



STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

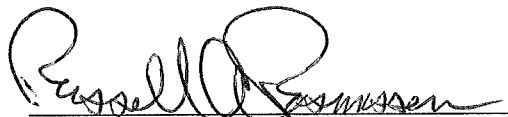
GENERAL PERMIT TO DISCHARGE UNDER THE WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM

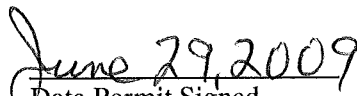
In compliance with the provisions of Chapter 283, Wis. Statutes, any Wisconsin facility engaged in

NONMETALLIC MINING OPERATIONS

that meets the applicability criteria listed in Part 1 of this permit and that receives a letter from the Department granting coverage under this permit, is permitted to discharge storm water and process wastewater directly to surface waters of the state and/or indirectly to groundwater of the state in accordance with the effluent limitations, monitoring requirements and other conditions set forth in this permit.

State of Wisconsin Department of Natural Resources
For the Secretary

By 
Russell A. Rasmussen, Director
Bureau of Watershed Management
Division of Water


Date Permit Signed

PERMIT EFFECTIVE DATE – July 1, 2009

EXPIRATION DATE - March 31, 2014

TABLE OF CONTENTS

Permit Part

1.	Applicability Criteria.....	3
2.	Requirements for All Discharges	4
	2.5 Impaired Waters and TMDL Requirements	4

STORM WATER CONTAMINANT CONTROL REQUIREMENTS

3.	Exemption from Parts 3.3 – 3.7 for Some Nonmetallic Mining Operations.....	6
	3.1 Physical Controls.....	6
	3.2 Storm Water Annual Facility Site Inspection (AFSCI)	7
	3.3 Storm Water Pollution Prevention Plan (SWPPP)	8
	3.4 Certification of SWPPP Completion	9
	3.5 SWPPP Amendments.....	9
	3.6 Compliance with SWPPP Requirements.....	10
	3.7 Inspections for Facilities Required to implement a SWPPP.....	10

PROCESS WASTEWATER REQUIREMENTS

4.	Additional Requirements for Discharges of Mining Wastewater to Groundwater	12
5.	Additional Requirements for Discharges of Mining Wastewater to Surface Waters.....	14

STANDARD REQUIREMENTS

6.	Standard Requirements for all discharges	16
----	--	----

1. APPLICABILITY CRITERIA

1.1. Activities Covered

This permit applies to discharges of wastewater and storm water from nonmetallic mining operations to surface waters or groundwater of Wisconsin directly or indirectly via a storm sewer or other conveyance. Concrete operations contiguous to or located within the mining site can also be covered under this permit when the nonmetallic mine operator has legal responsibility for the concrete plant's wastewater and storm water discharges. Concrete product process wastewater, such as contact cooling water, condensate, material washwater, and equipment washwater, may be discharged along with nonmetallic mining wastewater under this permit. Nonmetallic mining operations include sites and equipment engaged in excavation or processing of sand, gravel, dimension stone, crushed stone, rotten granite, clay, or other similar activities, that result in a discharge of one or more of the following:

- contaminated storm water as defined in s. NR 216.002(3), Wis. Adm. Code,
- washwater associated with cleaning or separating earthen materials,
- mining site dewatering wastewater,
- contact and noncontact cooling water, condensate or boiler water discharged in combination with other wastewater allowed under this permit,
- dust suppression water,
- water from the outside washing of vehicles, equipment, and other objects, or
- other similar wastewaters.

1.2. Activities Not Covered

This permit does not authorize discharge of contaminants from the following:

- wastewater from the following nonmetallic mining processes: crushed stone flotation, construction sand and gravel heavy liquid separation, industrial sand flotation, and industrial sand acid leaching;
- wastewater from the manufacturing of cement by the kiln dust process;
- wastewater from the washing of a precast concrete surface treated with retarder (to expose aggregate after the unset surface cement is cleaned off);
- wastewater from the regeneration of ion exchange water treatment units;
- wastewater from use of petroleum or halogenated hydrocarbon degreasing agents during the washing of vehicles, equipment or other objects;
- wastewater from dredging or excavation operations in areas that the Department has determined contain contaminated soils or sediments;
- noncontact cooling water treated with biocides, except that uncontaminated water from a municipal water supply may be discharged;

- wastewater to wetlands where the Department has determined the pollutant discharge does not meet Ch. NR 103 wetland protection requirements. Note: s. NR 103.06(4), Wis. Adm. Code, contains exemptions for certain sedimentation basins, storm water detention basins and artificial wetlands within active nonmetallic mining operations;
- wastewater directly to an outstanding resource water as defined in s. NR 102.10, Wis. Adm. Code, or a wastewater discharge that would lower the water quality of downstream outstanding resource waters;
- wastewater directly to an exceptional resource water as defined in s. NR 102.11, Wis. Adm. Code, or a wastewater discharge that would lower the water quality of downstream exceptional resource water;
- wastewater containing pollutants in quantities that must be limited to prevent harm to animals, aquatic life, or human health, to prevent violation of the surface water quality standards in chs. NR 102, NR 105, NR 106, and NR 207, Wis. Adm. Code, or to prevent violation of the groundwater standards in ch. NR 140, Wis. Adm. Code;

2. REQUIREMENTS FOR ALL DISCHARGES

2.1. Dikes and Berms

There shall be no above ground leakage through or flow over the top of dikes or berms utilized for holding or diverting wastewater or storm water. Outflow shall be through structures or channels designed to withstand the force of flowing water.

