



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

CONCRETE PRODUCTS OPERATIONS

that meets the applicability criteria listed in Part 1 of this permit, is authorized to discharge 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

March 31, 2009
Date Permit Signed/Issued

PERMIT EFFECTIVE DATE - April 1, 2009

EXPIRATION DATE - March 31, 2014

1. APPLICABILITY CRITERIA

1.1. Activities Covered

This permit applies to wastewater discharges from concrete and concrete products manufacturing operations to surface waters or groundwaters directly or indirectly via a storm sewer or other conveyance. The following wastewaters are eligible for coverage under this permit:

- water from washing of material and equipment directly associated with the production of concrete and concrete products;
- contact and noncontact cooling water, condensate, or boiler water discharged in combination with other wastewater allowed under this general permit;
- dust suppression water; or
- other similar wastewaters.

1.2. Activities Not Covered

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

- wastewater from the manufacturing of cement by the kiln process;
- wastewater from the washing of vehicles, equipment or other objects that contains halogenated hydrocarbons from degreasing agents;
- wastewater from the washing of a precast concrete surface treated with retarder (to expose aggregate after the unset surface cement is cleaned off);
- noncontact cooling water containing biocides, except that uncontaminated water from a municipal water supply may be discharged;
- discharges to a wetland where the Department has determined that the discharge of pollutants will not meet the wetland protection requirements of ch. NR 103, Wis. Adm. Code;
- discharges directly to an outstanding resource water as defined in s. NR 102.10, Wis. Adm. Code, or discharges that would lower the water quality of downstream outstanding resource waters;
- discharges directly to an exceptional resource water as defined in s. NR 102.11, Wis. Adm. Code, or discharges that would lower the water quality of downstream exceptional water resources; or
- discharges 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.

1.3. Department Coverage Determination

All facilities discharging under this permit shall have a record of Department concurrence with regulation of the facility under the Concrete Product Operations WPDES Permit.

1.4. Concrete Operations Contained Within Nonmetallic Mining Site

Concrete product operations do not require coverage under this permit if the concrete operations are contained within a nonmetallic mining operation regulated by WPDES Permit No. WI-0046515-5.

2. REQUIREMENTS FOR ALL DISCHARGES

2.1. Dikes and Berms

Dikes or berms constructed as part of a treatment facility shall be designed to have no above ground leakage through or over the outer surface of such dikes or berms.

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, which falls within or flows into the area of disposal or treatment.

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

2.3.1 “Pollutant(s) of concern” means a pollutant that is contributing to the impairment of a water body.

2.3.2 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 water quality standards.

Note: The section 303(d) list of Wisconsin impaired 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/>.

2.3.3 A permittee that discharges a pollutant of concern to an impaired water body shall, **within 180 days of the impaired water annual check, evaluate** the wastewater discharge from the facility to determine whether additional management practices and treatment enhancements can be implemented to minimize, with the goal of eliminating, the discharge of pollutant(s) of concern that contribute to the impairment of a water body.

2.3.4 The permittee may not establish a **new** pollutant of concern discharge to an impaired water body or **significantly increase** the 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 new discharge is consistent with a State and Federal Approved Total Maximum Daily Load (TMDL) allocation for the impaired water body.

2.3.5 By February 15th each calendar year, the permittee shall perform an **annual check** to determine whether its facility discharges process wastewater 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 improvements in the prevention of pollutant transfer to the wastewater and improvements to the process wastewater treatment effectiveness.

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

2.3.6 Within 180 days of the annual check for discharge 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 TMDL implementation plan** for the facility's concrete product wastewater 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 additional management practices, pollution prevention activities, and wastewater treatment improvements that can be implemented. The TMDL implementation plan shall also specify a time schedule for implementation of the additional pollutant controls needed to meet the wasteload allocation.

2.4. Dust Suppression Control for Roads

Collected stormwater 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 significant dust suppression water running off the 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 subject to monitoring under this permit.

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

2.6. 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.

2.7. 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 sample results for all discharges of process wastewater 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 data collected during the previous calendar year. The report may be submitted to the office identified in the document granting coverage under this permit or it may be submitted to the Department of Natural Resources Regional Headquarters office. The operator of portable equipment groups specifically covered under this permit may submit the annual reporting information, including the site and county where the monitoring data was collected, to the Headquarters of the Department Region in which the portable operation was primarily operated.

3. ADDITIONAL REQUIREMENTS FOR DISCHARGES TO GROUND-WATER VIA SEEPAGE

Discharges to groundwater that contain one or more of the following wastewaters shall be monitored in accordance with and meet the effluent limitations specified in this section: washwater from washing of material and equipment associated with concrete products production, contact and noncontact cooling water and condensates, and other concrete production process wastewaters. Samples collected in compliance with the monitoring requirements specified below shall be taken at each discharge location (outfall) following any applicable treatment and prior to discharge to seepage. Monitoring during a specified sample period is only required when wastewater is being discharged during that period. The samples taken shall be representative of the seepage discharge to groundwater.

