

PERMIT FACT SHEET

General Information

Permit Number:	WI-0046515-07-0
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

WPDES Permit Program Background

Chapter 283 of Wisconsin Statutes requires a Wisconsin Pollutant Discharge Elimination System (WPDES) permit for the discharge of any pollutant through a point source into any waters of the state which includes surface waters and groundwater. WPDES permits are issued by the Wisconsin Department of Natural Resources (department) consistent with applicable federal requirements. These permits contain requirements that include pollutant discharge limitations, monitoring and reporting or record keeping requirements, best management practices (BMPs) and other provisions to reduce, eliminate, or minimize the risk of pollutants impacting human health and water quality.

A WPDES permit is an allowance for a facility to discharge a specified amount of a pollutant into the waters of the state under specific conditions. There are two basic types of WPDES permits:

- **Individual permit.** An individual permit is a permit specifically tailored to an individual facility. Once a facility submits a complete application(s), the department develops a draft permit for that facility based on the information contained in the permit application (e.g., type of activity, nature of discharge, receiving water quality). After a public participation process, the department may issue the permit to the facility for a specific time period (not to exceed five years) with a requirement that the facility reapply 180 days prior to the expiration date. Public notices are posted for each individual permit application and proposed individual permit permittee.
- **General Permit.** A general permit covers a group or category of dischargers with similar qualities within a designated area of the state under one WPDES permit. A general permit provides coverage to several dischargers. To obtain coverage under a general permit for a discharge of pollutants, an owner or operator must submit a notice of intent (NOI) requesting general permit coverage. General permits have an effective term of 5 years from the date of issuance. If a permittee submitted a complete and timely NOI to be covered by the general permit and the department grants coverage under the general permit, the discharge of pollutants is then subject to all conditions of the general permit and these terms or conditions shall continue to apply until the effective date of the reissued general permit. Public notices are issued for the general permit and not for the permittee covered under the general permit. A person may apply for general permit coverage at the time a general permit is issued, or during the term of the permit.

General Permit Objective

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.

General Permit Description

Section NR 205.08, Wis. Adm. Code, authorizes the department to issue a general permit applicable to a designated area of the state authorizing discharges from specified categories or classes of point sources located within that area if they (1) Perform the same or substantially similar operations; (2) Produce the same types of wastewater streams; (3) Employ the same or substantially similar wastewater treatment operations to control specific pollutants; (4) Are subject to the same effluent limitations and monitoring requirements; and (5) In the opinion of the department, are more appropriately controlled under a general permit than under individual permits. The department recognized that many mineral mining and processing facilities perform the same operations, produce the same waste streams, and that individual WPDES permits for these facilities contain very similar requirements. As a result, the department developed this general permit. The following describes the categories and operations covered under this general permit.

Mineral mining and processing operations: Mineral mining and processing operations are those facilities engaged in the extraction of minerals from underground mines, surface mines and quarries using machinery and explosives. Some extraction processes, such as stone quarries, may use large quantities of water. After extraction, many types of raw minerals are then subject to processes such as crushing, milling, washing and chemical treatments.

Wastewater is generated during mineral processing (e.g., stone cutting, wash water, scrubber water), equipment cooling, mine dewatering, and storm water runoff at mines and processing plants. The following describes the storm water and wastewater that may be generated from mineral processing.

Storm Water: Storm water is runoff from precipitation including rain, snow, ice melt or similar water that moves on the land surface via sheet or channelized flow and comes into contact with material handling equipment or activities, raw materials, intermediate products, final products, waste materials, byproducts or industrial machinery at a mineral mining and processing facility. A mineral mining and processing facility may capture and use storm water for process water or makeup water, or it may become commingled with other wastewater. For the purposes of the general permit, storm water used for processing or commingled with other wastewater is considered process generated wastewater.

Process Generated Wastewater: Any wastewater used in the slurry transport of mined material, air emissions control, or processing exclusive of mining (e.g. washing, cleaning, drying, or separating minerals). The term also includes any other water (e.g. storm water, sludge decant, dewatering water, mineral (e.g. tailings or sediment) drainage water, vehicle and equipment washwater, dust suppression water, noncontact cooling water, condensates, or boiler blowdown) which becomes commingled with such wastewater in a pit, pond, lagoon, mine, or other facility used for treatment of such wastewater.

Mine Dewatering Water: Mine dewatering means any water that that is impounded or that collects in the mine and is pumped, drained, or otherwise removed from the mine through the efforts of the mine operator. However, if a mine is also used for treatment of process generated wastewater, discharges of commingled water from the facilities shall be deemed discharges of process generated wastewater. For industrial sand, and construction sand and gravel facilities, mine dewatering includes any wet pit overflows caused solely by direct rainfall and groundwater seepage infiltration.

Vehicle and Equipment Washwater: Any water used to rinse and wash dirt or other inert material off vehicle or equipment. Biodegradable detergents or soaps must be used during washing. This water is usually low volume and either evaporates or infiltrates.

Noncontact Cooling Water: Water used for cooling which does not come into contact with any raw material, intermediate or finished product, or waste and has been used in heat exchangers, air or refrigeration compressors, or other cooling means where contamination with process waste is not normally expected. The largest use of noncontact cooling water is for equipment cooling such as crusher

bearings, dryers, pumps and air compressors. Noncontact cooling water used for processing or commingled with other wastewater is considered process generated wastewater.

Dust suppression water: Water sprayed to control dust at crushers, conveyor transfer points, discharge chutes, stockpiles, and roadways. This water is usually low volume and either evaporates or infiltrates.

Scrubber Water: Water generated from wet scrubbers used for air pollution control on dryers, crushers, grinding mills, screens, conveyors and packaging equipment.

Mine: Mine means an area of land, surface or underground, activity used for or resulting from the extraction of a mineral from natural deposits.

General Permit Summary

This general permit establishes applicability criteria, application for permit coverage requirements, storm water control requirements, wastewater discharge requirements, and standard requirements for discharges from mineral mining and/or processing facilities. The permit requirements are provided to protect human health and protect and maintain the physical, chemical, and biological integrity of the waters of the state by eliminating or minimizing the discharge of pollutants.

Fact Sheet Organization

This fact sheet explains the rationale and assumptions used in deriving the conditions and requirements set forth in the general permit. Additionally, this fact sheet highlights changes in permit conditions that the department proposes to make when reissuing the Mineral Mining and/or Processing WPDES permit. This fact sheet compares conditions in the previous general permit to those in the reissued permit. The previous permit remains in effect until the permit is reissued. The tables that follow were taken from the permit and are numbered in this fact sheet as they are numbered in the permit. Shaded text and cells within tables indicate permit conditions that are new or different from those found in the previous permit.

1 Applicability Criteria

Changes from Previous Permit

- The wastewater and storm water discharge covered has been separated into Section 1.1 and Section 1.2 and have been expanded to clearly define applicable storm water and wastewater discharges under this permit.
- The discharges not covered in Section 1.3 have been expanded to clearly define all discharges not applicable under this permit.
- Section 1.4 has been added to define what discharges are excluded from requiring coverage under this WPDES permit.

Explanation of Applicability Criteria

According to s. NR 205.08(2) and NR 216.003(1), Wis. Adm. Code, the department may include applicability criteria in general permits. Additionally, according to 40 CFR 122.28(a)(4)(ii), general permits may exclude specified sources or areas from coverage. Sections below explain the rationale and assumptions used in deriving the applicability criteria for this general permit.

1.1 Storm Water Discharge Activities Covered

In accordance with s. NR 216.24(1), Wis. Adm. Code, the department may issue industry-specific general storm water discharge permits to one or more categories of industries identified in s. NR 216.21(2), Wis. Adm. Code. Therefore, the department created this industry-specific general permit, and it is applicable to any point source discharge of contaminated storm water associated with industrial activity to a water of the state, either directly or via a separate storm sewer system, originating from any mineral mining and processing site as defined by SIC Code 1400 to 1499 within the state of Wisconsin pursuant to ss. NR 216.21 and NR 216.24(1), Wis. Adm. Code.

1.2 Wastewater Discharge Activities Covered

In accordance with s. NR 205.08(1), the department may issue general WPDES permits applicable to designated areas of the state authorizing wastewater discharges from specified categories or classes of point sources located within those areas. Therefore, the department created this general permit, and it is applicable to nonmetallic mineral mining and processing operations within the state of Wisconsin that result in any of the following point source discharges to a water of the state:

Process Generated Wastewater: The general permit is applicable to the discharge of process generated wastewater from facilities that recycle the process generated wastewater for use in processing to wetlands, surface water or a groundwater via infiltration. The term also includes any other water (e.g. storm water, sludge decant, dewatering water, mineral (e.g. tailings or sediment) drainage water, vehicle and equipment washwater, dust suppression water, noncontact cooling water, condensates, or boiler blowdown) which becomes commingled with such wastewater in a pit, pond, lagoon, mine, or other facility used for treatment of such wastewater.

Mine Dewatering Water: The general permit is applicable to the discharge of mine dewatering water to a water of the state. However, if a mine is also used for treatment of process generated wastewater, discharges of commingled water from the facilities shall be deemed discharges of process generated wastewater.

Vehicle and Equipment Washwater to Groundwater: The general permit is applicable to the discharge of washwater from outside washing of vehicles, equipment, or other objects at the site to a groundwater seepage or infiltration area. Any vehicle or equipment washwater commingled with process generated

wastewater in a pit, pond, lagoon, mine, or other facility used for treatment of the process generated wastewater is deemed a discharge of process generated wastewater.

Dust Suppression Water to Groundwater: The general permit is applicable to the discharge of dust suppression water from controlling dust at the site to groundwater seepage or infiltration. Any dust suppression water commingled with process generated wastewater in a pit, pond, lagoon, mine, or other facility used for treatment of the process generated wastewater is deemed a discharge of process generated wastewater.

1.3 Discharge Activities Not Covered

Concrete Products Operations: The general permit is no longer applicable to the discharge of wastewater associated with concrete products operations that are contiguous to or located within a mineral mining and processing facility site. Such discharges may be applicable under the Concrete Products Operations WPDES General Permit No. WI-0046507 for wastewater discharges or be covered under an individual permit.

Construction Site Activities Disturbing More than One Acre: The department has broadly interpreted mining activities including clearing, grubbing, topsoil stripping, overburden stockpiling and other mining operations activity as industrial activity under s. NR 216.21, Wis. Adm. Code. Although those industrial-type activities can look like they are construction related and appear to need a construction site storm water discharge permit, they do not trigger a separate construction site storm water permit if they occur without the construction of impervious surfaces. Instead, a landowner must obtain coverage under the Construction Site Storm Water Runoff WPDES Permit No. WI-S067831, in addition to the mineral mining and processing permit, if one or more acres of land will be disturbed and impervious surfaces will be constructed necessitating implementation of post-construction performance measures to comply with s. NR 216.47, Wis. Adm. Code, and ss. NR 151.121 through NR 151.128, Wis. Adm. Code. Land use conversions at mine sites that involve the installation of impervious surfaces like gravel, concrete and buildings require a landowner to apply for and obtain coverage under a construction site stormwater discharge permit before those land disturbing construction activities commence so that measures to address pollutants caused by storm water discharges after construction is complete are appropriately implemented.

Process Generated Wastewaters not Recycled: This general permit is not applicable to the discharge of process generated wastewater (does not include mine dewatering water) to surface water or wetlands from facilities that do not recycle the process generated wastewater for use in processing. 40 CFR Part 436 requires that the discharge of process wastewater pollutants from facilities be recycled for use in the processing to be authorized to discharge into navigable waters.

Facilities Subject to 40 CFR Part 436 Subparts E to AL: This general permit is not applicable to facilities processing nonmetallic minerals subject to 40 CFR Part 436 Subparts E to AL. Nonmetallic minerals subject to 40 CFR Part 436 Subparts E to AL are not authorized to discharge process generated wastewater pollutants into navigable waters. However, the discharge of mine dewatering water may be allowed under this general permit if 40 CFR Part 436 Subparts E to AL allows the mine dewatering to be discharged to navigable waters and the effluent limits in this general permit are equally or more stringent than the effluent limit guidelines listed in 40 CFR Part 436 Subparts E to AL.

Industrial Sand with Hydrofluoric Acid Flotation Processes: This general permit is not applicable to the discharge of process generated wastewater from facilities processing industrial sand where the facility employs hydrofluoric acid flotation processes. For these discharges, the department requires that technology-based effluent limits be calculated for pollutants if discharged to a surface water pursuant to 40 CFR Part 436.42(a)(3). Therefore, the department would require an individual permit for these facilities which provides oversight, monitoring and discharge limitations necessary to protect surface water.

Wastewater with Groundwater Monitoring: This general permit is not applicable to the discharge of wastewater from a mineral mining, mineral processing, or other similar facility where a groundwater monitoring system is required to be installed to demonstrate compliance with ch. 283, Wis. Stats. Groundwater monitoring systems require more review and oversight as provided by an individual permit.

Vehicle and Equipment Washwater to Surface Water: The general permit is not applicable to the discharge of washwater from outside washing of vehicles, equipment, or other objects at the site to a surface water unless commingled with process generated wastewater in a pit, pond, lagoon, mine, or other facility used for treatment of process generated wastewater. Such discharges would require an individual permit which provides the oversight, monitoring and discharge limitations necessary to protect surface water quality.

Dust Suppression Water to Surface Water: The general permit is not applicable to the discharge of dust suppression water for controlling dust at the site to a surface water unless commingled with process generated wastewater in a pit, pond, lagoon, mine, or other facility used for treatment of process generated wastewater. Such discharges would require an individual permit which provides the oversight, monitoring and discharge limitations necessary to protect surface water quality.

Metallic Mining and Dressing: The general permit is not applicable to the discharge of process and non-process wastewater associated with metallic mining and dressing as defined by SIC Codes 1000 to 1099. Such discharges would require an individual permit which provides the oversight, monitoring and discharge limitations necessary to protect surface water quality and groundwater.

Coal Mining Activities: The general permit is not applicable to the discharge of process and non-process wastewater associated with coal mining activities as defined by SIC Codes 1200 to 1299. Such discharges would require an individual permit which provides the oversight, monitoring and discharge limitations necessary to protect surface water quality and groundwater.

Manufacturing of Cement: The general permit is not applicable to the discharge of process and non-process wastewater associated with manufacturing of cement. Such discharges would require an individual permit which provides the oversight, monitoring and discharge limitations necessary to protect surface water quality and groundwater.

Domestic Wastewater: The general permit is not applicable to the discharge of domestic wastewater. Any discharge containing domestic wastewaters as described in ch. NR 210, Wis. Adm. Code, are not authorized under this permit. These discharges will contain pathogens or significant amounts of pollutants that will require an individual permit which provides the oversight, monitoring and discharge limitations necessary to protect surface water or groundwater.

Degreasing Operations Using Halogenated Hydrocarbon Degreasing Agents: Chemical degreasing with solvents, such as trichlorethylene, poses a high risk of water contamination and is not allowed under this permit.