2.2. Adequate Design

Constructed wastewater disposal or treatment facilities shall have at least sufficient capacity to contain all wastewater discharges and any precipitation resulting from a 10-year, 24-hour storm event that falls within or flows into the area of disposal or treatment.

2.3. Dust Suppression Control for Roads

Collected storm water and process wastewaters may be used for road dust suppression. The permittee shall not use excess water in roadway dust suppression practices that will: (1) result in a discharge of the dust suppression water to surface waters, or (2) result in dust suppression water running off the nonmetallic mining site. Wastewaters contaminated with pollutants other than suspended solids (such as petroleum products, salt, solvent degreasers, etc.) may not be used for dust suppression activities. Road dust suppression water is not required to be monitored under this permit.

2.4. Water Treatment Additives

The water treatment additive discharge concentrations shall be below the level of concern for impacts to aquatic life and human health as specified in s. NR 106.10, Wis. Adm. Code, for surface water discharges, or for impacts to human health as specified in ch. NR 140, Wis. Adm. Code, for discharges to groundwater.

2.5. Requirements for Discharges to Impaired Surface Waters & to Surface Waters With Total Maximum Daily Load Allocations

2.5.1 "Pollutant(s) of concern" means a pollutant that is contributing to the impairment of a water body.

2.5.2 By February 15th of each calendar year, the permittee shall perform an **annual check** to determine

whether its facility discharges a pollutant of concern to an **impaired water body** listed in accordance with Section 303(d)(1) of the Federal Clean Water Act, 33 USC §1313(d)(1)(C), and the implementing regulation of the U.S. Environmental Protection Agency, 40 CFR §130.7(c)(1). Impaired waters are those listed as not meeting applicable surface water quality standards.

Note: 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. The Department updates the section 303(d) list approximately every two years. The updated list is effective upon approval by EPA. The current link to the section 303(d) list is: <http://dnr.wi.gov/org/water/wm/wqs/303d/>.

2.5.3, A permittee that discharges a pollutant of concern to an impaired water body shall, **within 180 days of the annual check** that determines the facility discharges to an **impaired water body**, include a written section in a storm water pollution prevention plan that specifically identifies control measures and management practices that will collectively be used to reduce, with the goal of eliminating, the storm water discharge of pollutant(s) of concern that contribute to the impairment of the water body and explain why these control measures and management practices were chosen as opposed to other alternatives. The discharge of a pollutant of concern from mining wastewater shall also be evaluated, within 180 days of identification that the discharge is to an impaired water body, to determine whether additional pollution prevention activities, pollutant control measures and treatment enhancements will be used to reduce, with the goal of eliminating, the discharge of a pollutant of concern that contributes to the impairment of the water body.

2.5.4 The permittee may not establish a **new** wastewater or storm water discharge of a pollutant concern to an impaired water body or **significantly increase** an existing discharge of a pollutant of concern to an **impaired water body** unless the new or increased discharge does not contribute to the receiving water impairment, or the discharge is consistent with a State and Federal approved total maximum daily load (TMDL) allocation for the impaired water body.

2.5.5 By February 15th each calendar year, the permittee shall perform an **annual check** to determine whether its facility discharges a wastewater or storm water pollutant of concern to a water body included in a **State and Federal Approved TMDL**. If so, the permittee shall assess whether the TMDL wasteload allocation for the facility's discharge is being met through the existing pollutant controls or whether additional control measures are necessary and feasible. The assessment of the feasibility of additional control measures shall focus on the ability to improve the wastewater pollution prevention and treatment system effectiveness and the adequacy of implementation and maintenance of the permittee's storm water pollution prevention plan controls.

Note: 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. The current link to identify the list of State and Federal Approved Final TMDLs is:

[http://dnr.wi.gov/org/water/wm/wqs/303d/Approved TMDLs.html](http://dnr.wi.gov/org/water/wm/wqs/303d/Approved%20TMDLs.html)

2.5.6 Within 180 days of the annual check that determines the facility discharges to a TMDL allocated water body, a permittee that is included in a **State and Federal Approved TMDL** shall submit to the Department a **proposed implementation plan** for the wastewater and storm water discharges that meets the requirements of the State and Federal Approved TMDL wasteload allocation for the facility. The proposed TMDL implementation plan shall specify any feasible pollution prevention and wastewater treatment improvements that could be made and specify any revisions or redesigns that could be implemented to increase the effectiveness of the permittee's storm water pollution prevention controls. The TMDL implementation plan shall also specify a time schedule for implementation of the pollutant controls necessary to meet the wasteload allocation for the facility.

