Public Noticed Maine WWTF Draft Permit Fact Sheet

General Information

Permit Number	WI-0022136-11-0
Permittee Name and Address	Village of Maine 6111 North 44th Ave, Wausau, WI 54401
Permitted Facility Name and Address	Maine Wastewater Treatment Facility 090 Everest Ave., Brokaw, WI
Permit Term	January 01, 2027 to December 31, 2031
Discharge Location	Maine Wastewater Treatment Plant, 090 Everest Avenue, Maine, WI
Receiving Water	Wisconsin River in Lower Eau Claire (Marathon Co.) River Watershed of Central Wisconsin River Basin in Marathon County Outfall location: SW1/4 NW1/4, Section 2, T26N R07E, Village of Maine, Marathon County, WI East Bank of Wisconsin River one-quarter mile downstream of Highway WW bridge
Stream Flow ($Q_{7,10}$)	900 cfs
Stream Classification	Warm water sport fish community, non-public water supply.
Discharge Type	Existing, continuous
Annual Average Design Flow (MGD)	0.036 MGD
Industrial or Commercial Contributors	No
Plant Classification	A1 - Suspended Growth Processes; B - Solids Separation; C - Biological Solids/Sludges; P - Total Phosphorus; SS - Sanitary Sewage Collection System
Approved Pretreatment Program?	N/A

Facility Description

The Maine Wastewater Treatment Facility treats domestic wastewater from the Village of Maine and the Village of Brokaw. It has an annual average design flow of 0.036 million gallons per day (MGD) and treated an average of 0.026 MGD in 2025.

Preliminary treatment consists of coarse bar screening. Secondary wastewater treatment is via an activated sludge process. Following secondary biological treatment, the wastewater is discharged to a final clarifier where solids are settled out prior to discharge of the effluent to the Wisconsin River. Sludge is hauled to the Village of Rib Mountain Metro Sewerage WWTP where it is further treated under their own WPDES permit. The wastewater treatment plant was shut down from September 2022 to April 2024 but then restarted discharge in May 2024. From start up, Maine has not accepted hauled waste.

Significant effluent limit and/or monitoring changes in this permit term are as follows: 1) removal of the copper effluent limit however monthly monitoring continues, 2) addition of a phosphorus effluent mass limit that is part of the Wisconsin River Total Maximum Daily Load (TMDL) allotment for the facility, and 3) and PFAS sludge sampling has been included in the WPDES permit pursuant to ss. NR 214.18(5)(b) and NR 204.06(2)(b)9., Wis. Adm. Code to quantitate risk. The first sample for PFAS and PFOA + PFOS is required to be between 01/01/2027 - 06/30/2027 to meet the requirements of the PFAS General Permit (WI-0012345-1).

Substantial Compliance Determination

Enforcement During Last Permit: On 01/30/2026, a NON was issued for not sampling biosolids as required in Section 3.1 WPDES of the Permit. Maine has taken the necessary biosolids sample and will be extracting and reporting samples compliant with the permit going forth. A NON was issued on 03/03/2025 for violating nitrogen, ammonia and pH limitations. An action plan was developed to assure Maine will be compliant going forth. A NON was issued on 6/19/2024 for an unsubmitted 2022 CMAR. Maine returned to compliance by submitting the report. Furthermore, a site visit on 1/20/2026 revealed deficiencies in their CMOM document. Maine is working with a consultant to ensure the necessary changes are made, which are expected before expiration of the current permit. An updated CMOM was submitted and approved on 08/20/2026.

After a desktop review of all discharge monitoring reports, CMAR, CMOM, land application reports, compliance schedule items, a site visit on 02/25/2026, and an updated CMOM that was submitted and approved on 08/20/2026, Maine has been found to be in substantial compliance with their WPDES permit.

Compliance determination made by Nick Lindstrom on August 25, 2026.

