Permit Fact Sheet

General Information

Permit Number	WI-0060160-10-0
Permittee Name and Address	Village of Mattoon P O Box 225, Mattoon, WI 54450
Permitted Facility Name and Address	Mattoon Wastewater Treatment Facility West Red River Road, Mattoon, Wisconsin
Permit Term	January 01, 2027 to December 31, 2031
Discharge Location	SW ¼ of SE ¼, Sec. 16, T29N-R12E Town of Hutchins, Shawano County
Receiving Water	Groundwater of the Wolf River Basin in Red River Watershed of Wolf River River Basin in Shawano County
Discharge Type	Existing, Intermittent
Annual Average Design Flow (MGD)	0.038 MGD
Industrial or Commercial Contributors	N/A
Plant Classification	A4 - Ponds, Lagoons and Natural Systems; SS - Sanitary Sewage Collection System
Approved Pretreatment Program?	N/A

Facility Description

The permittee operates a stabilization pond system followed by spray irrigation on agricultural land. The system was upgraded to its current configuration in 1998. Treatment consists of a 3.86-acre stabilization pond followed by a 1.74-acre storage pond. Winter storage of 180 days is available. Sludge was last removed in 1998 and is not anticipated to be removed this permit term. The facility should evaluate level of sludge during this permit term.

The storage pond is emptied using an irrigation pump and a network of 18 spray nozzles. The total spray area is 17.4 acres. A groundwater monitoring system consisting of three wells has been provided.

Substantial Compliance Determination

After a desk top review of all discharge monitoring reports, CMARs, land application reports, compliance schedule items, and a site visit on June 16th, 2026, this facility has been found to be in substantial compliance with their current permit.

Compliance determination made by Brooke Klingbeil, Wastewater Specilaist on June 29th, 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	0.03 MGD (2025)	INFLUENT: Representative 24-hour composite samples shall be collected from the wet well at the main lift station. Flow is measured with a sonic flow meter at the main lift station.
002	0.06 MGD (2025)	SPRAY IRRIGATION: Representative samples shall be collected from the sampling tap on the discharge piping prior to spray irrigation. Flow is measured with a magnetic flow meter at the lagoon building.
003	N/A – no land application in previous permit term	LAND APPLICATION: Liquid sludge that accumulates in the treatment lagoons. Representative samples shall be collected from various locations and depths and then composited for analysis. At the time of sample collection the permittee shall evaluate the depth or quantity of sludge in the lagoons and shall submit these findings with the characteristics report form.

Sample Point Designation For Groundwater Monitoring Systems			
System	**Sample Pt Number**	**Well Name**	**Comments**
Spray irrigation	801	MW-1 (801)	Upgradient well used to measure background groundwater quality and to evaluate and calculate PALs and ACLs.
	802	MW-2 (802)	Down gradient non-point of standard well.
	803	MW-3 (803)	Down gradient non-point of standard well.

Permit Requirements

1 Influent – Monitoring Requirements

1.1 Sample Point Number: 701- INFLUENT

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	Daily	Continuous	
BOD5, Total		mg/L	Weekly	24-Hr Flow Prop Comp	
Suspended Solids, Total		mg/L	Weekly	24-Hr Flow Prop Comp	
Nitrogen, Total Kjeldahl		mg/L	Monthly	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		mg/L	Monthly	24-Hr Flow Prop Comp	
Nitrogen, Organic Total		mg/L	Monthly	Calculated	

1.1.1 Changes from Previous Permit:

Influent 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.

BOD5, Total – Sampling frequency changed from "monthly" to "weekly".

Suspended Solids, Total - Sampling frequency changed from "monthly" to "weekly".

1.1.2 Explanation of Limits and Monitoring Requirements

Influent monitoring is needed to assess loading to the facility and treatment performance. The required parameters and sampling frequency are appropriate for a land treatment system as outlined in ch NR 206, Wis. Adm. Code.

Sample frequencies for BOD and Suspended Solids have been included to meet sample frequency guidance requirements.

2 Land Treatment – Monitoring and Limitations

2.1 Sample Point Number: 002- LAND TREATMENT

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	Daily	Total Daily	
Hydraulic Application Rate	Monthly Avg	10,000 gal/ac/day	Monthly	Calculated	Applies May - October.
Hydraulic Application Rate	Monthly Avg	0 gal/ac/day	Monthly	Calculated	Applies November - April.
BOD5, Total	Monthly Avg	50 mg/L	Weekly	Grab	
Suspended Solids, Total		mg/L	Weekly	Grab	
pH Field		su	Weekly	Grab	
Chloride		mg/L	Monthly	Grab	
Nitrogen, Total Kjeldahl		mg/L	Monthly	Grab	
Nitrogen, Ammonia (NH3-N) Total		mg/L	Monthly	Grab	

