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, Wisconsin Statutes, any facility discharging

CARRIAGE and/or INTERSTITIAL WATER RESULTING from DREDGING OPERATIONS

located in the State of Wisconsin and meeting the applicability criteria listed in this General Permit, is permitted to discharge these wastewaters directly to surface waters of the state and/or indirectly to groundwaters 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 Rasmussen
Russell Rasmussen
Director, Bureau of Watershed Management

April 27, 2006
Date of Signature

PERMIT TERM
Effective Date: May 1, 2006
Expiration Date: March 31, 2011

1 APPLICABILITY CRITERIA

1.1 Activities Covered

This permit applies to discharges associated with dredging of sediments from surface waters that contain concentrations of monitored contaminants less than the probable effect concentration (PEC) values contained in the "*Consensus-Based Sediment Quality Guidelines*" (CBSQG), WDNR Publication WT-732, and consisting only of the following:

- Discharges of hydraulic dredging carriage return water from settling or treatment facilities;
- Discharges of the interstitial water from facilities that are used to dewater mechanically and hydraulically dredged material; and
- Discharges associated with the disposal of dredged material on the beaches or in the water landward of the ordinary high water mark of Lakes Michigan and Superior as provided in Section 5.

The Department may grant coverage under this general permit when the sediment contains contaminants that exceed the PEC, but only if the applicant provides any necessary treatment of the carriage and/or interstitial water, and demonstrates through pilot studies compliance with all applicable effluent limits.

1.2 Activities Not Covered

This permit does not apply to discharges that meet any of the following conditions:

- 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;
- Discharges containing substances that will exceed the surface water quality standards and effluent limitations determined according to chs. NR 102, NR 105, NR 106, and NR 207, Wis. Adm. Code, or will exceed the groundwater quality standards in ch. NR 140, Wis. Adm. Code;
- Discharges of dredging wastewater when the sediment contains contaminants at concentrations that exceed the probable effect concentration (such discharges require an individual permit unless the requirements for an effluent compliance demonstration are met);
- Discharges associated with US Army Corps of Engineer (COE) dredging projects in and near the Mississippi River, St. Croix River, and Black River if the project is included under a memorandum of understanding between the Department and the COE in accordance with s. 30.202, Wis. Stats.;
- Discharges from dredging projects that are carried out under the supervision and direction of the Wisconsin Department of Transportation in accordance with s. 30.2022, Wis. Stats.;
- Discharges from dredging projects that are exempt from permitting under ch. 30, Wis. Stats., or ch. NR 345, Wis. Adm. Code.; or
- Discharges from mechanical dredging machinery during the dredging operation, including leakage of water from clam shell buckets, barges, etc.

1.3 Granting of Coverage

All activities with discharges meeting the applicability requirements of this permit must receive a letter from the Department granting coverage under this permit prior to commencing a discharge. The letter will specify monitoring requirements and limitations based upon the requirements contained in Sections 3 and 4. The Department may not grant permit coverage until the applicant has submitted a completed "*General Permit Request for Coverage*" form, and has collected and analyzed sediment samples for the project as required by ch. NR 347, Wis. Adm. Code.

2 REQUIREMENTS FOR ALL DISCHARGES

2.1 Other Permits and Requirements

The permittee shall obtain all other necessary approvals for dredging. This permit does not relieve the permittee from having to comply with applicable federal, state, and local requirements. Dredging in navigable waters requires a permit under ch. 30, Wis. Stats, and is subject to applicable requirements in s. 30.20, Wis. Stats., ch. NR 345, Wis. Adm. Code, and ch. NR 347, Wis. Adm. Code. In the event of noncompliance with the conditions or effluent limitations in this permit, the Department may require the discharge to be curtailed or stopped (see Section 6.11 of this permit) or may order the suspension of dredging operations pursuant to s. NR 347.08(3), Wis. Adm. Code, until all permit conditions can be met.

2.2 Settling, Filtration, and Wastewater Treatment Systems

2.2.1 Submittal of Plans

The permittee shall submit to the Department for review and approval plans for settling, filtration, and other wastewater treatment systems whenever the discharge is subject to monitoring requirements and limitation under Section 3.1.2 or 4.1.2. Such plans shall be submitted in accordance with NR 108, Wis. Adm. Code (the Department is allowed up to 90 days to approve the plans). Plans for settling, filtration, and treatment systems for discharges subject to Section 3.1.1 or 4.1.1 are exempt from the plan submittal requirements because the sediment is uncontaminated. Both exempt projects and systems requiring a plan approval shall meet the requirements of Sections 2.2.2 and 2.2.3 below.

