

PERMIT FACT SHEET

General Information

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| Permit Number: | WI-A057681-05-0 |
| Permit Name: | Operation and Maintenance of Industrial Potable and Non-Potable Water Systems and/or Hydrostatic Testing of Petroleum Systems |
| Permittee: | Point source dischargers in the state of Wisconsin |
| Discharge Location: | Land surface or surface waters in the state of Wisconsin |
| Receiving Water: | Surface waters or groundwater in the state of Wisconsin |

WPDES Permit Program Background

Chapter 283 of Wisconsin Statutes requires a Wisconsin Pollutant Discharge Elimination System (WPDES) permit for the discharge of any pollutant through a point source into any waters of the state which includes surface waters and groundwater. WPDES permits are issued by the Wisconsin Department of Natural Resources (department) consistent with applicable federal requirements. These permits contain requirements that include pollutant discharge limitations, monitoring and reporting or record keeping requirements, best management practices and other provisions to reduce, eliminate, or minimize the risk of pollutants impacting human health and water quality.

A WPDES permit is an allowance for a facility to discharge a specified amount of a pollutant into the waters of the state under specific conditions. There are two basic types of WPDES permits:

- **Individual permit.** An individual permit is a permit specifically tailored to an individual facility. Once a facility submits a complete application(s), the department develops a draft permit for that particular facility based on the information contained in the permit application (e.g., type of activity, nature of discharge, receiving water quality). After a public participation process, the department may issue the permit to the facility for a specific time period (not to exceed five years) with a requirement that the facility reapply 180 days prior to the expiration date. Public notices are posted for each individual permit application and proposed individual permit permittee.
- **General Permit.** A general permit covers a group or category of dischargers with similar qualities within a designated area of the state under one WPDES permit. A general permit provides coverage to several dischargers. To obtain coverage under a general permit for a discharge of pollutants, an owner or operator must submit a notice of intent (NOI) requesting general permit coverage. General permits have an effective term of 5 years from the date of issuance. If a permittee submitted a complete and timely NOI to be covered by the general permit and the department grants coverage under the general permit, the discharge of pollutants is then subject to all conditions of the general permit and these terms or conditions shall continue to apply until the effective date of the reissued general permit. Public notices are issued for the general permit and not for the permittee covered under the general permit. A person may apply for general permit coverage at the time a general permit is issued or a person may apply during the term of the permit.

General Permit Objective

This general permit was created to properly manage operational and maintenance discharges from industrial potable and non-potable water systems and hydrostatic testing of petroleum systems to waters of the state to protect public health and water quality of groundwater and surface waters within the state of Wisconsin.

General Permit Description

Section NR 205.08, Wis. Adm. Code, authorizes the department to issue a general permit applicable to a designated area of the state authorizing discharges from specified categories or classes of point sources located within that area if they (1) Perform the same or substantially similar operations; (2) Produce the same types of wastewater streams; (3) Employ the same or substantially similar wastewater treatment operations to control specific pollutants; (4) Are subject to the same effluent limitations and monitoring requirements; and (5) In the opinion of the department, are more appropriately controlled under a general permit than under individual permits. The department recognized that many industrial facilities perform the similar maintenance activities of water systems and hydrostatic testing operations, produce the same waste streams, and that individual WPDES permits for these facilities contain very similar requirements. As a result, the department developed this general permit. This permit is applicable to short-duration point source discharges from operational and maintenance activities for industrial potable and non-potable water systems and hydrostatic testing of petroleum systems and other similar discharges to a water of the state. Examples of some discharge activities that may be regulated by this general permit include:

- Hydrostatic testing of industrial potable and non-potable water systems;
- Hydrostatic testing of petroleum systems;
- Flushing water from the cleaning, disinfecting, and/or flushing industrial potable and non-potable water systems; and
- Other discharge activities as determined by the department on case-by-case basis.

The discharge of petroleum contaminated water including petroleum contaminated hydrostatic test water to a water of the state is not authorized by this general permit.

General Permit Summary

This general permit establishes applicability criteria, application requirements, surface water discharge requirements, groundwater discharge requirements, reporting requirements, water treatment additives requirements, antidegradation, impaired waters, TMDL, and wetland requirements, schedules, and standard requirements for private/industrial facilities with maintenance discharges from their water systems and when performing hydrostatic testing. The permit requirements are provided to protect human health and protect and maintain the physical, chemical and biological integrity of the waters of the state by eliminating or minimizing the discharge of pollutants.

Fact Sheet Organization

This fact sheet serves to explain the rationale and assumptions used in deriving the conditions and requirements set forth in the general permit. Additionally, this fact sheet highlights changes in permit conditions that the department proposes to make when reissuing the Operation and Maintenance of Industrial Potable and Non-Potable Water Systems and/or Hydrostatic Testing of Petroleum Systems WPDES permit. This fact sheet compares conditions in the previous general permit to those in the reissued permit. The previous permit remains in effect until the permit is reissued. The sections that follow are taken from the permit and are numbered in this fact sheet as they are numbered in the permit.

1 Applicability Criteria

According to s. NR 205.08(2), Wis. Adm. Code, the department may include applicability criteria in general permits.

1.1 Discharge Activities Covered

This general permit is applicable to a short-term point source discharges of pollutants to a water of the state from the operation and maintenance activities of industrial potable and non-potable water systems and hydrostatic testing of petroleum systems and other similar discharges to a water of the state except those discharge activities excluded from coverage under this permit listed under Section 1.2 and Section 1.3.

Hydrostatic Test Water: Hydrostatic test water includes water (e.g. water supply system water, surface water, groundwater, etc.) that is used to hydrostatically pressure test watermains, water storage tanks, petroleum pipelines, tanks or other vessels for strength and leaks immediately following construction or being placed into service. Hydrostatic testing or leakage testing of watermains, storage tanks, or vessels is a standard practice after the installation of new or replacement piping, tanks, or vessels for strength and leaks. Hydrostatic testing may also be done during the operating life of the watermain, storage tank, pipeline, tank or another vessel.

Generally, the hydrostatic test water is left in pipelines, tanks, or vessels for an extended period of time (i.e. hours to days) prior to discharge. Therefore, the chemistry of the source water is important. The water must be non-corrosive to protect the integrity of the pipeline, tank, or vessel; non-scaling to prevent solids accumulation in the pipeline, tank, or vessel; and biostatic to prevent biofilm build up and microbially induced corrosion of the pipeline, tank, or vessel. Typically, the test water is pretreated with oxygen scavenging compounds (e.g. sodium sulfite) and chlorine that are added to prevent oxygen and microbiologically influenced corrosion. Typically, the test water for water mains or water storage tanks is pretreated with disinfection chemicals like chlorine to prevent contamination from harmful bacteria, viruses, other organisms after construction.

For existing petroleum systems, the system must be physically cleaned to ensure that there will be no discharge of petroleum contaminated water from tank bottoms, construction debris, raw material, intermediate product, final product, or waste products prior to hydrostatic testing to remain eligible under this general permit.