Sample Point Descriptions

Sample Point Designation		
Sample Point Number	**Discharge Flow, Units, and Averaging Period**	**Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)**
701	N/A	Representative influent samples shall be collected directly after the comminutor in the headworks trough.
001	0.026 MGD (2025)	Representative effluent samples shall be collected at the effluent sample tank prior to discharge to the Wisconsin River.
002	No sludge landspread during the last permit term. Approx. 36,000 gallons of sludge hauled to Rib Mountain Metropolitan Sewer District in 2025.	As long as sludge is hauled away by a contracted hauler to another permitted facility, representative sludge samples shall be collected annually and monitored for List 1 and PFAS. Sludge samples shall be collected prior to hauling and test results shall be reported on Form 3400-49 "Waste Characteristics Report". Hauled sludge reports shall be submitted on Form 3400-52 "Other Methods of Disposal or Distribution Report" following each year that sludge is hauled. Department notification and approval is required prior to changes to this disposal option. In the event that the permittee is approved to landspread, permittee shall monitor sludge annually for Lists 1, 2, 3 & 4.

Permit Requirements

1 Influent – Monitoring Requirements

1.1 Sample Point Number: 701- INFLUENT TO PLANT

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
BOD5, Total		mg/L	3/Week	24-Hr Comp	
Suspended Solids, Total		mg/L	3/Week	24-Hr Comp	

1.1.1 Changes from Previous Permit:

Influent limitations and monitoring requirements were evaluated for this permit term and no changes were required in this permit section.

1.1.2 Explanation of Limits and Monitoring Requirements

Monitoring of influent flow, BOD5 and total suspended solids is required by s. NR 210.04(2), Wis. Adm. Code, to assess wastewater strengths and volumes and to demonstrate the percent removal requirements in s. NR 210.05, Wis. Adm. Code, and in the Standard Requirements section of the permit.

2 Surface Water - Monitoring and Limitations

2.1 Sample Point Number: 001- EFFLUENT TO WISCONSIN RIVER

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	Daily	Continuous	
BOD5, Total	Monthly Avg	30 mg/L	3/Week	24-Hr Flow Prop Comp	
BOD5, Total	Weekly Avg	45 mg/L	3/Week	24-Hr Flow Prop Comp	
BOD5, Total	Daily Max	18 lbs/day	3/Week	Calculated	Monitoring and limit apply May - Oct annually.
Suspended Solids, Total	Monthly Avg	30 mg/L	3/Week	24-Hr Flow Prop Comp	
Suspended Solids, Total	Weekly Avg	45 mg/L	3/Week	24-Hr Flow Prop Comp	
pH Field	Daily Max	9.0 su	3/Week	Grab	See pH subsection.
pH Field	Daily Min	6.0 su	3/Week	Grab	See pH subsection.
Nitrogen, Ammonia (NH3-N) Total	Monthly Avg	108 mg/L	3/Week	24-Hr Flow Prop Comp	

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Nitrogen, Ammonia (NH3-N) Total	Weekly Avg	108 mg/L	3/Week	24-Hr Flow Prop Comp	
Nitrogen, Ammonia (NH3-N) Total	Daily Max - Variable	mg/L	3/Week	24-Hr Flow Prop Comp	Report the daily maximum Ammonia result in the Nitrogen, Ammonia (NH3-N) Total column of the eDMR. See Ammonia subsection.
Nitrogen, Ammonia Variable Limit		mg/L	3/Week	See Table	Look up the variable ammonia limit from the 'Variable Ammonia Limitation' table and report the variable limit in the Ammonia Variable Limit column on the eDMR. See Ammonia subsection.
Copper, Total Recoverable		ug/L	Monthly	24-Hr Flow Prop Comp	
Hardness, Total as CaCO3		mg/L	Monthly	24-Hr Flow Prop Comp	
Phosphorus, Total	Monthly Avg	1.0 mg/L	3/Week	24-Hr Comp	
Phosphorus, Total	Monthly Avg	0.18 lbs/day	3/Week	Calculated	See TMDL subsection.
Phosphorus, Total		lbs/month	Monthly	Calculated	Calculate the Total Monthly Discharge of phosphorus and report on the last day of the month on the DMR. See TMDL subsection.
Phosphorus, Total		lbs/yr	Monthly	Calculated	Calculate the 12-month rolling sum of total monthly mass of phosphorus discharged and report on the last day of the month on the DMR. See TMDL subsection.
Nitrogen, Total Kjeldahl		mg/L	See Listed Qtr(s)	24-Hr Flow Prop Comp	Annual in rotating quarters. See Nitrogen Series Monitoring subsection.
Nitrogen, Nitrite + Nitrate Total		mg/L	See Listed Qtr(s)	24-Hr Flow Prop Comp	Annual in rotating quarters. See Nitrogen Series Monitoring subsection.

