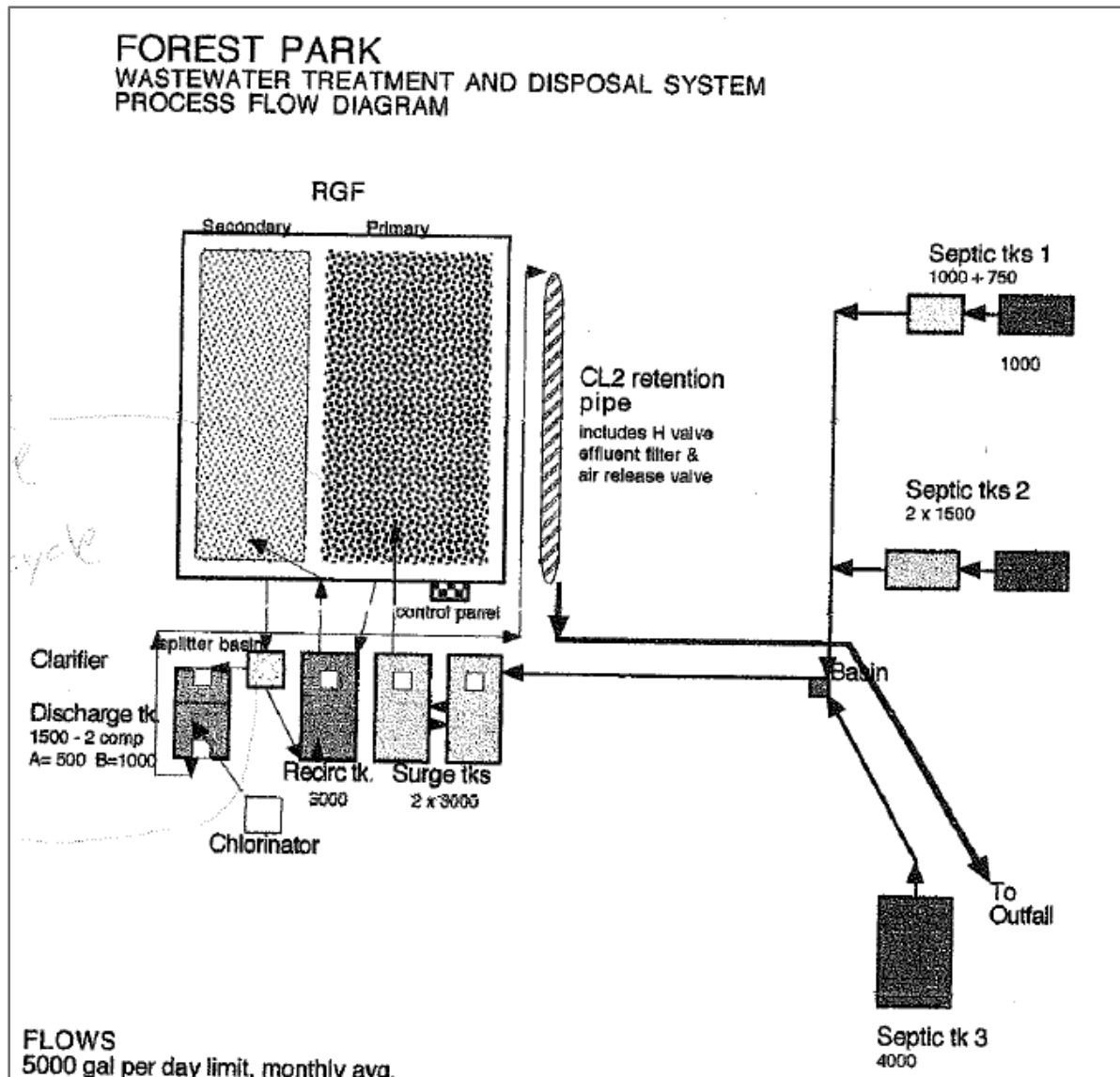


Figure 2-2: Process flow diagram for Forest Park Mobile Village

Table 2-1: List of Outfalls

Outfall Number	Type of Waste	Lat/Long	Design Flow ¹ (mgd)	Existing Flow ² (mgd)
001	Treated Wastewater	45.33787°, -122.64303°	0.005	0.0057
1. Design Flow = design average dry weather flow 2. Existing Flow = existing average effluent flow (Dec-2019 to June-2023)				

2.2 Compliance History

The most recent facility inspection was on November 4, 2023. The FPMV facility was in compliance with permit requirements at the time of the inspection. The treatment facility was well cared for and in good operating condition but was lacking an updated Operations & Maintenance manual to reflect upgrades in the control systems and changes to the operating setting to improve performance.

