

## 7 Summary of Reports Due

FOR INFORMATIONAL PURPOSES ONLY

Description	Date	Page
Mercury Pollutant Minimization Program -Request Limitation Determination	April 30, 2008	12
Mercury Pollutant Minimization Program -Mercury Pollutant Minimization Program Plan	March 31, 2009	12
Mercury Pollutant Minimization Program -Implement the Mercury Pollutant Minimization Program	July 1, 2009	12
Mercury Pollutant Minimization Program -Annual Status Reports	March 31, 2010	12
Compliance Maintenance Annual Reports (CMAR)	by June 30, each year	14
Industrial User Compliance Evaluation and Violation Reports	Semiannual	20
Pretreatment Program Report	Annually	20
General Sludge Management Form 3400-48	prior to any significant sludge management changes	21
Characteristic Form 3400-49 and Lab Report	by January 31 following each year of analysis	21
Land Application Report Form 3400-55	by January 31, following each year non-exceptional quality sludge is land applied	22
Report Form 3400-52	by January 31, following each year sludge is hauled, landfilled, incinerated, or when exceptional quality sludge is distributed or land applied	22
Wastewater Discharge Monitoring Report Form	no later than the date indicated on the form	13

All submittals required by this permit shall be submitted to the Northeast Region, 2984 Shawano Avenue, P.O. Box 10448, Green Bay, WI 54307-0448, except as follows. Report forms shall be submitted to the address printed on the report form. Any facility plans or plans and specifications for municipal, industrial pretreatment and non industrial wastewater systems shall be submitted to the Regional Plan Reviewer (as designated at [www.dnr.state.wi.us/org/water/wm/consultant.htm](http://www.dnr.state.wi.us/org/water/wm/consultant.htm)). Any construction plans and specifications for industrial wastewater systems shall be submitted to the Bureau of Watershed Management, P.O. Box 7921, Madison, WI 53707-7921.

### **6.5.13 Landfilling of Sludge**

General: Sewage sludge may not be disposed of in a municipal solid waste landfill unless the landfill meets the requirements of chs. NR 500 to 536, Wis. Adm. Code, and is an approved facility as defined in s. 289.01(3), Wis. Stats. Any facility accepting sewage sludge shall be approved by the Department in writing to accept sewage sludge. Disposal of sewage sludge in a municipal solid waste landfill shall be in accordance with ss. NR 506.13 and 506.14. Sewage sludge may not be disposed of in a surface disposal unit as defined in s. NR 204.03(62).

Approval: The permittee shall obtain approval from the Department prior to the disposal of sludge at a Wisconsin licensed landfill.

### **6.5.14 Sludge Landfilling Reports**

The permittee shall report the volume of sludge disposed of at any landfill facility on Form 3400-52. The permittee shall include the name and address of the landfill, the Department license number or other state's designation or license number for all landfills used during the report period and a letter of acceptability from the landfill owner. In addition, any permittee utilizing landfills as a disposal method shall submit to the Department any test results used to indicate acceptability of the sludge at a landfill. Form 3400-52 shall be submitted annually by January 31, following each year sludge is landfilled.

### **6.5.15 Sludge Incineration Reports**

The permittee shall report the volume of sludge combusted at an on-site incinerator on Form 3400-52. Submittal of Form 3400-52 is required annually by January 31, following each year sludge is incinerated.

### **6.5.16 Land Application of Sludge Which Contains Elevated Levels of Radium-226**

When contributory water supplies exceed 2 pci per liter of Radium 226, monitoring for Radium 226 in sludge is required. Sludge containing Radium 226 shall be land applied in accordance with the requirements in s. NR 204.07(3)(n), Wis. Adm. Code.

characteristics is required prior to land application. Application on frozen or snow covered ground is restricted to the extent specified in s. NR 204.07(3) (1), Wis. Adm. Code.

### 6.5.9 Soil Analysis Requirements

Each site requested for approval for land application must have the soil tested prior to use. Each approved site used for land application must subsequently be soil tested such that there is at least one valid soil test in the four years prior to land application. All soil sampling and submittal of information to the testing laboratory shall be done in accordance with UW Extension Bulletin A-2100. The testing shall be done by the UW Soils Lab in Madison or Marshfield, WI or at a lab approved by UW. The test results including the crop recommendations shall be submitted to the DNR contact listed for this permit, as they are available. Application rates shall be determined based on the crop nitrogen recommendations and with consideration for other sources of nitrogen applied to the site.

### 6.5.10 Land Application Site Evaluation

For non-exceptional quality sludge, as defined in s. NR 204.07(4), Wis. Adm. Code, a Land Application Site Evaluation Form 3400-53 shall be submitted to the Department for the proposed land application site. The Department will evaluate the proposed site for acceptability and will either approve or deny use of the proposed site. The permittee may obtain permission to approve their own sites in accordance with s. NR 204.06(6), Wis. Adm. Code.

### 6.5.11 Class B Sludge: Fecal Coliform Limitation

Compliance with the fecal coliform limitation for Class B sludge shall be demonstrated by calculating the geometric mean of at least 7 separate samples. (Note that a Total Solids analysis must be done on each sample). The geometric mean shall be less than 2,000,000 MPN or CFU/g TS. Calculation of the geometric mean can be done using one of the following 2 methods.

Method 1:

$$\text{Geometric Mean} = (X_1 \times X_2 \times X_3 \dots \times X_n)^{1/n}$$

Where X = Coliform Density value of the sludge sample, and where n = number of samples (at least 7)

Method 2:

$$\text{Geometric Mean} = \text{antilog}[(X_1 + X_2 + X_3 \dots + X_n) \div n]$$

Where X =  $\log_{10}$  of Coliform Density value of the sludge sample, and where n = number of samples (at least 7)

Example for Method 2

Sample Number	Coliform Density of Sludge Sample	$\log_{10}$
1	$6.0 \times 10^5$	5.78
2	$4.2 \times 10^6$	6.62
3	$1.6 \times 10^6$	6.20
4	$9.0 \times 10^5$	5.95
5	$4.0 \times 10^5$	5.60
6	$1.0 \times 10^6$	6.00
7	$5.1 \times 10^5$	5.71

The geometric mean for the seven samples is determined by averaging the  $\log_{10}$  values of the coliform density and taking the antilog of that value.

$$(5.78 + 6.62 + 6.20 + 5.95 + 5.60 + 6.00 + 5.71) \div 7 = 5.98$$

$$\text{The antilog of } 5.98 = 9.5 \times 10^5$$

### 6.5.12 Class B Sludge - Vector Control: Incorporation

Class B sludge shall be incorporated within 6 hours of surface application, or as approved by the Department.

When sludge analysis for "PCB, Total Dry Wt" is required by this permit, the PCB concentration in the sludge shall be determined as follows.

Either congener-specific analysis or Aroclor analysis shall be used to determine the PCB concentration. The permittee may determine whether Aroclor or congener specific analysis is performed. Analyses shall be performed in accordance with the following provisions and Table EM in s. NR 219.04, Wis. Adm. Code.

