



# WPDES PERMIT

*STATE OF WISCONSIN*  
*DEPARTMENT OF NATURAL RESOURCES*  
**PERMIT TO DISCHARGE UNDER THE WISCONSIN POLLUTANT DISCHARGE  
ELIMINATION SYSTEM**

**Waste Management Omega Hills Landfill**

is permitted, under the authority of Chapter 283, Wisconsin Statutes, to discharge from a facility  
located at  
SH SEQ Sec 36 T9N R20E;  
N96 W12730 County Line Road, Village of Germantown  
to

**Menomonee River Via Nor-X-Way Channel in the Milwaukee River 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 \_\_\_\_\_  
Susan Sylvester  
Director, Bureau of Water Quality

\_\_\_\_\_  
Date Permit Signed/Issued

**PERMIT TERM: EFFECTIVE DATE - December 01, 2014**

**EXPIRATION DATE - November 30, 2019**

## 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 to air stripper</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 101 - AFTER AIR STRIPPING</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 - MENOMONEE R VIA NOR- X-WAY CHN</i>	5
<b>4 SCHEDULES</b>	<b>9</b>
4.1 BHC TECHNICAL GRADE	9
<b>5 STANDARD REQUIREMENTS</b>	<b>10</b>
5.1 REPORTING AND MONITORING REQUIREMENTS	10
5.1.1 <i>Monitoring Results</i>	10
5.1.2 <i>Sampling and Testing Procedures</i>	10
5.1.3 <i>Recording of Results</i>	10
5.1.4 <i>Reporting of Monitoring Results</i>	10
5.1.5 <i>Records Retention</i>	11
5.1.6 <i>Other Information</i>	11
5.2 SYSTEM OPERATING REQUIREMENTS	11
5.2.1 <i>Noncompliance Reporting</i>	11
5.2.2 <i>Bypass</i>	12
5.2.3 <i>Scheduled Bypass</i>	12
5.2.4 <i>Controlled Diversions</i>	12
5.2.5 <i>Proper Operation and Maintenance</i>	13
5.2.6 <i>Spill Reporting</i>	13
5.2.7 <i>Planned Changes</i>	13
5.2.8 <i>Duty to Halt or Reduce Activity</i>	13
5.3 SURFACE WATER REQUIREMENTS	13
5.3.1 <i>Permittee-Determined Limit of Quantitation Incorporated into this Permit</i>	13
5.3.2 <i>Appropriate Formulas for Effluent Calculations</i>	13
5.3.3 <i>Effluent Temperature Requirements</i>	14
5.3.4 <i>Visible Foam or Floating Solids</i>	14
5.3.5 <i>Surface Water Uses and Criteria</i>	14
5.3.6 <i>Whole Effluent Toxicity (WET) Monitoring Requirements</i>	15
5.3.7 <i>Whole Effluent Toxicity (WET) Identification and Reduction</i>	15
<b>6 SUMMARY OF REPORTS DUE</b>	<b>16</b>

# 1 Influent Requirements

## 1.1 Sampling Point(s)

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
701	Influent contaminated groundwater to the air stripper

## 1.2 Monitoring Requirements

The permittee shall comply with the following monitoring requirements.

### 1.2.1 Sampling Point 701 - Influent to air stripper

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Acrolein		µg/L	1/ 6 Months	Grab	
Acrylonitrile		µg/L	1/ 6 Months	Grab	
Benzene		µg/L	1/ 6 Months	Grab	
Bromoform		µg/L	1/ 6 Months	Grab	
Carbon tetrachloride		µg/L	1/ 6 Months	Grab	
Chlorobenzene		µg/L	1/ 6 Months	Grab	
Chlorodibromo-methane		µg/L	1/ 6 Months	Grab	
Chloroethane		µg/L	1/ 6 Months	Grab	
2-Chloroethyl vinyl ether		µg/L	1/ 6 Months	Grab	
Chloroform		µg/L	1/ 6 Months	Grab	
Dichlorobromo-methane (bromo-dichloromethane)		µg/L	1/ 6 Months	Grab	
1,1-Dichloro- ethane		µg/L	1/ 6 Months	Grab	
1,2-Dichloro- ethane		µg/L	1/ 6 Months	Grab	
1,1-Dichloro-ethylene		µg/L	1/ 6 Months	Grab	
1,2-trans Dichloroethylene		µg/L	1/ 6 Months	Grab	
1,2-Dichloropropane		µg/L	1/ 6 Months	Grab	
1,3-cis Dichloropropylene		µg/L	1/ 6 Months	Grab	
1,3-trans Dichloropropylene		µg/L	1/ 6 Months	Grab	
Ethylbenzene		µg/L	1/ 6 Months	Grab	