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Nitrogen, Total		mg/L	See Listed Qtr(s)	Calculated	Annual in rotating quarters. See Nitrogen Series Monitoring subsection. Total Nitrogen shall be calculated as the sum of reported values for Total Kjeldahl Nitrogen and Total Nitrite + Nitrate Nitrogen.

2.1.1 Changes from Previous Permit

Effluent limitations and monitoring requirements were evaluated for this permit term and the following changes were made from the previous permit. See additional explanation of limits under "Explanation of Limits and Monitoring Requirements" below.

- **Copper-** The limits have been removed and replaced with quarterly monitoring.
- **Phosphorus –** TMDL mass limit of 0.18 lbs/day monthly average has been added.

2.1.2 Explanation of Limits and Monitoring Requirements

Detailed discussions of limits and monitoring requirements can be found in the attached water quality-based effluent limits (WQBEL) memo dated October 5, 2026 from Benjamin Hartenbower to Angela Parkhurst titled "Water Quality-Based Effluent Limitations for the Maine WWTF WPDES Permit No. WI-0022136*"*.

Monitoring Frequencies- The Monitoring Frequencies for Individual Wastewater Permits guidance (April 12, 2021) recommends that standard monitoring frequencies be included in individual wastewater permits based on the size and type of the facility, in order to characterize effluent quality and variability, to detect events of noncompliance, and to ensure consistency in permits issued across the state. Guidance and requirements in administrative code were considered when determining the appropriate monitoring frequencies for pollutants that have final effluent limits in effect during this permit term. No changes to existing sampling frequencies have been made.

BOD, TSS, and pH: Limits for BOD, TSS, and pH continue from the current permit.

Ammonia Nitrogen: Daily maximum, weekly average, and monthly average limits continue from the current permit. Below are the daily maximum limits that will vary depending on pH measurements of the effluent. Current acute and chronic ammonia toxicity criteria for the protection of aquatic life are included in Tables 2C and 4B of ch. NR 105, Wis. Adm. Code. Subchapter IV of ch. NR 106 establishes the procedure for calculating water quality-based effluent limitations (WQBELs) for ammonia. Please refer to the WQBEL memo mentioned above for more information.

Daily maximum ammonia limits that vary with effluent pH apply year-round. See table below for more information. Samples for ammonia shall be collected at the same time as the pH samples.

Daily Maximum Ammonia Nitrogen Limits

Effluent pH s.u.	Limit mg/L	Effluent pH s.u.	Limit mg/L	Effluent pH s.u.	Limit mg/L
$6.0 \leq pH \leq 6.1$	108	$7.0 < pH \leq 7.1$	66	$8.0 < pH \leq 8.1$	14
$6.1 < pH \leq 6.2$	106	$7.1 < pH \leq 7.2$	59	$8.1 < pH \leq 8.2$	11