Flushing Operations: Flushing portions of an industrial potable and non-potable water system or fire suppression system may be necessary to replace stagnant water when demand is low, or to remove poor quality potable water containing silt, rust, or debris. Flushing may also be needed to test the hydrants for adequate fire flow and pressure. Flushing may be part of routine operations, and can occur daily, weekly, monthly, or annually based on seasonal water use or known water quality trends. Occasionally, water mains, water storage tanks, and water supply wells will be drained and be taken out of service for maintenance, such as for inspections, rehabilitation, disinfection, repairs, upgrades, or hydrostatic testing. Water systems are generally disinfected with a chlorine solution (e.g. sodium or calcium hypochlorite) to prevent contamination from harmful bacteria, viruses, other organisms after construction, repair or routine maintenance. However, water systems may also need disinfection after damage, deterioration, flooding, or cross connections. All the disinfection water in the water systems is then flushed or drained before these systems are activated or reactivated. These waters have a net addition of chlorine and require treatment for chlorine prior to discharge to surface waters.

Blanket/Statewide Coverage: In accordance with s. NR 205.08(2), Wis. Adm. Code, a general permit may cover more than one class or category of discharge, or more than one area of the state, provided the permit clearly identifies the conditions applicable to each included class or category, or each specific area of the state. Therefore, coverage under this permit may apply statewide to utility

companies that perform hydrostatic testing of utility infrastructure across the state of Wisconsin. Utility companies who are authorized blanket/statewide coverage for hydrostatic testing operations across the state of Wisconsin do not need to apply for permit coverage each time a discharge of hydrostatic test water to a water of the state occurs within the state of Wisconsin provided the requirements in this general permit are met.

1.2 Discharge Activities Not Covered

According to 40 CFR 122.289(a)(4)(ii), general permits may exclude specified sources from coverage. Below is an explanation for all discharges not covered under the permit.

Petroleum Contaminated Hydrostatic Test Water: This general permit is not applicable to discharges from hydrostatically testing any existing petroleum system that has not been physically cleaned to prevent discharge of petroleum contaminated water from tank bottoms, construction debris, raw material, intermediate product, final product, or waste products. These discharges may contain pollutants that are not regulated by this permit. These discharges may be more appropriately regulated under the Petroleum Contaminated Water WPDES General Permit (No. WI-0046531).

Municipal Water Systems: This general permit is not applicable to discharges from operational and maintenance activities of municipal water systems. Rather this permit is only applicable to discharges from industrial facilities that perform maintenance on their water systems or hydrostatic testing of petroleum systems.

Continuous Discharges: This general permit is not applicable to continuous discharges from hydrostatic testing or flushing operations. This general permit does not provide the necessary effluent limits to be protective of water quality standards. Regulation of continuous discharges require the oversight, monitoring and discharge limitations of an individual permit. Continuous discharge means a facility that discharges 24 hours per day on a year-round basis except for temporary shutdowns for maintenance or other similar activities.

Dewatering Water: Some projects may require excavation to reach existing piping or install new piping in high groundwater areas. Therefore, it may be necessary to perform dewatering of groundwater and discharge that water to a water of the state. Discharge of dewatering water from dewatering any construction pit/trench is not covered under this general permit. The discharge of dewatering water may be covered by the Dewatering Operations WPDES General Permit (No. WI-0049344).

Hydrostatic Testing with Other Liquids: If the discharge from hydrostatically testing where the hydrostatic test is conducted with a liquid other than water, the discharge is not eligible for this general permit. These discharges may contain pollutants that are not regulated by this permit and require coverage under another general permit or individual permit which will provide the oversight, monitoring and discharge limitations necessary to protect surface water or groundwater.

Water Treatment and Conditioning: Discharges of backwash, regeneration, and rinse water from iron filters, alum coagulation, granular media filters, and reverse osmosis facilities for the treatment and conditioning of water are not covered under this general permit. Discharges from water treatment operations may be covered under the Water Treatment and/or Conditioning WPDES General Permit (No. WI-0046540).

Washing of Vehicles and/or Equipment: This permit does not cover the washing of vehicles and/or equipment at the construction site. This permit does not contain the conditions and limitations necessary for adequate regulation of washing discharges from vehicles and/or equipment (e.g. concrete mixer trucks or dump trucks).

Process Wastewater: Any discharge containing process wastewaters as described in chs. NR 221 to 297, Wis. Adm. Code, is not authorized under this permit. Discharges containing process wastewaters require the limitations and oversight associated with an individual permit.

Accidental or Uncontrolled Discharges: Any discharge from any accidental or uncontrolled release, spill, leak, or overflow to a water of state is prohibited under State and Federal Law and not authorized by this general permit. However, this general permit does provide the necessary reporting procedures in case an accidental or unplanned discharge does occur to a water of the state.

Unapproved Water Treatment Additives: The discharge shall not contain a water treatment additive where the additive use is not approved in writing by department. Many additives are toxic at certain rates to fish and aquatic life and require approval by the department prior to initiating use. Facilities discharging water with unapproved additive will be in violation of this permit.

Wetlands: Discharges covered under this permit shall meet the wetland protection requirements of ch. NR 103, Wis. Adm. Code, and shall not adversely impact wetlands in accordance with s. NR 106.61(1)(b), Wis. Adm. Code. For discharges that impact wetlands, a facility will need to submit information that allows the department to determine if a discharge meets code requirements.

Outstanding and Exceptional Resource Waters: Discharges to outstanding and exceptional resource waters in ch. NR 102, Wis. Adm. Code, or discharges that would lower the water quality of downstream outstanding and exceptional water resources are not authorized by this permit as specified in s. NR 106.61(1)(c), Wis. Adm. Code. Regulation of discharges to outstanding and exceptional resource waters requires an individual permit which provides the oversight, monitoring and discharge limitations necessary to protect these types of receiving waters. The permittee can use the surface water data viewer (<http://dnrm.wi.gov/sl/?Viewer=SWDV>) to identify the outstanding and exceptional resource waters in the county that the discharge will occur.

Capability to Meet Limits: Any new or increased discharge of water where the permittee is found to not have the treatment capability to treat any proposed new or increased discharge and maintain treatment levels sufficient to meet the effluent limitations in this general permit is not authorized this general permit. The department requires that the applicant apply for coverage under an individual permit. The discharge will then be evaluated by the department under the antidegradation requirements of ch. NR 207, Wis. Adm. Code. The department may suggest that applicants evaluate a variety of options to ensure no significant lowering of water quality occurs in the receiving water. Options include improved wastewater treatment effectiveness, wastewater reuse, directing the discharge to a seepage area, an alternate discharge location, process changes to reduce the pollutant discharge level, pollutant prevention activities, etc.

Significant Lowering of Water Quality: In a case where a proposed discharge would result in the significant lowering of water quality in fish and aquatic life waters identified in s. NR 102.13, Wis. Adm. Code, Great Lakes system waters, and variance waters identified within ss. NR 104.05 through 104.10, Wis. Adm. Code, the discharge would not be authorized under this permit. The department requires that the applicant apply for coverage under an individual permit. The discharge will then be evaluated by the department under the antidegradation requirements of ch. NR 207, Wis. Adm. Code. The department may suggest that applicants evaluate a variety of options to ensure no significant lowering of water quality occurs in the receiving water. Options include improved wastewater treatment effectiveness, wastewater reuse, directing the discharge to a seepage area, an alternate discharge location, process changes to reduce the pollutant discharge level, pollutant prevention activities, etc.