Contaminated Groundwater: If the discharge contains any contaminated groundwater, the discharge is not eligible for this general permit. Contaminated groundwater will contain pollutants not regulated by this permit and require coverage under another general permit or individual permit which will provide the oversight, monitoring and discharge limitations necessary to protect surface water or groundwater.

Petroleum Contaminated Water: If the discharge contains any petroleum contaminated water, the discharge is not eligible for this general permit. Petroleum contaminated water will contain pollutants not regulated by this permit and will require coverage under another general permit or individual permit which will provide the oversight, monitoring and discharge limitations necessary to protect surface water or groundwater.

Water Dewatered from Sediments and Sludges: The general permit is not applicable to the discharge of any water from dewatering sediment or sludge removed during maintenance of storm water BMPs or

wastewater treatment and storage facilities that are directly discharged to surface water unless commingled with process generated wastewater in a pit, pond, lagoon, mine, or other facility used for treatment of process generated wastewater. This water may contain pollutants not regulated by this permit from process generated wastewater and will require coverage under another general permit or individual permit which will provide the oversight, monitoring and discharge limitations necessary to protect surface water. Also 40 CFR Part 436 requires that the discharge of process wastewater pollutants from facilities be recycled for use in the processing to be authorized to discharge into navigable waters.

Dredging of Navigable Waterways: The general permit is not applicable to discharge of carriage water and/or interstitial water associated with mechanical or hydraulic dredging of sediment from the beds of navigable waterways returned directly back to the waterway.

Industrial Liquid Wastes, By-Product Solids, and Sludges: The general permit is not applicable to the landspreading of any industrial liquid wastes, by-product solids, or sludges regulated under ch. NR 214, Wis. Adm. Code. The landspreading of these wastes require certain monitoring and landspreading requirements from ch. NR 214, Wis. Adm. Code, which are provided by another general permit or individual permit.

Accidental or Unplanned Discharges: Any discharge from an accidental or unplanned release, spill, leak, or overflow to a water of state is prohibited under State and Federal Law and not authorized by this general permit. This general permit provides the necessary reporting procedures in case an accidental or unplanned discharge occurs to a water of the state. However, any overflow from wastewater treatment facilities that are designed, constructed and operated to treat the volume of wastewater that would result from a 10-year 24-hour precipitation event is covered by this general permit pursuant to s. NR 269.06(6), Wis. Adm. Code.

Unapproved Water Treatment Additives: The discharge shall not contain a water treatment additive where the additive use is not approved in writing by department. Many additives are toxic at certain rates to fish and aquatic life and require approval by the department prior to initiating use. Facilities using additives at rates greater than what was approved by department or discharging wastewater to surface water with unapproved additives will be in violation of this permit.

Wetlands: Discharges covered under this permit shall meet the wetland protection requirements of ch. NR 103, Wis. Adm. Code, and shall not adversely impact wetlands in accordance with s. NR 106.61(1)(b), Wis. Adm. Code. For discharges that impact wetlands, a facility will need to submit information that allows the department to determine if a discharge meets code requirements.

Outstanding and Exceptional Resource Waters: Wastewater discharges to outstanding and exceptional resource waters in ch. NR 102, Wis. Adm. Code, or discharges that would lower the water quality of downstream outstanding and exceptional water resources are not authorized by this permit. Regulation of discharges to outstanding and exceptional resource waters requires an individual permit which provides the oversight, monitoring and discharge limitations necessary to protect these types of receiving waters. The permittee can use the surface water data viewer (<https://dnr.wisconsin.gov/topic/SurfaceWater/swdv>) to identify the outstanding and exceptional resource waters in the county that the discharge will occur.

Capability to Meet Limits: Any new or increased discharge of storm water or wastewater where the permittee is found to not have the capability to treat any proposed new or increased discharge and maintain treatment levels sufficient to meet the effluent limitations in this general permit is not authorized this general permit. The department requires that the applicant apply for coverage under an individual permit. The discharge will then be evaluated by the department under the antidegradation requirements of ch. NR 207, Wis. Adm. Code. The department may suggest that applicants evaluate a variety of options to ensure no significant lowering of water quality occurs in the receiving water. Options include improved wastewater treatment effectiveness, wastewater reuse, directing the discharge to a seepage area, an

alternate discharge location, process changes to reduce the pollutant discharge level, pollutant prevention activities, etc.

Significant Lowering of Water Quality: In a case where a proposed new or increased discharge would result in the significant lowering of water quality in fish and aquatic life waters identified in s. NR 102.13, Wis. Adm. Code, and Great Lakes system waters, the discharge would not be authorized under this permit. Also this exclusion also applies if the new or increased discharge is to a variance water identified in ss. NR 104.05 through NR 104.10, Wis. Adm. Code where the department determines there is a significant lowering of water quality in a downstream fish and aquatic life water or Great Lakes system water. The department requires that the applicant apply for coverage under an individual permit. The discharge will then be evaluated by the department under the antidegradation requirements of ch. NR 207, Wis. Adm. Code. The department may suggest that applicants evaluate a variety of options to ensure no significant lowering of water quality occurs in the receiving water. Options may include improved wastewater treatment effectiveness, wastewater reuse, directing the discharge to a seepage area, an alternate discharge location, process changes to reduce the pollutant discharge level, or pollutant prevention activities.

Impaired Waters and TMDLs: This general permit is not applicable to discharges that will contain a pollutant of concern that will contribute to the impairment of a 303(d) listed impaired water that does not have a federally approved Total Daily Maximum Load (TMDL) for the pollutant of concern; or if there is a federally approved TMDL for the listed waterbody, be inconsistent with the wasteload allocations for general permits in the federally approved TMDL. Regulation of pollutants of concern to impaired waters that do not have a federally approved TMDL or waters with a federally approved TMDL are more appropriately regulated by individual permit which will provide more oversight, monitoring and discharge limitations necessary to protect these waters. These discharges would be considered a significant contributor of pollution and potentially inconsistent with state water quality standards.

Hazardous Substances: Discharges of hazardous substances that are required to be reported under ch. NR 706, Wis. Adm. Code are not authorized by this permit. Exemptions for discharge of these substances require an individual permit which provides the oversight, monitoring and discharge limitations necessary to protect receiving waters. Section 292.11(2)(a), Wis. Stats., requires any person who possesses or controls a hazardous substance or who causes the discharge of a hazardous substance to notify the department of Natural Resources **immediately** of any discharge not authorized by the permit.

Endangered and Threatened Resources: Discharges that affect endangered and threatened resources are not eligible for this permit, unless the department determines that the discharges comply with the endangered and threatened resource protection requirements of s. 29.604, Wis. Stats., and ch. NR 27, Wis. Adm. Code. Facilities with discharges that require more oversight to ensure that they do not violate these protection requirements may need to be covered by an individual permit. If the permittee has reason to believe that endangered and threatened resources will be impacted, then further Wisconsin Natural Heritage Inventory (NHI) screening should be conducted by the permittee. Please contact the [Endangered Resources Review Program \(https://dnr.wisconsin.gov/topic/ERreview\)](https://dnr.wisconsin.gov/topic/ERreview) if you need information about whether a proposed project may impact rare species or other sensitive resources.

Historical Properties: Discharges that will adversely affect any historic property that is a listed property, or on the inventory or on the list of locally designated historic places under s. 44.45, Wis. Stats., are not eligible for this permit, unless the department determines that the discharges will not have an adverse effect on any historic property pursuant to s. 44.40(3), Wis. Stats. The department is required by law to review the project for historic preservation compliance. Please contact the department archaeologist with any questions.

Discharges within Indian Country: The USEPA is the permitting authority for the NPDES program in Indian Country. If your facility is located in Indian Country, then USEPA has the jurisdiction to regulate the discharge from your facility and you must apply to the USEPA for coverage under the multi-sector

general permit or for an individual permit. For more information, see <https://www.epa.gov/npdes/stormwater-discharges-industrial-activities>.

Surface Water Standards and Groundwater Standards: The discharges from facilities eligible for this permit shall not have a reasonable potential to exceed any applicable surface or groundwater standards. This includes any other applicable surface water quality standards downstream of the discharge (i.e. tribal or other states). Facilities with discharges that have a reasonable potential (as specified in ch. NR 106, Wis. Adm. Code) to violate any applicable surface water quality standards or exceed ch. NR 140, Wis. Adm. Code, groundwater quality standards would normally require the increased oversight, monitoring and water quality limitations found in a site-specific individual permit. Facilities whose discharge to groundwater has potential to reach surface water and cause an exceedance of surface water quality standards are also not eligible for coverage under this general permit. Ineligible facilities with such discharges may apply for coverage under an individual WPDES permit. Through the individual permit drafting process, the applicant can demonstrate whether their discharge is a functional equivalent to a surface water discharge, and it can be regulated accordingly through the individual permit.

1.4 Permit Exclusions

Below is an explanation for all discharges excluded from requiring coverage under a WPDES permit.

Holding Tanks: In accordance with s. NR 200.03(2)(a), Wis. Adm. Code, any portion of the wastewater directed to a holding tank then pumped and hauled to publicly owned treatment works (POTW) is excluded under this general permit as the POTW already has a WPDES general permit. Rather, this general permit applies only to direct discharges to a subsurface soil absorption system.

Publicly Owned Treatment Works: In accordance with s. NR 200.03(2)(a), Wis. Adm. Code, any portion of the wastewater directed to a sanitary sewer system that conveys the wastewater to a publicly owned wastewater treatment works (POTW) is excluded under this general permit as the POTW already has a WPDES general permit. This general permit applies only to direct discharges to waters of the state. Direct discharges include discharges to storm sewers or other conveyances to a surface water (such as swales, ditches, sloped land, etc.) or seepage to the groundwater.

Removed Solids from Wastewater Treatment Facilities: A WPDES permit is not necessary for the disposal of any sludges, solids, spoils, tailings, or pond fines removed from wastewater treatment facilities, including settling ponds, at nonmetallic mining and processing sites and the exclusive disposal of the removed sludges, solids, spoils, tailings, or pond fines at the mine site. Any sludges, solids, spoils, tailings, or pond fines removed from wastewater treatment facilities, including settling ponds, at nonmetallic mining and processing sites and the exclusive disposal of the removed sludges, solids, spoils, tailings, or pond fines at the mine site under a reclamation plan are subject to regulations in chs. NR 135 and NR 500 to 538, Wis. Adm. Code. The removed sludges, solids, spoils, tailings, or pond fines may be eligible for the conditional exemption under s. NR 500.08(2)(b), Wis. Adm. Code, but a case-by-case analysis is necessary to determine how these materials are regulated under the NR 500 administrative code chapters. Any questions concerning mine waste disposal should be directed to the department's Waste & Materials Management Program (<https://dnr.wisconsin.gov/topic/Waste/Solid.html>).

Segregated Storm Water Discharges: Discharge of storm water from areas located on plant lands that are segregated from the industrial activities of the plant, such as office buildings and accompanying parking lots, if the storm water drainage from the segregated areas is not mixed with contaminated storm water drainage, is excluded under this general permit pursuant to s. NR 216.21(5)(g), Wis. Adm. Code.

2 Application for Permit Coverage

Changes from Previous Permit

This section has been revised from the previous permit to contain application requirements. Sections 2.12.1 and 2.12.2 from the previous permit have been revised but contain original elements from the previous permit.

Explanation of Application for Permit Coverage Requirements

The department has retained permit application requirements in the reissued permit. The permit application requirements assures that all the necessary discharge information is properly reported to the department and will help the department determine if a discharge is eligible for the general permit. Data provided will be entered into the department permitting database to facilitate setting-up discharge monitoring reports and compliance monitoring that may be required. The sections below explain the rationale and assumptions used in deriving the permit application requirements for this general permit.

2.1 New Permittees

2.1.1 Submittal of a Notice of Intent

Any new permittee meeting the applicability criteria in Section 1 of this general permit and proposes a new or existing discharge that was not previously covered under WPDES Permit No. WI-A046515-06-0 or WI-B046515-06-0 prior to the **Effective Date** of this general permit shall submit a complete electronic Notice of Intent (eNOI) for coverage under this general permit at least 14 working days prior to initiating industrial operations and discharging to a water of the state in accordance ss. NR 205.08(3) and NR 216.22(2), Wis. Adm. Code. Initiating industrial operations means initiating land disturbing construction activities at the site.

New permittees must submit an eNOI to obtain coverage under this general permit using the online ePermitting System pursuant to 40 CFR Part 127.

2.1.2 NOI Review Time Period

The department will evaluate the information submitted in the eNOI to determine whether the eNOI is true, accurate, complete, and whether the facility is eligible for coverage under the general permit within 30 calendar days of receipt of the complete NOI and associated attachments pursuant to ss. NR 205.08(3) and NR 216.22(5)(a), Wis. Adm. Code.

In accordance with s. NR 205.08(5), Wis. Adm. Code, if the department notifies an applicant that a discharge is ineligible for coverage under this general permit but still requires WPDES permit coverage, the applicant shall apply for and obtain coverage under an individual WPDES permit (or alternative general permit, if available) prior to discharging to the waters of the state. The necessary steps to apply for coverage under an individual permit can be found at the department website: <http://dnr.wi.gov/topic/wastewater/PermitApplications.html>.

2.1.3 Content of the NOI

The contents of the notice of intent shall be specified in the general permit and shall require the submission of information necessary for adequate program implementation, including at a minimum, the legal name and address of the owner or operator, the facility name and address, type of facility or discharges, the receiving stream(s), and other required data elements as identified in appendix A to part 127 pursuant to 40 CFR Part 122.28(b)(2)(ii).

2.1.4 NOI Attachments

Attachments to a NOI are considered a part of the NOI and must be submitted pursuant to ss. NR 205.08(3) and NR 216.22(2), Wis. Adm. Code.

2.1.5 Incomplete NOI

The department may require more information than what is provided in the notice of intent in order to determine if coverage under a general permit is appropriate. The applicant shall provide additional information requested by the department within 30 days from receipt of notification by the department pursuant to ss. NR 205.08(3) and NR 216.22(6), Wis. Adm. Code.

2.1.6 Granting of Permit Coverage to New Permittees

The department will transmit a coverage letter via mail addressed to the permittee stating that the discharge from the facility is granted coverage under this general permit within 30 calendar days of receipt of the eNOI unless the department has otherwise notified the permittee of the need for additional information as identified in section 2.1.2 and 2.1.5 or the department determines that the permittee is ineligible for coverage under this general permit. The applicant may not discharge to a water of the state until a coverage letter has been received from the department. Initial coverage under this permit will become effective at a new facility beginning upon the **Start Date** specified by the department in the coverage letter in accordance with ss. NR 205.08(3) and NR 216.22(5)(a), Wis. Adm. Code and 40 CFR 122.28(b)(2)(iv).