<b>Monitoring Requirements and Limitations</b>					
<b>Parameter</b>	<b>Limit Type</b>	<b>Limit and Units</b>	<b>Sample Frequency</b>	<b>Sample Type</b>	<b>Notes</b>
Methyl bromide		µg/L	1/ 6 Months	Grab	
Chloromethane		µg/L	1/ 6 Months	Grab	
Methylene chloride		µg/L	1/ 6 Months	Grab	
1,1,2,2-Tetrachloro-ethane		µg/L	1/ 6 Months	Grab	
Tetrachloroethylene		µg/L	1/ 6 Months	Grab	
Toluene		µg/L	1/ 6 Months	Grab	
1,1,1-Trichloro-ethane		µg/L	1/ 6 Months	Grab	
1,1,2-Trichloro-ethane		µg/L	1/ 6 Months	Grab	
Trichloro- ethylene		µg/L	1/ 6 Months	Grab	
Vinyl chloride		µg/L	1/ 6 Months	Grab	

## 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)
101	Treated groundwater after air stripping

### 2.2 Monitoring Requirements and Limitations

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

#### 2.2.1 Sampling Point 101 - AFTER AIR STRIPPING

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Acrolein		µg/L	1/ 6 Months	Grab	
Acrylonitrile		µg/L	1/ 6 Months	Grab	
Benzene		µg/L	1/ 6 Months	Grab	
Bromoform		µg/L	1/ 6 Months	Grab	
Carbon tetrachloride		µg/L	1/ 6 Months	Grab	
Chlorobenzene		µg/L	1/ 6 Months	Grab	
Chlorodibromo-methane		µg/L	1/ 6 Months	Grab	
Chloroethane		µg/L	1/ 6 Months	Grab	
2-Chloroethyl vinyl ether		µg/L	1/ 6 Months	Grab	
Chloroform		µg/L	1/ 6 Months	Grab	
Dichlorobromo-methane (bromo-dichloromethane)		µg/L	1/ 6 Months	Grab	
1,1-Dichloro- ethane		µg/L	1/ 6 Months	Grab	
1,2-Dichloro- ethane		µg/L	1/ 6 Months	Grab	
1,1-Dichloro-ethylene		µg/L	1/ 6 Months	Grab	
1,2-trans Dichloroethylene		µg/L	1/ 6 Months	Grab	
1,2-Dichloropropane		µg/L	1/ 6 Months	Grab	
1,3-cis Dichloropropylene		µg/L	1/ 6 Months	Grab	
Ethylbenzene		µg/L	1/ 6 Months	Grab	
Methyl bromide		µg/L	1/ 6 Months	Grab	
Chloromethane		µg/L	1/ 6 Months	Grab	
Methylene chloride		µg/L	1/ 6 Months	Grab	

WPDES Permit No. WI-0049514-03-0  
Waste Management Omega Hills Landfill

1,1,2,2-Tetrachloroethane		ppb	1/ 6 Months	Grab	
Tetrachloroethylene		µg/L	1/ 6 Months	Grab	
Toluene		µg/L	1/ 6 Months	Grab	
1,1,1-Trichloroethane		µg/L	1/ 6 Months	Grab	
1,1,2-Trichloroethane		µg/L	1/ 6 Months	Grab	
Trichloro- ethylene		µg/L	1/ 6 Months	Grab	
Vinyl chloride		µg/L	1/ 6 Months	Grab	
Iron, Total Recoverable		µg/L	1/ 6 Months	Grab	
1,3-trans Dichloropropylene		µg/L	1/ 6 Months	Grab	

### 3 Surface Water Requirements

#### 3.1 Sampling Point(s)

The discharge(s) shall be limited to the waste type(s) designated for the listed sampling point(s).