Table 1

Limitations for Groundwater Discharges		Monitoring Requirements	
Parameter	Daily ^(a) Maximum	Sample Frequency	Sample Type
Flow - Gallons Per Day	-	Quarterly ^(b)	Estimate ^(d)
Flow - Number of Days Discharged	-	Quarterly ^(b)	Record
Oil and Grease	15 mg/l	Annually ^(c)	Grab
Water Treatment Additives	-	Monthly	Record Usage

(a) Daily maximum effluent limitation means the limitation placed on each effluent characteristic which is to be compared with each single daily analysis. Compliance is achieved when the result of each analysis is less than the maximum daily effluent limitation.

(b) Quarterly sample frequency means performing the associated 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. Refer to section 3.2 for conditions necessitating more frequent monitoring.

(c) Refer to section 3.3 for conditions necessitating different monitoring frequency.

(d) 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, or 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.

3.1. Solids Removal

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

3.2. Sample Frequency for Flow

The sample frequency for flow shall be quarterly, except that the permittee shall monitor flow **each month for 12 months** starting the month following a recorded discharge flow value greater than 200,000 gal/day.

3.3. Sample Frequency for Oil and Grease

Oil & grease shall be monitored annually, 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 the Department's 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.

3.4. pH of Discharges to Seepage

Any concrete product 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 wastewater to bring the pH to within the range of 6.0 to 9.0 Standard Units prior to mixing with groundwater.

4. ADDITIONAL REQUIREMENTS FOR DISCHARGES TO SURFACE WATERS

Discharges to surface waters that contain one or more of the following wastewaters shall be monitored in accordance with and meet the effluent limitations specified in this section: washwater from washing of material and equipment directly associated with concrete production processes, contact and noncontact cooling water and condensates, and other concrete production process wastewaters. Samples collected in compliance with the monitoring requirements specified below shall be taken at each outfall following treatment (if applicable) and prior to discharge to surface waters. Monitoring during a specified sample period is only required when industrial activities are occurring at the site. The samples taken shall be representative of the discharge.

Table 2

Limitations for Surface Water Discharges			Monitoring Requirements	
Parameter	Daily ^(a) Minimum	Daily ^(b) Maximum	Sample Frequency	Sample ^(g) Type
Flow - Gallons Per Day	-	-	Quarterly ^(c)	Estimate
Flow - Number of Days Discharged	-	-	Quarterly ^(c)	Record
Total Suspended Solids	-	40 mg/l	Quarterly ^(d)	Grab
pH	6.0 s.u.	9.0 s.u.	Quarterly ^(e)	Grab
Oil and Grease	-	15 mg/l	Annually ^(f)	Grab
Water Treatment Additives	-	-	Monthly	Record Usage

- (a) Daily minimum effluent limitation for pH means the limitation on pH, which 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) Daily maximum effluent limitation means the limitation placed on each effluent characteristic which is to be compared with each single daily analysis. Compliance is achieved when the result of each analysis is less than the maximum daily effluent limitation.
- (c) Quarterly sample frequency means performing the associated 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. Refer to section 4.2 for conditions necessitating more frequent monitoring.
- (d) Refer to section 4.4 for conditions necessitating more frequent monitoring.
- (e) Refer to section 4.5 for conditions necessitating different monitoring frequency.
- (f) Refer to section 4.6 for conditions necessitating different monitoring frequency.
- (g) 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.

4.1. Floating Solids and Foam

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

4.2. Sample Frequency for Flow

The sample frequency for flow shall be quarterly, except that the permittee shall monitor flow **each month for 12 months** starting the month following a recorded discharge flow value greater than 200,000 gal/day. Facilities that monitor flow on a monthly frequency shall also report an estimate of the monthly total discharge flow to surface waters.

4.3. 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 prevent carry-over of solids.

4.4. Sample Frequency & 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 each month for 12 months** starting the month following receipt of a sample result showing a discharge TSS above 40 mg/L. When monthly sampling is required, a representative **composite sample** 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 the Department's 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.

4.5. Sample Frequency for pH

The sample frequency for pH shall be quarterly, except that pH monitoring is reduced to annually if four consecutive quarterly samples are within the pH range of 6.7 to 8.3.

4.6. Sampling for Oil and Grease

The sample frequency for oil & grease shall be annually, 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 the Department's 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.

4.7. 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 standards listed in Part 4 and in Table 2 of this permit. Phosphorus free biodegradable soaps shall be used, and the washing of road deicing chemicals to surface waters shall be minimized.

5. STANDARD REQUIREMENTS

5.1. 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 NR 205.07 requirements are listed below for convenience.

5.2. 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).

5.3. Duty to Halt or Reduce Activity: Upon failure or impairment of treatment facility operation, the permittee shall as required in 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.

5.4. 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.

5.5. 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.

5.6. 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).

5.7. 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).

5.8. 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).

5.9. 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 chapters 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.

5.10. 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). 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.

5.11. 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.

5.12. More Frequent Monitoring: If the permittee monitors any parameter more frequently than required by the permit, using test procedures specified in ch. NR 204 or 219, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharge monitoring report.

5.13. 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.

5.14. 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 expired general permits and forms for requesting continued permit coverage can be accessed at <http://dnr.wi.gov/org/water/wm/ww/gpindex/gpinfo.htm>.

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

5.16. 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.

5.17. 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.