Impaired Waters and TMDLs: This general permit is not applicable to discharges that will contain a pollutant in a measurable amount that will contribute to the impairment of a 303(d) listed impaired water or be in noncompliance with an approved Total Daily Maximum Load (TMDL) for a

watershed. Regulation of pollutants of concern to impaired waters or TMDLs are more appropriately regulated by another general permit or individual permit which will provide more oversight, monitoring and discharge limitations necessary to protect these impaired waters.

Hazardous Substances: Discharges of hazardous substances that are required to be reported under ch. NR 706, Wis. Adm. Code are not authorized by this permit. Exemptions for discharge of these substances require an individual permit which provides the oversight, monitoring and discharge limitations necessary to protect receiving waters. Section 292.11(2)(a), Wis. Stats., requires any person who possesses or controls a hazardous substance or who causes the discharge of a hazardous substance to notify the department **immediately** of any discharge not authorized by the permit.

Endangered and Threatened Resources: Discharges that affect endangered and threatened resources are not eligible for this permit, unless the department determines that the discharges comply with the endangered and threatened resource protection requirements of s. 29.604, Wis. Stats., and ch. NR 27, Wis. Adm. Code. Facilities with discharges that require more oversight to ensure that they do not violate these protection requirements may need to be covered by an individual permit. If the permittee has reason to believe that endangered and threatened resources will be impacted, then further Wisconsin Natural Heritage Inventory (NHI) screening should be conducted by the permittee. Please contact the [ER Review Program](#) if you need information about whether a proposed project may impact rare species or other sensitive resources.

Historical Properties: Discharges that will adversely affect any historic property that is listed property, or on the inventory or on the list of locally designated historic places under s. 44.45, Wis. Stats., are not eligible for this permit, unless the department determines that the discharges will not have an adverse effect on any historic property pursuant to s. 44.40(3), Wis. Stats. The department is required by law to review the project for historic preservation compliance. Please contact the [DNR Archaeologist](#) with any questions.

Indian Country: The department lacks the authority to issue WPDES permits within Indian Country due to the state delegation agreement with EPA. In such instances, EPA regulates the discharge and would issue a discharge permit.

Surface Water Standards and Groundwater Standards: The discharges from facilities eligible for this permit shall not have a reasonable potential to exceed any applicable surface water or groundwater standards. This also includes any other applicable surface water quality standards downstream of the discharge (i.e. tribal or other states). Facilities with discharges that have a reasonable potential (as specified in ch. NR 106, Wis. Adm. Code) to violate any applicable surface water quality standards or ch. NR 140, Wis. Adm. Code, groundwater quality standards would normally require the increased oversight, monitoring and water quality limitations found in a site-specific individual permit.

1.3 Permit Exclusions

Below is an explanation for all discharges excluded from requiring coverage under a WPDES permit.

Holding Tanks: Any portion of the water directed to a holding tank then pumped and hauled to publicly owned wastewater treatment works (POTW) is excluded under this general permit as the POTW already has a WPDES general permit. Rather, this general permit applies only to direct discharges to a water of the state.

Publicly Owned Wastewater Treatment Works: Any portion of the water directed to a publicly owned wastewater treatment works (POTW) is excluded under this general permit as the POTW already has a WPDES general permit. Rather, this general permit applies only to direct discharges to a water of the state.

2 Application for Permit Coverage

An applicant shall comply with the following requirements to obtain coverage and authorization to discharge to a water of the state under this general permit.

2.1 New Permittees

2.1.1 Submittal of a Notice of Intent

Any new permittee meeting the applicability criteria in Section 1 of this general permit and proposes a new or existing discharge that was not previously covered under WPDES Permit No. WI-0057681-04-0 prior to the **Effective Date** of this general permit shall submit a complete electronic Notice of Intent (eNOI) for coverage under this general permit at least 30 calendar days prior to discharging to a water of state in accordance s. NR 205.08(3), Wis. Adm. Code.

New permittees must submit an eNOI to obtain coverage under this general permit using the online ePermitting System pursuant to 40 CFR Part 127.

2.1.2 NOI Review Time Period

The department will evaluate the information submitted in the eNOI to determine whether the eNOI is true, accurate, complete, and whether the facility is eligible for coverage under the general permit within 30 calendar days of receipt of the complete NOI and associated attachments pursuant to s. NR 205.08(3), Wis. Adm. Code.

In accordance with s. NR 205.08(5), Wis. Adm. Code, if the department notifies an applicant that a discharge is ineligible for coverage under this general permit but still requires WPDES permit coverage, the applicant shall apply for and obtain coverage under an individual WPDES permit (or alternative general permit, if available) prior to discharging to the waters of the state. The necessary steps to apply for coverage under an individual permit can be found at the department website: <http://dnr.wi.gov/topic/wastewater/PermitApplications.html>.

2.1.3 Content of the NOI

The contents of the notice of intent shall be specified in the general permit and shall require the submission of information necessary for adequate program implementation, including at a minimum, the legal name and address of the owner or operator, the facility name and address, type of facility or discharges, the receiving stream(s), and other required data elements as identified in appendix A to part 127 pursuant to 40 CFR Part 122.28(b)(2)(ii).

2.1.4 NOI Attachments

Attachments to NOI are considered a part of the NOI and must be submitted pursuant to s. NR 205.08(3), Wis. Adm. Code.

2.1.5 Incomplete NOI

The department may require more information than what is provided in the notice of intent in order to determine if coverage under a general permit is appropriate pursuant to ss. NR 205.07(1)(L), NR 205.08(3), Wis. Adm. Code and s. 283.37(6), Wis. Stats.

2.1.6 Granting of Permit Coverage to New Permittees

The department will transmit a coverage letter via mail addressed to the permittee stating that the discharge from the facility is granted coverage under this general permit within 30 calendar days of receipt of the eNOI. The applicant may not discharge to a water of the state until a coverage letter has been received from the department. Initial coverage under this permit will become effective at a new facility beginning upon the **Start Date** specified by the department in the

coverage letter in accordance with s. NR 205.08(3), Wis. Adm. Code and 40 CFR 122.28(b)(2)(iv).

2.2 Existing Permittees

2.2.1 Granting of Permit Coverage to Existing Permittees

Any existing permittee that still meets the applicability criteria in Section 1 of this general permit and has an existing discharge that was previously covered under WPDES Permit No. WI-0057681-04-0 prior to the **Effective Date** of this general permit, the permittee is automatically granted coverage under this general permit upon the **Effective Date** in accordance s. NR 205.08(3), Wis. Adm. Code and 40 CFR 122.28(b)(2)(iv). For existing permittees, coverage under this permit will become effective at an existing facility beginning upon the **Effective Date** as the **Start Date** in accordance with 40 CFR 122.28(b)(2)(iii).

The department will transmit a reissuance letter via mail addressed to the existing permittee stating that the discharge from the facility is granted continued coverage under this general permit in accordance with s. NR 205.08(3), Wis. Adm. Code and 40 CFR 122.28(b)(2)(iv).

2.3 Groundwater Discharge Certification

The department may require the owner or operator to submit information regarding any discharge pursuant to s. 283.37(6), Wis. Stats. For the discharge to be regulated under Section 4 as a groundwater discharge, the permittee shall certify on the NOI that the discharge will be completely infiltrate into the ground via a seepage system with no accumulation of standing water or runoff to surface water via any pipe, ditch, channel, tunnel, conduit, swale, or storm sewer. If the permittee cannot certify that the discharge will completely infiltrate into the ground via a seepage system with no accumulation of standing water or runoff to surface water, the discharge will be regulated as a surface water discharge under Section 3.