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, WasteType/Sample Contents and Treatment Description (as applicable)
001	Combined treated groundwater and stormwater sampled after the stormwater basin on the northwestern portion of the site prior to discharge to the Menomonee River via NOR-X-WAY CHANNEL

#### 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 - MENOMONEE R VIA NOR- X-WAY CHN

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Continuous	
Suspended Solids, Total	Daily Max	40 mg/L	1/ 6 Months	Grab	
pH Field	Daily Max	9.0 su	1/ 6 Months	Grab	
pH Field	Daily Min	6.0 su	1/ 6 Months	Grab	
BOD <sub>5</sub> , Total		mg/L	1/ 6 Months	Grab	
Arsenic, Total Recoverable		µg/L	1/ 6 Months	Grab	
Iron, Total Recoverable	Quarterly Avg	1.0 mg/L	1/ 6 Months	Grab	
1,1-Dichloro- ethane		µg/L	1/ 6 Months	Grab	
1,2-Dichloro- ethane		µg/L	1/ 6 Months	Grab	
Trichloro- ethylene		µg/L	1/ 6 Months	Grab	
1,2-Dichloro- ethene		µg/L	1/ 6 Months	Grab	
Vinyl chloride		µg/L	1/ 6 Months	Grab	
Acrolein		µg/L	1/ 6 Months	Grab	
Acrylonitrile		µg/L	1/ 6 Months	Grab	
Benzene		µg/L	1/ 6 Months	Grab	
Bromoform		µg/L	1/ 6 Months	Grab	
Carbon tetrachloride		µg/L	1/ 6 Months	Grab	
Chlorobenzene		µg/L	1/ 6 Months	Grab	
Chlorodibromo- methane		µg/L	1/ 6 Months	Grab	
Chloroethane		µg/L	1/ 6 Months	Grab	
2-Chloroethyl vinyl ether		µg/L	1/ 6 Months	Grab	

<b>Monitoring Requirements and Effluent Limitations</b>					
<b>Parameter</b>	<b>Limit Type</b>	<b>Limit and Units</b>	<b>Sample Frequency</b>	<b>Sample Type</b>	<b>Notes</b>
Chloroform		µg/L	1/ 6 Months	Grab	
Dichlorobromo- methane (bromo- dichloromethane)		µg/L	1/ 6 Months	Grab	
1,1-Dichloro- ethylene		µg/L	1/ 6 Months	Grab	
1,2-trans Dichloroethylene		µg/L	1/ 6 Months	Grab	
1,2-Dichloropropane		µg/L	1/ 6 Months	Grab	
1,3-cis Dichloropropylene		µg/L	1/ 6 Months	Grab	
1,3-trans Dichloropropylene		µg/L	1/ 6 Months	Grab	
Ethylbenzene		µg/L	1/ 6 Months	Grab	
Methyl bromide		µg/L	1/ 6 Months	Grab	
Chloromethane		µg/L	1/ 6 Months	Grab	
Methylene chloride		µg/L	1/ 6 Months	Grab	
1,1,2,2-Tetrachloro- ethane		µg/L	1/ 6 Months	Grab	
Tetrachloroethylene		µg/L	1/ 6 Months	Grab	
Toluene		µg/L	1/ 6 Months	Grab	
1,1,1-Trichloro- ethane		µg/L	1/ 6 Months	Grab	
1,1,2-Trichloro- ethane		µg/L	1/ 6 Months	Grab	
Xylene		µg/L	1/ 6 Months	Grab	
Chronic WET		rTU <sub>c</sub>	See Listed Qtr(s)	Grab	WET testing is required once per year in the calendar quarters specified below. Samples for WET testing shall be collected after the stormwater basin unless otherwise approved by the Department.
BHC, alpha		ng/L	Quarterly	Grab	
BHC, beta		ng/L	Quarterly	Grab	
BHC, delta		ng/L	Quarterly	Grab	
BHC, gamma (Lindane)		ng/L	Quarterly	Grab	
BHC, Technical Grade	Monthly Avg	8.6 ng/L	Quarterly	Grab	Limit is effective January 1, 2019. See BHC Footnote and Compliance Schedule.
BHC, Technical Grade	Monthly Avg	6.9E-6 lbs/day	Quarterly	Grab	Limit is effective January 1, 2019. See BHC Footnote and Compliance Schedule.

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Priority Pollutant Scan			Annual	Grab	As specified in ch. NR 215.03 (1-6), Wis. Adm. Code (excluding asbestos).

### 3.2.1.1 BHC Technical Grade Potential Removal of Effluent Limitation(s)

The effluent limitations for BHC Technical Grade become effective on January 1, 2019 as specified in the Schedules of Compliance Section.