3. STORM WATER CONTAMINANT CONTROL REQUIREMENTS

As authorized in ch. NR 216, Wis. Adm. Code, nonmetallic mining operations (including contiguous concrete product operations) that have storm water contact with raw materials, intermediate products, final products, waste materials, by-products, material handling equipment or other nonmetallic mining machinery shall implement storm water best management practices as specified below. **Facilities are exempted from parts 3.3 through 3.7 of the storm water control requirements listed below when they obtain Department concurrence that their storm water contaminants are limited to only earthen materials from the nonmetallic mining operation, the contaminated storm water is captured and seeped into the ground within the mining site (not including runoff from greater than a 10 year, 24 hour frequency storm), and the storm water contaminants are discharged to a previously non-wetland area or a wetland exempted under s. NR 103.06, Wis. Adm. Code.** Storm water treatment and seepage areas that are totally within the permittee's owned or leased property boundaries shall be considered part of the nonmetallic mining site.

3.1. Physical Controls

Nonmetallic mining operations (including any contiguous concrete operations) covered under this permit shall operate the following physical controls to prevent the discharge of storm water contaminants to surface or ground waters:

3.1.1. Source Area Pollution Prevention Best Management Practices (BMPs)

The permittee shall install, to the maximum extent practicable and to the extent it is cost effective, source area pollution prevention BMPs that are designed to prevent storm water from becoming contaminated at the site. Source area pollution prevention BMPs include:

3.1.1.1. Practices that prevent and control soil erosion and sediment movement including, but not limited to, soil stabilization practices, structural practices to divert overland storm flow away from exposed soil and material stockpiles, and minimization of tracking on access roads. Sound engineering principles and practices shall be utilized to minimize erosion and movement of sediment by storm water.

3.1.1.2. Practices that manage and control residual contaminants from the outside washing of vehicles, equipment, and other objects.

3.1.1.3. Practices that prevent storm water from being contaminated by maintenance fluids, fuels, and lubricants associated with vehicles and machinery, including: good house-keeping measures, preventative maintenance measures, visual inspections, spill prevention and response measures, and employee training and awareness.

3.1.1.4. Structures or materials that cover or otherwise enclose salt handling areas or storage piles so that neither precipitation nor storm water runoff comes into contact with the salt. Any salt spillage, resulting from activities such as loading or unloading, shall be managed to minimize contact with storm water. Permittees that use brine and have salt storage piles on impervious curbed surfaces shall have a means of diverting contaminated storm water to a brine treatment system to facilitate reuse.

3.1.1.5. Practices that use a combination of precipitation control, containment, drainage controls or diversions to control SARA section 313 water priority chemicals potentially discharged through the action of storm water runoff, leaching or wind.

3.1.1.6. Protection practices for petroleum product and chemical bulk storage structures that prevent any significant loss of the material to surface or ground waters.

3.1.2. Contaminated Storm Water Treatment Best Management Practices

When the permittee determines that source area pollution prevention BMPs are not feasible, not cost effective or are inadequate to control storm water contamination, or when the Department notifies the permittee that source area pollution prevention BMPs are inadequate to achieve a water quality standard, contaminated storm water shall be treated to reduce pollutant levels prior to discharge to waters of the state. Nonmetallic mining operations (including any contiguous concrete operations) that cannot prevent the exposure of earthen materials to precipitation shall implement sediment treatment BMPs as follows:

3.1.2.1. Storm water contaminated with sediment shall, to the maximum extent practicable, be captured on the nonmetallic mining site and then allowed to evaporate or infiltrate into the earth so the sediment is removed prior to discharge to groundwater. The tracking of sediment onto local roads shall be minimized by the use of BMPs such as, an asphalt or concrete approach to the road or use of a vehicle-tracking pad. There shall be no direct injection, through wells, of storm water into the groundwater.

3.1.2.2. Storm water discharges off the mining site, to wetlands not exempted under s. NR 103.06, Wis. Adm. Code or to surface waters from areas with exposed earthen materials (including aggregate materials stockpiled for reuse) shall be treated with solids separation best management practices to reduce the amount of sediment discharged to the maximum extent practicable. These treatment practices may include settling, sedimentation, filtration, and modifications to retain sediment at drainage inlets (e.g., storm sewer grates or drainage pipe openings) where they occur. [Note: Technical standards developed in accordance with NR 151, Wis. Adm. Code, such as #1063 Sediment Traps, #1001 Wet Detention Basins, # 1064 Sediment Basins, are available for control of erosion and pollutant runoff. This information can be accessed by contacting Department storm water program staff or by accessing the storm water page on the Department internet site. The current link to the storm water page is <http://dnr.wi.gov/runoff/stormwater.htm>]

3.1.2.3. An adequately sized, designed and functioning oil/water separation wastewater treatment device shall be provided for storm water significantly contaminated with petroleum products. The Department may require coverage under an additional WPDES permit for this wastewater if the discharge from the petroleum treatment devices is not limited to a daily maximum of 15 mg/L by the process wastewater sections of this permit.

3.2. Annual Facility Site Compliance Inspections

The permittee shall perform and document the results of an annual facility site compliance inspection for all nonmetallic mining operations and contiguous concrete operations covered under this permit. A qualified individual shall perform the inspections. The inspector shall verify that all pollution sources are correctly identified and that the site drainage pattern description remains accurate. The inspector shall also check that appropriate storm water pollution prevention and treatment best management practices have been chosen, and the practices are being implemented, properly operated and adequately maintained. The timing of the inspection shall include seasonal or cyclical activities at the facility so the inspection is representative of the full range of activities at the site. A report shall be completed for each inspection and shall include: the inspection date, inspection personnel, scope of the inspection, major observations, and a schedule for implementing any further actions needed to control storm water contaminants. The annual inspection reports shall be available for

Department review at the nonmetallic mining site, company headquarters, or any other location approved by the Department. The inspection reports shall be kept for the duration of this permit or three years after the report is generated whichever is longer. [An example annual facility site compliance inspection report is available on the Department website or can be obtained by contacting Department storm water staff].