On December 3, 2019, DEQ issued a Pre-Enforcement Notice to FPMV (2019-PEN-5155) in relation to TBEL limit exceedances for BOD₅ (weekly maximum and monthly average) in May 2019 and failing to achieve required TSS percent removal efficiency in April 2019. A civil penalty (WQ/D-NWR-2019-314) was assessed for this event.

- Class 1 violation of BOD exceeded by more than 100%
- Class 3 violation of TSS % removal

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 Industrial Pretreatment

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

2.5 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 shows the limits contained in the existing permit.

Table 3-1: Existing Effluent Limits

Parameter	Units	Average Monthly	Average Weekly	Daily Maximum
BOD ₅ (May 1 – October 31) (See note a.)	mg/L	10	15	-
	lb/day	0.4	0.6	0.8
TSS (May 1 – October 31) (See note a.)	mg/L	10	15	-
	lb/day	0.4	0.6	0.8
BOD ₅ (November 1 – April 30) (See note a.)	mg/L	20	30	-
	lb/day	0.8	1.3	1.7
TSS (November 1 – April 30) (See note a.)	mg/L	20	30	
	lb/day	0.8	1.3	1.7
BOD ₅ and TSS Removal Efficiency	Year-round, shall not be less than 85% monthly average for BOD ₅ and 70% monthly for TSS.			
pH	SU	Shall be within the range of 6.0 – 9.0		
<i>E. coli</i> bacteria (See note b.)	#/100 mL	Shall not exceed 126 organisms per 100 mL monthly geometric mean. No single sample shall exceed 406 organisms per 100 mL. (See note b.)		
Notes:				
a. Average dry weather design flow to the facility equals 0.005 MGD. Mass load limits are based upon average dry weather design flow to the facility.				
b. If a single sample exceeds 406 organisms per 100 mL, then five consecutive re-samples may be taken at four-hour intervals beginning within 28 hours after the original sample was taken. If the log mean of the five re-samples is less than or equal to 126 organisms per 100 mL, a violation shall not be triggered.				

3.2 Technology-Based Effluent Limit Development

40 CFR 122.44(a)(1) requires that all NPDES permits include technology-based effluent limits (TBELs). Publicly owned treatment works (POTW) are required to meet specific TBELs 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. DEQ also uses best professional judgement, as allowed under federal rule (40 CFR 125.3), to apply the secondary treatment standards as TBELs for domestic wastewater treatment facilities that are not publicly owned.

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

Parameter	Federal Secondary Treatment Standards		Willamette Basin-Specific Design Criteria (OAR 340-041-0345)
	30-Day Average	7-Day Average	Monthly Average
BOD ₅ (mg/L)	30	45	10 mg/L during period of low stream flows (approximately May 1 – Oct. 31). Minimum of secondary treatment or equivalent control during period of high stream flows, (approximately Nov. 1 – Apr. 30).
TSS (mg/L)	30	45	
pH (S.U.)	6.0 – 9.0. (instantaneous)		Not applicable
BOD ₅ and TSS % Removal	85%	Not applicable	Not applicable

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

- The treatment works is consistently meeting, or will consistently meet, its permit effluent concentration limits, but it's 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 federal 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. Further, during the previous permit renewal, the percent removal for suspended solids requirement was adjusted to a less stringent level of 70%. This revision accounted for the fact that FPMV's sanitary system relies on septic tanks for collection prior to FPMV's influent sampling point, hence a substantial reduction of suspended solids is observed. DEQ is proposing retaining the existing permit BOD percent removal limits of 85% and TSS percent removal limits of 70%.

The limits for BOD₅ and TSS in Table 3-2 above are concentration-based limits. The existing concentration-based BOD₅ and TSS TBELs for the winter period (November through April), as listed in Table 3-1 above are more stringent. DEQ is retaining the existing limits in the proposed permit to meet antidegradation and antibacksliding requirements. Mass-based limits are required in addition to the concentration-based limits per OAR 340-041-0061(9). 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:

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

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

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

* Design flow is the design average dry weather flow (DADWF)

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	0.005	10	10
Wet Weather	0.005	20	20
Design flow comments: FPMV does not have wet weather design flows. Mass load limits are based on design average dry weather flow (DADWF).			