The Permittee may request that the Department make a determination of the need for a limit. If the Department determines that effluent limitations are unnecessary the Department shall notify the permittee that the limitations will not become effective. The monitoring requirements for BHC Technical Grade shall be reduced to annual monitoring and the compliance schedule shall be discontinued at that time. This action shall take place without public notice thereof.

If, after reviewing the data, the Department determines that effluent limitations for BHC Technical Grade are necessary, the requirement to meet the effluent limitations according to the Schedules of Compliance will not be removed nor will the monitoring frequency be reduced.

### 3.2.1.2 Whole Effluent Toxicity (WET) Testing

**Primary Control Water:** Nor-X-Way Channel

Lab Water shall be used for Chronic WET test for fathead minnows

**Instream Waste Concentration (IWC):** 100%

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

- **Chronic:** 100, 75, 50, 25, 12.5, 6.25% and any additional selected by the permittee.
- **Special Procedure for the Chronic WET Test for Fathead Minnows:** The Chronic WET test for fathead minnows shall be performed using 10 replicates of 2 fish instead of the normally specified 4 replicates of 10 fish.

#### WET Testing Frequency:

**Chronic** tests shall be conducted 3 times during the permit term in rotating quarters in order to collect seasonal information about the discharge. Tests are required in years 1, 3, and 5 of the permit term in the following quarters:

- **Chronic: January 1 to March 31, 2015; April 1 to June 30, 2017; and July 1 to September 30, 2019**

Chronic WET testing shall continue after the permit expiration date at a frequency of once per 2 years until the permit is reissued. For example, the next test would be required during October 1 to December 31, 2021.

**Testing:** WET testing shall be performed during normal operating conditions. Permittees are not allowed to turn off or otherwise modify treatment systems, production processes, or change other operating or treatment conditions during WET tests.

**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 Water Quality, 101 S. Webster St., P.O. Box 7921, Madison, WI 53707-7921, within 45 days of test completion. The Discharge Monitoring Report (DMR) form shall be submitted electronically 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 90 day reporting period shall begin the day after the test which showed a positive result. The retests shall be completed using the same species and test methods specified for the original test (see the Standard Requirements section herein).

## 4 Schedules

### 4.1 BHC Technical Grade

This compliance schedule requires the permittee to achieve compliance by the specified date

<b>Required Action</b>	<b>Due Date</b>
<b>Report on Effluent Discharges:</b> Submit a report on effluent discharges of BHC Technical Grade with conclusions regarding compliance. The Department will use this report and monitoring data to determine if the limit is necessary.	01/01/2017
<b>Action Plan:</b> Submit an action plan for complying with the effluent limitation. If construction is required, include plans and specifications with the submittal.	06/01/2017
<b>Initiate Actions:</b> Initiate actions identified in the plan.	10/01/2018
<b>Complete Actions:</b> Complete actions necessary to achieve compliance with the effluent limitations.	01/01/2019

## 5 Standard Requirements

**NR 205, Wisconsin Administrative Code (Conditions for Industrial Dischargers):** 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. 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(3).

### 5.1 Reporting and Monitoring Requirements

#### 5.1.1 Monitoring Results

Monitoring results obtained during the previous month shall be summarized and reported on a Department Wastewater Discharge Monitoring Report. The report may require reporting of any or all of the information specified below under 'Recording of Results'. This report is to be returned to the Department no later than the date indicated on the form. A copy of the Wastewater Discharge Monitoring Report Form or an electronic file of the report shall be retained by the permittee.

Monitoring results shall be reported on an electronic discharge monitoring report (eDMR). The eDMR shall be certified electronically by a principal executive officer, a ranking elected official or other duly authorized representative. The 'eReport Certify' page certifies that the electronic report form is true, accurate and complete.

If the permittee monitors any pollutant more frequently than required by this permit, the results of such monitoring shall be included on the Wastewater Discharge Monitoring Report.

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.

#### 5.1.2 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.

#### 5.1.3 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;
- the individual who performed the analysis;
- the analytical techniques or methods used; and
- the results of the analysis.

#### 5.1.4 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 purposes of calculating NR 101 fees, the 2 mg/l lower reporting limits for BOD<sub>5</sub> and Total Suspended Solids shall be considered to be limits of quantitation
- 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.

### **5.1.5 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, except for sludge management forms and records, which shall be kept for a period of at least 5 years.

### **5.1.6 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.

## **5.2 System Operating Requirements**

### **5.2.1 Noncompliance Reporting**

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 unscheduled 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 as directed at the end of this permit 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.