When inspection activities are impractical at inactive facilities that have no product or waste stockpiles, inspections may be performed on the following alternate schedule: these facilities shall be inspected within 10 days of changing to active status or, at a minimum, once every three years.

3.3. Storm Water Pollution Prevention Plan (SWPPP)

Nonmetallic mining operations that have storm water contact with overburden, raw material, intermediate product, finished product or waste material and that storm water is discharged off the mining site, to a surface water (excluding mine water treatment ponds) or to a wetland not exempted under s. NR 103.06, Wis. Adm. Code shall be operated in compliance with a Storm Water Pollution Prevention Plan. Any concrete product operations covered under this permit and any portable nonmetallic mining equipment groupings specifically requested to be covered under this permit shall also be operated in compliance with a SWPPP. **The SWPPP and any amendments thereto shall be available for Department review and maintained at the nonmetallic mining site, company headquarters, or any other location approved by the Department.** [Note: A model SWPPP for nonmetallic mining operations is available on the Department internet site or by contacting Department industrial storm water staff in the region or Madison office.]

3.3.1. Purpose and Content of the Storm Water Pollution Prevention Plan

The SWPPP is a written document that: 1) identifies sources of storm water contamination; 2) prescribes appropriate source area pollution prevention best management practices designed to prevent or minimize storm water contamination; 3) prescribes storm water treatment best management practices to reduce storm water contaminants prior to discharge; 4) prescribes actions needed either to bring non-storm water discharges under a WPDES permit or to remove these discharges from the storm drainage system; and 5) 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 and sediment treatment best management practices shall be utilized to minimize sediment discharge to the maximum extent practicable. Control of other storm water pollutants, such as salt, petroleum products, cement materials, or other materials potentially hazardous to groundwaters or surface waters shall be controlled to the maximum extent practicable by the use of source area pollution prevention best management practices and treatment best management practices.

3.3.2. SWPPP Contact

The SWPPP shall identify the job title of the person responsible for SWPPP development and implementation. The individual acting in that job title shall have the responsibility to coordinate the development, implementation, evaluation, maintenance, and amendment of the SWPPP. This person shall also coordinate facility compliance with the specific management actions identified in the SWPPP, including maintaining best management practices, conducting monitoring activities, preparing and submitting reports, and serving as facility contact for the Department.

3.3.3. Site Description and Drainage Base Map

The SWPPP for nonmetallic mining sites shall contain a drainage base map that depicts how storm water drains on, through and from the mining site (including any controlled contiguous concrete operations) to either surface waters, surface water tributaries, wetlands, or seepage to groundwater. The drainage base map shall show the following: site property boundaries; the storm drainage collection and disposal system (including all known surface and subsurface conveyances, with the conveyances named); any secondary containment structures; roadways (paved and unpaved); groundcover features (i.e., grass, wooded areas, etc.); the location of all water discharge outfall pipes (including any outfalls permitted under another WPDES permit) numbered for reference, that discharge channelized flow to surface water, groundwater or wetlands); the drainage area boundary for each outfall pipe; the approximate surface area in acres draining to each outfall; the name and location of any surface water features; source area control BMPs and storm water treatment BMPs that are in place at the facility.

The permittee shall also identify on the drainage base map any potential sources of pollution (materials or activities) and areas susceptible to erosion that have the potential to contaminate storm water. Such sources may include: disturbed areas with no stabilizing vegetative cover; product or waste stockpiles; truck loading and washing areas, haul roads; equipment storage and maintenance areas; and fuel storage areas.

3.3.4. Description of Storm Water Controls

The SWPPP shall describe (including diagrams as necessary) all source area pollution prevention BMPs and storm water treatment BMPs that are in place or will be implemented for the operation.

3.4. Certification of SWPPP Completion

Nonmetallic mining operations required to have a SWPPP shall certify, in writing, to the Department that the operation has complied with the SWPPP requirements of this permit. A copy of the certification, showing the date mailed to the Department, must be retained as part of the SWPPP documentation. The certification shall contain the following statement and be signed in accordance with the Authorized Signature standard requirement in Part 6 of this permit:

"I certify under penalty of law that the Storm Water Pollution Prevention Plan (SWPPP) required by WPDES General Permit No. WI-0046515-5 has been completed and retained on site at the facility, at the company headquarters, or any other location approved by the Department. The SWPPP and attachments were completed under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information contained in the plan. Based on my inquiry of the person, or persons, who manage the system, or those persons directly responsible for gathering the information; the information contained in the SWPPP is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for providing false information, including the possibility of fine and imprisonment. In addition, I certify under penalty of law that, based upon inquiry of persons directly under my supervision, to the best of my knowledge and belief, the SWPPP adheres to the storm water control provisions of WPDES General Permit No. WI-0046515-5 for the development and implementation of a Storm Water Pollution Prevention Plan. I certify that the plan will be complied with."