- EPA Method 1668 may be used to test for all PCB congeners. If this method is employed, all PCB congeners shall be delineated. Non-detects shall be treated as zero. The values that are between the limit of detection and the limit of quantitation shall be used when calculating the total value of all congeners. All results shall be added together and the total PCB concentration by dry weight reported. **Note:** It is recognized that a number of the congeners will co-elute with others, so there will not be 209 results to sum.
- EPA Method 8082A shall be used for PCB-Aroclor analysis and may be used for congener specific analysis as well. If congener specific analysis is performed using Method 8082A, the list of congeners tested shall include at least congener numbers 5, 18, 31, 44, 52, 66, 87, 101, 110, 138, 141, 151, 153, 170, 180, 183, 187, and 206 plus any other additional congeners which might be reasonably expected to occur in the particular sample. For either type of analysis, the sample shall be extracted using the Soxhlet extraction (EPA Method 3540C) (or the Soxhlet Dean-Stark modification) or the pressurized fluid extraction (EPA Method 3545A). If Aroclor analysis is performed using Method 8082A, clean up steps of the extract shall be performed as necessary to remove interference and to achieve as close to a limit of detection of 0.11 mg/kg as possible. Reporting protocol, consistent with s. NR 106.07(6)(e), should be as follows: If all Aroclors are less than the LOD, then the Total PCB Dry Wt result should be reported as less than the highest LOD. If a single Aroclor is detected then that is what should be reported for the Total PCB result. If multiple Aroclors are detected, they should be summed and reported as Total PCBs. If congener specific analysis is done using Method 8082A, clean up steps of the extract shall be performed as necessary to remove interference and to achieve as close to a limit of detection of 0.003 mg/kg as possible for each congener. If the aforementioned limits of detection cannot be achieved after using the appropriate clean up techniques, a reporting limit that is achievable for the Aroclors or each congener for the sample shall be determined. This reporting limit shall be reported and qualified indicating the presence of an interference. The lab conducting the analysis shall perform as many of the following methods as necessary to remove interference:

3620C - Florisil	3611B - Alumina
3640A - Gel Permeation	3660B - Sulfur Clean Up (using copper shot instead of powder)
3630C - Silica Gel	3665A - Sulfuric Acid Clean Up

### 6.5.6 Land Application Report

Land Application Report Form 3400-55 shall be submitted by January 31, following each year non-exceptional quality sludge is land applied. Non-exceptional quality sludge is defined in s. NR 204.07(4), Wis. Adm. Code.

### 6.5.7 Other Methods of Disposal or Distribution Report

The permittee shall submit Report Form 3400-52 by January 31, following each year sludge is hauled, landfilled, incinerated, or when exceptional quality sludge is distributed or land applied.

### 6.5.8 Approval to Land Apply

Bulk non-exceptional quality sludge as defined in s. NR 204.07(4), Wis. Adm. Code, may not be applied to land without a written approval letter or Form 3400-122 from the Department unless the Permittee has obtained permission from the Department to self approve sites in accordance with s. NR 204.06 (6), Wis. Adm. Code. Analysis of sludge

- **Modifications Subject to Department Approval:** The permittee shall submit all proposed pretreatment program modifications to the Department for determination of significance and opportunity for comment in accordance with the requirements and conditions of s. NR 211.27, Wis. Adm. Code. Any substantial proposed program modification shall be subject to Department public noticing and formal approval prior to implementation. A substantial program modification includes, but is not limited to, changes in enabling legal authority to administer and enforce pretreatment conditions and requirements; significant changes in program administrative or operational procedures; significant reductions in monitoring frequencies; significant reductions in program resources including personnel commitments, equipment, and funding levels; changes (including any relaxation) in the local limitations for substances enforced and applied to users of the sewerage treatment works; changes in treatment works sludge disposal or management practices which impact the pretreatment program; or program modifications which increase pollutant loadings to the treatment works. The Department shall use the procedures outlined in s. NR 211.30, Wis. Adm. Code for review and approval/denial of proposed pretreatment program modifications. The permittee shall comply with local public participation requirements when implementing the pretreatment program.

#### **6.4.5 Program Resources**

The permittee shall have sufficient resources and qualified personnel to carry out the pretreatment program responsibilities as listed in ss. NR 211.22 and NR 211.23, Wis. Adm. Code.

### **6.5 Land Application Requirements**

#### **6.5.1 Sludge Management Program Standards And Requirements Based Upon Federally Promulgated Regulations**

In the event that new federal sludge standards or regulations are promulgated, the permittee shall comply with the new sludge requirements by the dates established in the regulations, if required by federal law, even if the permit has not yet been modified to incorporate the new federal regulations.

#### **6.5.2 General Sludge Management Information**

The General Sludge Management Form 3400-48 shall be completed and submitted prior to any significant sludge management changes.

#### **6.5.3 Sludge Samples**

All sludge samples shall be collected at a point and in a manner which will yield sample results which are representative of the sludge being tested, and collected at the time which is appropriate for the specific test.

#### **6.5.4 Land Application Characteristic Report**

Each report shall consist of a Characteristic Form 3400-49 and Lab Report, unless approval for not submitting the lab reports has been given. Both reports shall be submitted by January 31 following each year of analysis.

The permittee shall use the following convention when reporting sludge monitoring results: Pollutant concentrations less than the limit of detection shall be reported as < (less than) the value of the limit of detection. For example, if a substance is not detected at a detection limit of 1.0 mg/kg, report the pollutant concentration as < 1.0 mg/kg .

All results shall be reported on a dry weight basis.

#### **6.5.5 Monitoring and Calculating PCB Concentrations in Sludge**

#### **6.4.2.4 Enforcement and Industrial User Compliance Evaluation & Violation Reports**

The permittee shall enforce the industrial pretreatment requirements including the industrial user discharge limitations of the permittee's sewer use ordinance. The permittee shall investigate instances of noncompliance by collecting and analyzing samples and collecting other information with sufficient care to produce evidence admissible in enforcement proceedings or in judicial actions. Investigation and response to instances of noncompliance shall be in accordance with the permittee's sewer use ordinance and approved Enforcement Response Plan.

The permittee shall make a semiannual report on forms provided or approved by the Department. The semiannual report shall include an analysis of industrial user significant noncompliance (i.e. the Industrial User Compliance Evaluation, also known as the SNC Analysis) as outlined in s.NR 211.23(1)(j), Wis. Adm. Code, and a summary of the permittee's response to all industrial noncompliance (i.e. the Industrial User Violation Report). The Industrial User Compliance Evaluation Report shall include monitoring results received from industrial users pursuant to s. NR 211.15(1)-(5), Wis. Adm. Code. The Industrial User Violation Report shall include copies of all notices of noncompliance, notices of violation and other enforcement correspondence sent by the permittee to industrial users, together with the industrial user's response. The Industrial User Compliance Evaluation and Violation Reports for the period January through June shall be provided to the Department by September 30 of each year and for the period July through December shall be provided to the Department by March 31 of the succeeding year, unless alternate submittal dates are approved.

#### **6.4.2.5 Publication of Violations**

The permittee shall publish a list of industrial users that have significantly violated the municipal sewer use ordinance during the calendar year, in the largest daily newspaper in the area by March 31 of the following year pursuant to s. NR 211.23(1)(j), Wis. Adm. Code. A copy of the newspaper publication shall be provided as part of the annual pretreatment report specified herein.