2.2 Existing Permittees

2.2.1 Granting of Permit Coverage to Existing Permittees

Any existing permittee that still meets the applicability criteria in Section 1 of this general permit and has an existing discharge that was previously covered under WPDES Permit No. WI-A046515-06-0 or WI-B046515-06-0 prior to the **Effective Date** of this general permit, the permittee is automatically granted coverage under this general permit upon the **Effective Date** in accordance with ss. NR 205.08(3) and NR 216.22(9), Wis. Adm. Code and 40 CFR 122.28(b)(2)(iv). For existing permittees, coverage under this permit will become effective at an existing facility beginning upon the **Effective Date** as the **Start Date** of coverage in accordance with 40 CFR 122.28(b)(2)(iii).

The department will transmit a reissuance letter via mail addressed to the existing permittee stating that the discharge from the facility is granted continued coverage under this general permit in accordance with s. NR 205.08(3) and NR 216.22(5)(a), Wis. Adm. Code and 40 CFR 122.28(b)(2)(iv).

3 Storm Water Control Requirements

Section 3 of the general permit applies to the discharge of storm water only. Mineral (nonmetallic) mining operations meeting the applicability criteria in the general permit that have storm water that comes into contact with overburden, raw materials, intermediate products, final products, waste materials, by-products, material handling equipment or other nonmetallic mining machinery are to implement storm water BMPs and meet the applicable requirements in Section 3.

Internally drained site: The mineral mining, mineral processing, or other similar activity site is considered internally drained when all storm water up to the 25 year, 24-hour frequency storm falling directly on disturbed areas or that comes into contact with excavated material and containing only sediment is entirely captured and contained or infiltrated within the nonmetallic mining operation. To verify internal drainage, the department may request technical information used by an applicant or permittee to claim internal drainage and inspect the nonmetallic mining operation. For an internally drained nonmetallic mining operation, the permittee shall comply with Sections 3.1 and 3.2.

Externally drained site: Any a mineral mining, mineral processing, or other similar activity site that meets the applicability criteria in Section 1.1 and is externally drained shall comply with the SWPPP requirements in Sections 3.1 to 3.7 pursuant to ss. NR 216.27 and NR 216.28, Wis. Adm. Code.

3.1 Physical Controls

3.1.1 Minimum Source Area Pollution Prevention

All permittees shall comply with the minimum source area pollution prevention requirements. The source area pollution prevention controls are based on s. NR 216.27(3)(h) and (i), Wis. Adm. Code

3.1.2 Storm Water Best Management Practices (BMPs)

When the permittee determines that source area pollution prevention controls are not feasible, are not cost effective or are inadequate to control storm water contamination, or when the department notifies the permittee that source area pollution prevention controls are inadequate to achieve a water quality standard, to the maximum extent practicable, contaminated storm water shall be treated to reduce pollutant levels prior to discharge to waters of the state in accordance with s. NR 216.27(3)(k), Wis. Adm. Code.

3.2 Annual Facility Site Compliance Inspections

Permittees shall perform and document the results of an annual facility site compliance inspection pursuant to ss. NR 216.28(2) and NR 216.29(2), Wis. Adm. Code.

3.3 Storm Water Pollution Prevention Plan (SWPPP)

3.3.1 SWPPP Required

Any person who owns or operates a storm water discharge covered by this permit shall prepare and implement an SWPPP in accordance with ss. NR 216.27(1) and NR 216.29(1), Wis. Adm. Code.

3.3.2 Purpose and Content of the SWPPP

The SWPPP is a written document that identifies sources of contaminated storm water; prescribes appropriate source area pollution prevention controls and storm water BMPs designed to prevent or minimize storm water contamination; prescribes storm water BMPs to reduce storm water contaminants prior to discharge; prescribes actions to identify non-storm water discharges that are either regulated under the wastewater requirements of this permit or to remove these discharges from the storm drainage system; and includes schedules, as necessary, to ensure that the storm water management actions prescribed in the SWPPP are implemented and evaluated on a regular basis.

Source area pollution prevention controls and storm water BMPs shall be utilized to minimize sediment discharge to waters of the state. Control of other storm water pollutants, such as salt, petroleum products, cement materials, or other materials potentially hazardous to groundwater or a surface water shall be controlled through the use of source area pollution prevention controls and storm water BMPs.

3.3.3 SWPPP Contact

The SWPPP contact requirements are included from s. NR 216.27(3)(a), Wis. Adm. Code.

3.3.4 Site Description and Drainage Base Map

Site description and drainage base map are included from s. NR 216.27(3)(c) and (e), Wis. Adm. Code.

3.3.5 Description of Storm Water Controls

The description of storm water controls are included from s. NR 216.27(3)(b) and (h), Wis. Adm. Code.

3.3.6 SWPPP Submittal

Owners or operators of other facilities shall develop an SWPPP and submit an SWPPP summary to the department prior to initiating industrial operations in accordance with s. NR 216.29(1)(b), Wis. Adm. Code. The SWPPP shall be kept at the facility and made available to the department upon request in accordance with s. NR 216.29(1)(d), Wis. Adm. Code.

3.3.7 SWPPP Implementation

Any person who owns or operates a storm water discharge covered by this permit shall prepare and implement an SWPPP in accordance with ss. NR 216.27(1) and NR 216.29(1), Wis. Adm. Code.

3.4 Certification of SWPPP Completion

The SWPPP signature and certification requirements are included from s. NR 216.22(7), Wis. Adm. Code.

3.5 SWPPP Amendments

The SWPPP amendment requirements included from ss. NR 216.27(4) and NR 216.29(6), Wis. Adm. Code.

3.6 Compliance with SWPPP Requirements

1. Mineral mining, mineral processing, or other similar activity site with existing WPDES general permit coverage for industrial storm water discharges prior to the **Effective Date** of this permit that have previously submitted a SWPPP or SWPPP summary to the department may be considered to be in compliance with the SWPPP requirements specified in sections 3.3 and 3.4 above if the SWPPP meets the requirements of this permit.
2. For existing mineral mining, mineral processing, or other similar activity site found to be discharging without an industrial storm water WPDES permit, the department may, through an appropriate enforcement action or stipulation, agree to cover the operation under this permit and specify a schedule for SWPPP development, implementation and certification within the shortest time practicable.
3. New mineral mining, mineral processing, or other similar activity site covered under this permit shall comply with the SWPPP requirements of this permit and shall submit a SWPPP to the department in accordance with Section 2.1.3.

3.7 Quarterly Visual Inspections

The quarterly visual inspection requirements are included from ss. NR 216.28(3) and NR 216.29(2), Wis. Adm. Code.

4 Wastewater Discharge Requirements

This section only applies to wastewater discharges. See Section 3 for storm water discharge requirements.

4.1 Surface Water Discharge Requirements

The requirements of this section apply only to surface water discharges. Surface water discharge means any discernible, confined and discrete conveyance system including but not limited to any pipe, ditch, channel, tunnel, conduit, swale, or storm sewer that will carry wastewater to surface waters within the state of Wisconsin. Any discharge to a wetland is considered a surface water discharge consistent with s. NR 102.245(1), Wis. Adm. Code.

4.1.1 Sampling Point(s)

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, WasteType/Sample Contents and Treatment Description (as applicable)
001	Sampling Point 001 applies to the discharge of mine dewatering water to surface water or wetlands from any dimension stone, crushed stone, or construction sand and gravel facility. The permittee shall sample the mine dewatering water following treatment (if applicable) at the end of pipe or if the end of the pipe is not accessible, prior to entering any pipe, ditch, channel, tunnel, conduit, swale, or storm sewer that will discharge to surface water or wetland via Outfall 001. The permittee shall take representative samples of the discharge that consists solely of the mine dewatering water before mixing with any other water. The permittee is only required to collect samples when there is a discharge to surface water or wetlands; if there are no discharges within the reporting frequency the permittee shall report no discharge consistent with Sections 4.6.1 and 4.6.2.
002	Sampling Point 002 applies to the discharge of mine dewatering water to surface water or wetlands from any industrial sand facility. The permittee shall sample the mine dewatering water following treatment (if applicable) at the end of pipe, or if the end of the pipe is not accessible, prior to entering any pipe, ditch, channel, tunnel, conduit, swale, or storm sewer that will discharge to surface water or wetlands via Outfall 002. The permittee shall take representative samples of the discharge that consists solely of the mine dewatering water before mixing with any other water. The permittee is only required to collect samples when there is a discharge to surface water or wetlands; if there are no discharges within the reporting frequency the permittee shall report no discharge consistent with Sections 4.6.1 and 4.6.2.

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, WasteType/Sample Contents and Treatment Description (as applicable)
003	<p>Sampling Point 003 applies to the discharge of process generated wastewater to surface water or wetlands from any dimension stone, crushed stone, or construction sand and gravel facility that recycle the wastewater for use in the processing. The permittee shall sample the process generated wastewater following treatment (if applicable) at the end of pipe or if the end of the pipe is not accessible prior to entering any pipe, ditch, channel, tunnel, conduit, swale, or storm sewer that will discharge to surface water or wetlands via Outfall 003. The permittee shall take representative samples of the discharge that consists solely of the process generated wastewater before mixing with any other water. The permittee is only required to collect samples when there is a discharge to surface water or wetlands; if there are no discharges within the reporting frequency the permittee shall report no discharge consistent with Sections 4.6.1 and 4.6.2. Any other water (e.g. storm water, sludge decant, dewatering water, mineral (e.g. tailings or sediment) drainage water, vehicle and equipment washwater, dust suppression water, noncontact cooling water, condensates, or boiler blowdown) commingled with process generated wastewater in a pit, pond, lagoon, mine, or other facility used for treatment of the process generated wastewater is deemed to be process generated wastewater.</p>
004	<p>Sampling Point 004 applies to the discharge of process generated wastewater to surface water or wetland from any industrial sand facility that recycles the wastewater for use in the processing. The permittee shall sample the process generated wastewater following treatment (if applicable) at the end of pipe or if the end of the pipe is not accessible, prior to entering any pipe, ditch, channel, tunnel, conduit, swale, or storm sewer that will discharge to surface water or wetland via Outfall 004. The permittee shall take representative samples of the discharge that consists solely of the process generated wastewater before mixing with any other water. The permittee is only required to collect samples when there is a discharge to surface water or wetlands; if there are no discharges within the reporting frequency the permittee shall report no discharge consistent with Sections 4.6.1 and 4.6.2. Any other water (e.g. storm water, sludge decant, dewatering water, mineral (e.g. tailings or sediment) drainage water, vehicle and equipment washwater, dust suppression water, noncontact cooling water, condensates, or boiler blowdown) commingled with process generated wastewater in a pit, pond, lagoon, mine, or other facility used for treatment of the process generated wastewater is deemed to be process generated wastewater.</p>

Explanation of Sampling Points

In accordance with s. NR 218.07, Wis. Adm. Code, the location of sampling points shall be as specified in an applicable permit. The identified sampling points are specified for the permittee to collect representative samples of the discharge after treatment to demonstrate compliance with this general permit. These sampling points are generalized so that it covers all possible discharge situations. The department may state the specific location of sampling points in the coverage letter to the permittee. The department may require relocation of a sampling point if it determines that the existing location does not provide samples representative of the discharge.

The department has provided separate mine dewatering and process generated wastewater sampling points and outfalls for non-industrial sand facilities and industrial sand facilities to make it clear what monitoring requirements and effluent limitations apply to each type of facility.

4.1.2 Monitoring Requirements and Effluent Limitations for Mine Dewatering

The permittee shall comply with the following monitoring requirements and limitations.

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	
Suspended Solids, Total	Daily Max	40 mg/L	Monthly	Grab	Monthly	
pH Field	Daily Min	6.0 s.u.	Monthly	Grab	Monthly	
	Daily Max	9.0 s.u.				

Changes from Previous Permit

- The reporting frequency has been added for all parameters.
- Regular monitoring for temperature and total phosphorus has been removed.
- Monitoring and effluent limitations for oil and grease has been removed.
- The sample frequency for new permittees has been changed to “monthly” for all parameters except for the flow rate which has been changed to “daily”.

Explanation of Monitoring Requirements and Effluent Limitations

According to s. NR 205.08(2), Wis. Adm. Code, the department may include monitoring requirements and effluent limitations in general permits. Sections below explain the rationale and assumptions used in deriving the monitoring requirements and effluent limitations.

Sample Frequency: Samples shall be taken at the frequencies specified in the WPDES permit authorizing discharge pursuant to s. NR 218.10, Wis. Adm. Code. Also, the department shall determine on a case-by-case basis, the monitoring frequency to be required for each effluent limitation in a permit in accordance with s. NR 205.066(1), Wis. Adm. Code. The sampling frequency has been changed for new permittees to improve the effectiveness of the permit in protecting surface water quality and establish substantial compliance with the monitoring requirements and effluent limitations. Additionally, this change will reduce the time period when a facility could unknowingly be out of compliance with the permit.

Sample Type: Additionally, the method of sampling shall be that specified in the WPDES permit pursuant to s. NR 218.11, Wis. Adm. Code. Grab samples as the sample type remain the same from the previous permit as many of the non-industrial sand facilities with mine dewatering only are isolated or sit vacant for some time, so it may not be logistically practicable for all facilities to obtain 3-hour grab composite samples.

Reporting Frequency: Monitoring results shall be reported at the intervals specified in the permit pursuant to s. NR 205.07(1)(r), Wis. Adm. Code.

Flow Rate: For the department to assure compliance with permit limitations , monitoring and reporting is required for the volume of effluent discharged from each outfall pursuant to 283.55(1)(b), Wis. Stats. and 40 CFR Part 122.44(i)(1) Therefore, the permittee is required to estimate and report the total daily flow rate of the mine dewatering discharge.

Total Suspended Solids (TSS): The daily maximum limit of 40 mg/L remains unchanged from the previous permit. This limit is achievable by the application of the best practicable control technology currently available. This determination was based on best professional judgment in accordance with s. NR 220.21, Wis. Adm. Code.

pH Monitoring: The pH is limited to the range of 6.0 to 9.0 standard units. This is consistent with the pH technology based effluent limits under Mineral Mining and Processing in 40 CFR Part 436 Subpart B and C for mine dewatering discharges from the crushed stone and construction sand and gravel subcategories. Also, the pH limits are consistent with the water quality standards pH range for waters classified for fish and aquatic life as defined in s. NR 102.04(4)(c), Wis. Adm. Code for other non-industrial sand facilities that do not specify pH technology-based effluent limits in 40 CFR Part 436. Any wastewater with a pH outside the range of 6.0 to 9.0 s.u. shall not be discharged directly to surface waters.

4.1.2.2 Sampling Point (Outfall) 002 – Mine Dewatering Discharge to Surface Water from 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	
Suspended Solids, Total	Daily Max	40 mg/L	Monthly	Grab Comp	Monthly	
	Monthly Avg	25 mg/L				
pH Field	Daily Min	6.0 s.u.	Monthly	Grab	Monthly	
	Daily Max	9.0 s.u.				