3.5. SWPPP Amendments

The permittee shall amend the SWPPP and notify the Department, in writing, that an amendment has been made under the following circumstances:

3.5.1. When expansion, production increases, process modifications, changes in material handling or storage or other activities are planned, and the changes will result in a significant increase in the exposure of pollutants or a need for significant modifications to the treatment best management practices. The amendment shall contain: a description of the new activities that contribute to the increased pollutant loading, planned source control activities that will be used to minimize pollutant loads, an estimate of the new or increased discharge of pollutants following treatment, and a description of any treatment system modifications needed to manage the storm water contaminants.

3.5.2. Upon written notice that the Department finds the storm water controls to be ineffective in achieving the conditions of this permit.

3.6. Compliance with SWPPP Requirements

3.6.1. Nonmetallic mining operations that have previously submitted a SWPPP certification due to the previous version of this general permit (WI-0046515-4) may be considered to be in compliance with the SWPPP certification requirement specified in part 3.4 above if the previously submitted SWPPP meets the requirements of this permit.

3.6.2. Nonmetallic mining operations that include a contiguous concrete operation and have previously submitted a SWPPP certification due to a previous version of this general permit (WI-0046515-4) or the tier II storm water general permit (WI-S0067857) may be considered to be in compliance with the SWPPP certification requirement specified in part 3.4 above if the previously submitted SWPPP meets the requirements of this permit.

3.6.3. For existing nonmetallic mining operations 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.

3.6.4. New nonmetallic mining operations covered under this permit shall comply with the SWPPP requirements of this permit and shall submit a SWPPP certification to the Department prior to initiating nonmetallic mining activities that result in a discharge of contaminated storm water.

3.7. Inspections for Facilities Required to Implement a SWPPP

3.7.1. Nonmetallic mining operations required to prepare and implement a SWPPP in part 3.3 above, shall inspect the system of storm water controls at least once each calendar quarter. A qualified individual shall perform the inspections. The inspector shall check that site drainage conditions and potential pollution sources identified in the SWPPP remain accurate, and that appropriate storm water pollution prevention and treatment best management practices are being implemented, properly operated and adequately maintained. A report shall be completed for each quarterly inspection and shall include: the inspection date, inspection personnel, scope of the inspection, major observations, possible sources of any observed storm water contamination, any appropriate revisions needed to the SWPPP, and a schedule for implementing any further actions needed to control storm water contaminants. The quarterly inspection reports shall be available for Department review at the nonmetallic mining site, company headquarters, or any other location approved by the Department. The inspection reports shall be kept for the duration of this permit or three years after the report is generated, whichever is longer.

3.7.2. Sites required to prepare and implement a SWPPP in part 3.3 above shall **visually check** the quality of storm water discharge within 60 minutes of a significant storm water runoff event. A qualified individual should be trained to perform this visual inspection at least once per quarter (except as provided below) for NMM operations that generally have staff on site. Remote, inactive and operations that do not generally have a qualified individual on site may perform this visual inspection on an alternate schedule of at least once every three years. A visual observation record shall be created for each visual runoff check that includes the discharge outfall location and any observations of color, odor, turbidity, floating solids, foam, oil sheen, or other obvious indicators associated with storm water contamination. The visual observation record shall be kept with, and for the same time period as, the quarterly inspection reports described above.

3.7.3. The quarterly inspection and/or the visual check requirement can be waived if any of the following apply: (1) the permittee indicates that an employee could not reasonably be present at the time of a snow melt or runoff event; (2) the permittee determines that attempts to complete the inspection would endanger employee safety or well being; (3) the permittee indicates that there were no snow melt or runoff events large enough to conduct a visual check at an outfall; (3) the permittee demonstrates that a quarterly inspection or visual check is impractical or unnecessary at an inactive or remote facility and an alternate inspection frequency of at least once every three years is established; or (4) the permittee demonstrates that the sources of storm water contamination are outside the site's property boundary and are not associated with the permittee's activities. These demonstrations shall be presented in the SWPPP and submitted to the Department as part of the SWPPP certification.

4. ADDITIONAL REQUIREMENTS FOR DISCHARGES OF NONMETALLIC MINING & CONCRETE WASTEWATERS TO GROUNDWATER VIA SEEPAGE

Discharges to groundwater that contain mine dewatering wastewater, equipment washwater, mining material or concrete material washwater, contact and noncontact cooling water, or other process wastewaters related to production of nonmetallic mining materials or concrete products shall comply with the limits and requirements listed below. The discharge of storm water to seepage areas within the mining site does not require monitoring under this section. Samples collected to fulfill the monitoring requirements shall be taken at each outfall following treatment (if applicable) and prior to discharge to groundwater. Monitoring during a specified sample period is only required when nonmetallic mining process wastewater or concrete product wastewater is being discharged to seepage during that period. The samples taken shall be representative of the discharge to groundwater.