#### **6.4.2.6 Multijurisdictional Agreements**

The permittee shall establish agreements with all contributing jurisdictions as necessary to ensure compliance with pretreatment standards and requirements by all industrial users discharging to the permittee's wastewater treatment system. Any such agreement shall identify who will be responsible for maintaining the industrial user inventory, issuance of industrial user control mechanisms, inspections and sampling, pretreatment program implementation, and enforcement.

#### **6.4.3 Annual Pretreatment Program Report**

The permittee shall evaluate the pretreatment program, and submit the Pretreatment Program Report to the Department on forms provided or approved by the Department by March 31 annually, unless an alternate submittal date is approved. The report shall include a brief summary of the work performed during the preceding calendar year, including the numbers of discharge permits issued and in effect, pollution prevention activities, number of inspections and monitoring surveys conducted, budget and personnel assigned to the program, a general discussion of program progress in meeting the objectives of the permittee's pretreatment program together with summary comments and recommendations.

#### **6.4.4 Pretreatment Program Modifications**

- **Future Modifications:** The permittee shall within one year of any revisions to federal or state General Pretreatment Regulations submit an application to the Department in duplicate to modify and update its approved pretreatment program to incorporate such regulatory changes as applicable to the permittee. Additionally, the Department or the permittee may request an application for program modification at any time where necessary to improve program effectiveness based on program experience to date.

Once the above investigation has been completed, the permittee must conduct the postponed test(s) to demonstrate that toxicity has been reduced/eliminated.

## **6.4 Pretreatment Program Requirements**

The permittee is required to operate an industrial pretreatment program as described in the program initially approved by the Department of Natural Resources including any subsequent program modifications approved by the Department, and including commitments to program implementation activities provided in the permittee's annual pretreatment program report, and that complies with the requirements set forth in 40 CFR Part 403 and ch. NR 211, Wis. Adm. Code. To ensure that the program is operated in accordance with these requirements, the following general conditions and requirements are hereby established:

### **6.4.1 Inventories**

The permittee shall implement methods to maintain a current inventory of the general character and volume of wastewater that industrial users discharge to the treatment works and shall provide an updated industrial user listing annually and report any changes in the listing to the Department by March 31 of each year as part of the annual pretreatment program report required herein.

### **6.4.2 Regulation of Industrial Users**

#### **6.4.2.1 Limitations for Industrial Users:**

The permittee shall develop, maintain, enforce and revise as necessary local limits to implement the general and specific prohibitions of the state and federal General Pretreatment Regulations.

#### **6.4.2.2 Control Documents for Industrial Users (IUs)**

The permittee shall control the discharge from each significant industrial user through individual discharge permits as required by s. NR 211.235, Wis. Adm. Code and in accordance with the approved pretreatment program procedures and the permittee's sewer use ordinance. The discharge permits shall be modified in a timely manner during the stated term of the discharge permits according to the sewer use ordinance as conditions warrant. The discharge permits shall include at a minimum the elements found in s. NR 211.235(1), Wis. Adm. Code and references to the approved pretreatment program procedures and the sewer use ordinance.

The permittee shall provide a copy of all newly issued, reissued, or modified discharge permits to the Department.

#### **6.4.2.3 Review of Industrial User Reports, Inspections and Compliance Monitoring**

The permittee shall require the submission of, receive, and review self-monitoring reports and other notices from industrial users in accordance with the approved pretreatment program procedures. The permittee shall randomly sample and analyze industrial user discharges and conduct surveillance activities to determine independent of information supplied by the industrial users, whether the industrial users are in compliance with pretreatment standards and requirements. The inspections and monitoring shall also be conducted to maintain accurate knowledge of local industrial processes, including changes in the discharge, pretreatment equipment operation, spill prevention control plans, slug control plans, and implementation of solvent management plans.

At least one time per year the permittee shall inspect and sample the discharge from each significant industrial user, or more frequently if so specified in the permittee's approved pretreatment program. At least once every 2 years the permittee shall evaluate whether each significant industrial user needs a slug control plan. If a slug control plan is needed, the plan shall contain at a minimum the elements specified in s. NR 211.235(4)(b), Wis. Adm. Code.

Disinfection shall be provided from May 1 through September 30 of each year. Monitoring requirements and the limitation for fecal coliforms apply only during the period in which disinfection is required. Whenever chlorine is used for disinfection or other uses, the limitations and monitoring requirements for residual chlorine shall apply. A dechlorination process shall be in operation whenever chlorine is used.

### 6.3.7 Total Residual Chlorine

Test methods for total residual chlorine, approved in ch. NR 219 - Table B, Wis. Adm. Code, normally achieve a limit of detection of about 20 to 50 micrograms per liter and a limit of quantitation of about 100 micrograms per liter. Reporting of test results and compliance with effluent limitations for chlorine residual and total residual halogens shall be as follows:

- Sample results which show no detectable levels are in compliance with the limit. These test results shall be reported on Wastewater Discharge Monitoring Report Forms as "< 100 µg/L". (Note: 0.1 mg/L converts to 100 µg/L)
- Samples showing detectable traces of chlorine are in compliance if measured at less than 100 µg/L, unless there is a consistent pattern of detectable values in this range. These values shall also be reported on Wastewater Discharge Monitoring Report Forms as "<100 µg/L." The facility operating staff shall record actual readings on logs maintained at the plant, shall take action to determine the reliability of detected results (such as re-sampling and/or calculating dosages), and shall adjust the chemical feed system if necessary to reduce the chances of detects.
- Samples showing detectable levels greater than 100 µg/L shall be considered as exceedances, and shall be reported as measured.
- To calculate average or mass discharge values, a "0" (zero) may be substituted for any test result less than 100 µg/L. Calculated values shall then be compared directly to the average or mass limitations to determine compliance.

### 6.3.8 Whole Effluent Toxicity (WET) Monitoring Requirements

In order to determine the potential impact of the discharge on aquatic organisms, static-renewal toxicity tests shall be performed on the effluent in accordance with the procedures specified in the *"State of Wisconsin Aquatic Life Toxicity Testing Methods Manual, 2<sup>nd</sup> Edition"* (PUB-WT-797, November 2004) as required by NR 219.04, Table A, Wis. Adm. Code). All of the WET tests required in this permit, including any required retests, shall be conducted on the *Ceriodaphnia dubia* and fathead minnow species. Receiving water samples shall not be collected from any point in contact with the permittee's mixing zone and every attempt shall be made to avoid contact with any other discharge's mixing zone.

### 6.3.9 Whole Effluent Toxicity (WET) Identification

In the event of serious or repeated toxicity, the permittee may obtain approval from the Department to postpone retests in order to investigate the source(s) of toxicity. In order to postpone these tests, the permittee must provide the following information to the Department in writing, within 30 days of the end of the test which showed a positive result:

- a description of the investigation to be used to identify potential sources of toxicity. Treatment efficiency, housekeeping practices, and chemicals used in operation of the facility should be included in the investigation.
- who will conduct a toxicity identification evaluation (TIE), if required.