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Nitrogen, Organic Total		mg/L	Monthly	Calculated	
Nitrogen, Nitrite + Nitrate Total		mg/L	Monthly	Grab	
Nitrogen, Total		mg/L	Monthly	Calculated	
Solids, Total Dissolved		mg/L	Monthly	Grab	
Nitrogen, Max Applied On Any Zone		lbs/ac/yr	Annual	Total Annual	Loadings in accordance with management plan.
Soil - Nitrogen, Available		mg/kg	Annual	Grab	
Soil - Phosphorus, Available		mg/kg	Annual	Grab	
Soil - Potassium, Available		mg/kg	Annual	Grab	
Soil - pH Lab		su	Annual	Grab	
Other Sources of Nitrogen		lbs/ac/yr	Annual	Measure	

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.

BOD5, Total – Sampling frequency changed from "2/month" to "weekly".

Suspended Solids, Total - Sampling frequency changed from "2/month" to "weekly".

pH Field - Sampling frequency changed from "monthly" to "weekly".

Soil Sampling – Annual spray field soil sampling has been added to the permit. This information was previously required in the annual report.

2.1.2 Explanation of Limits and Monitoring Requirements

All requirements for land treatment of municipal wastewater are determined in accordance with ch. NR 206, Wis. Adm. Code. All categorical limits are based on s. NR 206.08(2), Wis. Adm. Code. More information on the limitations can be found in the Groundwater Evaluation for Mattoon Wastewater Treatment Facility, WI-0060160.

Sampling Frequency - The "Monitoring Frequencies for Individual Wastewater Permits" guidance document (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 fairness and 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.

3 Groundwater – Monitoring and Limitations

3.1 Groundwater Monitoring System for Spray irrigation

Location of Monitoring system: SW1/4 of SE 1/4, Sec.16, T29N-R12E

Groundwater Monitoring Well(s) to be Sampled: MW-1 (801), MW-2 (802), MW-3 (803)

Groundwater Monitoring Well(s) Used to Evaluate Background Groundwater Quality: MW-1 (801)

Groundwater Monitoring Well(s) Used for Point of Standards Application: N/A

Parameter	Units	Preventative Action Limit	Enforcement Standard	Frequency
Depth To Groundwater	feet	N/A	N/A	Quarterly
Groundwater Elevation	feet MSL	N/A	N/A	Quarterly
Nitrogen, Total Kjeldahl Dissolved	mg/L	N/A	N/A	Quarterly
Nitrogen, Ammonia Dissolved	mg/L	0.97	9.7	Quarterly
Nitrogen, Organic Dissolved	mg/L	2.3	N/A	Quarterly
Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	2.0	10	Quarterly
pH Field	su	8.1	N/A	Quarterly
Chloride Dissolved	mg/L	125	250	Quarterly
Solids, Total Dissolved	mg/L	420	N/A	Quarterly

3.1.1 Changes from Previous Permit:

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

3.1.2 Explanation of Limits and Monitoring Requirements

Groundwater limits and requirements are determined in accordance with ch. NR 140, Wis. Adm. Code. Indicator parameter Preventive Action Limit (PAL) values are established per s. NR 140.20, Wis. Adm. Code. Alternative Concentration Limits as allowed under s. NR 140.28, Wis. Adm. Code, are established on a case-by-case basis.

For more information, please refer to the Groundwater Evaluation for Mattoon Wastewater Treatment Facility, WI-0060160, Woody Myers, dated October 9th, 2026.

4 Land Application - Sludge

4.1 Sample Point Number: 003- LAND APPLICATION

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Solids, Total		Percent	Once	Composite	Monitoring required in 2028 and prior to any land application.
Arsenic Dry Wt	Ceiling	75 mg/kg	Once	Composite	
Arsenic Dry Wt	High Quality	41 mg/kg	Once	Composite	
Cadmium Dry Wt	Ceiling	85 mg/kg	Once	Composite	
Cadmium Dry Wt	High Quality	39 mg/kg	Once	Composite	
Copper Dry Wt	Ceiling	4,300 mg/kg	Once	Composite	
Copper Dry Wt	High Quality	1,500 mg/kg	Once	Composite	
Lead Dry Wt	Ceiling	840 mg/kg	Once	Composite	
Lead Dry Wt	High Quality	300 mg/kg	Once	Composite	
Mercury Dry Wt	Ceiling	57 mg/kg	Once	Composite	
Mercury Dry Wt	High Quality	17 mg/kg	Once	Composite	
Molybdenum Dry Wt	Ceiling	75 mg/kg	Once	Composite	
Nickel Dry Wt	Ceiling	420 mg/kg	Once	Composite	
Nickel Dry Wt	High Quality	420 mg/kg	Once	Composite	
Selenium Dry Wt	Ceiling	100 mg/kg	Once	Composite	
Selenium Dry Wt	High Quality	100 mg/kg	Once	Composite	
Zinc Dry Wt	Ceiling	7,500 mg/kg	Once	Composite	
Zinc Dry Wt	High Quality	2,800 mg/kg	Once	Composite	
Nitrogen, Total Kjeldahl		Percent	Once	Composite	
Nitrogen, Ammonium (NH_4-N) Total		Percent	Once	Composite	
Phosphorus, Total		Percent	Once	Composite	
Phosphorus, Water Extractable		% of Tot P	Once	Composite	
Potassium, Total Recoverable		Percent	Once	Composite	
PCB Total Dry Wt	Ceiling	50 mg/kg	Once	Composite	Monitoring required in 2028.
PCB Total Dry Wt	High Quality	10 mg/kg	Once	Composite	Monitoring required in 2028.
PFOA + PFOS		ug/kg	Once	Calculated	Report the sum of PFOA and PFOS. See PFAS