Changes from Previous Permit

- The reporting frequency has been added for all parameters.
- The sample type for TSS has been changed to grab composite.
- Regular monitoring for temperature and total phosphorus has been removed.
- Monitoring and effluent limitations for oil and grease has been removed.
- The sample frequency for new permittees has been changed to “monthly” for all parameters except for the flow rate which has been changed to “daily”.
- A monthly average effluent limitation of 25 mg/L for total suspended solids (TSS) have been added to the permit.

Explanation of Monitoring Requirements and Effluent Limitations

According to s. NR 205.08(2), Wis. Adm. Code, the department may include monitoring requirements and effluent limitations in general permits. The sections below explain the rationale and assumptions used in deriving the monitoring requirements and effluent limitations.

Sample Frequency: Samples shall be taken at the frequencies specified in the WPDES permit authorizing discharge pursuant to s. NR 218.10, Wis. Adm. Code. Also, the department shall determine on a case-by-case basis, the monitoring frequency to be required for each effluent limitation in a permit in accordance with s. NR 205.066(1), Wis. Adm. Code. The sampling frequency has been changed for new permittees to improve the effectiveness of the permit in protecting surface water quality and establish substantial compliance with the monitoring requirements and effluent limitations. Additionally, this change will reduce the time period when a facility could unknowingly be out of compliance with the permit.

Sample Type: Additionally, the method of sampling shall be that specified in the WPDES permit pursuant to s. NR 218.11, Wis. Adm. Code.

Reporting Frequency: Monitoring results shall be reported at the intervals specified in the permit pursuant to s. NR 205.07(1)(r), Wis. Adm. Code.

Flow Rate: For the department to assure compliance with permit limitations, monitoring and reporting is required for the volume of effluent discharged from each outfall pursuant to 283.55(1)(b), Wis. Stats. and

40 CFR Part 122.44(i)(1). Therefore, the permittee is required to estimate and report the total daily flow rate of the mine dewatering discharge.

Total Suspended Solids (TSS): The daily maximum limit of 40 mg/L remains unchanged from the previous permit. This limit is achievable by the application of the best practicable control technology currently available. This determination was based on best professional judgment in accordance with s. NR 220.21, Wis. Adm. Code. 40 CFR Part 436.42(a)(4) specifies a daily maximum limit of 45 mg/L for mine dewatering discharges for the Industrial Sand Subcategory. However, effluent limits that are less restrictive than the limits from the current permit, cannot be increased unless the antidegradation and anti-backsliding provisions of ch. NR 207, Wis. Adm. Code, are met. The industry has demonstrated through compliance monitoring that the current limits can be met, therefore, the current limits shall be continued in the reissued permit.

The department changed the sample type from grab to grab composite for TSS. This sample type change will ensure that a representative sample for TSS is collected over the duration of the discharge.

The monthly average limit of 25 mg/L has been included to comply the technology based effluent limits for mine dewatering discharges under the Industrial Sand Subcategory in 40 CFR Part 436.42(a)(4).

Section NR 220.13, Wis. Adm. Code includes provisions that address cases where federal and state rules differ. Section 283.11, Wis. Stats., addresses compliance with federal standards. In this case, the state rules in ch. NR 269, Wis. Adm. Code, are consistent with federal rules in 40 CFR Part 436 with a few exceptions or omissions. In such cases, the permit will in all cases be based on the state rule notwithstanding the federal regulations.

pH Monitoring: The pH is limited to the range of 6.0 to 9.0 standard units. This is consistent with the pH technology based effluent limits under Mineral Mining and Processing in 40 CFR Part 436.42(a)(4) for mine dewatering discharges from Industrial Sand Subcategory. Also, the pH limits are consistent with the water quality standards pH range for waters classified for fish and aquatic life as defined in s. NR 102.04(4)(c), Wis. Adm. Code. Any wastewater with a pH outside the range of 6.0 to 9.0 s.u. shall not be discharged directly to surface waters.

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 access compliance with surface 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	
Water Treatment Additives - Specify	TBD	TBD	Monthly	Grab	Monthly	See Section 6

Changes from Previous Permit

- Total phosphorus monitoring has been changed to be only required for discharges to impaired or TMDL waters.
- Additional monitoring for water treatment additives has been added.

Explanation of Monitoring Requirements and Effluent Limitations

According to s. NR 205.08(2), Wis. Adm. Code, the department may include monitoring requirements and effluent limitations in general permits. Sections below explain the rationale and assumptions used in deriving the monitoring requirements and effluent limitations.

Total Phosphorus: Total phosphorus was added to the permit to monitor that the levels of total phosphorus in the mine dewatering discharge to assess compliance with the total phosphorus wasteload allocations assigned to general permit facilities in a federally approved TMDL. Quarterly sampling frequency will allow the department to see seasonal variations in the discharge over the calendar year.

Water Treatment Additives: The department added monitoring for water treatment additives as a place holder. In some cases, the permittee is required to monitor and limit the discharge for those water treatment additives determined by the department as needing effluent limits under Section 6. The effluent limitations, limit type, and sample type for substances will be stated in the additive use approval letter. The calculation of the effluent limits for water treatment additives are based on procedures for calculating water quality-based effluent limitations for point source discharges to surface waters in ch. NR 106, Wis. Adm. Code.

4.1.2.3.1 Total Phosphorus Monitoring

If the permittee discharges to a surface water with a federally approved TMDL where total phosphorus is listed as a pollutant of concern, and if the TMDL assigns a total phosphorus wasteload allocation to general permit facilities, the permittee shall sample the discharge for total phosphorus and comply the applicable sections in Section 5 of this general permit. Also, in accordance with ss. 283.31(3) and (4), 283.15(5), Wis. Stats., the department shall prescribe conditions for permits issued under ch. 283, Wis. Adm. Code to assure compliance with any more stringent limitations necessary to meet state water quality standards and avoid exceeding TMDLs established pursuant to a continuing planning process developed under s. 283.83, Wis. Stats.

4.1.2.4 Flow Rate

The methods for measuring or estimating flow are based on ss. NR 218.04(15), and NR 218.05, Wis. Adm. Code.

4.1.2.5 Flow Rate Control

The permittee shall control the flow rate to minimize the stream bank erosion, resuspension of sediment, downstream flooding, or property damage. Best management practices to control or abate the discharge of pollutants shall be included in a WPDES permit issued when the practices are reasonably necessary to achieve effluent limitations and standards pursuant to s. NR 205.10(3), Wis. Adm. Code. Therefore, the flow rate control requirement is included to assure compliance with surface water narrative standards in with s. NR 102.04(1), Wis. Adm. Code.

4.1.3 Monitoring Requirements and Effluent Limitations for Process Generated Wastewaters

The permittee shall comply with the following monitoring requirements and limitations.

4.1.3.1 Sampling Point (Outfall) 003 – Process Generated Wastewater 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	Continuous	Monthly	
Suspended Solids, Total	Daily Max	40 mg/L	Monthly	Grab Comp	Monthly	
pH Field	Daily Min	6.0 s.u.	Monthly	Grab	Monthly	
	Daily Max	9.0 s.u.				

Changes from Previous Permit

- The reporting frequency has been added for all parameters.
- The sample type for TSS has been changed to grab composite.
- Regular monitoring for temperature and total phosphorus has been removed.
- Monitoring and effluent limitations for oil and grease has been removed.
- The sample frequency for new permittees has been changed to “monthly” for all parameters except for the flow rate which has been changed to “daily”.

Explanation of Monitoring Requirements and Effluent Limitations

According to s. NR 205.08(2), Wis. Adm. Code, the department may include monitoring requirements and effluent limitations in general permits. The sections below explain the rationale and assumptions used in deriving the monitoring requirements and effluent limitations.

Sample Frequency: Samples shall be taken at the frequencies specified in the WPDES permit authorizing discharge pursuant to s. NR 218.10, Wis. Adm. Code. Also, the department shall determine, on a case-by-case basis, the monitoring frequency to be required for each effluent limitation in a permit in accordance with s. NR 205.066(1), Wis. Adm. Code. The sampling frequency has been changed for new permittees to improve the effectiveness of the permit in protecting surface water quality and establish substantial compliance with the monitoring requirements and effluent limitations. Additionally, this change will reduce the time period when a facility could unknowingly be out of compliance with the permit.

Sample Type: Additionally, the method of sampling shall be that specified in the WPDES permit pursuant to s. NR 218.11, Wis. Adm. Code. Grab samples were chosen as the sample type as many of the non-industrial sand facilities are isolated or sit vacant for some time.

Reporting Frequency: Monitoring results shall be reported at the intervals specified in the permit pursuant to s. NR 205.07(1)(r), Wis. Adm. Code.

Flow Rate: For the department to assure compliance with permit limitations, monitoring and reporting is required for the volume of effluent discharged from each outfall pursuant to 283.55(1)(b), Wis. Stats. and 40 CFR Part 122.44(i)(1). In accordance with s. NR 218.05(1), Wis. Adm. Code, for process wastewater, methods of flow measurement shall include continuous recording devices, preferably with integrating capabilities. Therefore, the permittee is required to measure flow rate continuous for process generated wastewaters to surface water.

Total Suspended Solids (TSS): The daily maximum limit of 40 mg/L remains unchanged from the previous permit. This limit is achievable by the application of best practicable control technology currently available. This determination was based on best professional judgment in accordance with s. NR 220.21, Wis. Adm. Code.

The department changed the sample type from grab to grab composite for TSS. This sample type change will ensure that a representative sample for TSS is collected over the duration of the discharge.

pH Monitoring: The pH is limited to the range of 6.0 to 9.0 standard units. This is consistent with the pH technology based effluent limits under Mineral Mining and Processing in 40 CFR Part 436 Subpart B and C for process generated wastewater from facilities that recycle wastewater for use in the processing under the crushed stone and construction sand and gravel subcategories. Also, the pH limits are consistent with the water quality standards pH range for waters classified for fish and aquatic life as defined in s. NR 102.04(4)(c), Wis. Adm. Code for other non-industrial sand facilities that do not specify pH technology-based effluent limits in 40 CFR Part 436. Any wastewater with a pH outside the range of 6.0 to 9.0 s.u. shall not be discharged directly to surface waters.

4.1.3.2 Sampling Point (Outfall) 004 – Process Generated Wastewater Discharge to Surface Water from 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	Continuous	Monthly	
Suspended Solids, Total	Daily Max	40 mg/L	Monthly	Grab Comp	Monthly	
	Monthly Avg	25 mg/L				
pH Field	Daily Min	6.0 s.u.	Monthly	Grab	Monthly	
	Daily Max	9.0 s.u.				

Changes from Previous Permit

- The reporting frequency has been added for all parameters.
- The sample type for TSS has been changed to grab composite.
- Regular monitoring for temperature and total phosphorus has been removed.
- Monitoring and effluent limitations for oil and grease has been removed.
- The sample frequency for new permittees has been changed to “monthly” for all parameters except for the flow rate which has been changed to “daily”.
- A monthly average effluent limitation of 25 mg/L for TSS have been added to the permit.
- Whole effluent toxicity (WET) testing as effluent monitoring option has been removed from the permit for industrial sand facilities.

Explanation of Monitoring Requirements and Effluent Limitations

According to s. NR 205.08(2), Wis. Adm. Code, the department may include monitoring requirements and effluent limitations in general permits. Sections below explain the rationale and assumptions used in deriving the monitoring requirements and effluent limitations.

Sample Frequency: Samples shall be taken at the frequencies specified in the WPDES permit authorizing discharges pursuant to s. NR 218.10, Wis. Adm. Code. Also, the department shall determine, on a case-by-case basis, the monitoring frequency to be required for each effluent limitation in a permit in accordance with s. NR 205.066(1), Wis. Adm. Code. The sampling frequency has been changed for new permittees to improve the effectiveness of the permit in protecting surface water quality and establish substantial compliance with the monitoring requirements and effluent limitations. Additionally, this change will reduce the time period when a facility could unknowingly be out of compliance with the permit.

Sample Type: The method of sampling shall be that specified in the WPDES permit pursuant to s. NR 218.11, Wis. Adm. Code.

Reporting Frequency: Monitoring results shall be reported at the intervals specified in the permit pursuant to s. NR 205.07(1)(r), Wis. Adm. Code.

Flow Rate: For the department to assure compliance with permit limitations, monitoring and reporting is required for the volume of effluent discharged from each outfall pursuant to 283.55(1)(b), Wis. Stats. and 40 CFR Part 122.44(i)(1). In accordance with s. NR 218.05(1), Wis. Adm. Code, for process wastewater, methods of flow measurement shall include continuous recording devices, preferably with integrating capabilities. Therefore, the permittee is required to measure flow rate continuous for process generated wastewaters to surface water.

Total Suspended Solids (TSS): The daily maximum limit of 40 mg/L remains unchanged from the previous permit. The limit is achievable by the application of best practicable control technology currently available. The determination was based on best professional judgment in accordance with s. NR 220.21, Wis. Adm. Code. 40 CFR Part 436.42(a)(1) specifies a daily maximum limit of 45 mg/L for process generated wastewaters from facilities that recycle wastewater for use in the processing under the Industrial Sand Subcategory. However, effluent limits that are less restrictive than the limits from the current permit cannot be increased unless the antidegradation and anti-backsliding provisions of ch. NR 207, Wis. Adm. Code are met. The industry has demonstrated, through compliance monitoring, that the current limits can be met, therefore, the current limits shall be continued in the reissued permit.

The department changed the sample type from grab to grab composite for TSS. This sample type change will ensure that a representative sample for TSS is collected over the duration of the discharge.

The monthly average limit of 25 mg/L has been included to comply with the technology based effluent limits for process generated wastewater discharges from facilities that recycle wastewater for use in the processing, under the Industrial Sand Subcategory in 40 CFR Part 436.42(a)(1).

Section NR 220.13, Wis. Adm. Code, includes provisions that address cases where federal and state rule differ. Section 283.11, Wis. Stats., addresses compliance with federal standards. In this case, the state rules in ch. NR 269, Wis. Adm. Code, are consistent with federal rules in 40 CFR Part 436 with a few exceptions or omissions. In such cases, the permit will be based on the state rule notwithstanding the federal regulations.

pH Monitoring: The pH is limited to the range of 6.0 to 9.0 standard units. This is consistent with the pH technology based effluent limits under Mineral Mining and Processing in 40 CFR Part 436.42(a)(1) for process generated wastewater discharges from facilities that recycle wastewater for use in the processing under the Industrial Sand Subcategory. Also, the pH limits are consistent with the water quality standards pH range for waters classified for fish and aquatic life as defined in s. NR 102.04(4)(c), Wis. Adm. Code. Any wastewater with a pH outside the range of 6.0 to 9.0 s.u. shall not be discharged directly to surface waters.

WET Testing Removal: The department has removed WET testing as an effluent monitoring option from the previous permit for industrial sand facilities. Any WET testing requirements and the inclusion of WET limits are more appropriate regulated under an individual permit. An individual permit will allow the department to evaluate site specific water-quality effluent limitations and determine the necessity of WET Limits based on WET testing results.

