

PERMIT FACT SHEET

General Information

Permit Number:	WI-0046515-07-1
Permit Name:	Mineral (Nonmetallic) Mining and/or Processing
Permittee:	Point source dischargers in the state of Wisconsin
Discharge Location:	Land surface or surface waters in the state of Wisconsin
Receiving Water:	Surface water or groundwater in the state of Wisconsin

Reason for Permit Modification

The purpose of this permit modification is to:

- Modify the sampling frequency for pH, TSS, and additives for new non-industrial sand mines (e.g. aggregate mines) to be consistent with the pH, TSS, and additives sampling required for existing facilities.
- Delay the requirement for metals monitoring for discharges of process wastewater to groundwater until the second year of the permit
- Delay the due date for discharge screening results for discharges of process wastewater to surface water by 90 days.
- Correction of minor typographical errors limited to a misspelled word and a missing space between two words.

Each of these changes, except for the typo corrections, are made based on new information presented by permittees and/or their industry sector groups. Further information on the reasoning and authority for these modifications is included below.

General Permit Description

This general permit was created to properly manage discharges from mineral mining, processing, or other similar facilities to waters of the state to protect public health and water quality of groundwater and surface water within the state of Wisconsin. The department issued WPDES Permit No. WI-0046515-07-01 for Mineral (Nonmetallic) Mining and/or Processing on June 7, 2022. The Permit became effective on January 1, 2023.

The Permit regulates discharges from Industrial and Non-Industrial Sand Facilities. Facilities range in size from small to large, and Permit requirements differ depending on the type of operation and the type of discharge. Since issuance of the Permit, the department has received additional comments and information from regulated facilities regarding some of the new monitoring and reporting requirements for Non-Industrial Sand Facilities that have prompted the department to propose limited modifications to the Permit.

This fact sheet addresses only the changes made in this proposed modification. Please see the fact sheet for the original permit 0046515-07-0 for explanations of limits and monitoring requirements for all parameters and for explanations of other permit conditions.

Change #1:

Section 4.1.2.1 and 4.1.2.3: Modified monitoring frequency for TSS, pH, and additives for mine dewatering discharges from new non-industrial sand facilities from monthly to quarterly. See changes below, highlighted in gray.

Explanation of Change: The department has determined that new permittees should have a monitoring frequency of quarterly rather than monthly, to match the frequency for existing facilities. The department received new information about staffing changes that would be needed to complete monthly monitoring from a trade association representing pit and quarry operators in every county of Wisconsin. Section NR 203.136(1)(b), Wis. Adm. Code, specifies that causes for modification include new information, other than revised regulations, guidance or test methods, that was not available at the time of permit issuance or reissuance and that would have justified different permit terms or conditions. This proposed change will reduce the administrative burden and staffing requirements for new facilities while maintaining a sampling frequency that is similar to that required for all other facilities.

4.1.2.1 Sampling Point (Outfall) 001 – Mine Dewatering Discharge to Surface Water from Non-Industrial Sand Facilities

Monitoring Requirements and Effluent Limitations						
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Reporting Frequency	Notes
Flow Rate		gpd	Daily	Total Daily	Monthly	See Sections 4.1.2.4, 4.1.2.5, 4.1.6, and 4.1.7
Suspended Solids, Total	Daily Max	40 mg/L	Quarterly	Grab	Quarterly	See Sections 4.1.6, and 4.1.7
pH Field	Daily Min	6.0 s.u.	Quarterly	Grab	Quarterly	See Sections 4.1.6 and 4.1.7
	Daily Max	9.0 s.u.				

4.1.2.3 Additional Monitoring Requirements to Outfall 001 and Outfall 002

The permittee shall comply with the following additional monitoring requirements for mine dewatering discharges at each applicable outfall at the facility site if the department determines that these monitoring requirements are necessary to assess compliance with water quality standards. The department will specify the additional monitoring requirements in the coverage letter to the permittee.

Monitoring Requirements and Effluent Limitations						
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Reporting Frequency	Notes
Phosphorus, Total	-	mg/L	Quarterly	Grab	Quarterly	See Section 4.1.2.3.1
Water Treatment Additives - Specify	TBD	TBD	Monthly	Grab	Monthly	For industrial sand facilities. See Section 6.

Monitoring Requirements and Effluent Limitations						
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Reporting Frequency	Notes
Water Treatment Additives – Specify	TBD	TBD	Quarterly	Grab	Quarterly	For non-industrial sand facilities. See Section 6.

Change #2:

Sections 4.1.3.4.2 and 9: Modified the due date for existing facilities’ discharge screening sampling results from 90 days after permit effective date to 180 days after permit effective date. This section applies only to existing facilities which discharge process wastewater to surface water.

Explanation of Change: Multiple permittees notified the department that many mines do not operate during winter months and would not discharge during the first 90 days of the permit term (January 1 – March 31, 2023) and therefore would not be able to provide screening results by the due date. The department has determined that sampling during the first 90 days will provide little value, and therefore is proposing to delay the sampling due date from 90 to 180 days. See s. NR 203.136(1)(b), Wis. Adm. Code.

Change #3:

Sections 4.2.3.1, 4.2.3.1.3.4, 4.5, and 4.6.2: Modified to delay the requirement of annual sampling for metals in discharges of process wastewater to groundwater (i.e. unlined ponds) until the second year of the permit term. See changes below highlighted in gray.