Mass Load Calculations (Dry Weather, May 1 – October 31):

$$\text{Monthly Average: } (0.005 \text{ mgd}) \times (10 \text{ mg/L}) \times 8.34 = 0.42 \text{ lb/day, rounded to 0.4 lb/day}$$

$$\text{Weekly Average: } (0.42 \text{ lbs/day monthly average}) \times 1.5 = 0.63 \text{ lb/day, rounded to 0.6 lb/day}$$

$$\text{Daily Maximum: } (0.42 \text{ lbs/day monthly average}) \times 2 = 0.84 \text{ lb/day, rounded to 0.8 lb/day}$$

Mass Load Calculations (Wet Weather, November 1 – April 30):

$$\text{Monthly Average: } (0.005 \text{ mgd}) \times (20 \text{ mg/L}) \times 8.34 = 0.83 \text{ lb/day, rounded to 0.8 lb/day}$$

$$\text{Weekly Average: } (0.83 \text{ lbs/day monthly average}) \times 1.5 = 1.245 \text{ lb/day, rounded to 1.3 lb/day}$$

$$\text{Daily Maximum: } (0.83 \text{ lbs/day monthly average}) \times 2 = 1.66 \text{ lb/day, rounded to 1.7 lb/day}$$

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

Table 3-4: Technology Based Effluent Limits

Parameter	Units	Average Monthly	Average Weekly	Daily Maximum
BOD ₅ (May 1 – October 31)	mg/L	10	15	-
	lbs/day	0.4	0.6	0.8
	% removal	85	-	-
TSS (May 1 – October 31)	mg/L	10	15	-
	lbs/day	0.4	0.6	0.8
	% removal	70	-	-
BOD ₅ (November 1 – April 30)	mg/L	20	30	-
	lbs/day	0.8	1.3	1.7
	% removal	85	-	-
TSS (November 1 – April 30)	mg/L	20	30	-
	lbs/day	0.8	1.3	1.7
	% removal	70	-	-

3.3 Water Quality-Based Effluent Limit Development

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

3.3.1 Designated Beneficial Uses

NPDES permits issued by DEQ must protect the following designated beneficial uses of the Willamette River. These uses are listed in OAR-340-041-0340 for the mainstem of the Willamette River between Newberg and Willamette Falls.

- Public and private domestic water supply
- Industrial water supply
- Irrigation and livestock watering
- Fish and aquatic life (including salmonid migration)
- Wildlife and hunting
- Fishing
- Boating
- Water contact recreation
- Aesthetic quality
- Hydro power

- Commercial navigation and transportation

Based upon the Fish Use Designations – Willamette Basin, Oregon figure contained in OAR 340-041-0340 (Figure 340A), the Lower Willamette River is designated as a salmon and steelhead migration corridor. Referencing OAR 340-041-0340 (Figure 340B), this portion of the river is not designated for salmon or steelhead spawning use.

The applicable numeric water quality criteria are found in OAR 340-041-0345. These include general criteria and Willamette Basin-specific criteria intended to be protective of the beneficial uses for the basin, as listed above.

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. The table also lists any parameters with a TMDL wasteload allocation assigned to the facility (Category 4A). According to DEQ's 303(d) list, the section of the Willamette River that FPMV discharges into is impaired for each of the Category 4 and 5 parameters listed below. For those parameters listed without a TMDL (Category 5), FPMV is a domestic minor facility with no industrial influences and is not anticipated to contribute to the impairments for BioCriteria, Aquatic weeds, Aldrin, DDE 4,4', DDT 4,4', Dieldrin nor Polychlorinated Biphenyls (PCBs). Additionally, FPMV is not expected to contribute to the Dioxin nor methylmercury impairments.

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

Water Quality Limited Parameters (Category 5)	
AU ID:	OR_SR_1709000704_88_104020
AU Name:	Willamette River
AU Status:	Impaired
Year Listed	1998
Year Last Assessed	2022
303d Parameters (Category 5)	BioCriteria; Aquatic Weeds; Temperature (year-round); Human Health Toxics: Aldrin; DDE 4,4'; DDT 4,4'; Dieldrin; Polychlorinated Biphenyls (PCBs)
Category 4A Parameters	
Human Health Toxics: Dioxin (2,3,7,8-TCDD); Methylmercury TMDLs: Temperature (2006); Bacteria (2006); Mercury (2019).	