3 Surface Water Discharge Requirements

The requirements of this section only apply to point source discharges to surface waters. Surface water point source discharges means any discernible, confined and discrete conveyance system including but not limited to any pipe, ditch, channel, tunnel, conduit, swale, or storm sewer that will carry water to surface waters within the state of Wisconsin. Discharges of water to a storm water pond that is hydraulically connected to a surface water or to a wetland are considered surface water point source discharges consistent with s. NR 102.245(1), Wis. Adm. Code.

3.1 Sampling Point(s)

In accordance with s. NR 218.07, Wis. Adm. Code, the location of sampling points shall be as specified in an applicable permit. 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 | The permittee shall sample the hydrostatic test water from hydrostatic testing any petroleum system; hydrostatic test water from hydrostatic testing any industrial potable and non-potable water system; and/or flushing water from the cleaning, disinfecting, and/or flushing any industrial potable and non-potable water system following treatment (if applicable) at the end of pipe or prior to entering any pipe, ditch, channel, tunnel, conduit, swale, or storm sewer that will discharge to surface water or wetlands via Outfall 001. The permittee shall take representative samples of the discharge that consists solely of the water before mixing with any other water. The permittee is only required to collect samples when there is a discharge to surface water or wetlands; if there are no discharges within the reporting frequency the permittee shall report no discharge consistent with Sections 5.1 and 5.3. |

3.2 Monitoring Requirements and Effluent Limitations for Hydrostatic Test Water and/or Water System Flushing

According to s. NR 205.08(2), Wis. Adm. Code, the department may include monitoring requirements and effluent limitations in general permits. Additionally, samples shall be taken at the frequencies specified in the WPDES permit authorizing discharge pursuant to s. NR 218.10, Wis. Adm. Code. The permittee shall comply with the following monitoring requirements and limitations for each applicable outfall.

3.2.1 Sampling Point (Outfall) 001 – Hydrostatic Test Water and/or Water System Flushing

| Monitoring Requirements and Effluent Limitations | | | | | | |
|--|------------|-----------------|------------------|-------------|---------------------|-------|
| Parameter | Limit Type | Limit and Units | Sample Frequency | Sample Type | Reporting Frequency | Notes |
| Flow Rate | - | gpd | Daily | Total Daily | Monthly | |
| Suspended Solids, Total | Daily Max | 40 mg/L | Weekly | Grab | Monthly | |
| | - | lbs/day | | | | |
| pH Field | Daily Min | 6.0 s.u. | Weekly | Grab | Monthly | |
| | Daily Max | 9.0 s.u. | | | | |

Explanation of Monitoring Requirements and Effluent Limitations

Flow Rate: In accordance with 40 CFR Part 122.44(i)(1), to assure compliance with permit limitations and ensure all discharge events are reported, monitoring is required for the volume of effluent discharged from each outfall. Therefore, the permittee is required to estimate the total daily flow rate for each discharge.

Total Suspended Solids (TSS): The limit for TSS of 40 mg/L as a daily maximum is achievable by applying best practicable control technology currently available for these types of discharges. This established effluent limitation is based on the average of the best performance of the treatment technologies used for these similar types of discharges. This determination was based on best professional judgment in accordance with s. NR 220.21, Wis. Adm. Code.

pH Monitoring: The pH is limited to the range of 6.0 to 9.0 standard units. This is consistent with the water quality standards pH range for waters classified for fish and aquatic life as defined in ch. NR 102.04(c), Wis. Adm. Code. Any water with a pH outside the range of 6.0 to 9.0 s.u. shall not be discharged directly to surface waters.

3.2.1.1 Flow Rate

In accordance with 40 CFR Part 122.44(i)(1), to assure compliance with permit limitations, monitoring is required for the volume of effluent discharged from each outfall. Therefore, the permittee is required to estimate the flow rate being discharged through each outfall. The methods for measuring or estimating flow are based on ss. NR 218.04(15), and NR 218.05, Wis. Adm. Code.

3.2.1.2 Total Suspended Solids (TSS) Monitoring

Discharges may introduce suspended solids to the source water from chemicals to sediments. Therefore, the permittee shall monitor the discharge for TSS and limit the TSS concentration.

3.2.2 Additional Monitoring Requirements to Outfall 001

According to s. NR 205.08(2), Wis. Adm. Code, the department may include monitoring requirements and effluent limitations in general permits. Additionally, samples shall be taken at the frequencies specified in the WPDES permit authorizing discharge pursuant to s. NR 218.10, Wis. Adm. Code. The permittee shall comply with the following monitoring requirements and limitations for each applicable outfall.

| Monitoring Requirements and Effluent Limitations | | | | | | |
|--|------------|-----------------|------------------|-------------|---------------------|-------|
| Parameter | Limit Type | Limit and Units | Sample Frequency | Sample Type | Reporting Frequency | Notes |
| Oil & Grease (Hexane) | Daily Max | 15 mg/L | Weekly | Grab | Monthly | |
| Chlorine, Total Residual | Daily Max | 19 µg/L | Weekly | Grab | Monthly | |
| Dissolved Oxygen | Daily Min | See Permit Note | Weekly | Grab | Monthly | |
| Phosphorus, Total | - | mg/L | Weekly | Grab | Monthly | |
| | - | lbs/day | | Calculated | | |
| Water Treatment Additives - Specify | TBD | TBD | Weekly | Grab | Monthly | |

Explanation of Monitoring Requirements and Effluent Limitations

Oil & Grease: The limit for oil & grease of 15 mg/L daily maximum is achievable by application of best practicable control technology currently available for these types of discharges. This established effluent limitation is based on the ability of simple oil/water separator equipment to easily remove oil and grease from the discharge to concentrations below 15 mg/L. This determination was based on best professional judgment in accordance with s. NR 220.21, Wis. Adm. Code. Chapter NR 219, Wis. Adm. Code, specifies that the Freon Oil & Grease test method is no longer approved and shall not be used. Permittees shall either use the hexane extractable material (HEM) or silica gel treated HEM test methods as provided in ch. NR 219, Wis. Adm. Code.

Total Residual Chlorine (TRC): The TRC limit in this permit is based on acute toxicity criteria in Table 1 of s. NR 105.06, Wis. Adm. Code.

Dissolved Oxygen (DO): The DO limits in this permit are based on water quality standards from surface waters classified as fish and aquatic life as specified in s. NR 102.04(4)(a) and (b), Wis. Adm. Code.

Total Phosphorus: Total phosphorus monitoring was added to permit to assess the levels of phosphorus in source waters that have phosphorus containing additives to determine if there is reasonable potential to exceed phosphorus water quality standards in chs. NR 102 and NR 217, Wis. Adm. Code.

Water Treatment Additives: The permittee is required to monitor and limit the discharge for those water treatment additives determined by the department as needing effluent limits under Section 6. The effluent limitations, limit type, and sample type for substances will be stated in the additive use approval letter. The calculation of the effluent limits for water treatment additives are based on procedures for calculating water quality-based effluent limitations for point source discharges to surface waters in ch.

NR 106, Wis. Adm. Code. Water treatment additives already present in the water supply system do not need to be reviewed and approved.