2.2.2 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. The inner and outer slope (horizontal to vertical ratio) of dikes and berms may not be steeper than 3:1, and the inner slope may not be less than 4:1. A minimum of 2 feet of freeboard shall be maintained below the top elevation of the dike or berm.

2.2.3 Adequate Storm Water Capacity

Constructed wastewater disposal or treatment facilities shall have 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 Water Treatment Additives

Discharges containing water treatment additives, including additives which may be added to the dredged material prior to or during treatment, are prohibited under this general permit unless use of the water treatment additive is approved, in writing, by the Department. Any subsequent changes in additives usage must also be approved. The permittee shall maintain records of the monthly water treatment additive use including the additive name, manufacturer, and daily maximum amount used.

The permittee shall provide the following information to receive Department approval:

(a) Commercial name of the additive and the Material Safety Data Sheet.

(b) Additive dosage concentration.

(c) Anticipated additive discharge concentration.

(d) Proposed usage frequency.

(e) Aquatic toxicity information (for surface water discharges), consisting of at least one 48-hour LC_{50} or EC_{50} value for daphnia magna or ceriodaphnia dubia, and at least one 96-hour LC_{50} or EC_{50} value for either fathead minnow, rainbow trout, or bluegill. The Department will only consider toxicity information on the whole product, not just the active ingredient or component of a product.

2.4 Discharge Monitoring Reports

The reports required below in Sections 2.4.1, 2.4.2, and 2.4.3 shall be submitted to the Department's regional office to the attention of the basin engineer or wastewater specialist assigned to the project (identified in the letter granting permit coverage). Submit the data on the form provided by the Department for monthly reporting, or an alternate report format may be used that clearly shows data was collected according to the permit monitoring requirements.

2.4.1 Start-Up Reporting

The permittee shall collect samples and report monitoring results as soon as possible upon start-up of the dredging operation and a wastewater discharge occurs. During the first five weeks of discharge, provide data results within 24 hours of receipt from the lab to the Department by either telephoning, faxing, or emailing the basin engineer or wastewater specialist (identified in the letter granting permit coverage). The data shall also be submitted on the monthly report described in Section 2.4.2.

2.4.2 Monthly Reporting

The permittee shall submit to the Department by the fifteenth day of the following month all monitoring data for the previous calendar month.

2.4.3 Final Report

The permittee shall submit a report to the Department within 60 days following completion of the dredging project that contains a summary of all the monitoring data for wastewater discharged, and date when a discharge last occurred.

3 GROUNDWATER DISCHARGE REQUIREMENTS

3.1 Monitoring Requirements and Limitations

Information from the ch. 30, Wis. Stats. dredging permit application process, including sediment characterization data collected according to ch. NR 347, Wis. Adm. Code, shall be used to determine the applicable monitoring requirements and limitations. The sediment characterization data shall be compared with the "*Consensus-Based Sediment Quality Guidelines*" (CBSQG) Threshold Effect Concentration (TEC) to determine if the sediment is contaminated or uncontaminated.

- If the concentration of all the substances used to characterize the sediment is less than the TEC, then the sediment is uncontaminated and the requirements in Section 3.1.1 shall apply.
- If the concentration of any substance in the sediment is equal to or greater than the TEC for that substance, then the sediment is contaminated and the requirements in Section 3.1.2 shall apply.
- If the concentration of any substance in the sediment exceeds the TEC, but is less than the maximum probable background concentration as determined using the procedure in Appendix B of the CBSQG, then the sediment is uncontaminated and the requirements of Section 3.1.1 shall apply.
- If elutriate testing is conducted under the provisions of ch. NR 347, Wis. Adm. Code, and if the substance does not have a TEC in the CBSQG, and if such testing determines that the concentration of any substance in the elutriate is greater than the groundwater preventive action limit (PAL) in ch. NR 140, Wis. Adm. Code, then the sediment is contaminated and the requirements of Section 3.1.2 shall apply. If the conditions of this paragraph do not apply, then the sediment is uncontaminated.

Samples shall be collected as specified in Section 3.1.1 or 3.1.2 from each outfall following treatment (if applicable) and prior to land application and discharge to groundwater. The samples collected shall be representative of the discharge.

3.1.1 Uncontaminated Sediment

Discharges to groundwater from dredging projects where sediment is uncontaminated shall be monitored according to the requirements in Table 3.1.1.

Table 3.1.1 Uncontaminated Sediment

Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow or amount of dredged material placed in a settling basin	--	-- MGD	Daily	Measure or Estimate	3.4

3.1.2 Contaminated Sediment

Discharges to groundwater from dredging projects where sediment is contaminated shall be monitored according to the requirements in Table 3.1.2.