Explanation of Change: A trade association provided additional information to the department regarding the requirements for annual sampling for metals for process wastewater discharges to groundwater. The department has determined that delaying the sampling for one year, as requested, would allow permittees to adjust processes and staffing in order to comply with the new requirements and would allow further opportunity for educational efforts to permittees and the public. Additionally, the department has determined that 4 sampling results over 4 years will be sufficient to assess whether a given discharge poses potential for impacts to groundwater and therefore warrants coverage under an individual permit. See s. NR 203.136(1)(b), Wis. Adm. Code. DNR has created a new Section 4.6.2. to clarify that sampling for metals will be delayed for one year. Annual metals sampling will be required beginning in 2024, with reporting due by January 2025. Changes were made to sections 4.2.3.1.3.4 and 4.5 to refer to the collection of an initial sample in the second year of the permit rather than the first year, as no sampling in the first year will be required after this modification.

4.2.3.1 Sampling Point (Outfall) 006 – Process Generated Wastewater Treatment Facility

Monitoring Requirements and Effluent Limitations						
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Reporting Frequency	Notes
COD	-	mg/L	Annual	Grab Comp	Annual	See Sections 4.2.3.1.1 to 4.2.3.1.4
pH Field	-	s.u.	Annual	Grab Comp	Annual	See Sections 4.2.3.1.1 to 4.2.3.1.4

Monitoring Requirements and Effluent Limitations						
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Reporting Frequency	Notes
Nitrogen, Nitrate + Nitrite Total	-	mg/L	Annual	Grab Comp	Annual	See Sections 4.2.3.1.1 to 4.2.3.1.4
Chloride	-	mg/L	Annual	Grab Comp	Annual	See Sections 4.2.3.1.1 to 4.2.3.1.4
Sulfate, Total	-	mg/L	Annual	Grab Comp	Annual	See Sections 4.2.3.1.1 to 4.2.3.1.4
Aluminum, Dissolved	-	µg/L	Annual	Grab Comp	Annual	See Sections 4.2.3.1.1 to 4.2.3.1.4 and 4.6.2.
Arsenic, Dissolved	-	µg/L	Annual	Grab Comp	Annual	See Sections 4.2.3.1.1 to 4.2.3.1.4 and 4.6.2.
Cadmium, Dissolved	-	µg/L	Annual	Grab Comp	Annual	See Sections 4.2.3.1.1 to 4.2.3.1.4 and 4.6.2.
Chromium, Dissolved	-	µg/L	Annual	Grab Comp	Annual	See Sections 4.2.3.1.1 to 4.2.3.1.4 and 4.6.2.
Copper, Dissolved	-	µg/L	Annual	Grab Comp	Annual	See Sections 4.2.3.1.1 to 4.2.3.1.4 and 4.6.2.
Iron, Dissolved	-	µg/L	Annual	Grab Comp	Annual	See Sections 4.2.3.1.1 to 4.2.3.1.4 and 4.6.2.
Lead, Dissolved	-	µg/L	Annual	Grab Comp	Annual	See Sections 4.2.3.1.1 to 4.2.3.1.4 and 4.6.2.
Manganese, Dissolved	-	µg/L	Annual	Grab Comp	Annual	See Sections 4.2.3.1.1 to 4.2.3.1.4 and 4.6.2.
Nickel, Dissolved	-	µg/L	Annual	Grab Comp	Annual	See Sections 4.2.3.1.1 to 4.2.3.1.4 and 4.6.2.
Zinc, Dissolved	-	µg/L	Annual	Grab Comp	Annual	See Sections 4.2.3.1.1 to 4.2.3.1.4 and 4.6.2.

4.2.3.1.3.4 Inactive Site:

Inactive mines must only sample process generated wastewater ponds for the parameters specified in section 4.2.3.1 in the second year of the permit. Following collection of an initial sample, permittees may notify the department that the mine is inactive using the process in Section 4.5 and be exempt from future monitoring and reporting for process generated wastewater while inactive. If the mine becomes active again, the mine must notify the department, and this waiver is no longer valid.

4.5 Notification of Temporarily Inactive Site

The permittee shall notify the department when a mine and/or processing site will be temporarily inactive for a prolonged period of time and when the site becomes active again with a discharge to a water of the state. The department will inactivate the electronic discharge monitoring reports (eDMR) for the site until the site and discharge become active again. The permittee is not required to sample process generated wastewater treatment facilities while the site is temporarily inactive and sits idle, except in the second year of the permit term. The permittee must collect the annual sample required under section 4.2.3.1 for a given year if the mine is active at any point during that calendar year.

4.6.2 Reporting of Metals Monitoring Results

The reporting period for metals monitoring data from Outfall 006 – Process Generated Wastewater Treatment Facility – shall begin on January 1, 2024, one year following the Effective Date of this general permit. Metals sampling is not required in the first year of the permit term (January 1, 2023-December 31, 2023) at Sampling Point 006.

Change #4: Correction of Typographical Errors

Sections 4.1.6.2.1 and 4.3: A misspelled word (“facitlies”) was corrected (“facilities”) in section 4.1.6.2.1. A space was added between the words “water” and “BMPs” in section 4.3.

Explanation of Change: Correction of typographical errors in permit modifications is authorized under s. NR 203.015(1), Wis. Adm. Code.

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