3.2.2.1 Oil & Grease Monitoring

In accordance with 40 CFR 122.28(a)(4), general permits must clearly identify the applicable conditions for each category or subcategory of dischargers covered by the permit. Oil and grease are not expected in levels of concern when hydrostatic testing is conducted in infrastructure not related to petroleum products (e.g. watermains). Therefore, the permit requires oil and grease monitoring and limits only if the department determines the permittee discharges hydrostatic test water from existing petroleum system. Oil and grease monitoring and limits are retained to ensure that existing petroleum systems are properly physically cleaned to prevent discharge of petroleum contaminated water from tank bottoms, construction debris, raw material, intermediate product, final product, or waste products prior to hydrostatic testing.

3.2.2.2 Total Residual Chlorine (TRC) Monitoring

In accordance with 40 CFR 122.28(a)(4), general permits must clearly identify the applicable conditions for each category or subcategory of dischargers covered by the permit. The permittee shall monitor the discharge for TRC and limit the TRC concentration to a daily maximum of 19 µg/L or less if the department determines the permittee adds chlorine-based additives to the water prior to discharge or the source water contains chlorine or chlorine compounds except if the department approves a higher TRC limit based on Section 3.2.2.2.1 or a monitoring waiver in Section 3.2.2.2.3. The permittee shall have total residual chlorine samples tested and analyzed within 15 minutes of sample collection consistent with the holding times for wastewater listed in Table F of ch. NR 219, Wis. Adm. Code.

Chlorine is very toxic to fish and aquatic organisms at low levels. Many chlorine-based additive products and water utilities disinfect their water supplies with chlorine or chloramines to ensure protection of human health from microbial or algal contamination. Normally, the concentration of total residual chlorine in water supplies is about 0.01 mg/L to 1.9 mg/L. These levels exceed the acute water quality criterion in Table 1 of s. NR 105.06, Wis. Adm. Code. Therefore, the permittee shall monitor the discharge for TRC and limit the TRC concentration chlorine-based additives to the water prior to discharge or the source water contains chlorine or chlorine compounds.

Total residual chlorine is the sum of free available chlorine residual and combined available chlorine residual. Combined available chlorine residual is the residual consisting of chlorine that is combined with ammonia, nitrogen, or nitrogenous compounds (chloramines). Free available chlorine residual is the residual consisting of hypochlorite ions (OCl⁻), hypochlorous acid (HOCl) or a combination of the two. Typical chlorine-based water treatment additives used in water treatment disinfection include chlorine gas, sodium hypochlorite, or calcium hypochlorite.

The National Environmental Methods Index (NEMI) <www.nemi.gov>. NEMI is a Web-based, searchable clearinghouse of methods supported by the U.S. Geological Survey and EPA's Office of Water. NEMI contains summaries of more than 1,100 methods and describes them by their performance characteristics and their regulatory status, relative cost, detection level, detection level type, accuracy, precision, spiking level, instrumentation, lab equipment, and the *greenness* of analytic methods.

3.2.2.2.1 TRC Limitations to High Flow Streams

If the discharge is to a high flow stream with a stream flow to effluent flow greater than or equal to 2:1 or a lake or impoundment that does not exhibit unidirectional flow, the

department may determine upon the effective date of this general permit or at the time of the submittal of the Notice of Intent (NOI), daily maximum TRC limit of 38 µg/L. This calculation for TRC limits to high flow streams is consistent with s. NR 106.06, Wis. Adm. Code. Those facilities that fail have enough mixing and dilution will have to meet a daily maximum limit of 19 µg/L at the end of the pipe.

3.2.2.2.2 Compliance with TRC Limits when Limit is Less than LOD

Conditions for compliance with TRC limits when limit is less than LOD is based on the requirements from s. NR 106.07(6), Wis. Adm. Code.

3.2.2.2.3 TRC Monitoring Waiver

A unique property of chlorine is that chlorine is highly reactive and rapidly dissipates in the environment. This dissipation will only occur in situations where the effluent is exposed to the atmosphere. For instance, the chlorine concentration entering a surface water may be significantly lower if the effluent first enters a storm sewer system, storm water or treatment pond system, or a combination of both prior to entering the surface water in question. Therefore, the department may approve in writing a monitoring waiver for TRC considering the above situations. This is based similar practices used for noncontact cooling water discharges consistent with s. NR 106.10(1), Wis. Adm. Code using best professional judgment in accordance with s. NR 220.21, Wis. Adm. Code. The permittee must provide reasonable hydraulic calculations or sampling data to the department showing that the residual chlorine in the discharge will be dissipated below the chlorine limits prior to entering the surface water, certify that there is no reasonable potential that TRC limits will be exceeded in the discharge when entering the surface water; and submit a monitoring waiver request to the department at the time of the submittal of the NOI.

3.2.2.3 Dissolved Oxygen (DO) Monitoring

In accordance with 40 CFR 122.28(a)(4), general permits must clearly identify the applicable conditions for each category or subcategory of dischargers covered by the permit. Commonly used chemicals in hydrostatic testing are biocides, corrosion inhibitors and oxygen scavengers. These chemical agents may consume oxygen in the process. Also, some dechlorination chemicals may consume oxygen. However, the department believes that facilities that do not added chemicals or facilities discharging the water to a vegetative swale system, storm water pond system or combination of storm water conveyance system and storm water pond system where natural aeration occurs are expected to meet the DO limits. Therefore, this permit requires DO monitoring and limits only if chemicals are added prior to discharge and the chemicals are known to scavenge or remove oxygen and does not discharge to o a vegetative swale system, storm water pond system or combination of storm water conveyance system and storm water pond system that will convey the water to a surface water or wetland. The permittee shall have DO samples tested and analyzed within 15 minutes of sample collection consistent with the holding times for wastewater listed in Table F of ch. NR 219, Wis. Adm. Code.

The permittee shall maintain a DO content of 5 mg/L or greater in the discharge to all surface waters except if the discharge is to a classified trout stream then DO content in the discharge must be 6 mg/L or greater. If the permittee discharges to a trout stream, the permittee must maintain a DO content of 7 mg/L or greater in the discharge during the spawning season. Trout species are very sensitive to changes in DO levels in the stream especially during spawning so extra protection is provided in this permit during spawning season. Trout spawning season runs September 15th through May 15th for all trout streams, the Root River (Racine County), the Kewaunee River (Kewaunee County) and Strawberry Creek (Door

County). Permittees may request a waiver or modification to this time period in writing if they believe this is not representative of the trout spawning season in the receiving water.

3.2.2.4 Total Phosphorus (TP) Monitoring

In accordance with 40 CFR 122.28(a)(4), general permits must clearly identify the applicable conditions for each category or subcategory of dischargers covered by the permit. The permittee is only required to monitor TP if the department determines that the permittee adds phosphorus containing additives to the water prior to discharge or the water already contains phosphorus or phosphorus compounds.

Many public water utilities will dose orthophosphates to the water distribution for corrosion control. Many water treatment facilities will also add polyphosphate additives as sequestering agents for treatment of groundwaters with low to moderate levels of iron and/or manganese. These phosphates may have the potential to be in the discharge. Therefore, the department has added total phosphorus monitoring to the permit to assess if the levels of phosphorus warrant limitation to protect water quality in future permit reissuances.