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control which are installed or used by the permittee to achieve compliance with the conditions of this permit. The wastewater treatment facility shall be under the direct supervision of a state certified operator as required in s. NR 108.06(2), Wis. Adm. Code. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training as required in ch. NR 114, Wis. Adm. Code, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

## 6.3 Surface Water Requirements

### 6.3.1 Permittee-Determined Limit of Quantitation Incorporated into this Permit

For pollutants with water quality-based effluent limits below the Limit of Quantification (LOQ) in this permit, the LOQ calculated by the permittee and reported on the Discharge Monitoring Reports (DMRs) is incorporated by reference into this permit. The LOQ shall be reported on the DMRs, shall be the lowest quantifiable level practicable, and shall be no greater than the minimum level (ML) specified in or approved under 40 CFR Part 136 for the pollutant at the time this permit was issued, unless this permit specifies a higher LOQ.

### 6.3.2 Appropriate Formulas for Effluent Calculations

The permittee shall use the following formulas for calculating effluent results to determine compliance with average limits and mass limits:

**Weekly/Monthly average concentration** = the sum of all daily results for that week/month, divided by the number of results during that time period.

**Weekly Average Mass Discharge (lbs/day):** Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the week.

**Monthly Average Mass Discharge (lbs/day):** Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the month.

### 6.3.3 Visible Foam or Floating Solids

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

### 6.3.4 Percent Removal

During any 30 consecutive days, the average effluent concentrations of BOD<sub>5</sub> and of total suspended solids shall not exceed 15% of the average influent concentrations, respectively. This requirement does not apply to removal of total suspended solids if the permittee operates a lagoon system and has received a variance for suspended solids granted under NR 210.07(2), Wis. Adm. Code.

### 6.3.5 Fecal Coliforms

The limit for fecal coliforms shall be expressed as a monthly geometric mean.

### 6.3.6 Seasonal Disinfection

- wastewaters at a flow rate or pollutant loading which are excessive over relatively short time periods so as to cause a loss of treatment efficiency; and
- changes in discharge volume or composition from contributing industries which overload the treatment works or cause a loss of treatment efficiency.

### 6.2.6 Unscheduled Bypassing

Any unscheduled bypass or overflow of wastewater at the treatment works or from the collection system is prohibited, and the Department may take enforcement action against a permittee for such occurrences under s. 283.89, Wis. Stats., unless:

- The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
- The permittee notified the Department as required in this Section.

Whenever there is an unscheduled bypass or overflow occurrence at the treatment works or from the collection system, the permittee shall notify the Department within 24 hours of initiation of the bypass or overflow occurrence by telephoning the wastewater staff in the regional office as soon as reasonably possible (FAX, email or voice mail, if staff are unavailable).

In addition, the permittee shall within 5 days of conclusion of the bypass or overflow occurrence report the following information to the Department in writing:

- Reason the bypass or overflow occurred, or explanation of other contributing circumstances that resulted in the overflow event. If the overflow or bypass is associated with wet weather, provide data on the amount and duration of the rainfall or snow melt for each separate event.
- Date the bypass or overflow occurred.
- Location where the bypass or overflow occurred.
- Duration of the bypass or overflow and estimated wastewater volume discharged.
- Steps taken or the proposed corrective action planned to prevent similar future occurrences.
- Any other information the permittee believes is relevant.

### 6.2.7 Scheduled Bypassing

Any construction or normal maintenance which results in a bypass of wastewater from a treatment system is prohibited unless authorized by the Department in writing. If the Department determines that there is significant public interest in the proposed action, the Department may schedule a public hearing or notice a proposal to approve the bypass. Each request shall specify the following minimum information:

- proposed date of bypass;
- estimated duration of the bypass;
- estimated volume of the bypass;
- alternatives to bypassing; and
- measures to mitigate environmental harm caused by the bypass.

### 6.2.8 Proper Operation and Maintenance

## 6.2 System Operating Requirements

### 6.2.1 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, either for effluent or sludge.
- 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.

NOTE: Section 292.11(2)(a), Wisconsin Statutes, requires any person who possesses or controls a hazardous substance or who causes the discharge of a hazardous substance to notify the Department of Natural Resources **immediately** of any discharge not authorized by the permit. The discharge of a hazardous substance that is not authorized by this permit or that violates this permit may be a hazardous substance spill. To report a hazardous substance spill, call DNR's 24-hour HOTLINE at 1-800-943-0003

### 6.2.2 Flow Meters

Flow meters shall be calibrated annually, as per s. NR 218.06, Wis. Adm. Code.

### 6.2.3 Raw Grit and Screenings

All raw grit and screenings shall be disposed of at a properly licensed solid waste facility or picked up by a licensed waste hauler. If the facility or hauler are located in Wisconsin, then they shall be licensed under chs. NR 500-536, Wis. Adm. Code.

### 6.2.4 Sludge Management

All sludge management activities shall be conducted in compliance with ch. NR 204 "Domestic Sewage Sludge Management", Wis. Adm. Code.

### 6.2.5 Prohibited Wastes

Under no circumstances may the introduction of wastes prohibited by s. NR 211.10, Wis. Adm. Code, be allowed into the waste treatment system. Prohibited wastes include those:

- which create a fire or explosion hazard in the treatment work;
- which will cause corrosive structural damage to the treatment work;
- solid or viscous substances in amounts which cause obstructions to the flow in sewers or interference with the proper operation of the treatment work;

- the individual who performed the analysis;
- the analytical techniques or methods used; and
- the results of the analysis.

### 6.1.5 Reporting of Monitoring Results

The permittee shall use the following conventions when reporting effluent monitoring results:

- Pollutant concentrations less than the limit of detection shall be reported as < (less than) the value of the limit of detection. For example, if a substance is not detected at a detection limit of 0.1 mg/L, report the pollutant concentration as < 0.1 mg/L.
- 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.
- For the purposes of reporting a calculated result, average or a mass discharge value, the permittee may substitute a 0 (zero) for any pollutant concentration that is less than the limit of detection. However, if the effluent limitation is less than the limit of detection, the department may substitute a value other than zero for results less than the limit of detection, after considering the number of monitoring results that are greater than the limit of detection and if warranted when applying appropriate statistical techniques.

### 6.1.6 Compliance Maintenance Annual Reports

Compliance Maintenance Annual Reports (CMAR) shall be completed using information obtained over each calendar year regarding the wastewater conveyance and treatment system. The CMAR shall be submitted by the permittee in accordance with ch. NR 208, Wis. Adm. Code, by June 30, each year on an electronic report form provided by the Department.

In the case of a publicly owned treatment works, a resolution shall be passed by the governing body and submitted as part of the CMAR, verifying its review of the report and providing responses as required. Private owners of wastewater treatment works are not required to pass a resolution; but they must provide an Owner Statement and responses as required, as part of the CMAR submittal.

A separate CMAR certification document, that is not part of the electronic report form, shall be mailed to the Department at the time of electronic submittal of the CMAR. The CMAR certification shall be signed and submitted by an authorized representative of the permittee. The certification shall be submitted by mail. The certification shall verify the electronic report is complete, accurate and contains information from the owner's treatment works.

### 6.1.7 Records Retention

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit for a period of at least 3 years from the date of the sample, measurement, report or application. All pertinent sludge information, including permit application information and other documents specified in this permit or s. NR 204.06(9), Wis. Adm. Code shall be retained for a minimum of 5 years.