6.2 < pH ≤ 6.3	104	7.2 < pH ≤ 7.3	52	8.2 < pH ≤ 8.3	9.4
6.3 < pH ≤ 6.4	101	7.3 < pH ≤ 7.4	46	8.3 < pH ≤ 8.4	7.8
6.4 < pH ≤ 6.5	98	7.4 < pH ≤ 7.5	40	8.4 < pH ≤ 8.5	6.4
6.5 < pH ≤ 6.6	94	7.5 < pH ≤ 7.6	34	8.5 < pH ≤ 8.6	5.3
6.6 < pH ≤ 6.7	89	7.6 < pH ≤ 7.7	29	8.6 < pH ≤ 8.7	4.4
6.7 < pH ≤ 6.8	84	7.7 < pH ≤ 7.8	24	8.7 < pH ≤ 8.8	3.7
6.8 < pH ≤ 6.9	78	7.8 < pH ≤ 7.9	20	8.8 < pH ≤ 8.9	3.1
6.9 < pH ≤ 7.0	72	7.9 < pH ≤ 8.0	17	8.9 < pH ≤ 9.0	2.6

Copper: Considering available effluent data from the current permit term (July 2024 to July 2026), the 4-day P_{99} concentration is 12.95 µg/L, and the 1-day P_{99} concentration is 20.55 µg/L, with a maximum concentration of 17 µg/L. These effluent concentrations are below the calculated WQBELs for Copper, therefore no effluent limits are required. Monthly copper monitoring will continue to meet the data requirements of s. NR 106.05, Wis. Adm. Code for next permit reissuance.

Phosphorus: Phosphorus requirements are based on the Phosphorus Rules that became effective December 1, 2010 as detailed in chs. NR 102, Water Quality Standards and NR 217, Effluent Standards and Limitations for Phosphorus, Wis. Adm. Code. Chapter NR 217, Wis. Adm. Code, addresses point source dischargers of phosphorus to surface waters.

Discharge effluent concentration (mg/L) shall be reported 3 times per week and will be used to calculate amounts reported for mass-based parameters. An additional reporting requirement for lbs/month and lbs/yr will be used to calculate the facility's compliance with their TMDL allotment.

Wisconsin River Total Maximum Daily Load (TMDL): The Village of Maine is located within the Wisconsin River Basin Total Maximum Daily Load (TMDL) area, which was approved by EPA April 26, 2019. The TMDL establishes Waste Load Allocations (WLAs) for point source dischargers and determines the maximum amounts of phosphorus that can be discharged and still protect water quality.

Total phosphorus (TP) effluent limits in lbs/day are calculated as recommended in the *TMDL Development and Implementation Guidance: Integrating the WPDES and Impaired Waters Programs (April 2020)* and are based on the annual phosphorus wasteload allocation (WLA) given in lbs/yr. This WLA is found in appendix K of the *Wisconsin River TMDL Report (April 2019)* and is expressed as a maximum annual load (lbs/yr). For the Maine Wastewater Treatment Facility, this WLA is 40 lbs/year.

The approved TMDL expresses WLAs as lbs/year and lbs/day (maximum annual load divided by 365 days). As outlined in Section 4.6 of the department's *TMDL Development and Implementation Guidance: Integrating the WPDES and Impaired Waters Program*, mass limits must be given in the permit that are consistent with the TMDL WLA and the phosphorus impracticability agreement that was approved by USEPA in 2012 (see NPDES MOA Addendum dated July 12, 2012 at https://apps.dnr.wi.gov/swims/Documents/DownloadDocument?id=167886175). Continuously discharging facilities covered by the WRB TMDL are given monthly average mass limits. The TMDL based mass limits are expressed as 0.18 lbs/day monthly average.

Facilities with WRB TMDL based effluent limits for phosphorus must report the 12-month rolling sum of total monthly discharge (lbs/yr). If reported 12-month rolling sums exceed the facility's max annual WLA, the facility's mass limits (monthly average and six-month average) may be recalculated using more appropriate CVs or monitoring frequencies when the permit is reissued to bring discharge levels into compliance with the facility's given WLA.