The monitoring parameters consist of those substances at a concentration of concern, which consists of the substance in the sediment exceeding the TEC, or were identified in the elutriate test above the PAL. The effluent limits are the groundwater enforcement standards (ES) in ch. NR 140, Wis. Adm. Code. If nitrogen is a substance of concern, the limit is 10 mg/L total nitrogen.

Discharges to land treatment or land application systems shall be sampled at the point of discharge. Discharges that seep into the groundwater from settling basins shall be sampled as elutriate from the dredged material placed in the basin.

Table 3.1.2 Contaminated Sediment

Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow or amount of dredged material placed in a settling basin	--	-- MGD	Daily	Measure or Estimate	3.4
All substances at a concentration of concern	Daily Max	Groundwater ES	See Permit	Grab	3.2, 3.3

3.2 Sample Frequency

Samples shall be collected as follows:

(a) Two times on two different days during the first calendar week of discharge.

(b) One time per week during the second through fifth calendar week of discharge.

(c) One time per month after the fifth week for the remaining duration of the project.

A monthly sampling frequency only applies if data indicates substantial compliance with effluent limits. If the sampling frequency is monthly and an exceedance occurs, a weekly monitoring frequency must resume until substantial compliance is demonstrated for eight consecutive weeks. The Department may require daily sampling for some parameters upon start-up of a treatment system, or when an exceedance occurs.

3.3 Grab Sample

A grab sample means a single sample collected at one moment of time or a combination of several smaller samples of equal volume collected in less than a two-minute period. Samples shall be filtered (0.45 micron) prior to analysis following the procedure in the Department's *"Groundwater Sampling Field Manual"* PUBL-DG-038 96.

3.4 Flow Volume

Estimate means a reasonable approximation of the average daily flow based on a water balance, an uncalibrated weir, calculations from the velocity and cross section of the discharge, intake water meter readings, discharge water meter readings, or any other method approved by the Department. If the discharge from a settling basin is directly to groundwater through seepage or infiltration within the settling basin, then the flow shall be the volume of dredged material placed in the settling basin.

3.5 Solids Removal

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

4 SURFACE WATER DISCHARGE REQUIREMENTS

4.1 Monitoring Requirements and Limitations

Information from the ch. 30, Wis. Stats. dredging permit application process, including sediment characterization data collected according to ch. NR 347, Wis. Adm. Code, shall be used to determine the applicable monitoring requirements and limitations. The sediment characterization data shall be compared with the "*Consensus-Based Sediment Quality Guidelines*" (CBSQG) Threshold Effect Concentration (TEC) to determine if the sediment is contaminated or uncontaminated.

- If the concentration of all the substances used to characterize the sediment is less than the TEC, then the sediment is uncontaminated and the requirements in Section 4.1.1 shall apply.
- If the concentration of any substance in the sediment is equal to or greater than the TEC for that substance, then the sediment is contaminated and the requirements in Section 4.1.2 shall apply.
- If the concentration of any substance in the sediment exceeds the TEC, but is less than the maximum probable background concentration as determined using the procedure in Appendix B of the CBSQG, then the sediment is uncontaminated and the requirements of Section 4.1.1 shall apply.
- If elutriate testing is conducted under the provisions of ch. NR 347, Wis. Adm. Code, and if the substance does not have a TEC in the CBSQG, and if such testing determines that the concentration of any substance in the elutriate is greater than the 1/5 the water quality based effluent limit, then the sediment is contaminated and the requirements of Section 4.1.2 shall apply. If the conditions of this paragraph do not apply, then the sediment is uncontaminated.

Samples shall be collected as specified in Section 4.1.1 or 4.1.2 from each outfall following treatment (if applicable) and prior to discharge to surface water. The samples collected shall be representative of the discharge.

4.1.1 Uncontaminated Sediment

Discharges to surface water from dredging projects where sediment is uncontaminated shall be monitored according to the requirements in Table 4.1.1.

Table 4.1.1 Uncontaminated Sediment

Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow	--	-- MGD	Daily	Measure or Estimate	4.4
Total Suspended Solids	Daily Max	80 mg/L	Weekly	Grab	4.3

4.1.2 Contaminated Sediment

Discharges to surface water from dredging projects where sediment is contaminated shall be monitored according to the requirements in Table 4.1.2.

The monitoring parameters consist of those substances at a concentration of concern, which consists of the substance in the sediment exceeding the TEC, or were identified in the elutriate test above 1/5 the water quality based effluent limit. The effluent limits are determined using the procedures in chs. NR 105 and NR 106, Wis. Adm. Code. If oil and grease or phosphorus are substances of concern, their limits are 15 mg/L and 1 mg/L respectively.