### 6.1.8 Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or correct information to the Department.

## 6 Standard Requirements

NR 205, Wisconsin Administrative Code: The conditions in ss. NR 205.07(1) and NR 205.07(2), Wis. Adm. Code, are included by reference in this permit. The permittee shall comply with all of these requirements. Some of these requirements are outlined in the Standard Requirements section of this permit. Requirements not specifically outlined in the Standard Requirement section of this permit can be found in ss. NR 205.07(1) and NR 205.07(2).

### 6.1 Reporting and Monitoring Requirements

#### 6.1.1 Monitoring Results

Monitoring results obtained during the previous month shall be summarized and reported on a Department Wastewater Discharge Monitoring Report Form. This report form is to be returned to the Department no later than the date indicated on the form. The original and one copy of the Wastewater Discharge Monitoring Report Form shall be submitted to your DNR regional office. A copy of the Wastewater Discharge Monitoring Report Form shall be retained by the permittee. Sludge monitoring shall be reported on Characteristic Form 3400-49 by January 31, following the year any sludge analysis is performed.

If the permittee monitors any pollutant more frequently than required by this permit, the results of such monitoring shall be included in the calculations and reporting. The data shall be submitted on the Wastewater Discharge Monitoring Report Form or sludge reporting form.

The permittee shall comply with all limits for each parameter regardless of monitoring frequency. For example, monthly, weekly, and/or daily limits shall be met even with monthly monitoring. The permittee may monitor more frequently than required for any parameter.

Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Department in this permit.

#### 6.1.2 Sampling and Testing Procedures

Sampling and laboratory testing procedures shall be performed in accordance with Chapters NR 218 and NR 219, Wis. Adm. Code and shall be performed by a laboratory certified or registered in accordance with the requirements of ch. NR 149, Wis. Adm. Code. Groundwater sample collection and analysis shall be performed in accordance with ch. NR 140, Wis. Adm. Code. The analytical methodologies used shall enable the laboratory to quantitate all substances for which monitoring is required at levels below the effluent limitation. If the required level cannot be met by any of the methods available in NR 219, Wis. Adm. Code, then the method with the lowest limit of detection shall be selected. Additional test procedures may be specified in this permit.

#### 6.1.3 Pretreatment Sampling Requirements

Sampling for pretreatment parameters (cadmium, chromium, copper, lead, nickel, zinc, and mercury) shall be done during a day each month when industrial discharges are occurring at normal to maximum levels. The sampling of the influent and effluent for these parameters shall be coordinated. All 24 hour composite samples shall be flow proportional.

#### 6.1.4 Recording of Results

The permittee shall maintain records which provide the following information for each effluent measurement or sample taken:

- the date, exact place, method and time of sampling or measurements;
- the individual who performed the sampling or measurements;
- the date the analysis was performed;

## 5 Schedules of Compliance

### 5.1 Mercury Pollutant Minimization Program

The permittee shall implement or continue a pollutant minimization program whenever, after the first 24 months of mercury monitoring, a mercury effluent limitation is necessary under the procedure in s. NR 106.145(2), Wis. Adm. Code. In the interim, the permittee is encouraged to continue ongoing mercury reduction efforts and to report the status of implementing those efforts annually.

Required Action	Date Due
<p><b>Request Limitation Determination:</b> After completion of the first 24 months of sampling under this permit, the permittee shall submit a summary of at least 12 monitoring results spaced over a period of at least 24 months and request that the Department make a preliminary determination of the need for effluent limitations according to the requirements of s. NR 106.145(2), Wis. Adm. Code. If the Department's determination under s. NR 106.145(2) shows that an effluent limitation is NOT necessary, the permittee shall not be required to follow subsequent steps in this schedule. Monitoring for mercury shall continue as required elsewhere in this permit.</p> <p>Note: The Department will make the determination and notify the permittee in writing within 90 days of such request.</p>	04/30/2008
<p><b>Mercury Pollutant Minimization Program Plan:</b> If the Department's determination under s. NR 106.145(2) shows that an effluent limitation is necessary, the permittee shall amend their March 19, 2002 Mercury Pollution Program to meet the requirements of a pollutant minimization program (PMP) as specified in s. NR 106.145(7), Wis. Adm. Code. The amended plan shall be submitted by the date due.</p> <p>Note: The Department will notify the permittee of acceptance of or comments on the proposed PMP. The permittee and the Department will then agree on what changes, if any will be made to the PMP. If the Department has not notified the permittee within 90 days of the Department's receipt of the PMP, the permittee may assume that the PMP has been accepted.</p>	03/31/2009
<p><b>Implement the Mercury Pollutant Minimization Program:</b> The permittee shall implement the PMP as submitted or as amended by agreement of the permittee and the Department.</p>	07/01/2009
<p><b>Annual Status Reports:</b> Each year by March 31, the permittee shall submit to the Department an annual status report on the progress of the PMP as required by s. NR 106.145(7), Wis. Adm. Code. Submittal of the first annual status report is required by the Date Due.</p> <p>Note: If the permittee wishes to apply for an alternative mercury effluent limitation, that application is due with the application for permit reissuance by 6 months prior to permit expiration. The permittee should submit or reference the PMP plan as updated by the Annual Status Report or more recent developments as part of that application.</p>	03/31/2010

List 4

**VECTOR ATTRACTION REDUCTION**

The permittee shall implement any one of the vector attraction reduction options specified in List 4. The Department shall be notified of the option utilized and shall be notified when the permittee decides to utilize an alternative option.

One of the following shall be satisfied prior to, or at the time of land application as specified in List 4.

Option	Limit	Where/When it Shall be Met
Volatile Solids Reduction	≥38%	Across the process
Specific Oxygen Uptake Rate	≤1.5 mg O <sub>2</sub> /hr/g TS	On aerobic stabilized sludge
Anaerobic bench-scale test	<17 % VS reduction	On anaerobic digested sludge
Aerobic bench-scale test	<15 % VS reduction	On aerobic digested sludge
Aerobic Process	>14 days, Temp >40°C and Avg. Temp > 45°C	On composted sludge
pH adjustment	>12 S.U. (for 2 hours) and >11.5 (for an additional 22 hours)	During the process
Drying without primary solids	>75 % TS	When applied or bagged
Drying with primary solids	>90 % TS	When applied or bagged
Equivalent Process	Approved by the Department	Varies with process
Injection	-	When applied
Incorporation	-	Within 6 hours of application

#### 4.2.1.4 Sludge Which Exceeds the High Quality Limit

Cumulative pollutant loading records shall be kept for all bulk land application of sludge which does not meet the high quality limit for any parameter. This requirement applies for the entire calendar year in which any exceedance of Table 3 of s. NR 204.07(5)(c), is experienced. Such loading records shall be kept for all List 1 parameters for each site land applied in that calendar year. The formula to be used for calculating cumulative loading is as follows:

$$[(\text{Pollutant concentration (mg/kg)} \times \text{dry tons applied/ac}) \div 500] + \text{previous loading (lbs/acre)} = \text{cumulative lbs pollutant per acre}$$

When a site reaches 90% of the allowable cumulative loading for any metal established in Table 2 of s. NR 204.07(5)(b), the Department shall be so notified through letter or in the comment section of the annual land application report (3400-55).