4.1.3.3 Additional Monitoring Requirements to Outfall 003 and Outfall 004

The permittee shall comply with the following additional monitoring requirements and limitations for process generated wastewater discharges to surface water at each applicable outfall at the facility site if the department determines that these monitoring requirements are necessary to access compliance with surface 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	
Water Treatment Additives - Specify	TBD	TBD	Monthly	Grab	Monthly	See Section 6

Changes from Previous Permit

- Total phosphorus monitoring has been changed to be only required for discharges to impaired or TMDL waters.
- Additional monitoring for water treatment additives has been added.

Explanation of Monitoring Requirements and Effluent Limitations

According to s. NR 205.08(2), Wis. Adm. Code, the department may include monitoring requirements and effluent limitations in general permits. Sections below explain the rationale and assumptions used in deriving the monitoring requirements and effluent limitations.

Total Phosphorus: Total phosphorus was added to the permit to monitor that the levels of total phosphorus in process generated wastewater discharges to assess compliance with the total phosphorus wasteload allocations assigned to general permit facilities in a federally approved TMDL. Quarterly sampling frequency will allow the department to see seasonal variations in the discharge over the calendar year.

Water Treatment Additives: The department added monitoring for water treatment additives as a place holder. In some cases, the permittee is required to monitor and limit the discharge for those water treatment additives determined by the department as needing effluent limits under Section 6. The effluent limitations, limit type, and sample type for substances will be stated in the additive use approval letter. The calculation of the effluent limits for water treatment additives are based on procedures for calculating water quality-based effluent limitations for point source discharges to surface waters in ch. NR 106, Wis. Adm. Code.

4.1.3.3.1 Total Phosphorus Monitoring

If the permittee discharges to a surface water with a federally approved TMDL where total phosphorus is listed as a pollutant of concern, and if the TMDL assigns a total phosphorus wasteload allocation to general permit facilities, the permittee shall sample the discharge for total phosphorus and comply with the applicable sections in Section 5 of this general permit. Also, in accordance with ss. 283.31(3) and (4), 283.15(5), Wis. Stats., the department shall prescribe conditions for permits issued under ch. 283, Wis. Adm. Code to assure compliance with any more stringent limitations necessary to meet state water quality

standards and avoid exceeding TMDLs established pursuant to a continuing planning process developed under s. 283.83, Wis. Stats.

4.1.3.4 Discharge Screening Requirements

The department has added requirements for Outfall 003 and Outfall 004 for process generated wastewater discharges to surface water to assess compliance with water quality standards in in chs. NR 102, NR 104, NR 105, NR 106, NR 207, and NR 217, Wis. Adm. Code, or other applicable surface water quality standards. The selected parameters are present in the minerals and soils found in the geology of Wisconsin. Mineral processing, such as aggregate washing, may concentrate these pollutants which may be toxic to fish and aquatic life and public health. The selected parameters and number of samples are based on the minimum individual permit application monitoring requirements for secondary industries in ch. NR 200, Wis. Adm. Code. Screening for these parameters will allow the department to assess and evaluate if the process generated wastewaters will have reasonable potential to exceed water quality standards in in chs. NR 102, NR 104, NR 105, NR 106, NR 207, and NR 217, Wis. Adm. Code, or other applicable surface water quality standards. If the process generated wastewater discharge has reasonable potential to exceed water quality standards for these parameters in in chs. NR 102, NR 104, NR 105, NR 106, NR 207, and NR 217, Wis. Adm. Code, or other applicable surface water quality standards then the facility is no longer eligible for coverage under this general permit and must apply for an individual permit to incorporate site-specific water quality-based effluent limitations and to continue to be authorized to discharge to surface water. Alternatively, permittees may consider changing discharge locations to groundwater or changing their processing to have complete recycling of process wastewater with no discharge to surface water.

Any new permittee that proposes a new discharge during the permit term that was not previously covered under WPDES Permit No. WI-A046515-06-0 or WI-B046515-06-0 prior to the **Effective Date** of this general permit, shall submit the discharge screening results with the NOI. In lieu of providing the discharge screening results with the NOI, the permittee shall sample the discharge after start-up to fulfill the discharge screening requirement above. The permittee shall submit the discharge screening results after start-up within 90 days of the date on the letter granting coverage under this general permit or commencement of the discharge, whichever is later to the department general permit contact for their county. This start-up sampling will allow the department to evaluate the impacts of the geology from site-to-site on effluent concentrations.

Any existing permittee that had an existing discharge that was previously covered under WPDES Permit No. WI-A046515-06-0 or WI-B046515-06-0 prior to the **Effective Date** of this general permit, shall provide the discharge screening results within 90 days of the effective date of this general permit. The 90 days will allow existing permittees adequate time to perform sampling, schedule lab testing, and receive results back from the lab.

4.1.3.5 Continuous Flow Rate Monitoring

In accordance with s. NR 218.05(1), Wis. Adm. Code, for process waste, methods of flow measurement shall include continuous recording devices, preferably with integrating capabilities, and shall be one of the following

- A magnetic flow meter installed in a section of pipe which is full at all rates of flow,
- A Parshall type flume installed in accordance with accepted design practices,
- A venturi meter,
- A sharp-edged horizontal crest weir, either straight or with end contractions, installed in accordance with accepted design practices,
- A “V” notch weir installed in accordance with accepted design practices, or

- Any other method approved by the department for any specific case in response to a written request for approval.

Any new permittee that was not previously covered under WPDES Permit No. WI-A046515-06-0 or WI-B046515-06-0 prior to the **Effective Date** of this general permit, shall continuously measure the effluent flow rate of process generated wastewater prior to being discharged to surface water with a department approved continuous recording device specified in s. NR 218.05(1), Wis. Adm. Code. Devices used for continuously measuring flow shall be calibrated and the calibration rechecked at least annually using one of the methods specified in s. NR 218.06(1), Wis. Adm. Code.

A WPDES permit may, when appropriate, include a schedule of compliance leading to compliance with new, or more stringent permit limitations or conditions in accordance with s. NR 205.14, Wis. Adm. Code. Therefore, any existing permittee that was previously covered under WPDES Permit No. WI-A046515-06-0 or WI-B046515-06-0 prior to the **Effective Date** of this general permit that does not have a continuous flow recording device installed to measure the effluent flow rate of process generated wastewater prior being discharged to surface water, must comply with the compliance schedule in Section 7.2 to install a continuous flow recording device. A compliance schedule will allow the existing facilities time to hire a consultant, evaluate the appropriate continuous flow recording device, prepare plans and specifications, receive department approval of the plans and specifications, and to install the continuous flow recording device at the facility site.

4.1.4 Overflows from Facilities Covered by Permit

Overflows from facilities covered by the permit requirements are consistent with s. NR 269.06(6), Wis. Adm. Code and 40 CFR Parts 436.22(b), 436.32(b), and 436.42(b).

4.1.5 Grab Composite Samples

The department is authorized to specify the method of sampling in a WPDES permit pursuant to s. NR 218.11, Wis. Adm. Code. The grab composite sample type is based on the composite defined under s. NR 218.04(11), Wis. Adm. Code.

4.1.6 Sampling and Reporting Frequency

The department shall determine, on a case-by-case basis, the monitoring frequency to be required for each effluent limitation in a permit in accordance with s. NR 205.066(1), Wis. Adm. Code.

Any new permittee that was not previously covered under WPDES Permit No. WI-A046515-06-0 or WI-B046515-06-0 prior to the **Effective Date** of this general permit, shall comply with the sampling and reporting frequencies listed in either Sections 4.1.2.1 to 4.1.2.3 or 4.1.3.1 to 4.1.3.3. The permittee may request a sampling and reporting reduction if the conditions of Section 4.1.7 are met. The sampling frequency has been changed for new permittees to improve the effectiveness of the permit in protecting surface water quality and establish substantial compliance with the monitoring requirements and effluent limitations. Additionally, this change will reduce the time period when a facility could unknowingly be out of compliance with the permit.

For any existing permittee that was previously covered under WPDES Permit No. WI-A046515-06-0 or WI-B046515-06-0 prior to the **Effective Date** of this general permit, the sampling and reporting frequency shall be quarterly for the applicable parameters listed in either Sections 4.1.2.1 to 4.1.2.3 or 4.1.3.1 to 4.1.3.3. The permittee may request a sampling and reporting reduction if the conditions of Section 4.1.7 are met. The established quarterly sampling and reporting frequency for existing permittees is based on their past performance and established operation of the sites. If limit exceedances occur, the department may increase the sampling frequency by letter for that parameter to monthly.

For any existing permittee that was previously covered under WPDES Permit No. WI-A046515-06-0 or WI-B046515-06-0 prior to the **Effective Date** of this general permit, the sampling frequency and reporting frequency shall be quarter for flow rate for facilities listed under either Sections 4.1.2.1 or

4.1.2.2. This section does not apply to facilities that are required to continuously measure the flow rate under Sections 4.1.3.1 and 4.1.3.2. The department may require a permittee to comply with the sampling and reporting frequencies listed in Sections 4.1.2.1 or 4.1.2.2 and provide notice by letter if more frequent flow rate monitoring is necessary to comply with the effluent limitations at the site. The permittee shall maintain a daily log of daily flows at the facility and retain the records pursuant to Section 8.2.5 except for remote and unmanned sites, which shall at least maintain and retain a monthly log of total monthly flows at the facility. The permittee shall furnish the flow log to the department upon request. Many of the facilities with mine dewatering only are isolated or sit vacant for some time, so it may not be possible to record daily flows as workers may only visit the site once per month. By requiring the facility at least maintain and retain a monthly log of total monthly flows of the mine dewatering discharge will ensure that the facility is properly recording and estimating the flow rate on a quarterly basis.

4.1.7 Sampling and Reporting Frequency Reduction

In accordance with s. NR 205.066, Wis. Adm. Code, the department shall determine, on a case-by-case basis, the monitoring frequency to be required for each effluent limitation in a permit. This section mirrors the statistical practices to reduce sampling frequencies based on performance established in the “Interim Guidance for Performance - Based Reductions of NPDES Permit Monitoring Frequencies” prepared by EPA dated April 19, 1996.

4.1.8 Surface Water Narrative Requirements

Surface water narrative water quality criteria pursuant to s. NR 102.04(1), Wis. Adm. Code, are included in the permit. These criteria shall be followed at all times and under all flow and water level conditions.

4.1.9 Wetland Narrative Requirements

Wetland narrative water quality criteria pursuant to s. NR 103.03(2), Wis. Adm. Code, are included in the permit. These criteria shall be followed at all times so that wetland water quality related functional values or uses of wetlands as stated in s. NR 103.03(1), Wis. Adm. Code are protected.

4.2 Groundwater Discharge Requirements

The requirements of this section only apply to groundwater discharges. Groundwater discharge means any discernible, confined and discrete conveyance system including but not limited to any pipe, ditch, channel, tunnel, conduit, swale, or storm sewer that will carry wastewater to a permeable surface, absorption pond, or seepage cell system that infiltrates or seeps the wastewater into the soil that may impact groundwater quality.

4.2.1 Sampling Point(s)

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, WasteType/Sample Contents and Treatment Description (as applicable)
005	Sampling Point 005 applies to the separate discharge of either mine dewatering water; washwater from outside washing of vehicles, equipment, or other objects; or dust suppression water to groundwater via infiltration at any mineral (nonmetallic) mining operations, mineral processing operations, or other similar activities. The permittee shall comply with the best management practices listed in Section 4.2.2 for each type of wastewater.
006	Sampling Point 006 applies to the discharge from process generated wastewater treatment facilities to groundwater via infiltration from any active mineral (nonmetallic) mining operations, mineral processing operations, or other similar activities. The permittee shall sample the process generated wastewater treatment facility water at a point and in a manner that will yield representative results of the wastewater that may enter groundwater via Outfall 006. Any other water (e.g. storm water, sludge decant, dewatering water, mineral (e.g. tailings or sediment) drainage water, vehicle and equipment washwater, dust suppression water, noncontact cooling water, condensates, or boiler blowdown) commingled with process generated wastewater in a pit, pond, lagoon, mine, or other facility used for treatment of the process generated wastewater is deemed to be process generated wastewater. The permittee is not required to sample process generated wastewater treatment facilities while the site is temporarily inactive and sits idle per Section 4.5.

Explanation of Sampling Points

In accordance with s. NR 218.07, Wis. Adm. Code, the location of sampling points shall be as specified in an applicable permit. The identified sampling point for Outfall 005 is specified for the permittee to make clear that no sampling applies if mine dewatering water; washwater from outside washing of vehicles, equipment, or other objects; or dust suppression water are discharged separately to groundwater via infiltration and if BMPs are followed. The identified sampling point for Outfall 005 is specified for the permittee to collect representative samples of the process generated wastewater treatment facility water at a point and in a manner that will yield representative results of the wastewater that may enter groundwater via infiltration to demonstrate compliance with this general permit. These sampling points are generalized so that it covers all possible discharge situations. The department may state the specific location of sampling points in the coverage letter to the permittee. The department may require relocation of a sampling point if it determines that the existing location does not provide samples representative of the discharge.

4.2.2 Best Management Practices (BMPs) for Mine Dewatering, Vehicle Washwater, and Dust Suppression Water

The permittee shall comply with the following BMPs for mine dewatering, vehicle washwater, and dust suppression water discharges to groundwater via infiltration at each applicable outfall at the facility site.

Changes from Previous Permit

- Sections 4.2.2.1 to 4.2.2.5 have been added to the permit to explain the BMPs applicable to mine dewatering activities, outside washing activities, and dust suppression control if discharged separately to groundwater via infiltration.

Explanation of Best Management Practices (BMPs)

Best management practices to control or abate the discharge of pollutants shall be included in a WPDES permit issued by the department to achieve effluent limitations and standards pursuant to s. NR 205.10, Wis. Adm. Code. The developed BMPs would provide reasonable pollutant control to protect water quality standards and fulfill the objectives and goals of the CWA from runoff of these wastewaters and encourage infiltration of these wastewaters.

4.2.2.1 Winter Operations

The permittee may discharge to groundwater during frozen conditions provided infiltration is adequate to prevent runoff and long-term ponding or pooling of water. Since infiltration decreases in the winter, the department may require storage during cold weather when feasible. This practice is based on s. NR 214.15(3)(e), Wis. Adm. Code.

4.2.2.2 Rainfall Events

. The permittee may not discharge during any rainfall events that cause runoff from the site into surface waters except if the infiltration area is located such that runoff from the area cannot enter a surface water. This practice is based on s. NR 214.14(3)(f), Wis. Adm. Code.

4.2.2.3 Mine Dewatering Activities

In accordance with 40 CFR 122.28(a)(4), general permits must clearly identify the applicable conditions for each category or subcategory of dischargers covered by the permit. If the discharge of mine dewatering water is directed to and commingled with any other wastewater in a pit, pond, lagoon, mine, or other facility used for treatment of wastewater, the wastewater is deemed to be process generated wastewater and required to be monitored in accordance with either Section 4.1.3 or Section 4.2.3.