Table 1

Limitations for Groundwater Discharges		Monitoring Requirements	
Parameter	Daily ^(a) Maximum	Sample ^(b) Frequency	Sample ^(c,d) Type
Discharge Flow (Gallons per Day)	-	Quarterly, or as specified in Part 4.3	Estimate
Oil and Grease	15 mg/l	Annually, or as specified in Part 4.4	Grab
Water Treatment Additives	-	Monthly	Keep Record of Usage on site
(a) A daily maximum effluent limitation is to be compared with each analysis for that day. Compliance is achieved when the result of each analysis is less than the maximum daily effluent limitation. If multiple samples are collected, all the test results should be reported. (b) A quarterly sample frequency means performing the associated monitoring at least once during each of the four calendar quarters (Jan.-March, April-June, July-Sept., Oct.-Dec.). If there is no discharge during a quarter, the permittee shall enter a zero flow for that quarter on the annual discharge monitoring report. (c) Flow estimate means a reasonable approximation of the average daily flow of process wastewater to groundwater based on amounts of makeup water added to a pond, estimates of pond seepage based on hydraulic conductivity and head, meter measurements of discharge to a seepage area, any other method specified in s. NR 218.05(1), Wis. Adm. Code. Seepage flow estimates need not include storm water that falls within the boundaries of or diffusely enters a pit or infiltration area. (d) A 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 two-minute period.			

4.1. Solids Removal

Solids shall be removed from seepage areas, if needed, to maintain the absorptive capacity of the soils and prevent plugging.

4.2. Water Treatment Additives

The permittee shall maintain records of monthly water treatment additive use including additive name, manufacturer, and maximum daily amount used.

4.3. Sample Frequency for Flow

The daily flow to seepage shall be estimated at least once per quarter, except that the permittee shall monitor flow to seepage **each month for 12 months** starting the month following a recorded daily discharge value greater than 200,000 gal/day. Facilities that monitor flow to seepage on a monthly frequency shall also report an estimate of the monthly total flow to seepage.

4.4. Sample Frequency for Oil and Grease

Oil & grease shall be monitored annually under this permit, except that: (1) the oil & grease monitoring frequency shall be **once each quarter for 4 calendar quarters** beginning the quarter following receipt of any sample result showing an oil & grease discharge above 15 mg/L, and (2) further annual monitoring is not required if the first annual sample result is less than 7.5 mg/L. An increased monitoring frequency is independent of any Department enforcement response to permit noncompliance. More frequent monitoring may be specified in an order or stipulation resulting from enforcement of permit noncompliance. For portable operations, any required monitoring for oil and grease may occur at any site where the unit is located during the specified sampling period. Samples shall be representative of the process wastewater (i.e., washwater or cooling water) discharge associated with operation of the portable unit.

4.5. pH of Discharges to Seepage

Any nonmetallic mining or concrete wastewater with a pH outside the range of 6.0 to 9.0 s.u. (such as concrete block curing condensate or concrete truck washwater) shall not be discharged directly to groundwater, but shall be passed through a soil zone to moderate the pH or mixed with other process or rinse waters to bring the pH to within the range of 6.0 to 9.0 Standard Units before the wastewater mixes with groundwater.

4.6. Outside Washing Activities

Wastewater from the outside washing of vehicles, equipment, and other objects used in the processing or transportation of earthen materials shall be diverted to seepage areas to the maximum extent practicable. Biodegradable soaps shall be used, and the washing of road deicing chemicals to seepage areas shall be minimized. Wash water containing petroleum products or volatile organic solvents (such as from engine degreasing, or washing off diesel or gasoline) shall not be discharged to seepage areas.

4.7. Monitoring Reports for Process Wastewaters

The permittee shall submit an annual report to the Department, by February 15th each year, that summarizes the monitoring information and shows all of the monitoring results required by this section of the permit during the previous calendar year. A Department monitoring form may be used to submit the annual data, or an alternate report format may be used that clearly shows the monitoring results from the previous calendar year. The annual report shall be submitted to: WI Department of Natural Resources, Attn: WPDES GP DMR, at (1) the office identified on the reporting form or the correspondence granting coverage under this permit, (2) the nearest Department of Natural Resources Regional Headquarters office, or (3) the watershed bureau address in Madison, Wisconsin. The operator of portable equipment groups specifically covered under this permit shall submit the annual reporting information, including the site and county where the monitoring data was collected, preferably to the Headquarters office of the Department Region in which the portable operation was primarily operated.

5. ADDITIONAL REQUIREMENTS FOR DISCHARGES OF NONMETALLIC MINING AND CONCRETE PROCESS WASTEWATER TO SURFACE WATERS

Discharges to surface waters of Wisconsin that contain mine dewatering wastewater, equipment washwater, mining material or concrete material washwaters, contact and noncontact cooling water, or other wastewaters related to production of nonmetallic mining materials or concrete products shall comply with the limits and requirements listed below. The pumping of excess ponded water (which may include storm water or groundwater) off the mining site is considered to be mine dewatering wastewater. Samples collected to fulfill the monitoring requirements shall be taken at each outfall following treatment (as applicable) and prior to discharge to surface waters. Monitoring during a specified sample period is only required when nonmetallic mining production wastewater or concrete product wastewater is being discharged during that period. The samples taken shall be representative of the discharge to surface waters.