A scheduled bypass approved by the Department under the 'Scheduled Bypass' section of this permit shall not be subject to the reporting required under this section.

**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.**

### 5.2.2 Bypass

Except for a controlled diversion as provided in the 'Controlled Diversions' section of this permit, any bypass is prohibited and the Department may take enforcement action against a permittee for such occurrences under s. 283.89, Wis. Stats. The Department may approve an unscheduled bypass provided all the following conditions are met:

- 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 or adequate back-up equipment, retention of untreated wastes, reduction of inflow and infiltration, 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 preventative maintenance. When evaluating feasibility of alternatives, the department may consider factors such as technical achievability, costs and affordability of implementation and risks to public health, the environment and, where the permittee is a municipality, the welfare of the community served; and
- The bypass was reported in accordance with the 'Noncompliance Reporting' section of this permit.

### 5.2.3 Scheduled Bypass

Whenever the permittee anticipates the need to bypass for purposes of efficient operations and maintenance and the permittee may not meet the conditions for controlled diversions in the 'Controlled Diversions' section of this permit, the permittee shall obtain prior written approval from the Department for the scheduled bypass. A permittee's written request for Department approval of a scheduled bypass shall demonstrate that the conditions for unscheduled bypassing are met and include the proposed date and reason for the bypass, estimated volume and duration of the bypass, alternatives to bypassing and measures to mitigate environmental harm caused by the bypass. The department may require the permittee to provide public notification for a scheduled bypass if it is determined there is significant public interest in the proposed action and may recommend mitigation measures to minimize the impact of such bypass.

### 5.2.4 Controlled Diversions

Controlled diversions are allowed only when necessary for essential maintenance to assure efficient operation provided the following requirements are met:

- Effluent from the wastewater treatment facility shall meet the effluent limitations established in the permit. Wastewater that is diverted around a treatment unit or treatment process during a controlled diversion shall be recombined with wastewater that is not diverted prior to the effluent sampling location and prior to effluent discharge;
- A controlled diversion may not occur during periods of excessive flow or other abnormal wastewater characteristics;
- A controlled diversion may not result in a wastewater treatment facility overflow; and
- All instances of controlled diversions shall be documented in wastewater treatment facility records and such records shall be available to the department on request.

### **5.2.5 Proper Operation and Maintenance**

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.

### **5.2.6 Spill Reporting**

The permittee shall notify the Department in accordance with ch. NR 706 (formerly NR 158), Wis. Adm. Code, in the event that a spill or accidental release of any material or substance results in the discharge of pollutants to the waters of the state at a rate or concentration greater than the effluent limitations established in this permit, or the spill or accidental release of the material is unregulated in this permit, unless the spill or release of pollutants has been reported to the Department in accordance with s. NR 205.07 (1)(s), Wis. Adm. Code.

### **5.2.7 Planned Changes**

In accordance with ss. 283.31(4)(b) and 283.59, Stats., 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. The report shall either be a new permit application, or if the new discharge will not violate the effluent limitations of this permit, a written notice of the new, different or increased discharge. The notice shall contain a description of the new activities, an estimate of the new, different or increased discharge of pollutants and a description of the effect of the new or increased discharge on existing waste treatment facilities. Following receipt of this report, the Department may modify this permit to specify and limit any pollutants not previously regulated in the permit.

### **5.2.8 Duty to Halt or Reduce Activity**

Upon failure or impairment of treatment facility operation, the permittee shall, to the extent necessary to maintain compliance with its permit, curtail production or wastewater discharges or both until the treatment facility operations are restored or an alternative method of treatment is provided.

## **5.3 Surface Water Requirements**

### **5.3.1 Permittee-Determined Limit of Quantitation Incorporated into this Permit**

For pollutants with water quality-based effluent limits below the Limit of Quantitation (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.

### **5.3.2 Appropriate Formulas for Effluent Calculations**

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

**Weekly/Monthly/Six-Month/Annual Average Concentration** = the sum of all daily results for that week/month/six-month/year, divided by the number of results during that time period. [Note: When a six-month average effluent limit is specified for Total Phosphorus the applicable periods are May through October and November through April.]

**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.

**Six-Month 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 six-month period. [Note: When a six-month average effluent limit is specified for Total Phosphorus the applicable periods are May through October and November through April.]