4.2.2.4 Outside Washing Activities

In accordance with 40 CFR 122.28(a)(4), general permits must clearly identify the applicable conditions for each category or subcategory of dischargers covered by the permit. The permittee shall comply with the specified BMPs in the general permit specific to discharges from outside washing of vehicles, equipment, and other objects. These BMPs are consistent with BMPs found in the Low-Impact Discharge General Permit No. WI-0066575 that covers outside washing activities. If the discharge of vehicle or equipment washwater is directed to and commingled with any other wastewater in a pit, pond, lagoon, mine, or other facility used for treatment of wastewater, the wastewater is deemed to be process generated wastewater and is required to be monitored in accordance with either Section 4.1.3 or Section 4.2.3.

4.2.2.5 Dust Suppression Control

In accordance with 40 CFR 122.28(a)(4), general permits must clearly identify the applicable conditions for each category or subcategory of dischargers covered by the permit. The permittee shall comply with the specified BMPs in the general permit specific to discharges from dust suppression control. The BMPs are used to prevent the dust suppression water from directly discharging to a surface water and running

off of the site. If the discharge of dust suppression water is directed to and commingled with any other wastewater in a pit, pond, lagoon, mine, or other facility used for treatment of wastewater, the wastewater is deemed to be process generated wastewater and is required to be monitored in accordance with either Section 4.1.3 or Section 4.2.3.

4.2.3 Monitoring Requirements and Effluent Limitations for Process Generated Wastewater Treatment Facility

The permittee shall comply with the following monitoring requirements and limitations.

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	
pH Field	-	s.u.	Annual	Grab Comp	Annual	
Nitrogen, Nitrate + Nitrite Total	-	mg/L	Annual	Grab Comp	Annual	
Chloride	-	mg/L	Annual	Grab Comp	Annual	
Sulfate, Total	-	mg/L	Annual	Grab Comp	Annual	
Aluminum, Dissolved	-	µg/L	Annual	Grab Comp	Annual	
Arsenic, Dissolved	-	µg/L	Annual	Grab Comp	Annual	
Cadmium, Dissolved	-	µg/L	Annual	Grab Comp	Annual	
Chromium, Dissolved	-	µg/L	Annual	Grab Comp	Annual	
Copper, Dissolved	-	µg/L	Annual	Grab Comp	Annual	
Iron, Dissolved	-	µg/L	Annual	Grab Comp	Annual	
Lead, Dissolved	-	µg/L	Annual	Grab Comp	Annual	
Manganese, Dissolved	-	µg/L	Annual	Grab Comp	Annual	
Nickel, Dissolved	-	µg/L	Annual	Grab Comp	Annual	
Zinc, Dissolved	-	µg/L	Annual	Grab Comp	Annual	

Changes from Previous Permit

- Reporting frequency has been added for all parameters.
- The pH limits have been removed.
- Oil and grease monitoring and limitations have been removed.
- The sample type has been changed from grab to grab composite.
- Annual effluent monitoring has been added for chloride, total sulfates, total nitrate + nitrite nitrogen, and dissolved metals.
- Sections 4.2.3.1.1 to 4.2.3.1.5 have been added to the permit to explain the requirements for grab composite sampling, sampling and reporting waivers, polyacrylamide usage, and procedures if there is a potential violation of groundwater standards in ch. NR 140, Wis. Adm. Code.

Explanation of Monitoring Requirements and Effluent Limitations

According to s. NR 205.08(2), Wis. Adm. Code, the department may include monitoring requirements and effluent limitations in general permits. The sections below explain the rationale and assumptions used in deriving the monitoring requirements and effluent limitations.

Sample Frequency: Samples shall be taken at the frequencies specified in the WPDES permit authorizing the discharge pursuant to s. NR 218.10, Wis. Adm. Code. The department shall determine, on a case-by-case basis, the monitoring frequency to be required for each effluent limitation in a permit, in accordance with s. NR 205.066(1), Wis. Adm. Code. In recognition of the variability of certain pollutants to be present at nonmetallic mineral facilities, the department proposed annual sampling requirements to limit sampling burden on the industry.

Sample Type: Additionally, the method of sampling shall be that specified in the WPDES permit pursuant to s. NR 218.11, Wis. Adm. Code. Grab samples were chosen as the sample type, as many of the facilities are isolated or sit vacant for some time.

Reporting Frequency: Monitoring results shall be reported at the intervals specified in the permit pursuant to s. NR 205.07(1)(r), Wis. Adm. Code.

COD: Oxygen depleting potential needs to be evaluated in wastewater discharges that infiltrate to groundwater. This testing evaluates the potential by testing wastewater for COD. The presence of high COD indicates a chemically reducing environment. Under these conditions, native metals, for instance iron and manganese, are reduced and in their reduce states are soluble in water and are mobilized in dissolved phase. They can then migrate to degrade an aquifer or impact a water supply well. Because the potential is caused by the loading of wastewater, the department has authority under ch. NR 140 Wis. Adm. Code to require dischargers to evaluate this potential by taking COD samples from wastewater discharges.

pH, total nitrate + nitrite nitrogen, and dissolved metals: The wastewater treatment facilities, including settling ponds, at nonmetallic mining and processing sites are regulated as industrial wastewater treatment facilities under ch. 283, Wis. Stats. Chapter NR 500, Wis. Adm. Code, does not apply to industrial wastewater treatment facilities that are permitted under ch. 283, Wis. Stats., and therefore the exemption under s. NR 500.08(2)(b), Wis. Adm. Code, does not apply to these facilities. The department has determined, based on information provided by the industry, that the wastewater treatment facilities, including settling ponds, are treatment structures regulated under ch. NR 213, Wis. Adm. Code, and not ch. NR 214, Wis. Adm. Code. The department defines treatment structures under s. NR 213.04(19), Wis. Adm. Code. Treatment structures may also include lagoons as defined under s. NR 213.04(11), Wis. Adm. Code.

The department has authority to issue general permits that may contain monitoring and reporting requirements pursuant to s. NR 205.08(2), Wis. Adm. Code. Treatment structures and lagoons have design criteria under ch. NR 213, Wis. Adm. Code which includes being properly sealed to prevent excessive exfiltration (s. NR 213.10(1)(a), Wis. Adm. Code). Also, in cases where critical groundwater, geologic or construction conditions warrant, the department may require construction specifications or testing requirements more stringent than those described in ch. 213, Wis. Adm. Code if necessary, to preclude detrimental effects to the groundwater pursuant to s. NR 213.08(4), Wis. Adm. Code. Therefore, the department has included additional sampling and reporting requirements under Section 4.2.3.1 for the quality of wastewater in the wastewater treatment facilities to determine if the wastewater lost to groundwater via infiltration may have an impact on groundwater quality and to access if groundwater monitoring may be necessary.

The selected parameters are present in the minerals and soils found in the geology of Wisconsin. However, the pollutants present in nonmetallic mineral mining process wastewater are inherently variable as they depend primarily on the specific pockets/seams of geology that may contain metal bound sulfide minerals. Although there are certain formations that are believed to contain more metal bound sulfide minerals than others (i.e., Tunnel City and Wonewoc formations) there is still potential for metals to be present in a number of different geological formations, to such an extent that the department is unable to target permit conditions at mines located in certain formations. Also, mineral processing, such as aggregate washing, may concentrate these pollutants which may impact public health and welfare groundwater quality standards found in Table 1 of s. NR 140.10, Wis. Adm. Code and Table 2 of s. NR 140.12, Wis. Adm. Code. Sampling for dissolved metals was selected as it would be more representative of the concentrations of metals that may be lost to groundwater via infiltration as this analysis will imitate the process where metals in particulate (insoluble) will settle out in the wastewater treatment facility by filtering the water sample through an 0.45 µm filter prior to analysis just leaving the dissolved (soluble) metals.

4.2.3.1.1 Grab Composite Samples

The department is authorized to specify the method of sampling in a WPDES permit pursuant to s. NR 218.11, Wis. Adm. Code. The department changed the sampling point from the process generated wastewater inlet pipe to the wastewater treatment facility, to collecting a grab composite sample of the wastewater in the wastewater treatment facility under Section 4.2.3.1.1. Sampling of wastewater in the wastewater treatment facility would allow for a more representative sample that would characterize all the different wastewater streams that may be conveyed to the wastewater treatment facility.

4.2.3.1.2 Waiver from Sampling and Reporting for Certain Parameters

The department included conditions that allow the department to waive monitoring for certain parameters if the permittee has collected representative samples of the wastewater in the process generated wastewater treatment facility in two consecutive years, and the concentrations of the parameter are equal to or less than the preventive action level for that parameter in ch. NR 140, Wis. Adm. Code. This sampling will ensure an initial sample and a confirmation sample is collected to demonstrate a certain parameter is not a concern. The exemption will help alleviate burdensome monitoring for permittees for low-risk discharges.

4.2.3.1.3 Waiver from All Sampling and Reporting Requirements

The department included conditions that allow the department to exempt the permittee from the monitoring and reporting requirements under Section 4.2.3.1, if the permittee can demonstrate that the exfiltration rate, upgrades, or site-specific conditions of the wastewater treatment facility comply with the general permit and chs. NR 140 and NR 213, Wis. Adm. Code. The waiver conditions are based on the exemptions performance criteria and factors found in ss. NR 213.06(1) and (2), Wis. Adm. Code.

4.2.3.1.4 Potential Violation of Groundwater Standards in ch. NR 140, Wis. Adm. Code

The threshold for requiring further actions under this section is the exceedance of an enforcement standard in two consecutive reporting periods for any parameter under ch. NR 140, Wis. Adm. Code. The further actions required under this section are authorized under chs. NR 205 and NR 213, Wis. Adm. Code. Under s. NR 205.08(5)(a), Wis. Adm. Code, the department is authorized to require any point source covered by a general permit to obtain an individual permit when that point source is a significant contributor of pollution or the point source is more appropriately regulated by an individual permit. The discharge of pollutants that consistently exceed ch. NR 140 enforcement standards are more appropriately regulated by an individual permit, which may specify groundwater monitoring requirements. In addition, wastewater treatment facilities have design criteria under ch. NR 213, Wis. Adm. Code. This chapter requires all lagoons to be sealed to prevent excessive exfiltration (s. NR 213.10(1)(a), Wis. Adm. Code), and the exfiltration rate from a lined lagoon may not exceed 500 gallons per acre per day (s. NR 213.10(2)(a), Wis. Adm. Code). A treatment lagoon that is unlined or has an excessive design loss does not meet ch. NR 213, Wis. Adm. Code, and further steps would be required to bring the treatment lagoon into compliance.

4.2.3.1.5 Polyacrylamide

The department can only issue a permit under ch. 283, Wis. Stats, if the discharge of pollutants that meet groundwater protection standards established under ch. 160, Wis. Stats are met. Polyacrylamide products break down into acrylamide monomer that exhibits toxic effects and may impact groundwater if not limited by weight. Therefore, if a polyacrylamide product is used as a water treatment additive, the permittee shall limit the amount of acrylamide monomer in the additive to no more than 0.05% by weight. The department may require the owner or operator to submit information regarding any discharge pursuant to s. 283.37(6), Wis. Stats. Therefore, the permittee shall certify to the department, in writing, the additive name and manufacturer, and that the acrylamide monomer content does not exceed 0.05% by weight within 30 calendar days of the effective date of this permit or prior to use of a polyacrylamide product. The permittee may use a third-party or manufacturer's certification to verify the percent of acrylamide content. The permittee shall limit the maximum dose of polyacrylamide product used to no more than necessary to achieve effective sedimentation in the treatment process.

4.3 Dewatering of Sediment and Sludge

In accordance with 40 CFR 122.28(a)(4), general permits must clearly identify the applicable conditions for each category or subcategory of dischargers covered by the permit. The permittee shall not discharge any water from dewatering sediment removed during maintenance of storm water BMPs or from sludge removed during maintenance of wastewater treatment facilities directly to surface water. The permittee shall recycle this water as process wastewater and may discharge the process wastewater in accordance with Sections 4.1.3 or 4.2.3.

4.4 Oil & Grease Best Management Practices (BMPs)

Best management practices to control or abate the discharge of pollutants shall be included in a WPDES permit issued by the department to carry out the purposes and intent of ch. 283, Stats. and the Clean Water Act (CWA) pursuant to s. NR 205.10, Wis. Adm. Code. The developed BMPs would provide reasonable pollutant control to eliminate any discharge of oil and grease to a water of the state, protect water quality standards and fulfill the objectives and goals of the CWA. The permittee shall implement BMPs to eliminate the release or leak of oil and grease from vehicles and equipment from entering any discharge to a water of the state authorized under this general permit.

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 first 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. This notification is consistent with reporting requirements and planned change requirements in ss. NR 208.07(1)(q) and NR 205.07(3)(c), Wis. Adm. Code.

Active Site: An active site means facilities actively engaged in industrial activities associated with nonmetallic mineral mining or processing with wastewater discharges to a water of the state as of the effective date of the general permit.

Temporarily Inactive Site: Temporarily inactive site means facilities that previously were actively engaged in nonmetallic mineral mining or processing but have ceased operations temporarily until the site is needed again in the future and where no active wastewater discharges associated with nonmetallic mineral mining or processing are occurring to a water of the state.

4.6 Wastewater Reporting Requirements

According to s. NR 205.08(2), Wis. Adm. Code, the department may include reporting requirements in general permits. The permittee shall comply with the following reporting requirements.

4.6.1 Reporting of Monitoring Results

The permit now requires that monitoring results be submitted on an electronic discharge monitoring report (eDMR) instead of a paper annual report in accordance with s. NR 205.07(1)(r), Wis. Adm. Code and 40 CFR Part 127. The eDMRs are due 21 days after the end of the reporting frequency. The eDMR shall be submitted regardless if there is a discharge or not during any reporting frequency. This permit requires that all monitoring data be submitted on an electronic discharge monitoring report (eDMR) form

4.6.2 Reporting Conventions

The permittee shall use the conventions specified in the permit when reporting effluent monitoring results, except when noted otherwise in the permit. These conventions are in accordance with ss. NR 106.07(6)(e) and NR 106.14(3), Wis. Adm. Code.

5 Antidegradation, Impaired Waters & TMDLs, and Wetland Requirements

5.1 Antidegradation Standard and Procedures

Any permittee proposing a new discharge of wastewater or new or increased discharge of storm water to a surface water of the state is in compliance with the antidegradation policy in s. NR 102.05(1)(a), Wis. Adm. Code and antidegradation evaluation procedures in ch. NR 207, Wis. Adm. Code when the department determines that the discharge is authorized for coverage under this general permit via letter. Any proposed new or increased discharge of storm water to an ORW or ERW must also comply with Section 5.1.1 prior to the discharge, to demonstrate compliance with the antidegradation standard in s. NR 102.05(1)(a), Wis. Adm. Code and antidegradation evaluation procedures in ch. NR 207, Wis. Adm. Code. Any increased discharge of storm water or wastewater would not be applicable to the antidegradation evaluation procedures in ch. NR 207, Wis. Adm. Code if the discharge is compliance with the effluent limitations or performance standards in this general permit.