Table 2

Limitations for Surface Water Discharges			Monitoring Requirements	
Parameter	Daily ^(a) Minimum	Daily ^(b) Maximum	Sample ^(c) Frequency	Sample ^(d,e) Type
Discharge Flow (Gallons Per Day)	-	-	Quarterly, or as specified in Part 5.4	Estimate
Flow – number of days of discharge	-	-	Quarterly	Record # of days with discharge flow in the quarter
Total Suspended Solids	-	40 mg/l	Quarterly, or as specified in Part 5.5	Grab, or as specified in Part 5.5
pH	6.0 s.u.	9.0 s.u.	NMM Annual, Concrete Quarterly, or as specified in Part 5.6	Grab
Oil and Grease	-	15 mg/l	Annually, or as specified in Part 5.7	Grab

(a) A daily minimum effluent limitation for pH is to be compared with each single daily analysis. Compliance is achieved when the result of each analysis is greater than the minimum daily effluent limitation.

(b) A daily maximum effluent limitation is to be compared with each analysis for that day. Compliance is achieved when the result of each analysis is less than the maximum daily effluent limitation. If multiple samples are collected, all the test results should be reported.

(c) A quarterly sample frequency means performing the associated monitoring once during each of the four calendar quarters (Jan.-March, April-June, July-Sept., Oct.-Dec.). If there is no discharge during a quarter, no sampling is required, and the permittee shall enter a zero flow for that quarter on the annual discharge monitoring report.

(d) An estimate means a reasonable approximation of the average daily flow based on s. NR 218.05(1), Wis. Adm. Code, or any other method approved by the Department.

(e) A 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 two-minute period.

5.1. Floating Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts.

5.2. Suspended Solids Treatment and Solids Removal

Wastewater shall be treated for suspended solids removal prior to discharge to surface waters. Captured solids shall be removed from solids separation equipment or facilities as needed to maintain treatment unit hydraulic capacity and effective removal of suspended solids.

5.3. Water Treatment Additives

The permittee shall maintain records of monthly water treatment additive use including additive name, manufacturer, and maximum daily amount used.

5.4. Sample Frequency for Flow

The daily discharge flow shall be estimated at least once per quarter, except that the permittee shall monitor discharge flow **each month for 12 months** starting the month following a recorded daily discharge value greater than 200,000 gal/day. Facilities that monitor discharge flow on a monthly frequency shall also report an estimate of the total monthly discharge flow on the annual reporting form.

5.5. Sample Frequency and Sample Type for Total Suspended Solids

Total suspended solids (TSS) shall be monitored with a grab sample each quarter, except that the TSS monitoring frequency shall be **once per month for 12 months** beginning the month following receipt of a sample result showing a discharge TSS above 40 mg/L. When this monthly sampling requirement is effective, representative TSS **composite samples** shall be created by combining at least 3 individual grab samples of equal volume, taken at approximately equal intervals over a 3-hour period. This increased monitoring frequency is independent of any Department enforcement response to permit noncompliance. More frequent monitoring or a different sample type may be specified in an order or stipulation resulting from enforcement of permit noncompliance.

5.6. Sample Frequency for pH

Discharges of nonmetallic mining process wastewater shall be sampled for pH annually, except that no further pH monitoring is required if the first two annual samples are within the pH range of 6.7 to 8.3. Discharges containing process wastewater from concrete product operations shall be sampled quarterly for pH, except that pH monitoring is reduced to annually if four consecutive quarterly samples are within the range of 6.7 to 8.3 s.u.

5.7. Sample Frequency for Oil and Grease

Discharges containing nonmetallic mining or concrete product production wastewater shall be sampled annually under this permit for oil & grease, except that: (1) the monitoring frequency shall be **once each quarter for 4 calendar quarters** beginning the quarter following receipt of any sample result showing an oil & grease discharge above 15 mg/L, and (2) further annual oil & grease monitoring is not required if the first annual sample result is less than 7.5 mg/L. An increased monitoring frequency is independent of any Department enforcement response to permit noncompliance. More frequent monitoring may be specified in an order or stipulation resulting from enforcement of permit noncompliance.

5.8. Monitoring Portable Operations

For portable operations, any required monitoring for flow, total suspended solids, oil and grease or pH may occur at any site where the unit is located during the specified sampling period. Samples shall be representative of the process wastewater discharge associated with operation of the portable unit.

5.9. Outside Washing Activities

The discharge of wastewater to surface waters from the outside washing of vehicles, equipment, and other objects shall comply with the oil & grease, total suspended solids, pH and floating foam discharge requirements and limitations listed in Part 5 of this permit. Phosphorus free biodegradable soaps shall be used, and the washing of road deicing chemicals to surface water resources shall be minimized. Wash water containing significant levels of petroleum products (such as diesel or gasoline) or volatile organic solvents (such as from engine degreasing) shall not be discharged to surface waters.

5.10. Monitoring Reports for Process Wastewaters

The permittee shall submit an annual report to the Department, by February 15th each year, that summarizes the monitoring information and shows all of the monitoring results required by this section of the permit during the previous calendar year. A Department monitoring form may be used to submit the annual data, or an alternate report format may be used that clearly shows the monitoring results from the previous calendar year. The annual report shall be submitted to: WI Department of Natural Resources, Attn: WPDES GP DMR, at (1) the office identified on the reporting form or the correspondence granting coverage under this permit, (2) the nearest Department of Natural Resources Regional Headquarters office, or (3) the watershed bureau address in Madison, Wisconsin. The operator of portable equipment groups specifically covered under this permit shall submit the annual reporting information, including the site and county where the monitoring data was collected, preferably to the Headquarters office of the Department Region in which the portable operation was primarily operated.