#### 4.2.1.5 Sludge Analysis for PCBs

The permittee shall analyze the sludge for Total PCBs one time during the first year sludge is land applied. The results shall be reported as "PCB Total Dry Wt". Either congener-specific analysis or Aroclor analysis shall be used to determine the PCB concentration. The permittee may determine whether Aroclor or congener specific analysis is performed. Analyses shall be performed in accordance with Table EM in s. NR 219.04, Wis. Adm. Code and the conditions specified in Standard Requirements of this permit. PCB results shall be submitted by January 31, following the specified year of analysis.

#### 4.2.1.6 Priority Pollutant Scan

The permittee shall analyze the sludge for the priority pollutants as specified in s. NR 215.03 (1-4), Wis. Adm. Code one time during the first year sludge is land applied. Results shall be reported on a dry weight basis.

#### 4.2.1.7 Lists 3 and 4

List 3 PATHOGEN CONTROL FOR CLASS B SLUDGE		
The permittee shall implement pathogen control as listed in List 3. The Department shall be notified of the pathogen control utilized and shall be notified when the permittee decides to utilize alternative pathogen control.		
The following requirements shall be met prior to land application of sludge.		
Parameter	Unit	Limit
Fecal Coliform*	MPN/gTS or CFU/gTS	2,000,000
<b>OR, ONE OF THE FOLLOWING PROCESS OPTIONS</b>		
Aerobic Digestion	Air Drying	
Anaerobic Digestion	Composting	
Alkaline Stabilization	PSRP Equivalent Process	
* The Fecal Coliform limit shall be reported as the geometric mean of 7 discrete samples on a dry weight basis.		

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Radium 226 Dry Wt		pCi/g	1/ 2 Months	Composite	List 1 – Not required after the public water utilities begin using Lake Michigan.
Nitrogen, Total Kjeldahl		Percent	1/ 2 Months	Composite	List 2 Parameters, Nutrients. Monitoring only required for land application.
Nitrogen, Ammonium (NH <sub>4</sub> -N) Total		Percent	1/ 2 Months	Composite	
Phosphorus, Total		Percent	1/ 2 Months	Composite	
Phosphorus, Water Extractable		Percent	1/ 2 Months	Composite	
Potassium, Total Recoverable		Percent	1/ 2 Months	Composite	
PCB Total Dry Wt	Ceiling High Quality	50 mg/kg 10 mg/kg	Once	Composite	Applicable only to land application. See § 4.2.1.5
Municipal Sludge Priority Pollutant Scan			Once	Composite	Applicable only to land application. See § 4.2.1.6

Other Sludge Requirements	
Sludge Requirements	Sample Frequency
<b>List 3 Requirements – Pathogen Control:</b> The requirements in List 3 shall be met prior to land application of sludge.	BiMonthly
<b>List 4 Requirements – Vector Attraction Reduction:</b> The vector attraction reduction shall be satisfied prior to, or at the time of land application as specified in List 4.	BiMonthly

#### 4.2.1.1 List 2 Analysis

If the monitoring frequency for List 2 parameters is more frequent than "Annual" then the sludge may be analyzed for the List 2 parameters just prior to each land application season rather than at the more frequent interval specified.

#### 4.2.1.2 Changes in Feed Sludge Characteristics

If a change in feed sludge characteristics, treatment process, or operational procedures occurs which may result in a significant shift in sludge characteristics, the permittee shall reanalyze the sludge for List 1, 2, 3 and 4 parameters each time such change occurs.

#### 4.2.1.3 Multiple Sludge Sample Points (Outfalls)

If there are multiple sludge sample points (outfalls), but the sludges are not subject to different sludge treatment processes, then a separate List 2 analysis shall be conducted for each sludge type which is land applied, just prior to land application, and the application rate shall be calculated for each sludge type. In this case, List 1, 3, and 4 and PCBs need only be analyzed on a single sludge type, at the specified frequency. If there are multiple sludge sample points (outfalls), due to multiple treatment processes, List 1, 2, 3 and 4 and PCBs shall be analyzed for each sludge type at the specified frequency.

## 4 Land Application Requirements

### 4.1 Sampling Point(s)

The discharge(s) shall be limited to land application of the waste type(s) designated for the listed sampling point(s) on Department approved land spreading sites or by hauling to another facility.

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, WasteType/Sample Contents and Treatment Description (as applicable)
002	Incinerated Cake: Incineration of biosolids is regulated under the jurisdiction of US EPA Region 5 and subject to the requirements of 40 CFR 503. While the State of Wisconsin has not been delegated authority for biosolids incineration, Form 3400-165 may be sent to the permittee each year and may be completed and returned to DNR, to satisfy federal reporting requirements. US EPA may also impose other 40 CFR part 503 requirements. For state reporting requirements submit form 3400-52, "Other Methods of Disposal or Distribution Report".
003	Future Land App. or Landfill - This sample point is reserved for future land application of sludge. Monitoring requirements and limitations are applicable during any year that sludge is disposed by land application. Also applicable to landfill disposal.

### 4.2 Monitoring Requirements and Limitations

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

#### 4.2.1 Sampling Point (Outfall) 003 - Future Land App. or Landfill

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Solids, Total		Percent	1/ 2 Months	Composite	List 1 Parameters, Total Solids and Metals. Monitoring required for land application or landfilling. Limits only applicable to land application.
Arsenic Dry Wt	Ceiling High Quality	75 mg/kg 41 mg/kg	1/ 2 Months	Composite	
Cadmium Dry Wt	Ceiling High Quality	85 mg/kg 39 mg/kg	1/ 2 Months	Composite	
Copper Dry Wt	Ceiling High Quality	4,300 mg/kg 1,500 mg/kg	1/ 2 Months	Composite	
Lead Dry Wt	Ceiling High Quality	840 mg/kg 300 mg/kg	1/ 2 Months	Composite	
Mercury Dry Wt	Ceiling High Quality	57 mg/kg 17 mg/kg	1/ 2 Months	Composite	
Molybdenum Dry Wt	Ceiling	75 mg/kg	1/ 2 Months	Composite	
Nickel Dry Wt	Ceiling High Quality	420 mg/kg 420 mg/kg	1/ 2 Months	Composite	
Selenium Dry Wt	Ceiling High Quality	100 mg/kg 100 mg/kg	1/ 2 Months	Composite	
Zinc Dry Wt	Ceiling High Quality	7,500 mg/kg 2,800 mg/kg	1/ 2 Months	Composite	

**WET Testing Frequency:** Tests are required during the following quarters (Qtr.).

Acute & Chronic WET

- 3<sup>rd</sup> Qtr. 2006 (July 1 – September 30, 2006)
- 4<sup>th</sup> Qtr. 2007 (October 1 – December 31, 2007)
- 3<sup>rd</sup> Qtr. 2008 (July 1 – September 30, 2008)
- 2<sup>nd</sup> Qtr. 2009 (April 1 – June 30, 2009)
- 1<sup>st</sup> Qtr. 2010 (January 1 – March 31, 2010)

**Reporting:** The permittee shall report test results on the Discharge Monitoring Report form, and also complete the "Whole Effluent Toxicity Test Report Form" (Section 6, "*State of Wisconsin Aquatic Life Toxicity Testing Methods Manual, 2<sup>nd</sup> Edition*"), for each test. The original, complete, signed version of the Whole Effluent Toxicity Test Report Form shall be sent to the Biomonitoring Coordinator, Bureau of Watershed Management, 101 S. Webster St., P.O. Box 7921, Madison, WI 53707-7921, within 45 days of test completion. The original Discharge Monitoring Report (DMR) form and one copy shall be sent to the contact and location provided on the DMR by the required deadline.