Total phosphorus is the sum of all orthophosphates and condensed phosphates, soluble and particulate, as well as organic and inorganic fractions. Typical orthophosphates, polyphosphates, condensed phosphates, and other phosphate additives used in water treatment include: phosphoric acids, monosodium phosphate, disodium phosphate, trisodium phosphate, monopotassium phosphate, dipotassium phosphate, tricalcium phosphate, sodium acid pyrophosphate, sodium trimetaphosphate, tetrasodium pyrophosphate, sodium tripolyphosphate, tetrapotassium pyrophosphate, tetrapotassium pyrophosphate, and sodium hexametaphosphate.

3.2.3 Sampling Frequency and Reporting Reduction for Recurring Hydrostatic Testing and/or Flushing Discharges

In accordance with s. NR 205.066, Wis. Adm. Code, the department shall determine on a case-by-case basis the monitoring frequency to be required for each effluent limitation in a permit. The selected sampling frequency and reporting reductions will allow for a permittee to establish a sampling and reporting frequency that works with their standard maintenance schedule for recurring hydrostatic testing or water system flushing at a single facility site and still allow for the collection of a representative sample of the hydrostatic test water or flushing water. Also, this will reduce the number of blank reports that will need to be submitted when there is no discharge.

3.3 Temporary Surface Water Intake Requirements

Section NR 205.10, Wis. Adm. Code provides that best management practices to control or abate the discharge of pollutants shall be included in WPDES permits.

3.3.1 Intake Screen Discharges and Removed Substances

This condition is included pursuant to s. NR 205.07(3)(a), Wis. Adm. Code.

3.3.2 Endangered Species Act

This permit does not authorize take of threatened or endangered species. Contact the state Natural Heritage Inventory (NHI) staff with inquiries regarding incidental take of state-listed threatened and endangered species and the US Fish and Wildlife Service with inquiries regarding incidental take of federally listed threatened and endangered species.

3.3.3 Invasive Species Control

The permittees must use all known, available, and reasonable methods of pollution control, prevention, and treatment when discharging to a surface water of the state to prevent the spread of

invasive species to comply with the invasive species identification, classification, and control requirements of ch. NR 40, Wis. Adm. Code. These control requirements are especially important if the project will use surface water as source water that is different from the receiving water.

3.4 Surface Water Narrative Requirements

Surface water narrative water quality criteria pursuant to s. NR 102.04(1), Wis. Adm. Code, are included in the permit. These criteria shall be followed at all times and under all flow and water level conditions.

3.5 Wetland Narrative Requirements

Wetland narrative water quality criteria pursuant to s. NR 103.03(2), Wis. Adm. Code, are included in the permit. These criteria shall be followed at all times so that wetland water quality related functional values or uses of wetlands as stated in s. NR 103.03(1), Wis. Adm. Code are protected:

4 Groundwater Discharge Requirements

The requirements of this section only apply to point source discharges to groundwater. Groundwater point source discharge means any discernible, confined and discrete conveyance system including but not limited to any pipe, ditch, channel, tunnel, conduit, swale, or storm sewer that will carry water to a permeable surface, absorption pond, or seepage cell system that infiltrates or seeps the water into the soil that may impact groundwater quality. Discharge of water to a storm water pond that is not hydraulically connected to a surface water and is completely confined on the property of the permittee is considered a groundwater point source discharge.

4.1 Sampling Point(s)

In accordance with s. NR 218.07, Wis. Adm. Code, the location of sampling points shall be as specified in an applicable permit. 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, Waste Type/Sample Contents and Treatment Description (as applicable) |
| 002 | The permittee shall sample the hydrostatic test water from hydrostatic testing any petroleum system; hydrostatic test water from hydrostatic testing any industrial potable and non-potable water system; and/or flushing water from the cleaning, disinfecting, and/or flushing any industrial potable and non-potable water system following treatment (if applicable) at the end of pipe or prior to entering any pipe, ditch, channel, tunnel, conduit, swale, or storm sewer that will discharge to any seepage system via Outfall 002. The permittee shall take representative samples of the discharge that consists solely of the water before mixing with any other water. The permittee is only required to collect samples when there is a discharge to groundwater; if there are no discharges within the sampling frequency the permittee shall report no discharge consistent with Sections 5.1 and 5.3. |

4.2 Monitoring Requirements and Effluent Limitations for All Groundwater Discharges

According to s. NR 205.08(2), Wis. Adm. Code, the department may include monitoring requirements and effluent limitations in general permits. Additionally, samples shall be taken at the frequencies specified in the WPDES permit authorizing discharge pursuant to s. NR 218.10, Wis. Adm. Code. The permittee shall comply with the following monitoring requirements and limitations.

4.2.1 Sampling Point (Outfall) 002 – All Groundwater Discharges

| Monitoring Requirements and Effluent Limitations | | | | | | |
|--|------------|-----------------|------------------|---------------------|-------------|-------|
| Parameter | Limit Type | Limit and Units | Sample Frequency | Reporting Frequency | Sample Type | Notes |
| Flow Rate | - | gpd | Daily | Monthly | Total Daily | |

Explanation of Monitoring Requirements and Effluent Limitations

Flow Rate: The discharge to each seepage system shall be monitored for total daily discharge volume consistent with s. NR 214.12(4)(a), Wis. Adm. Code. Therefore, the permittee is required to estimate the total daily flow rate for each discharge to groundwater.

4.2.1.1 Flow Rate

The discharge to each seepage system shall be monitored for total daily discharge volume consistent with s. NR 214.12(4)(a), Wis. Adm. Code. The methods for measuring or estimating flow are based on ss. NR 218.04(15), and NR 218.05, Wis. Adm. Code.

4.2.2 Additional Monitoring Requirements to Outfall 002 for Hydrostatic Test Water from Existing Petroleum Systems

According to s. NR 205.08(2), Wis. Adm. Code, the department may include monitoring requirements and effluent limitations in general permits. Additionally, samples shall be taken at the frequencies specified in the WPDES permit authorizing discharge pursuant to s. NR 218.10, Wis. Adm. Code. The permittee shall comply with the following monitoring requirements and limitations for each applicable outfall.

| Monitoring Requirements and Effluent Limitations | | | | | | |
|--|------------|-----------------|------------------|-------------|---------------------|---------------------|
| Parameter | Limit Type | Limit and Units | Sample Frequency | Sample Type | Reporting Frequency | Notes |
| Oil & Grease (Hexane) | Daily Max | 15 mg/L | Weekly | Grab | Monthly | See Section 4.2.2.1 |

Explanation of Monitoring Requirements and Effluent Limitations

Oil & Grease: The limit for oil & grease of 15 mg/L daily maximum is achievable by application of best practicable control technology currently available for these types of discharges. This established effluent limitation is based on the ability of simple oil/water separator equipment to easily remove oil and grease from the discharge to concentrations below 15 mg/l. This determination was based on best professional judgment in accordance with s. NR 220.21, Wis. Adm. Code. Chapter NR 219, Wis. Adm. Code, specifies that the Freon Oil & Grease test method is no longer approved and shall not be used. Permittees shall either use the hexane extractable material (HEM) or silica gel treated HEM test methods as provided in ch. NR 219, Wis. Adm. Code. The sample frequency for oil & grease shall follow the monitoring frequencies stated for each discharge type.