6. STANDARD REQUIREMENTS

6.1. NR 205, Wisconsin Administrative Code: The conditions in ss. NR 205.07(1) and NR 205.07(3), Wis. Adm. Code, are included by reference in this permit. The permittee shall comply with all of these requirements, except for s. NR 205.07(1)(n), which does not apply to facilities covered under general permits. Selected s. NR 205.07 requirements are listed below for convenience.

6.2. Spill Reporting for Hazardous Substances: The permittee shall immediately notify the Department of an accidental release or spill of any hazardous substance to the environment as specified in ch. NR 706 and s. NR 205.07(3)(b), Wis. Adm. Code. The Department shall be notified via the 24-hour toll free spills hotline (1-800-943-0003).

6.3. Duty to Halt or Reduce Activity: Upon failure or impairment of treatment facility operation, the permittee shall as required in s. NR 205.07(3)(e) and to the extent necessary to maintain compliance with its permit, curtail production or wastewater discharges or both until the treatment facility operations are restored or an alternative method of treatment is provided.

6.4. Permit Noncompliance Reporting: As specified in s. NR 205.07(1)(s), Department notification is required within 24 hours of becoming aware of permit noncompliance.

6.5. Bypassing: As specified in s. NR 205.07(1)(u) & (v) bypass or overflow of wastewater at the treatment works or collection system is prohibited unless there were no feasible alternatives to the bypass, the bypass is necessary to prevent severe injury or property damage, and the permittee notified the Department as required in s NR 205 (1)(u)3.

6.6. Planned Changes: The permittee shall report to the Department any facility expansion, production increase or process modifications which will result in new, different or increased discharges of pollutants as set forth in s. NR 205.07(3)(c).

6.7. Inspection and Entry: The permittee shall allow an authorized representative of the Department, upon the presentation of credentials, to enter the permittee's premises, have access to records, and inspect and monitor the discharge as described in s. NR 205.07(1)(d).

6.8. Authorized Signature: Reports, records, and monitoring results required by this permit shall be signed by the permittee's authorized representative or, in his or her absence, as specified in s. NR 205.07(1)(g).

6.9. Water Quality Sampling and Testing Procedures: Sampling and laboratory testing procedures shall be performed as specified in s. NR 205.07(1)(p) and as set forth below. Sampling and analysis of effluent samples shall be performed as specified in chs. NR 218 and NR 219, Wis. Adm. Code, respectively and shall be performed by a laboratory certified or registered in accordance with the requirements of ch. NR 149.

6.10. Retention and Submittal of Reports, Records, and Monitoring

Results: The permittee shall retain records of all monitoring required by this permit and report monitoring results as set forth in s. NR 205.07(1)(f) and (r) and as specified in 6.11 below. Reports (including storm water inspection reports), records, and monitoring results required by this permit shall be retained by the permittee for the duration of this permit or three years after this information is generated, whichever is longer.

6.11. Recording of Results: For each effluent measurement or sample taken, the permittee shall record the following information as required in s. NR 205.07(1)(e):

- The date, exact place, method and time of sampling or measurements,
- The individual who performed the sampling or measurements,
- The date of the analysis and the individual who performed the analysis,
- The analytical techniques or methods used, and the results of the analysis.

6.12. Conventions for the Reporting and Use of Low Level Results: The permittee shall use the following conventions when reporting effluent monitoring results: (a) non-detected pollutant results shall be reported as < (less than) the value of the analytical method's limit of detection; (b) pollutant concentrations equal to or greater than the limit of detection, but less than the limit of quantitation, shall be reported and the limit of quantitation shall be specified; and (c) a zero value may be substituted for any non-detected pollutant result for the purposes of calculating an average or a mass discharge.

6.13. Continuation of an Expired General Permit: As provided in s. NR 205.08(9), the terms and conditions of this general permit shall continue to apply until this general permit is reissued or revoked or until an individual permit is issued for the discharge to which the general permit applied. The status of a general permit and forms for updating facility information can be accessed on the Department website by searching for WPDES Wastewater Permits and selecting "General Permits".

6.14. Enforcement: Any violation of this permit is enforceable under ss. 283.89 and 283.91, Wisconsin Statutes.

6.15. Severability: The provisions of this permit are severable, and if any provisions of this permit or the application of any provision of this permit to any circumstance is held invalid the remainder of this permit shall not be affected thereby.

6.16. Work near Surface Waters and Wetlands: Any work performed in wetland areas or within areas subject to local floodplain and shoreland regulations must conform to all applicable county or local ordinances. All applicable state permits and/or contracts required by chs. 30, 31 and 87, Wis. Stats. and sections 281.15, 281.17(10), 281.36 and 281.37, Wis. Stats. (or Wisconsin Administrative Code adopted under these laws), and applicable federal permits must be obtained as necessary.

6.17. Property Rights: This permit does not convey property rights of any sort, or any exclusive privilege. This permit does not authorize any injury or damage to private property, any invasion of personal rights, or any infringement of Federal, State, or local laws or regulations.