Table 4.1.2 Contaminated Sediment

Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow	--	-- MGD	Daily	Measure or Estimate	4.4
Total Suspended Solids	Daily Max.	40 mg/L	Weekly	Grab	4.3
All substances at a concentration of concern	--	To be Determined	See Permit	Grab	4.2, 4.3

4.2 Sample Frequency

Samples shall be collected as follows:

(a) Two times on two different days during the first calendar week of discharge.

(b) One time per week during the second through fifth calendar week of discharge.

(c) One time per month after the fifth week for the remaining duration of the project.

A monthly sampling frequency only applies if data indicates substantial compliance with effluent limits. If the sampling frequency is monthly and an exceedance occurs, a weekly monitoring frequency must resume until substantial compliance is demonstrated for eight consecutive weeks. The Department may require daily sampling for some parameters upon start-up of a treatment system, or when an exceedance occurs.

4.3 Grab Sample

A grab sample means a single sample collected at one moment of time or a combination of several smaller samples of equal volume collected in less than a two-minute period.

4.4 Flow Volume

Estimate means a reasonable approximation of the average daily flow based on a water balance, an uncalibrated weir, calculations from the velocity and cross section of the discharge, intake water meter readings, discharge water meter readings, or any other method approved by the Department.

4.5 Visible Foam and Floating Solids

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

4.6 Solids Removal

Solids shall be removed from settling facilities as necessary to maintain hydraulic capacity of the treatment system, and to prevent carry over of solids into the discharge.

5 BEACH NOURISHMENT AND UNCONFINED DISPOSAL OF SEDIMENTS IN THE GREAT LAKES

The disposal of dredged material on the beaches or in the water landward from the ordinary high-water mark of Lakes Michigan and Superior for the purpose of adding, replenishing or preventing erosion of beach material, or where otherwise allowed by State law, is authorized by this permit if the conditions under Sections 5.1 and 5.2 are met. There are no effluent limitations or monitoring requirements for discharges authorized under this section of this permit.

5.1 Particle Size

The particle size shall meet the criteria of s. NR 347.07(4)(a)1, Wis. Adm. Code. The average percentage of silt plus clay (material passing a #200 sieve or <0.074 mm diameter) in the dredged material may not exceed the average percentage of silt plus clay in the existing beach by more than 15%, and the color of the dredged material may not differ significantly from the color of the beach material.

5.2 Contaminant Concentrations

Contaminant concentrations in the sediment shall be less than the Threshold Effect Concentration values contained in the "*Consensus-Based Sediment Quality Guidelines*" (CBSQG), and not greater than 1,000 mg/Kg for oil and grease.

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 NR 205.07 requirements are listed below for convenience.

6.2 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), Wis. Adm. Code.

6.3 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), Wis. Adm. Code:

- 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.

6.4 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), Wis. Adm. Code. 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.

6.5 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), Wis. Adm. Code.

6.6 Water Quality Sampling and Testing Procedures

Sampling and laboratory testing procedures shall be performed as specified in s. NR 205.07(1)(p), Wis. Adm. Code 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, Wis. Adm. Code.

6.7 Noncompliance Notification

- The permittee shall report the following types of noncompliance by a telephone call to the Department's regional office within 24 hours after becoming aware of the noncompliance;
  - any noncompliance which may endanger health or the environment;
  - any violation of an effluent limitation resulting from an unanticipated bypass;
  - any violation of an effluent limitation resulting from an upset; and
  - any violation of a maximum discharge limitation for any of the pollutants listed by the Department in the permit.
- A written report describing the noncompliance shall also be submitted to the Department's regional office within 5 days after the permittee becomes aware of the noncompliance. On a case-by-case basis, the Department may waive the requirement for submittal of a written report within 5 days and instruct the permittee to submit the written report with the next regularly scheduled monitoring report. In either case, the written report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; the steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance; and if the noncompliance has not been corrected, the length of time it is expected to continue.
- The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

6.8 Bypassing

As specified in s. NR 205.07(1)(u) & (v), Wis. Adm. Code, any bypass or overflow of discharges regulated by this permit around a settling, filtration or treatment 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, Wis. Adm. Code.

6.9 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).

6.10 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), Wis. Adm. Code.

6.11 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), Wis. Adm. Code 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.

6.12 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, Wis. Adm. Code, 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.

6.13 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.

6.14 Continuation of an Expired General Permit

As provided in s. NR 205.08(9), Wis. Adm. Code, 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 the Department's web site.

http://dnr.wi.gov/org/water/wm/ww/gpindex/gpinfo.htm.

6.15 Enforcement

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

6.16 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.

6.17 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. (or Wisconsin Administrative Code adopted under these laws), and applicable federal permits must be obtained as necessary.