**Determination of Positive Results:** An acute toxicity test shall be considered positive if the Toxic Unit - Acute ( $TU_a$ ) is greater than 1.0 for either species. The  $TU_a$  shall be calculated as follows: If  $LC_{50} \geq 100$ , then  $TU_a = 1.0$ . If  $LC_{50}$  is  $< 100$ , then  $TU_a = 100 \div LC_{50}$ . A chronic toxicity test shall be considered positive if the Relative Toxic Unit - Chronic ( $rTU_c$ ) is greater than 1.0 for either species. The  $rTU_c$  shall be calculated as follows: If  $IC_{25} \geq IWC$ , then  $rTU_c = 1.0$ . If  $IC_{25} < IWC$ , then  $rTU_c = IWC \div IC_{25}$ .

**Additional Testing Requirements:** Within 90 days of a test which showed positive results, the permittee shall submit the results of at least 2 retests to the Biomonitoring Coordinator on "Whole Effluent Toxicity Test Report Forms". The retests shall be completed using the same species and test methods specified for the original test (see the Standard Requirements section herein).

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Fecal Coliform	Geometric Mean	400 #/100 ml	Weekly	Grab	May - Sept.
Chlorine, Total Residual	Daily Max	38 µg/L	Daily	Grab	Monitoring required and limits apply whenever chlorine is used. Mass limit specified in § 3.2.1.4.
Acute WET		TU <sub>a</sub>	See Listed Qtr(s)	24-Hr Flow Prop Comp	The permittee shall perform WET testing as specified in § 3.2.1.5.
Chronic WET		rTU <sub>c</sub>			

### 3.2.1.1 Continue to Optimize Removal of Ammonia

Ammonia limits are not included for the months of May through October in accordance with the exceptions contained in s. NR 106.33(2). During these months, the wastewater treatment plant shall continue to be operated in a manner that optimizes removal of ammonia within the design capabilities of the wastewater treatment plant.

### 3.2.1.2 Sample Analysis

Samples shall be analyzed using a method which provides adequate sensitivity so that results can be quantified, unless not possible using the most sensitive approved method.

### 3.2.1.3 Mercury Monitoring

The permittee shall collect and analyze all mercury samples according to the data quality requirements of ss. NR 106.145(9) and (10), Wisconsin Administrative Code. The limit of quantitation (LOQ) used for the effluent and field blank shall be less than 1.3 ng/L, unless the samples are quantified at levels above 1.3 ng/L. The permittee shall collect at least one mercury field blank for each set of mercury samples (a set of samples may include combinations of intake, influent, effluent or other samples all collected on the same day). The permittee shall report results of samples and field blanks to the Department on Discharge Monitoring Reports.

### 3.2.1.4 Applicable Mass Limit for Total Residual Chlorine

The applicable mass limit for Total Residual Chlorine is 11 pounds per day (daily maximum).

### 3.2.1.5 Whole Effluent Toxicity (WET) Testing

**Primary Control Water:** Fox River from a point upstream of outfall 001 and any other known discharge.

**Instream Waste Concentration (IWC):** 12%

**Dilution series:** At least five effluent concentrations and dual controls must be included in each test.

- **Acute:** 100, 50, 25, 12.5, 6.25% and any additional selected by the permittee.
- **Chronic:** 100, 30, 10, 3, 1% and any additional selected by the permittee.

### 3 Surface Water Requirements

#### 3.1 Sampling Point(s)

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
001	Effluent: Representative composite samples shall be taken from the gravity filter building wet well, and grab samples shall be taken from the disinfection basin discharge.

#### 3.2 Monitoring Requirements and Effluent Limitations

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

##### 3.2.1 Sampling Point (Outfall) 001 - Effluent

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
CBOD <sub>5</sub>	Weekly Avg	18 mg/L	5/Week	24-Hr Flow Prop Comp	
	Monthly Avg	9.0 mg/L			
Suspended Solids, Total	Weekly Avg	20 mg/L	5/Week	24-Hr Flow Prop Comp	
	Monthly Avg	10 mg/L			
Phosphorus, Total	Monthly Avg	1.0 mg/L	5/Week	24-Hr Flow Prop Comp	
Nitrogen, Ammonia (NH <sub>3</sub> -N) Total	Daily Max	34 mg/L (a)	5/Week	24-Hr Flow Prop Comp	(a) Jan. - Mar.
	Monthly Avg	27 mg/L			(b) April
	Daily Max	34 mg/L (b)			(c) May - Oct., See § 3.2.1.1.
	Monthly Avg	24 mg/L			(d) Nov. & Dec.
	Monitor Only	mg/L (c)			
	Daily Max	34 mg/L (d)			
	Monthly Avg	31 mg/L			
pH Field	Daily Min	6.0 su	Daily	Grab	
	Daily Max	9.0 su			
Cadmium, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	See § 3.2.1.2.
Chromium, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	
Copper, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	
Lead, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	
Nickel, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	
Zinc, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	
Mercury, Total Recoverable		ng/L	Monthly	Grab	

### **2.2.1.1 Mercury Monitoring**

The permittee shall collect and analyze all mercury samples according to the data quality requirements of ss. NR 106.145(9) and (10), Wisconsin Administrative Code. The limit of quantitation (LOQ) used for the effluent and field blank shall be less than 1.3 ng/L, unless the samples are quantified at levels above 1.3 ng/L. The permittee shall collect at least one mercury field blank for each set of mercury samples (a set of samples may include combinations of intake, influent, effluent or other samples all collected on the same day). The permittee shall report results of samples and field blanks to the Department on Discharge Monitoring Reports.

## 2 In-Plant Requirements

### 2.1 Sampling Point(s)

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
110	Field Blank - Sample point for reporting results of Mercury field blanks collected using standard sample handling procedures.

### 2.2 Monitoring Requirements and Limitations

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

#### 2.2.1 Sampling Point 110 - Field Blank

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Mercury, Total Recoverable		ng/L	Monthly	Blank	See § 2.2.1.1.



# 1 Influent Requirements

## 1.1 Sampling Point(s)

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, WasteType/Sample Contents and Treatment Description (as applicable)
701	Influent: Representative samples shall be taken at the raw sewage pump station prior to the addition of any sidestreams.

## 1.2 Monitoring Requirements

The permittee shall comply with the following monitoring requirements.

### 1.2.1 Sampling Point 701 - Influent

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Continuous	
BOD <sub>5</sub> , Total		mg/L	5/Week	24-Hr Flow Prop Comp	
Suspended Solids, Total		mg/L	5/Week	24-Hr Flow Prop Comp	
Cadmium, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	See § 1.2.1.1.
Chromium, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	
Copper, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	
Lead, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	
Nickel, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	
Zinc, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	
Mercury, Total Recoverable		ng/L	Monthly	24-Hr Flow Prop Comp	

#### 1.2.1.1 Sample Analysis

Samples shall be analyzed using a method which provides adequate sensitivity so that results can be quantified, unless not possible using the most sensitive approved method.