The department has included applicability criteria under Section 1.3 to exclude those discharges that may be inconsistent with the antidegradation standard in s. NR 102.05(1)(a), Wis. Adm. Code and requires further antidegradation evaluation by the department under ch. NR 207, Wis. Adm. Code and an individual permit. The department will prescribe site-specific effluent limitations in the individual permit to be protective of water quality and existing and future designated uses of a surface water. Also, the permit contains conditions under Section 5.1.1 for any proposed new or increased discharge of storm water to an ORW or ERW to demonstrate compliance with the antidegradation evaluation procedures in ss. NR 207.03(3) and (4), Wis. Adm. Code. General permits may contain applicability criteria pursuant to s. NR 205.08(2), Wis. Adm. Code. When the department determines a discharge is authorized for coverage under this general permit by letter, the department is assuring that the discharge meets the applicability criteria.

- Any permittee that proposes new or increased discharge to surface water of the state applying for coverage under this general permit shall control, manage, or treat the proposed new or increased discharge and maintain treatment levels sufficient to meet the effluent limitations in this permit. Those permittees that do not have treatment capability to treat any proposed new or increased discharge and maintain treatment levels sufficient to meet the effluent limitations are not authorized under this general permit and must either apply for an individual permit or find an alternative discharge location.
- Effluent limitations in this general permit are based on applicable procedures and criteria in chs. NR 102, NR 103, NR 105 and NR 106, Wis. Adm. Code and on categorical effluent limitation procedures pursuant to chs. NR 200 to NR 297, Wis. Adm. Code as appropriate.
- Any proposed new or increased discharge that is found to result in a significant lowering of water quality, by containing pollutants not regulated by this general permit at levels that exceed water quality standards in n chs. NR 102, NR 103 NR 104, and NR 105, Wis. Adm. Code, are not authorized under this general permit and must either apply for an individual permit or find an alternative discharge location.
- Any proposed new or increased discharge of wastewater to outstanding and exceptional resource waters in ch. NR 102, Wis. Adm. Code, or discharges that would lower the water quality of downstream outstanding and exceptional water resources are not authorized by this permit and must either apply for an individual permit or find an alternative discharge location.
- Any discharge that will contain a pollutant of concern that will contribute to the impairment of a 303(d) listed impaired water that does not have a federally approved TMDL; or be inconsistent

with a federally approved TMDL are not authorized by this permit and must either apply for an individual permit or find an alternative discharge location.

5.1.1 New or Increased Discharge of Storm Water to an ERW or ORW

The permittee may not establish a new storm water discharge of pollutants directly to an ORW or an ERW unless the discharge of pollutants is equal to or less than existing levels of pollutants immediately upstream of the discharge site. The storm water pollution prevention plan required under Section 3 of the permit shall include practices designed to meet this requirement for new discharges. “New storm water discharge” or “new discharge” means a storm water discharge that would first occur after the permittee’s Start Date of coverage under this permit to a surface water to which the facility did not previously discharge storm water and does not include an increase in a storm water discharge to a surface water to which the facility discharged on or before coverage under this permit. The permittee may increase an existing storm water discharge directly to an ERW only if the increased discharge will not cause a significant lowering of water quality and the discharge is related to important economic or social development. The permittee may increase an existing storm water discharge to an ORW only if the increased discharge of pollutants is equal to or less than the background levels of the pollutant upstream of the discharge and the discharge is related to important economic or social development.

5.2 Impaired Waters & TMDL Requirements

The section 303(d) list of Wisconsin impaired surface water bodies may be obtained by contacting the department or by searching for the section 303(d) list on the department’s Internet site: <https://dnr.wisconsin.gov/topic/SurfaceWater/ConditionLists.html>. The department updates the section 303(d) list approximately every two years. State and Federal Approved TMDLs can be identified by contacting the department, or by searching for the State and Federal Approved TMDL list on the department Internet site: <https://dnr.wisconsin.gov/topic/TMDLs/TMDLReports.html>. General permit discharges located inside of a permitted Municipal Separate Storm Sewer Systems (MS4s) may be included in the wasteload allocation for MS4s.

5.2.1 Impaired Water and TMDL Compliance

In accordance with 40 CFR 122.28(a)(4), general permits must clearly identify the applicable conditions for each category or subcategory of dischargers covered by the permit. The permittee must comply with the pollutant wasteload allocation granted to general permit discharges in any USEPA approved TMDL pursuant to s. 283.31(3), Wis. Stats. The permittee shall assess whether the TMDL requirements are being met based on current practices. If additional control measures are necessary to consistently meet the TMDL wasteload allocations, the permittee shall implement such controls and reduce the pollutant of concern loadings or concentrations to meet the wasteload allocation for general permits. The department will specify whether the discharge is within a federally approved TMDL in the coverage letter to the permittee.

5.2.2 Department Determinations

The department may not issue a permit for any new discharge of a pollutant of concern to a surface water with a federally approved TMDL until the department has determined that the new discharge is consistent with the federally approved TMDL pursuant to s. 283.31(3), Wis. Stats and 40 CFR Part 122.4. The department will make this determination by granting coverage of the discharge under this general permit by letter. If the department determines, by notification to the permittee, that the proposed discharge is inconsistent with the wasteload allocation in a federally approved TMDL, the permittee must perform one of the following actions and notify the department of the selected option:

1. Apply for coverage under an individual permit;
2. Find an alternative discharge location (e.g. discharging to groundwater or sanitary sewer). If the alternative discharge location is to another water of the state, the department will determine if the discharge will be eligible and granted coverage under this general permit by letter; or
3. Reduce or eliminate the loadings or concentrations of the pollutant of concern so that the discharge meets the wasteload allocation in the approved TMDL for general permits. The department will determine if the discharge will be eligible and granted coverage under this general permit by letter.

5.3 Wetland Requirements

5.3.1 No Practical Alternatives Analysis

A permittee that proposes a new discharge to a wetland is required to submit a “practical alternatives analysis” to the department in compliance with s. NR 103.08(4), Wis. Adm. Code, and demonstrate the discharge activities are in conformance the wetland protection requirements in ch. NR 103, Wis. Adm. Code.

5.3.2 Department Determinations

The permittee may not establish a new discharge to a wetland until the department has determined that the proposed discharge meets the wetland requirements in Section 5.3.1 and in ch. NR 103, Wis. Adm. Code. The permittee must show the proposed discharge will not result in significant adverse impacts to wetland functional values, significant adverse impacts to water quality or other significant adverse environmental consequences pursuant to s. NR 103.08(4)(a), Wis. Adm. Code. The department will make this determination by granting coverage of the discharge under this general permit by letter. If the department determines, by notification to the permittee, that the proposed discharge will not meet the wetland requirements in Section 5.3.1 and ch. NR 103, Wis. Adm. Code, the permittee must do one of the following actions and notify the department of the selected option:

1. Apply for coverage under an individual permit;
2. Find an alternative discharge location (i.e. discharging to groundwater or sanitary sewer). If the alternative discharge location is to another water of the state, the department will determine if the discharge will be eligible and granted coverage under this general permit by letter; or
3. Correct the adverse impacts to wetland functional values, significant adverse impacts to water quality or other significant adverse environmental consequences. The department will determine if the discharge will be eligible and granted under this general permit by letter.

6 Water Treatment Additives

6.1 Use of Water Treatment Additives

The permittee shall not add any substance or water treatment additive to the discharge to a surface water unless the use of the water treatment additive is reviewed and approved, in writing, by the department pursuant to s. 283.31(3)(d)1., Wis. Stats. and ss. NR 105.02(3), NR 105.05, NR 106.05(1)(b), and NR 106.10, Wis. Adm. Code, to protect Wisconsin's surface water resources from such products. A water treatment additive review by the department is only necessary for water treatment additives that may enter surface water without receiving treatment. Water treatment additives already present in the water supply do not need to be reviewed and approved.

Examples of water treatment additives include biocides (i.e. algaecides, microbicides, fungicides, molluscicides, etc.), water quality conditioners (i.e. scale and corrosion inhibitors, pH adjustment chemicals, oxygen scavengers, conditioning agents, and water softening compounds, etc.), dechlorination chemicals, erosion control products, and clarifying agents. Water treatment additives already present in the water supply do not need to be reviewed and approved.

6.2 Approval of Water Treatment Additives Usage

On April 23rd, 2015, the department released guidance entitled "Water Quality Review Procedures for Additives" (3400-2015-03), which is available at <https://dnr.wisconsin.gov/topic/Wastewater/Additives.html>. This guidance supports the authority of ss. 283.31(3)(d)1., Wis. Stats. and ss. NR 105.02(3), NR 105.05, NR 106.05(1)(b), and NR 106.10, Wis. Adm. Code, to protect Wisconsin's surface water resources from such products. This guidance document establishes procedures to calculate secondary acute and chronic values for water treatment additives pursuant to ss. NR 105.05 and NR 105.06, Wis. Adm. Code. Secondary acute values are the concentrations of a pollutant in surface water that protect aquatic life from adverse short-term effects. Therefore, facilities shall submit information regarding the toxicity of any added substances or additives to the discharge as specified in the permit, so the department can determine if it is allowable and will not negatively impact aquatic life or human health. The department shall also be informed of significant changes in additive usage or new additives that would raise the potential for negative impacts on aquatic life or human health.

6.2.1 New Discharge

Any permittee that proposes a new discharge to a surface water during the permit term that has not been covered under this general permit and wishes to commence use of a water treatment additive, the permittee shall submit a copy of the Additive Review Worksheet and SDS to the department for each water treatment additive used which requires department approval with the NOI. The department will transmit the additive use approval on the coverage letter to the permittee. The permittee shall comply with the conditions specified in the coverage letter.

These requirements are based on ss. NR 106.10(2), NR 205.07(1)(L), NR 205.08(3), Wis. Adm. Code and s. 283.37(6), Wis. Stats

6.2.2 Existing Discharge

Any permittee with an existing discharge that has been granted coverage under this general permit during the permit term and wishes to commence use of a new water treatment additive or increase the usage of an approved water treatment additive, the permittee shall submit a written request with a copy of the Additive Review Worksheet and SDS to the department for each water treatment additive used which requires department approval. The permittee must receive written approval from the department prior to initiating such changes. The department will transmit an additive use approval letter to the permittee. The permittee shall comply with the conditions specified in the approval letter.

These requirements are based on ss. NR 106.10(2), NR 205.07(1)(L), NR 205.07(3)(c), NR 205.08(3), Wis. Adm. Code and s. 283.37(6), Wis. Stats

6.3 Water Treatment Additive Usage Record

Facilities are required to maintain records of additive use for department inspection. Recording additive use will provide documentation for the facility and the department to verify that the additive is being used and discharged in accordance with the permit requirements.

6.4 Public Notice of Additive Use Restrictions

If the department determines that a water treatment additive requires a usage restriction and effluent limits, the department is required to public notice those proposed limits prior to the limits becoming effective and implemented through this general permit. The public notice period is to last 30-days and be issued in a newspaper of general circulation in the area affected by the discharge and the department's public notice webpage. The public notice procedures are based on s. NR 203.02, Wis. Adm. Code.

7 Schedules

7.1 Submittal of Discharge Information for Existing Permittees

The permittee shall furnish the department, within a reasonable time, any information which the department may request to determine whether cause exists for continuing coverage under the permit pursuant to s. NR 205.07(1)(L), Wis. Adm. Code. Therefore, any existing permittee shall submit a detailed description of all wastewater discharge activities that occur at the mineral mining and processing site to the department.

7.2 Continuous Effluent Flow Monitoring Device Installation

In accordance with s. NR 218.05(1), Wis. Adm. Code, for process waste, methods of flow measurement shall include continuous recording devices. Therefore, any existing permittee that was previously covered under WPDES Permit No. WI-A046515-06-0 or WI-B046515-06-0, prior to the Effective Date of this general permit, shall have a continuous flow recording device installed to measure the effluent flow rate of process generated wastewater at the end of pipe prior to discharge to surface water if they do not have one already installed.

This schedule will allow a reasonable opportunity for the permittee to attain compliance with s. NR 218.05(1), Wis. Adm. Code. This schedule will allow the permittee time to design the continuous flow monitoring device, time for the department to review the system, time for the permittee to bid/prepare for installation, and time for the permittee to install and start-up the continuous flow monitoring device.

8 Standard Requirements

According to s. NR 205.08(2), Wis. Adm. Code, the department may include general conditions (standard requirements) in general permits.

Changes from Previous Permit

Changes to the standard requirements section include:

- General conditions specific to general permits are now included under Section 8.1.
- General conditions for all WPDES permits are now included under Section 8.2.
- General conditions specific to non-POTW permits are now included under Section 8.3.

8.1 General Conditions Specific to General Permits

8.1.1 Delegation of Signature Authority

The delegation of signature authority requirements for general permits are based on s. NR 205.07(1)(g), Wis. Adm. Code.

8.1.2 Permit Coverage Transfers

The transfer of permit coverage requirements for general permits are based on ss. NR 203.136(1)(p) and NR 216.31, Wis. Adm. Code, s. 283.53(2d)(d), Wis. Stats, and 40 CFR Part 122.61(b).

8.1.3 Permit Coverage Terminations

The termination of permit coverage requirements for general permits are based on ss. NR 203.136(3) and NR 216.32, Wis. Adm. Code, s. 283.53(2h), Wis. Stats, and 40 CFR Part 122.64(c).

8.1.4 Continuation of an Expired General Permit

The continuation of an expired general permit is based on s. NR 205.07(1)(n), Wis. Adm. Code and 40 CFR Part 122.28(b)(2)(i).

8.2 General Conditions for all WPDES Permits

The general conditions or standard requirements are included from s. NR 205.07(1), Wis. Adm. Code and are required to be included in all WPDES permits issued by the department. Conditions not from s. NR 205.07(1), Wis. Adm. Code, will be cited below.

8.2.1 Duty to Comply

This condition is included by reference from s. NR 205.07(1)(a), Wis. Adm. Code.

8.2.2 Property Rights

This condition is included by reference from s. NR 205.07(1)(c), Wis. Adm. Code.

8.2.3 Inspection and Entry

This condition is included by reference from s. NR 205.07(1)(d), Wis. Adm. Code.

8.2.4 Recording of Results

This condition is included by reference from s. NR 205.07(1)(e), Wis. Adm. Code.

8.2.5 Records Retention

This condition is included by reference from s. NR 205.07(1)(f), Wis. Adm. Code.

8.2.6 Signatory Requirement

This condition is included by reference from s. NR 205.07(1)(g), Wis. Adm. Code.

8.2.7 Proper Operation and Maintenance

This condition is included by reference from s. NR 205.07(1)(j), Wis. Adm. Code.

8.2.8 Duty to Mitigate

This condition is included by reference from s. NR 205.07(1)(k), Wis. Adm. Code.