DEQ has developed Total Maximum Daily Loads (TMDLs) in the Willamette Basin to address impairment for temperature and bacteria. These TMDLs were approved by EPA in September 2006. DEQ issued a TMDL for mercury as a pollutant of concern in the Willamette basin that was replaced in 2019. These TMDL parameters are discussed below. A TMDL can be thought of as an estimate of the total amount of pollution a waterbody can assimilate without exceeding water quality standards. For more information on TMDLs in general, and on the TMDLs developed for the Willamette in particular, go to:

<https://www.oregon.gov/deq/wq/tmdls/Pages/TMDLs-Willamette-Basin.aspx>

3.3.3 TMDL Wasteload Allocations

DEQ issued a temperature TMDL for the mainstem Willamette River in 2006. The wasteload allocation from this TMDL that is applicable to the permittee falls under the “bubble allocations” portion of the Willamette River TMDL. Discussion of this can be found in section 3.3.7. In 2019 the Environmental Protection Agency (EPA) issued a revised Willamette Basin mercury TMDL for DEQ to implement. This is discussed in section 3.3.9.2.

3.3.4 Pollutants of Concern

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

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

Based on EPA’s NPDES permit application requirements, toxic pollutants of concern for domestic facilities are listed in the following table.

Table 3-6: 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 3-7: Pollutants of Concern

Pollutant	How was pollutant identified?
pH	Effluent Monitoring
Temperature	Effluent Monitoring
<i>E. coli</i>	Effluent Monitoring
Total Residual Chlorine	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 an updated regulatory mixing zone description which is described as follows. The size of the RMZ has not changed. The description was updated to include a zone of initial dilution to be consistent with other permits.

The allowable mixing zone extends from the outfall to that portion of the Willamette River contained within five feet downstream from the culvert outfall. The allowable zone of initial dilution extends from the outfall to that portion of the Willamette River contained within two feet downstream from the culvert outfall.

The dilution factors at the edge of the Regulatory Mixing Zone and Zone of Initial Dilution are shown in Table 3-8. These dilutions are based on a 2024 mixing zone analysis conducted by DEQ. The mixing zone memo documenting this analysis and the dilutions is contained in a January 24, 2024 Mixing Zone Memo which is part of the administrative record. DEQ's analysis relied on conservative estimates of Willamette River ambient conditions within the mixing zone to then simulate the discharge using the mixing zone modeling software, CORMIX v12.0. This discharge is extremely small relative to the size of the Willamette River. The size of the zone of initial dilution and mixing zone are also extremely small (2 feet and 5 feet respectively).

The outfall pipe (approximately 3-inch diameter PVC pipe) discharges to a ditch at 45.337873°, -122.643032°. The mixing zone begins where the effluent is discharged and extends the length of a ditch and culvert into the Willamette River. The RMZ boundary in the Willamette River is 5 ft downstream of the coordinates 45.338090°, -122.644323° ("culvert outfall"). The ZID boundary in the Willamette River is 2 ft downstream of the coordinates 45.338090°, -122.644323° ("culvert outfall"). The RMZ and ZID are visualized in Figure 3-1 below for clarity.

Table 3-8: FPMV Mixing Zone Dilution Summary

Dilution Summary						
Water Quality Standard	Stream Flow (cfs)		Effluent Flow (mgd)		Dilution Factor	Location
	Statistic	Flow	Statistic	Flow		
Aquatic Life, Acute	1Q10	5600	☐ ADWDF x PF ☒ Max Daily Avg ☐ Other	0.0061	29	ZID (2 ft)
Aquatic Life, Chronic	7Q10	6330	☒ ADWDF ☐ Max Monthly Avg ☐ Other	0.005	128	RMZ (5 ft)
ADWDF = Average dry weather design flow PF = Peaking factor (1.5)						

Comments: The maximum monthly average flow during November was 0.0046 mgd and the maximum daily average flow was 0.0061 mgd. The ADWDF is 0.005 mgd. Since the maximum monthly average flow is almost equal to the ADWDF, the maximum monthly average flow is being used as an estimate of the ADWDF x PF.