4.2.2.1 Oil & Grease Monitoring

In accordance with 40 CFR 122.28(a)(4), general permits must clearly identify the applicable conditions for each category or subcategory of dischargers covered by the permit. Oil and grease are not expected in levels of concern when hydrostatic testing is conducted in infrastructure not related to petroleum products (e.g. watermains). Therefore, the permit requires oil and grease monitoring and limits only if the department determines the permittee discharges hydrostatic test water from existing petroleum system. Oil and grease monitoring and limits are retained to ensure that existing petroleum systems are properly physically cleaned to prevent discharge of petroleum contaminated water from tank bottoms, construction debris, raw material, intermediate product, final product, or waste products prior to hydrostatic testing.

5 Reporting Requirements for Surface Water and Groundwater Discharges

According to s. NR 205.08(2), Wis. Adm. Code, the department may include reporting requirements in general permits. The permittee shall comply with the following reporting requirements for surface water and groundwater discharges.

5.1 Reporting of Monitoring Results

The permit now requires that monitoring results be submitted on an electronic discharge monitoring report (eDMR) instead of a paper annual report in accordance with s. NR 205.07(1)(r), Wis. Adm. Code and 40 CFR Part 127. The eDMRs are due 21 days after the end of the reporting frequency. The eDMR shall be submitted regardless if there is a discharge or not during any reporting frequency.

5.2 Reporting of Monitoring Results for Pervious Permit

Any existing permittee that was previously covered under WPDES Permit No. WI-0057681-04-0 prior to the **Effective Date** of this general permit shall submit any water monitoring data that was required to be sampled and reported for January to July 2021 under WPDES Permit No. WI-0057681-04-0 on a paper DMR by August 21, 2021 pursuant to s. NR 205.07(1)(a), Wis. Adm.

5.3 Reporting Conventions

The permittee shall use the conventions specified in the permit when reporting effluent monitoring results except when noted otherwise in the permit. These conventions are in accordance with ss. NR 106.07(6)(e) and 106.14(3), Wis. Adm. Code.

5.4 Blanket/Statewide Coverage Requirements

5.4.1 Discharge Monitoring and Reporting

The monitoring and reporting requirements for permittees with statewide coverage will ensure that all hydrostatic discharges that will occur across the state of Wisconsin are sampled and reported accordingly consistent with this general permit.

5.4.2 Impaired Waters, TMDL Waters, Wetlands, Outstanding or Exceptional Resource Waters

Statewide operations may encounter impaired waters, TMDL waters, wetlands, outstanding resource waters, and exceptional resource waters as potential discharge locations. However, this general permit does not allow discharge to outstanding or exceptional resource water. Nor does this general permit allow discharge to wetlands, TMDL water, impaired waters unless determined by the department to meet the requirements in Section 7. Therefore, permittees who perform statewide operations shall develop procedures to properly identify and screen for impaired waters, TMDL waters, wetlands, outstanding resource waters, and exceptional resource waters.

5.4.3 Alternative Disposal Procedures

This general permit does not allow discharge to outstanding or exceptional resource water. Nor does it allow new or increased discharge to impaired waters, TMDL waters and wetlands unless determined by the department to meet the requirements in Section 7. Therefore, permittees who perform statewide operations shall develop alternative disposal procedures to avoid discharging to outstanding resource waters, and exceptional resource waters and if necessary impaired waters, TMDL waters, or wetlands.

5.4.4 Seven (7)-Day Discharge Notification

The permittee shall notify the department via email at least seven (7) calendar days prior to discharge to a water of state. This notification will allow to properly implement the discharge monitoring requirements in this general permit for each hydrostatic testing discharge, and keep the department informed of discharge activities happening throughout state in case of the need for inspection or complaints. The notification shall include the information stated in the permit pursuant to s. 283.37(6), Wis. Stats.

On a case-by-case basis the department may by letter require the permittee to submit additional information regarding a wastewater discharge which is covered by a general permit in accordance with s. NR 205.08(3), Wis. Adm. Code.

6 Water Treatment Additives

6.1 Use of Water Treatment Additives

The permittee shall not add any substance or water treatment additive to the discharge to a surface water unless the use of the water treatment additive is reviewed and approved, in writing, by the department pursuant to s. 283.31(3)(d)1., Wis. Stats. and ss. NR 105.02(3), NR 105.05, NR 106.05(1)(b), and NR 106.10, Wis. Adm. Code, to protect Wisconsin's surface water resources from such products. A water treatment additive review by the department is only necessary for water treatment additives that may enter surface water without receiving treatment. Water treatment additives already present in the water supply system do not need to be reviewed and approved.

Examples of water treatment additives added at the point of discharge include biocides (i.e. algaecides, microbicides, fungicides, molluscicides, etc.), water quality conditioners (i.e. scale and corrosion inhibitors, pH adjustment chemicals, oxygen scavengers, conditioning agents, and water softening compounds, etc.), dechlorination chemicals, erosion control products, and clarifying agents.

6.2 Approval of Water Treatment Additives Usage

On April 23rd, 2015, the department released guidance entitled "Water Quality Review Procedures for Additives" (3400-2015-03), which is available at <https://dnr.wisconsin.gov/topic/Wastewater/Additives.html>. This guidance supports the authority of s. 283.31(3)(d)1., Wis. Stats. and ss. NR 105.02(3), NR 105.05, NR 106.05(1)(b), and NR 106.10, Wis. Adm. Code, to protect Wisconsin's surface water resources from such products. This guidance document establishes procedures to calculate secondary acute and chronic values for water treatment additives pursuant to ss. NR 105.05 and NR 105.06, Wis. Adm. Code. Secondary acute values are the concentrations of a pollutant in surface water that protect aquatic life from adverse short-term effects. Therefore, facilities shall submit information regarding the toxicity of any added substances or additives to the discharge as specified in the permit, so the department can determine if it is allowable and will not negatively impact aquatic life or human health. The department shall also be informed of significant changes in additive usage or new additives that would raise the potential for negative impacts on aquatic life or human health.

6.2.1 New Discharge

Any permittee that proposes a new discharge to a surface water during the permit term that has not been covered under this general permit and wishes to commence use of a water treatment additive, the permittee shall submit a copy of the Additive Review Worksheet and SDS to the department for each water treatment additive used which requires department approval with the NOI. The department will transmit the additive use approval on the coverage letter to the permittee. The permittee shall comply with the conditions specified in the coverage letter.

These requirements are based on ss. NR 106.10(2), NR 205.07(1)(L), NR 205.08(3), Wis. Adm. Code and s. 283.37(6), Wis. Stats.

6.2.2 Existing Discharge

Any permittee with an existing discharge that has been granted coverage under this general permit during the permit term and wishes to commence use of a new water treatment additive or increase the usage of an approved water treatment additive, the permittee shall submit a written request with a copy of the Additive Review Worksheet and SDS to the department for each water treatment additive used which requires department approval. The permittee must receive written approval from the department prior to initiating such changes. The department will transmit an additive use approval letter to the permittee. The permittee shall comply with the conditions specified in the approval letter.

These requirements are based on ss. NR 106.10(2), NR 205.07(1)(L), NR 205.07(3)(c), NR 205.08(3), Wis. Adm. Code and s. 283.37(6), Wis. Stats.

6.3 Water Treatment Additive Usage Record

Facilities are required to maintain records of additive use for department inspection. Recording additive use will provide documentation for the facility and the department to verify that the additive is being used and discharged in accordance with the permit requirements.