PFOS and PFOA: NR 106 Subchapter VIII – Permit Requirements for PFOS and PFOA Dischargers became effective on August 1, 2022. Pursuant to s. NR 106.98(3)(b), Wis. Adm. Code, the department evaluated the need for PFOS and PFOA monitoring taking into consideration the presence of potential PFOS or PFOA industrial wastes, remediation sites and other potential sources of PFOS or PFOA. Based on information available at the time the proposed permit was drafted, the department has determined the permittee does not need to sample for PFOS or PFOA as part of this permit

reissuance. The department may re-evaluate the need for sampling at the next permit reissuance if new information becomes available that suggests PFOS or PFOA may be present in the discharge.

Total Nitrogen Monitoring (NO2+NO3, TKN and Total N): The Department has included effluent monitoring for Total Nitrogen through the authority under s. 283.55(1)(e), Wis. Stats., which allows the department to require the permittee to submit information necessary to identify the type and quantity of any pollutants discharged from the point source, and through s. NR 200.065(1)(h), Wis. Adm. Code., which allows for this monitoring to be collected during the permit term. More information on the justification to include total nitrogen monitoring in wastewater permits can be found in the "Guidance for Total Nitrogen Monitoring in Wastewater Permits" dated October 1, 2019. Annual monitoring in rotating quarters is required as specified in the permit.

Whole Effluent Toxicity: Whole effluent toxicity (WET) testing requirements and limits (if applicable) are determined in accordance with ss. NR 106.08 and NR 106.09 Wis. Adm. Code, as revised August 2016. See the current version of the Whole Effluent Toxicity Program Guidance Document and checklist and WET information, guidance and test methods at http://dnr.wi.gov/topic/wastewater/wet.html. With the amount of dilution available in the receiving water, there is little potential for acute or chronic toxicity effects in the Wisconsin River associated with the discharge from the Maine Wastewater Treatment Facility and therefore no WET tests are required.

3 Land Application - Monitoring and Limitations

Municipal Sludge Description						
Sample Point	**Sludge Class (A or B)**	**Sludge Type (Liquid or Cake)**	**Pathogen Reduction Method**	**Vector Attraction Method**	**Reuse Option**	**Amount Reused/Disposed (Dry Tons/Year)**
002	B	Liquid	N/A	N/A	Hauled	11
Does sludge management demonstrate compliance? Yes						
Is additional sludge storage required? No						
Is Radium-226 present in the water supply at a level greater than 2 pCi/liter? No						
Is a priority pollutant scan required? No because facility is a minor municipality.						

3.1 Sample Point Number: 002- HAULED SLUDGE

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Solids, Total		Percent	Annual	Composite	
Arsenic Dry Wt	Ceiling	75 mg/kg	Annual	Composite	
Arsenic Dry Wt	High Quality	41 mg/kg	Annual	Composite	
Cadmium Dry Wt	Ceiling	85 mg/kg	Annual	Composite	
Cadmium Dry Wt	High Quality	39 mg/kg	Annual	Composite	
Copper Dry Wt	Ceiling	4,300 mg/kg	Annual	Composite	
Copper Dry Wt	High Quality	1,500 mg/kg	Annual	Composite	