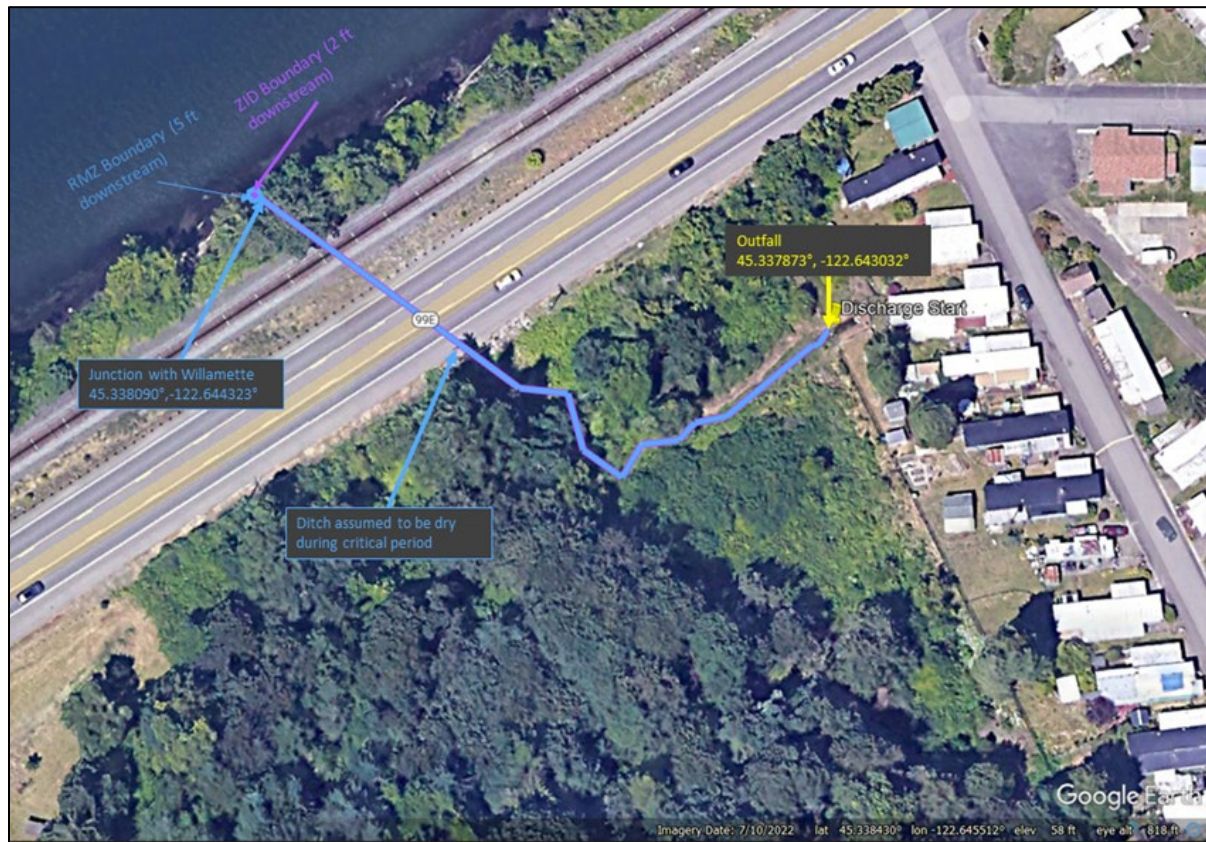


Figure 3-1: FPMV Outfall, Regulatory Mixing Zone (RMZ) and Zone of Initial Dilution (ZID) location.

3.3.6 pH

The pH criterion for this basin is 6.5 – 8.5 per OAR 340-041-0345. DEQ determined there is no reasonable potential for FPMV's discharge to exceed the pH criterion at the edge of the mixing zone. The proposed pH limit for Outfall 001 is maintained from the previous permit at 6.0 – 9.0. These pH limits are TBELs, since they are the secondary treatment standards for pH, 6.0 – 9.0. The following provides a summary of the data used for the analysis.