**Annual 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 entire year.

**Total Monthly Discharge:** = monthly average concentration (mg/L) x total flow for the month (MG/month) x 8.34.

**Total Annual Discharge:** = sum of total monthly discharges for the calendar year.

**12-Month Rolling Sum of Total Monthly Discharge:** = the sum of the most recent 12 consecutive months of Total Monthly Discharges.

### 5.3.3 Effluent Temperature Requirements

**Weekly Average Temperature** – The permittee shall use the following formula for calculating effluent results to determine compliance with the weekly average temperature limit (as applicable): Weekly Average Temperature = the sum of all daily maximum results for that week divided by the number of daily maximum results during that time period.

**Cold Shock Standard** – Water temperatures of the discharge shall be controlled in a manner as to protect fish and aquatic life uses from the deleterious effects of cold shock. ‘Cold Shock’ means exposure of aquatic organisms to a rapid decrease in temperature and a sustained exposure to low temperature that induces abnormal behavior or physiological performance and may lead to death.

**Rate of Temperature Change Standard** – Temperature of a water of the state or discharge to a water of the state may not be artificially raised or lowered at such a rate that it causes detrimental health or reproductive effects to fish or aquatic life of the water of the state.

### 5.3.4 Visible Foam or Floating Solids

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

### 5.3.5 Surface Water Uses and Criteria

In accordance with NR 102.04, Wis. Adm. Code, surface water uses and criteria are established to govern water management decisions. Practices attributable to municipal, industrial, commercial, domestic, agricultural, land development or other activities shall be controlled so that all surface waters including the mixing zone meet the following conditions at all times and under all flow and water level conditions:

- a) Substances that will cause objectionable deposits on the shore or in the bed of a body of water, shall not be present in such amounts as to interfere with public rights in waters of the state.
- b) Floating or submerged debris, oil, scum or other material shall not be present in such amounts as to interfere with public rights in waters of the state.

- c) Materials producing color, odor, taste or unsightliness shall not be present in such amounts as to interfere with public rights in waters of the state.
- d) Substances in concentrations or in combinations which are toxic or harmful to humans shall not be present in amounts found to be of public health significance, nor shall substances be present in amounts which are acutely harmful to animal, plant or aquatic life.

### 5.3.6 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.

### 5.3.7 Whole Effluent Toxicity (WET) Identification and Reduction

This standard requirement applies only to acute or chronic WET monitoring that is not accompanied by a WET limit. Within 60 days of a retest which showed positive results, the permittee shall submit a written report to the Biomonitoring Coordinator, Bureau of Water Quality, 101 S. Webster St., PO Box 7921, Madison, WI 53707-7921, which details the following:

- A description of actions the permittee has taken or will take to remove toxicity and to prevent the recurrence of toxicity;
- A description of toxicity reduction evaluation (TRE) investigations that have been or will be done to identify potential sources of toxicity, including some or all of the following actions:
  - (a) Evaluate the performance of the treatment system to identify deficiencies contributing to effluent toxicity (e.g., operational problems, chemical additives, incomplete treatment)
  - (b) Identify the compound(s) causing toxicity
  - (c) Trace the compound(s) causing toxicity to their sources (e.g., industrial, commercial, domestic)
  - (d) Evaluate, select, and implement methods or technologies to control effluent toxicity (e.g., in-plant or pretreatment controls, source reduction or removal)
- Where corrective actions including a TRE have not been completed, an expeditious schedule under which corrective actions will be implemented;
- If no actions have been taken, the reason for not taking action.

The permittee may also request approval from the Department to postpone additional retests in order to investigate the source(s) of toxicity. Postponed retests must be completed after toxicity is believed to have been removed.

## 6 Summary of Reports Due

FOR INFORMATIONAL PURPOSES ONLY

<b>Description</b>	<b>Date</b>	<b>Page</b>
BHC Technical Grade -Report on Effluent Discharges	January 1, 2017	9
BHC Technical Grade -Action Plan	June 1, 2017	9
BHC Technical Grade -Initiate Actions	October 1, 2018	9
BHC Technical Grade -Complete Actions	January 1, 2019	9
Wastewater Discharge Monitoring Report	no later than the date indicated on the form	10

Report forms shall be submitted electronically in accordance with the reporting requirements herein. Any facility plans or plans and specifications for municipal, industrial, industrial pretreatment and non industrial wastewater systems shall be submitted to the Bureau of Water Quality, P.O. Box 7921, Madison, WI 53707-7921. All other submittals required by this permit shall be submitted to:  
Southeast Region, 2300 N Dr ML King Drive, Milwaukee, WI 53212