8.2.9 Duty to Provide Information

This condition is included by reference from s. NR 205.07(1)(L), Wis. Adm. Code.

8.2.10 Need to Halt or Reduce Activity Not a Defense

This condition is included by reference from s. NR 205.07(1)(o), Wis. Adm. Code.

8.2.11 Sampling Procedures

This condition is included by reference from s. NR 205.07(1)(p), Wis. Adm. Code.

8.2.12 Testing Procedures

This condition is included by reference from s. NR 205.07(1)(p), Wis. Adm. Code.

8.2.13 Laboratory Certification or Registration

This condition is included by reference from s. NR 219.037, Wis. Adm. Code.

8.2.14 Effluent Limits Less than LOD or LOQ

This condition is included by reference from s. NR 106.07(6), Wis. Adm. Code.

8.2.15 More Frequent Monitoring

This condition is included by reference from s. NR 205.07(1)(r), Wis. Adm. Code.

8.2.16 Noncompliance and Other Reporting

This condition is included by reference from s. NR 205.07(1)(s), Wis. Adm. Code.

8.2.17 Other Information

This condition is included by reference from s. NR 205.07(1)(t), Wis. Adm. Code.

8.2.18 Bypassing

This condition is included by reference from s. NR 205.07(1)(u), Wis. Adm. Code.

8.2.19 Permit as Enforcement Shield

This condition is included by reference from s. NR 205.07(1)(x), Wis. Adm. Code.

8.2.20 Severability

This condition is included by reference from 33 USC 1251.

8.3 General Conditions Specific to non-POTW Permits

These general conditions are applicable to non-POTWs with general permits and are included from ss. NR 205.07(3), NR 213.07, and NR 214.08, Wis. Adm. Code.

8.3.1 Removed Substances

This condition is included by reference from s. NR 205.07(3)(a), Wis. Adm. Code.

8.3.2 Planned Changes

This condition is included by reference from s. NR 205.07(3)(c), Wis. Adm. Code.

8.3.3 Duty to Halt or Reduce Activity

This condition is included by reference from s. NR 205.07(3)(e), Wis. Adm. Code.

8.3.4 Abandonment Conditions

The abandonment conditions are included based on s. NR 213.07, Wis. Adm. Code.

8.4 General Conditions Specific to Storm Water WPDES Permits

These general conditions are applicable to storm water general permits.

8.4.1 Permit Fee

The storm water permit fee requirements are include based on s. NR 216.30, Wis. Adm. Code.

9 Summary of Reports Due

A summary of reports due has been added for informational purposes for the permittee to keep track of the due dates of permit reports and to be consistent with individual WPDES permits.

Other Changes from Previous Permit

- The department has combined Non-Industrial Sand and other Aggregates and Industrial Sand into one permit that covers storm water and wastewater discharges from all nonmetallic mineral mining and processing facilities.
- Section 1.2 regarding individual permit coverage has been moved to Section 1.3 and the note under Section 2.1.2.
- Section 1.4 regarding storm water discharges to outstanding and exceptional resource waters has been moved to Section 1.3.
- Section 2 on requirements for all sites has been removed and replaced with application for permit coverage requirements. This section provides instruction and guidance to applicants and existing permittees on how to apply for coverage under this general permit.
- Section 2.1 on design requirements for dikes and berms, Section 2.2 for wastewater treatment facilities, and Section 2.4 regarding storm water diversion has been removed. Any overflow from a wastewater treatment facility shall be reported as noncompliance and a spill.
- Requirements for dewatering of water from sediment and sludge, dust suppression control, outside washing activities, and polyacrylamide under Sections, 2.3, 2.5 – 2.7, and 2.11 have been modified and moved to Section 4.2.
- The wastewater surface water and groundwater discharge requirements have been moved under Section 4.
- Sections on flow estimate and grab sample have been removed and included under the definitions in Appendix A of this fact sheet.
- The permit includes a definition for surface water discharge under Section 4.1.
- New outfall and sampling point descriptions have been added to the permit under Section 4.1.1.
- A section for floating solids and foam has been removed from the permit, as this is covered under the surface water narrative requirements in Section 4.1.3.

- Section 4.1.8 has been added to the permit regarding surface water quality narrative standards.
- Section 4.1.9 has been added to the permit regarding wetland surface water quality narrative standards.
- The permit includes a definition for groundwater discharge under Section 4.2.
- Outfall and sampling point descriptions for groundwater discharges applicable under this general permit have been added under Section 4.2.2.
- The general permit now requires that permittees with process generated wastewaters discharged to surface waters shall install a continuously flow measuring device under Section 4.1.3.5
- The permit requires that wastewater monitoring results be submitted on an electronic discharge monitoring report (eDMR) instead of a paper annual report under Section 4.6. The monitoring forms are due 21 days after the end of the reporting permit. The eDMR shall be submitted regardless if there is a discharge or not during any reporting period.
- Information and policy on antidegradation, impaired waters, TMDLs, and wetlands have been modified/added to the permit under Section 5.
- Information on the policy and regulations on water treatment additives has been modified and moved to the permit in Section 6.
- The department has modified the schedule requirements under Section 7 to allow existing permittees time to come into compliance with any new or more stringent requirements in the permit. For information about due dates as provided in the previous, see the summary of reports due in Section 9.
- A summary of reports due under Section 9 has been added for informational purposes for the permittee to keep track of the due dates of permit reports and to be consistent with individual WPDES permits.
- Definitions in Section 8 of the previous permit has been moved to Attachment A of this fact sheet.

Attachments

A. Definitions

Prepared by:

Trevor J. Moen
Wastewater Engineer
Bureau of Water Quality

Melissa Yarrington
Storm Water Specialist
Bureau of Watershed Management

Date: 04/29/2022

Attachment A – Definitions

The definitions of terms used in this general permit are based on their applicability to the type of operations and activity covered under this general permit. The definitions of these terms are included by reference from department guidance, 40 CFR, ch. 283, Wis. Stats., and chs. NR 200, NR 205, NR 206, NR 211, NR 214, NR 216 and NR 218, Wis. Adm. Code. Definitions not specifically outlined in this section can be found in Wisconsin Administrative Code, Wisconsin Statutes, or 40 CFR. Most terms are provided with a code reference. If the terms below are found to be inconsistent with the definition in code, permittees shall refer to the code definition.

Annual Sampling Frequency

Annual sampling frequency means sampling the discharge once per calendar year (January 1st – December 31st). If there is no discharge during a calendar year, the permittee shall state this on the discharge monitoring report form.

Best Management Practices or BMPs

Best Management Practices or BMPs means structural or non-structural measures, practices, techniques or devices employed to avoid or minimize soil, sediment or pollutants carried in runoff to waters of the state. (*s. NR 216.02(1), Wis. Adm. Code*)

Business Days

Business days means each day except Saturday; Sunday; January 1; the third Monday in January, which shall be the day of celebration for January 15; the last Monday in May, which shall be the day of celebration for May 30; July 4; the first Monday in September; the 4th Thursday in November; December 24; December 25; December 31; and the day following if January 1, July 4 or December 25 falls on Sunday. (*s. NR 200.02(1), Wis. Adm. Code*)

Contaminated Storm Water

Contaminated storm water means storm water that comes into contact with material handling equipment or activities, raw materials, intermediate products, final products, waste materials, byproducts or industrial machinery in the source areas listed in s. NR 216.27(3)(e), Wis. Adm. Code. (*s. NR 216.02(3), Wis. Adm. Code*)

Continuous Discharge

Continuous discharge means a facility that discharges 24 hours per day on a year-round basis except for temporary shutdowns for maintenance or other similar activities. (*s. NR 205.03(9g), Wis. Adm. Code*)

Daily Maximum Discharge Limitation

Daily maximum discharge limitation means the highest allowable daily discharge concentration or loading for a certain pollutant. (*40 CFR 122.2*)

Daily Sampling Frequency

Daily sampling frequency means sampling the discharge once in a 24-hour day. If there is no discharge during a day, the permittee shall state this on the discharge monitoring report form.

Domestic Wastewater

Domestic wastewater means the type of wastewater normally discharged from plumbing facilities in private dwellings or commercial domestic establishments and includes, but is not limited to, sanitary, bath, laundry, dishwashing, garbage disposal and cleaning wastewaters. (*s. NR 205.03(14), Wis. Adm. Code*)

Erosion

Erosion means the process by which the land's surface is worn away by the action of wind, water, ice or gravity. (s. NR 216.02(7), Wis. Adm. Code)

Estimated

Estimated used to specify the type of sample for flow measurement, means a reasonable approximation of the average daily flow based on water balance, an uncalibrated weir, or any of the methods included in s. NR 218.05(3)(b), Wis. Adm. Code, disregarding requirements for continuously recording flow. (s. NR 218.04(15), Wis. Adm. Code)

Grab Composite Sample

A grab composite sample means a combination of individual samples of equal volume taken at approximately equal intervals (not exceeding one hour) over a three-hour time period of normal operation of the facility. (s. NR 218.04(11), Wis. Adm. Code)

Grab Sample

Grab sample means a single sample taken at one moment of time or a combination of several smaller samples of equal volume taken in less than a 2-minute period. Where the term is used in connection with monitoring temperature or pH it means a single measurement. (s. NR 218.04(10), Wis. Adm. Code)

Mine

Mine means an area of land, surface or underground, activity used for or resulting from the extraction of a mineral from natural deposits. (s. NR 269.03(1), Wis. Adm. Code)

Mine Dewatering

Mine dewatering means any water that is impounded or that collects in the mine and is pumped, drained or otherwise removed from the mine through the efforts of the mine operator. For construction sand and gravel and industrial sand facilities, this term shall also include wet pit overflows caused solely by direct rainfall and ground water seepage. However, if a mine is also used for treatment of process generated wastewater, discharges of commingled water from the facilities shall be deemed discharges of process generated wastewater. (40 CFR Part 436)

Monthly Average Discharge Limitation

Monthly average discharge limitation means the highest allowable average of daily discharge concentrations or loadings for a certain pollutant 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. (40 CFR 122.2)

Monthly Sampling Frequency

Monthly sampling frequency means sampling the discharge once per calendar month (Jan., Feb. March, April, May, June, July, Aug., Sept., Oct., Nov. and Dec.). If there is no discharge during a calendar month, the permittee shall state this on the discharge monitoring report form.

Municipal Wastewater

Municipal wastewater means the mixture of domestic, process and other wastewater tributary to any given municipal sanitary sewage or treatment system. (s. NR 205.03(19), Wis. Adm. Code)

Permittee

Permittee means a municipality, industry, public agency or commercial domestic establishment which is issued a permit. (s. NR 205.03(24), Wis. Adm. Code)

Point Source

Point source means a discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft from which pollutants may be discharged either into the waters of the state or into a publicly owned treatment works except for a conveyance that conveys only storm water. This term does not include agricultural storm water discharges and return flows from irrigated agriculture. (*s. 283.01(12)(a), Wis. Stats.*)

Privately Owned Treatment Works

Privately owned domestic sewage treatment works means those facilities which treat domestic wastewater and are owned and operated by nonmunicipal entities or enterprises such as mobile home parks, restaurants, hotels, motels, country clubs, resorts, etc., which are permitted under ch. 283, Wis. Stats. (*s. NR 206.03(18), Wis. Adm. Code*)

Process Generated Wastewater

Process generated wastewater means any wastewater used in the slurry transport of mined material, air emissions control, or processing exclusive of mining. The term shall also include any other water which becomes commingled with such wastewater in a pit, pond, lagoon, mine, or other facility used for treatment of such wastewater. The term does not include wastewater used for the suction dredging of deposits in a body of water and returned directly to the body of waste without being used for other purposes or combined with other wastewater. (*40 CFR Part 436*)

Publicly Owned Treatment Works

Publicly owned treatment works or POTW means a treatment works which is owned by a municipality and any sewers that convey wastewater to such a treatment works. This definition includes any devices or systems used by a municipality in the storage, treatment, recycling, and reclamation of municipal sewage or liquid industrial wastes. The term also means the municipality or local unit of government which has jurisdiction over the indirect discharges to, and the discharges from, such a treatment works. (*s. NR 211.03(30), Wis. Adm. Code*)

Quarterly Sampling Frequency

Quarterly sample frequency means monitoring four times per year; once anytime during each of the four annual quarters (Jan.-Feb.-March, April-May-June, July-Aug.-Sept., Oct.-Nov.-Dec.). If there is no discharge during a quarter, the permittee shall state this on the discharge monitoring report form.

Sediment

Sediment, as used in this permit, means settleable solid material that is transported by water, suspended within water or deposited by water away from its original location. (*s. NR 216.02(27), Wis. Adm. Code*)

Sludge

Sludge means the accumulated solids generated during the biological treatment, chemical treatment, coagulation or sedimentation of water or wastewater. (*s. NR 214.03(34), Wis. Adm. Code*)

Stabilize

Stabilize, stabilized, or stabilizing as used in this permit means the process of making a site steadfast or firm, minimizing soil movement by the use of practices such as mulching and seeding, sodding, landscaping, paving, graveling or other appropriate measures. (*s. NR 216.02(32), Wis. Adm. Code*)

Storm Water

Storm Water means runoff from precipitation including rain, snow, ice melt or similar water that moves on the land surface via sheet or channelized flow. (*s. NR 216.02(33), Wis. Adm. Code*)

Surface Waters

Surface waters means waters of the state except wells and other groundwater. Cooling lakes, farm ponds and facilities constructed for the treatment of wastewaters are also excluded from this definition. (*s. NR 200.03(18), Wis. Adm. Code*)

Total Daily

Total daily, used to specify the type of sample for flow measurement, means the determination of daily flow from at least one measurement, when daily frequency is specified, and three measurements in any other specified frequency period using methods appropriate to the type of waste flow involved as set forth in s. NR 218.05, Wis. Adm. Code, but disregarding requirements for continuously recording flow. (*s. NR 218.04(16), Wis. Adm. Code*)

Waters of the State

Waters of the state means those portions of Lake Michigan and Lake Superior within the boundaries of Wisconsin, all lakes, bays, rivers, streams, springs, ponds, wells, impounding reservoirs, marshes, water courses, drainage systems and other surface or groundwater, natural or artificial, public or private within the state or under its jurisdiction, except those waters which are entirely confined and retained completely upon the property of a person. (*s. NR 205.03(44), Wis. Adm. Code*)

Weekly Average Discharge Limitation

Weekly Average discharge limitation means the highest allowable average of daily discharge concentrations or loadings for a certain pollutant 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. (*40 CFR 122.2*)

Weekly Sampling Frequency

Weekly sampling frequency means sampling the discharge once per calendar week which begins on Sunday and ends on Saturday. If there is no discharge during a calendar week, the permittee shall state this on the discharge monitoring report form.

Working Day

Working Day means any day except Saturday and Sunday and holidays designated in s.230.35(4)(a), Wis. Stats. (*s. NR 216.02(41), Wis. Adm. Code*)