Table 3-9: pH Reasonable Potential Analysis

INPUT	Lower pH Criteria	Upper pH Criteria
1. Dilution at mixing zone boundary	128.0	128.0
2. Upstream characteristics		
a. Temperature (°C)	23.0	7.6
b. pH	6.9	7.6
c. Alkalinity (mg CaCO ₃ /L)	23.1	23.1
3. Effluent characteristics		
a. Temperature (°C)	13.9	4.6
b. pH (S.U.)	6.0	9.0
c. Alkalinity (mg CaCO ₃ /L)	134.6	134.6
4. Applicable pH criteria	6.5	8.5
pH at mixing zone boundary	6.8	7.6
Is there reasonable potential?	No	No
Proposed effluent limits	6.0	9.0
Effluent data source: ICIS data pull covering July-2019 through August-2023. Effluent Temperature was not a monitoring requirement in existing permit, thus not reported in ICIS. Data from facility-submitted Gap Analysis request from winter season 2021. Applied alkalinity defaults.		
Ambient data source: AWQMS data pull on 2-October-2023 for 2013-2022. Stations upstream of facility (~6 miles): 10339-ORDEQ, 26102-ORDEQ, 31545-ORDEQ, Canby_Ambient (City of Canby).		

3.3.7 Temperature

3.3.7.1 Temperature Criteria OAR 340-041-0028

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

Table 3-10: Temperature Criteria Information

Applicable Temperature Criterion	Migration Corridor 20°C (OAR 340-041-0028(4)(d))
Applicable dates: Year-round	
Salmon/Steelhead Spawning 13°C? OAR 340-041-0028(4)(a)	☐ Yes ☒ No
Applicable dates: NA	
WQ-limited?	☒ Yes ☐ No
TMDL wasteload allocation assigned?	☐ Yes ☒ No
Applicable dates: NA	
TMDL based on natural conditions criterion?	☐ Yes ☒ No
Cold water summer protection criterion applies?	☐ Yes ☒ No
Cold water spawning protection applies?	☐ Yes ☒ No
Comments: The Willamette TMDL established a wasteload allocation under the TMDL's "bubble allocation" portion. The TMDL did not designate specific effluent limit for individual small point sources in the "bubble".	

Located at river mile 28.2 in Oregon City, FPMV discharges to a segment of the Willamette River designated as a salmonid migration corridor, according to the Fish Use Designation map for the Willamette Basin, found in OAR 340-041, Figure 340A. OAR 340-041-0028(4)(d) states that the 7-day average maximum temperature of a stream identified as a migration corridor may not exceed 20.0 °C. As previously noted, this segment of the Willamette River does not meet water quality standards for temperature during the summer months. For streams with a TMDL that do not meet water quality standards, OAR 340-041-0028(12)(b)(B) states the following:

Following a temperature TMDL or other cumulative effects analysis, waste load and load allocations will restrict all NPDES point sources and nonpoint sources to a cumulative increase of no greater than 0.3 degrees Celsius (0.5 Fahrenheit) above the applicable criteria after complete mixing in the water body, and at the point of maximum impact.

The Mainstem Willamette Waste Load Allocation (WLA) chapter of the Willamette TMDL contains a subsection, "Bubble Allocations for Small Point Sources". The intent of this WLA subsection is to address the cumulative effects of small point sources, such as FPMV, on the Willamette system. Under the TMDL's "bubble allocation", no individual effluent limit is assigned (the facility was deemed small enough that its temperature discharge is not required to be regulated at this time).

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: NA
Applicable time period: Dates ☒ NA
Temperature Criterion Limit: NA
Applicable time period: Dates ☒ NA
Comments:

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

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

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

FPMV Discharge: Referencing the Willamette Basin salmonid spawning use map contained in OAR 340-041 (Figure 340B), the Willamette River at the discharge location is not designated as a salmonid and steelhead spawning waterbody. Since there are no active salmonid spawning areas within the mixing zone, the impairment of an active spawning area is prevented or minimized, and this provision does not apply.

- 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.

FPMV Discharge: Under the current permit, FPMV was not required to monitor effluent temperature, so no effluent temperature data is available for this analysis. However, their effluent temperature is certainly below 32 °C and their discharge flows relative to Willamette River flows are minimal. FPMV discharge is not expected to cause an acute impairment or instantaneous lethality due to an effluent thermal plume. The proposed permit includes effluent temperature monitoring requirements.

- 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.