#### 1.2.1.2 Mercury Monitoring

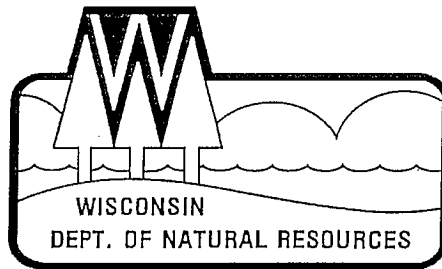
The permittee shall collect and analyze all mercury samples according to the data quality requirements of ss. NR 106.145(9) and (10), Wisconsin Administrative Code. The limit of quantitation (LOQ) used for the effluent and field blank shall be less than 1.3 ng/L, unless the samples are quantified at levels above 1.3 ng/L. The permittee shall collect at least one mercury field blank for each set of mercury samples (a set of samples may include combinations of intake, influent, effluent or other samples all collected on the same day). The permittee shall report results of samples and field blanks to the Department on Discharge Monitoring Reports.

6.4.1 Inventories	19
6.4.2 Regulation of Industrial Users	19
6.4.3 Annual Pretreatment Program Report	20
6.4.4 Pretreatment Program Modifications	20
6.4.5 Program Resources	21
6.5 LAND APPLICATION REQUIREMENTS	21
6.5.1 Sludge Management Program Standards And Requirements Based Upon Federally Promulgated Regulations	21
6.5.2 General Sludge Management Information	21
6.5.3 Sludge Samples	21
6.5.4 Land Application Characteristic Report	21
6.5.5 Monitoring and Calculating PCB Concentrations in Sludge	21
6.5.6 Land Application Report	22
6.5.7 Other Methods of Disposal or Distribution Report	22
6.5.8 Approval to Land Apply	22
6.5.9 Soil Analysis Requirements	23
6.5.10 Land Application Site Evaluation	23
6.5.11 Class B Sludge: Fecal Coliform Limitation	23
6.5.12 Class B Sludge - Vector Control: Incorporation	23
6.5.13 Landfilling of Sludge	24
6.5.14 Sludge Landfilling Reports	24
6.5.15 Sludge Incineration Reports	24
6.5.16 Land Application of Sludge Which Contains Elevated Levels of Radium-226	24
7 SUMMARY OF REPORTS DUE	25

## TABLE OF CONTENTS

<b>1 INFLUENT REQUIREMENTS</b>	<b>1</b>
1.1 SAMPLING POINT(S)	1
1.2 MONITORING REQUIREMENTS	1
1.2.1 <i>Sampling Point 701 - Influent</i>	1
<b>2 IN-PLANT REQUIREMENTS</b>	<b>3</b>
2.1 SAMPLING POINT(S)	3
2.2 MONITORING REQUIREMENTS AND LIMITATIONS	3
2.2.1 <i>Sampling Point 110 - Field Blank</i>	3
<b>3 SURFACE WATER REQUIREMENTS</b>	<b>5</b>
3.1 SAMPLING POINT(S)	5
3.2 MONITORING REQUIREMENTS AND EFFLUENT LIMITATIONS	5
3.2.1 <i>Sampling Point (Outfall) 001 - Effluent</i>	5
<b>4 LAND APPLICATION REQUIREMENTS</b>	<b>8</b>
4.1 SAMPLING POINT(S)	8
4.2 MONITORING REQUIREMENTS AND LIMITATIONS	8
4.2.1 <i>Sampling Point (Outfall) 003 - Future Land App. or Landfill</i>	8
<b>5 SCHEDULES OF COMPLIANCE</b>	<b>12</b>
5.1 MERCURY POLLUTANT MINIMIZATION PROGRAM	12
<b>6 STANDARD REQUIREMENTS</b>	<b>13</b>
6.1 REPORTING AND MONITORING REQUIREMENTS	13
6.1.1 <i>Monitoring Results</i>	13
6.1.2 <i>Sampling and Testing Procedures</i>	13
6.1.3 <i>Pretreatment Sampling Requirements</i>	13
6.1.4 <i>Recording of Results</i>	13
6.1.5 <i>Reporting of Monitoring Results</i>	14
6.1.6 <i>Compliance Maintenance Annual Reports</i>	14
6.1.7 <i>Records Retention</i>	14
6.1.8 <i>Other Information</i>	14
6.2 SYSTEM OPERATING REQUIREMENTS	15
6.2.1 <i>Noncompliance Notification</i>	15
6.2.2 <i>Flow Meters</i>	15
6.2.3 <i>Raw Grit and Screenings</i>	15
6.2.4 <i>Sludge Management</i>	15
6.2.5 <i>Prohibited Wastes</i>	15
6.2.6 <i>Unscheduled Bypassing</i>	16
6.2.7 <i>Scheduled Bypassing</i>	16
6.2.8 <i>Proper Operation and Maintenance</i>	16
6.3 SURFACE WATER REQUIREMENTS	17
6.3.1 <i>Permittee-Determined Limit of Quantitation Incorporated into this Permit</i>	17
6.3.2 <i>Appropriate Formulas for Effluent Calculations</i>	17
6.3.3 <i>Visible Foam or Floating Solids</i>	17
6.3.4 <i>Percent Removal</i>	17
6.3.5 <i>Fecal Coliforms</i>	17
6.3.6 <i>Seasonal Disinfection</i>	17
6.3.7 <i>Total Residual Chlorine</i>	18
6.3.8 <i>Whole Effluent Toxicity (WET) Monitoring Requirements</i>	18
6.3.9 <i>Whole Effluent Toxicity (WET) Identification</i>	18
6.4 PRETREATMENT PROGRAM REQUIREMENTS	19

*De Pere Facility*



# WPDES PERMIT

*STATE OF WISCONSIN*

*DEPARTMENT OF NATURAL RESOURCES*

**PERMIT TO DISCHARGE UNDER THE WISCONSIN POLLUTANT DISCHARGE  
ELIMINATION SYSTEM**

**Green Bay Metropolitan Sewerage District**

is permitted, under the authority of Chapter 283, Wisconsin Statutes, to discharge from a facility known as the Green Bay Metropolitan Sewerage District – De Pere Facility located at 315 Leonard St., De Pere, Wisconsin to

the Fox River in the East River Watershed (LF01) of the Lower Fox River Drainage Basin in the Lake Michigan Basin

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in this permit.

The permittee shall not discharge after the date of expiration. If the permittee wishes to continue to discharge after this expiration date an application shall be filed for reissuance of this permit, according to Chapter NR 200, Wis. Adm. Code, at least 180 days prior to the expiration date given below.

State of Wisconsin Department of Natural Resources

For the Secretary

By

*Richard Sachs*

Richard Sachs

Wastewater Specialist

*January 4, 2008*

Date Permit Signed/Issued for Modification

PERMIT TERM: EFFECTIVE DATE - May 01, 2006  
EFFECTIVE DATE OF MODIFICATION: January 01, 2008

EXPIRATION DATE - March 31, 2011