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Lead Dry Wt	Ceiling	840 mg/kg	Annual	Composite	
Lead Dry Wt	High Quality	300 mg/kg	Annual	Composite	
Mercury Dry Wt	Ceiling	57 mg/kg	Annual	Composite	
Mercury Dry Wt	High Quality	17 mg/kg	Annual	Composite	
Molybdenum Dry Wt	Ceiling	75 mg/kg	Annual	Composite	
Nickel Dry Wt	Ceiling	420 mg/kg	Annual	Composite	
Nickel Dry Wt	High Quality	420 mg/kg	Annual	Composite	
Selenium Dry Wt	Ceiling	100 mg/kg	Annual	Composite	
Selenium Dry Wt	High Quality	100 mg/kg	Annual	Composite	
Zinc Dry Wt	Ceiling	7,500 mg/kg	Annual	Composite	
Zinc Dry Wt	High Quality	2,800 mg/kg	Annual	Composite	
PFOA + PFOS		ug/kg	Annual	Calculated	The first sample for PFAS and PFOA + PFOS is required to be between 01/01/2027 - 06/30/2027 to meet the requirements of PFAS General Permit (WI-0012345-1). Report the sum of PFOA and PFOS. See PFAS Permit Sections for more information.
PFAS Dry Wt			Annual	Grab	The first sample for PFAS and PFOA + PFOS is required to be between 01/01/2027 - 06/30/2027 to meet the requirements of PFAS General Permit (WI-0012345-1). Perfluoroalkyl and Polyfluoroalkyl Substances based on updated DNR PFAS List. See PFAS Permit Sections for more information.

3.1.1 Changes from Previous Permit:

Sludge limitations and monitoring requirements were evaluated for this permit term and the following changes were made from the previous permit. See additional explanation of limits under “Explanation of Limits and Monitoring Requirements” below.

PFAS –Monitoring is required annually pursuant to s. NR 204.06(2)(b)9., Wis. Adm. Code**.** However, the first sample for PFAS and PFOA + PFOS is required to be between 01/01/2027 - 06/30/2027 to meet the requirements of PFAS General Permit (WI-0012345-1).

3.1.2 Explanation of Limits and Monitoring Requirements

Requirements for disposal, including land application of municipal sludge, are determined in accordance with ch. NR 204, Wis. Adm. Code. Ceiling and high-quality limits for metals in sludge are specified in s. NR 204.07(5). Requirements for pathogens are specified in s. NR 204.07(6) and in s. NR 204.07 (7) for vector attraction requirements. Limitations for PCBs are addressed in s. NR 204.07(3)(k). Radium requirements are addressed in s. NR 204.07(3)(n).

PFAS- The presence and fate of PFAS in municipal and industrial sludges is an emerging public health concern. EPA has developed a draft risk assessment to determine future land application rates and released this risk assessment in January of 2025. The department is evaluating this new information. Until a decision is made, the "Interim Strategy for Land Application of Biosolids and Industrial Sludges Containing PFAS" should be followed

Collecting sludge data on PFAS concentrations from a wide range of wastewater treatment facilities will help protect public health from exposure to elevated levels of PFAS and determine the department's implementation of EPA's recommendations. To quantitate this risk, PFAS sampling has been included in this WPDES permit pursuant to ss. NR 214.18(5)(b) and NR 204.06(2)(b)9., Wis. Adm. Code.

Monitoring for PFAS is required pursuant to s. NR 204.06(2)(b)9., Wis. Adm. Code. To maintain compliance with General Permit, WI-0012345-1, "PFAS Monitoring for Sewage Sludge (Biosolids) Generators" language has been added to the permit to restate that monitoring for PFAS and PFOA+PFOS is required by June 30, 2027. If the PFOA+PFOS result is under 20 ug/kg General Permit, WI-0012345-1, "PFAS Monitoring for Sewage Sludge (Biosolids) Generators" will be discontinued. If the results are over 20 ug/kg, General Permit section 5.4 must be followed (See link https://dnr.wisconsin.gov/sites/default/files/topic/Wastewater/PFASMonitoringforSewageSludgeGenerators-GeneralPermit.pdf).

Other Comments

TBD

Supporting Documents

Water Quality Based Effluent Limits - WQBEL memo dated October 5, 2026 from Benjamin Hartenbower to Angela Parkhurst titled "Water Quality-Based Effluent Limitations for the Maine WWTF WPDES Permit No. WI-0022136*"*

Public Notice – Wausau Daily Herald

Justification Of Any Waivers From Permit Application Requirements

No waivers requested or granted as part of this permit reissuance.

Prepared By: Angela Parkhurst Wastewater Specialist Date: November 2, 2026