FPMV Discharge: Under the current permit, FPMV was not required to monitor effluent temperature, so no effluent temperature data is available for this analysis. However, FPMV's maximum effluent flow rate during the period December 2018 to July 2023 was 0.016 MGD. Flows this minor, combined with typical domestic system effluent temperatures, are not expected to adversely affect temperatures in the Willamette River. After mixing with the Willamette River, FPMV's effluent will almost certainly not result in a sudden increase in water temperature causing thermal shock. The proposed permit includes effluent temperature monitoring requirements.

- 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.

FPMV Discharge: Under the current permit, FPMV was not required to monitor effluent temperature, so no effluent temperature data is available for this analysis. However, FPMV's maximum effluent flow rate during the period December 2018 to July 2023 was 0.016 MGD. Flows this minor, combined with typical domestic system effluent temperatures, are not expected to adversely affect temperatures in the Willamette River. After mixing with the Willamette River, FPMV's effluent will almost certainly not result in water temperature increases causing migration blockage. The proposed permit includes effluent temperature monitoring requirements.

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: NA
Applicable timeframe: NA
Comments:

3.3.8 Bacteria

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

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

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

3.3.9 Toxic Pollutants

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

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.

3.3.9.1 Total Residual Chlorine

An analysis was conducted to determine if the facility had the reasonable potential to exceed the chlorine criteria. The maximum chlorine concentration of 0.40 mg/L was used for the analysis; FPMV does not have an existing chlorine limit. 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. However, to address potential adverse impacts within the mixing zone, the permittee is required to develop a Best Management Practices (BMP) plan to reduce the level of total residual chlorine in their effluent during this permit cycle. DEQ's Level of Quantitation value of 0.05 mg/L for chlorine analysis will be used as a benchmark for BMP effectiveness. This is presented in the permit Schedule D.

3.3.9.2 Mercury – Human Health Criterion

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 very small. The TMDL states that no additional controls or monitoring will be required for minor domestic treatment plants. No additional controls or monitoring for mercury are required in this permit.

3.4 Antibacksliding

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

3.5 Antidegradation

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

DEQ has performed an antidegradation review for this discharge. The proposed permit contains the same or more stringent discharge loadings as the existing permit. Permit renewals with the same or more stringent discharge loadings as the previous permit are not considered to lower water quality from the existing condition. 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

High groundwater levels in this area require a constant program of sealing leaks that develop in the underground tanks in the park. The owner has had to repair most of the tank risers and pipe joints to keep groundwater out of the treatment plant. The treatment facility does not have any basins, ponds or lagoons that have the potential to leach into the groundwater. Due to the overland travel distance from the treatment plant discharge point and the relatively small discharge flows, the treated effluent often soaks into the ground before reaching the direct discharge point to the Willamette River.

To assess risk to groundwater, DEQ consulted drinking water well maps provided by Oregon Water Resources Department and confirmed there are no wells in the vicinity of FPMV's discharge. Given FPMV's location near the Willamette River, any potential groundwater contamination would likely attenuate to background levels and discharge to the river.

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. Schedule D requires the permittee to develop and submit a chlorine management plan by the dates specified in permit Table B-1.

4.2 Biosolids

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

4.3 Recycled Water

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.

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. 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.

The permittee requested a reduction in monitoring frequency for BOD₅, TSS and bacteria (*E. coli*), to be less than the 2/month frequency specified in DEQ's monitoring matrix. Using EPA's 1996 Interim Guidance for Performance-Based Reductions of NPDES Permit Monitoring Frequencies it was determined that the monitoring frequency could be reduced to 1/month for *E. coli* (year-round) and for BOD₅ and TSS during winter months (November 1 – April 30). A monitoring reduction was not approved for BOD₅ or TSS during summer months (May 1 – October 31) because the long-term average monitoring results were too close to the summer-time permit limits to allow a reduction. The standard frequency of 2/month will be retained for BOD₅ and TSS during summer months (May 1 – October 31).

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. The conditions include the following:

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 Chlorine Management Plan

This condition requires the permittee to develop and submit for DEQ approval a Chlorine Management Plan to reduce total residual chlorine levels in their effluent. The permittee is also required to implement the approved plan.

7.3 Emergency Response and Public Notification Plan

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

7.4 Exempt Wastewater Reuse at the Treatment System

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

7.5 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.

7.6 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.

7.7 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.

7.8 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.

7.9 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