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
					Permit Sections for more information. Monitoring is required any time sludge is hauled off site. Monitoring is also required prior to July 1, 2027 to meet the PFAS Sludge General Permit WI-0012345-01.
PFAS Dry Wt			Once	Grab	Perfluoroalkyl and Polyfluoroalkyl Substances based on updated DNR PFAS List. See PFAS Permit Sections for more information.

4.1.1 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.

List 2 nutrient – It is recommended that list 2 (nutrients) are monitored with the list 1 (metal) monitoring, they have been added to the table.

PFAS –Monitoring is required once pursuant to s. NR 204.06(2)(b)9., Wis. Adm. Code.

4.1.2 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).

List 2 Nutrient monitoring – Monitoring for list 2 (nutrients) is highly recommended at the same time as the monitoring of List 1 (metals) in year 2 of the permit (2028). Results will assist in the determination of the acres needed for land application of sludge should it be necessary. The number of acres needed is also required for the Sludge Management Schedule (see schedules for more information).

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.

5 Schedules

5.1 Sludge Depth

Required Action	Due Date
Sludge Depth: Measure the sludge depth for the lagoons and report findings.	01/01/2028
Sludge Depth: Measure the sludge depth for the lagoons and report findings.	01/01/2029
Sludge Depth: Measure the sludge depth for the lagoons and report findings.	01/01/2030
Sludge Depth: Measure the sludge depth for the lagoons and report findings.	01/01/2031

5.1.1 Explanation of Schedule

The permittee is required to sample the sludge depth of the lagoons annually and report the findings to the Department.

5.2 Land Treatment Management Plan

A management plan is required for the land treatment system.

Required Action	Due Date
Land Treatment Management Plan Submittal: Submit an update to the management plan to optimize the land treatment system performance and demonstrate compliance with ch. NR 206, Wis. Adm. Code. The land treatment system shall be operated in accordance with the approved management plan.	01/01/2028

5.2.1 Explanation of Schedule

An up-to-date Land Treatment Management plan is a standard requirement in reissued permits per ch. NR 214, Wis. Adm. Code.

5.3 Sludge Management Plan

Required Action	Due Date
Submit a Sludge Management Plan: The permittee shall submit an update to the management plan for approval if removal of sludge will occur during this permit term. The plan shall demonstrate compliance with ch. NR 204 Wis. Adm. Code and at minimum address 1) How and where sludge is sampled; 2) Available sludge storage details and location(s); 3) How the sludge will be removed with details on volume, characterization and how the treatment plant will continue to function during the drawdown; 4) Describe the type of transportation and spreading vehicles and loading and unloading practices; 5) Identify approved land application sites, apply for needed sites, site limitations, total acres needed and vegetative cover management; 6) Specify record keeping procedures including site loading; 7) Address contingency plans for adverse weather and odor/nuisance abatement; and 8) Include any other pertinent information such as other disposal options that may be used or specifications of any pretreatment processes. Once approved, all sludge management activities shall be conducted in accordance with the plan. Any changes to the plan must be approved by the Department prior to implementing the changes. No desludging may occur unless approval from the Department is obtained. Daily logs shall be kept that record where the sludge has been disposed. The plan is due at least 60 days prior to desludging.	

5.3.1 Explanation of Schedule

If the lagoons are to be de-sludged during this permit term a management plan is needed to show compliance with ch NR 204, Wis. Adm. Code. There are outlines available to assist in plan development.

Attachments

Groundwater Evaluation for Mattoon Wastewater Treatment Facility, WI-0060160, Woody Myers, dated October 9th, 2026.

Justification Of Any Waivers From Permit Application Requirements

No waivers requested or granted as part of this permit reissuance

Prepared By: Ashley Clark, Wastewater Specialist

Date: October 8, 2026