6.4 Public Notice of Additive Use Restrictions

If the department determines that a water treatment additive requires a usage restriction and effluent limits, the department is required to public notice those proposed limits prior to the limits becoming effective and implemented through this general permit. The public notice period is to last 30-days and be issued in a newspaper of general circulation in the area affected by the discharge and the department's public notice webpage. The public notice procedures are based on s. NR 203.02, Wis. Adm. Code.

7 Antidegradation, Impaired Waters & TMDLs, and Wetland Requirements

7.1 Antidegradation Policy Statement

Any proposed new or increased discharge to surface water of the state that meets the applicability criteria in Section 1 and the application requirements in Section 2 and that the department has determined via letter that the discharge is authorized for coverage under this general permit is in compliance with the antidegradation policy in s. NR 102.05(1)(a), Wis. Adm. Code, and antidegradation evaluation procedures in ch. NR 207, Wis. Adm. Code for the following reasons:

- Any permittee that proposes new or increased discharge to surface water of the state applying for coverage under this general permit shall establish the treatment capability to treat the proposed new or increased discharge and maintain treatment levels sufficient to meet the effluent limitations in this permit. Those permittees that do not have treatment capability to treat any proposed new or increased discharge and maintain treatment levels sufficient to meet the effluent limitations are not authorized under this general permit and must either apply for an individual permit or find an alternative discharge location.
- Effluent limitations in this general permit are based on applicable procedures and criteria in chs. NR 102, NR 103, NR 105 and NR 106, Wis. Adm. Code and on categorical effluent limitation procedures pursuant to chs. NR 200 to NR 297, Wis. Adm. Code as appropriate.
- Any proposed new or increased discharge that is found to result in a significant lowering of water quality by containing pollutants not regulated by this general permit at levels that exceed water quality standards in n chs. NR 102, NR 104, NR 105, NR 106, NR 207, and NR 217 Wis. Adm. Code are not authorized under this general permit and must either apply for an individual permit or find an alternative discharge location.
- Any proposed new or increased discharge to outstanding and exceptional resource waters in ch. NR 102, Wis. Adm. Code, or discharges that would lower the water quality of downstream outstanding and exceptional water resources are not authorized by this permit and must either apply for an individual permit or find an alternative discharge location.
- Any discharge will contain a pollutant of concern that will contribute to the impairment of a 303(d) listed impaired water or be in noncompliance with an approved Total Daily Maximum Load (TMDL) are not authorized by this permit and must either apply for an individual permit or find an alternative discharge location.

7.2 Impaired Waters & TMDL Requirements

7.2.1 Report Discharge to an Impaired Surface Water or TMDL

7.2.1.1 New Permittee

Any new permittee or existing permittee that proposes a new discharge during the permit term that was not previously covered under WPDES Permit No. WI-0057681-04-0 prior to the **Effective Date** of this general permit, shall report on the NOI if the water discharge has a detectable pollutant of concern (i.e. total suspended solids and total phosphorus) that discharges to an impaired surface water or a surface water with a State and EPA approved Total Daily Maximum Load (TMDL).

These requirements are based on ss. NR 205.07(1)(L), NR 205.08(3), Wis. Adm. Code and s. 283.37(6), Wis. Stats.

7.2.1.2 Existing Permittee

Any existing permittee that had an existing water discharge to an impaired surface water or a surface water with a State and EPA approved TMDL that was previously covered under WPDES Permit No. WI-0057681-04-0 prior to the **Effective Date** of this general permit, shall notify the department if the existing water discharge has a detectable pollutant of concern (i.e. total suspended solids and total phosphorus) that discharges to an impaired surface water or a surface water with a State and EPA approved TMDL.

These requirements are based on ss. NR 106.10(2), NR 205.07(1)(L), NR 205.07(3)(c), NR 205.08(3), Wis. Adm. Code and s. 283.37(6), Wis. Stats.

7.2.2 Department Determinations

The department may not issue a permit for any new or increased discharge of a pollutant of concern to an impaired water or a surface water with an approved TMDL until the department has determined that the new or increased discharge meets the antidegradation requirements provided ch. NR 207, Wis. Adm. Code and the discharge does not contribute to the receiving water impairment or the discharge is inconsistent with the State and Federal approved TMDL pursuant to s. 283.31(3), Wis. Stats and 40 CFR Part 122.4. If the department determines that the new or increased discharge does not meet the antidegradation requirements provided in ch. NR 207, Wis. Adm. Code or the discharge does contribute to the receiving water impairment or the discharge is consistent with the State and Federal approved TMDL, the permittee must apply for coverage under for an individual permit or find an alternative discharge location such as discharging to groundwater to potentially remain eligible for this general permit.

7.2.3 Impaired Water and TMDL Compliance

In accordance with 40 CFR 122.28(a)(4), general permits must clearly identify the applicable conditions for each category or subcategory of dischargers covered by the permit. If the permittee will have a water discharge with a detectable pollutant of concern to an impaired water or a surface water with an approved TMDL, the permittee is required to calculate the mass loading of the pollutant of concern discharged if that pollutant is required to be monitored in this general permit. The permittee must comply with the pollutant wasteload allocation granted to general permit discharges in any State and EPA approved TMDLs pursuant to s. 283.31(3), Wis. Stats. General permit discharges located inside of a permitted Municipal Separate Storm Sewer Systems (MS4s) may be included in the wasteload allocation for MS4s. If department determines that sufficient allocation has not been set aside for general permit facilities, facilities may be switched to individual permits with discharge requirements placed in the permit sufficient to meet the TMDL allocations and/or reserve capacity may be used to increase the WLA for general permits, where necessary.

7.3 Wetland Requirements

7.3.1 Report Discharge to Wetland

7.3.1.1 New Permittee

Any new permittee or existing permittee that proposes a new discharge to a wetland during the permit term that that was not previously covered under WPDES Permit No. WI-0057681-04-0 prior to the **Effective Date** of this general permit, shall report on the NOI if the water will be a to wetland. Any water discharge to wetland is considered a surface water discharge and must comply with the surface water discharge requirements in Section 3. Additionally, the permittee shall provide no practical alternatives analysis documentation as an attachment to the NOI per Section 7.3.2.

These requirements are based on ss. NR 205.07(1)(L), NR 205.08(3), Wis. Adm. Code and s. 283.37(6), Wis. Stats.

7.3.1.2 Existing Permittee

Any existing permittee that had an existing water discharge to a wetland that was previously covered under WPDES Permit No. WI-0057681-04-0 prior to the **Effective Date** of this general permit, shall notify the department if the existing water discharge will be to a wetland. If existing discharge will be to a wetland, the permittee must comply with the surface water discharge requirements in Section 3.

These requirements are based on ss. NR 106.10(2), NR 205.07(1)(L), NR 205.07(3)(c), NR 205.08(3), Wis. Adm. Code and s. 283.37(6), Wis. Stats.

7.3.2 No Practical Alternatives Analysis

The permittee is required to submit no practical alternatives analysis to the department based on s. NR 103.08(4), Wis. Adm. Code if the discharge activities are in conformance the wetland protection requirements in ch. NR 103, Wis. Adm. Code.

7.3.3 Department Determinations

The permittee may not establish a new or increased discharge to a wetland until the department has determined that the proposed discharge meets the wetland requirements in Section 7.3.1 and Section 7.3.2 and in ch. NR 103, Wis. Adm. Code and the proposed discharge will not result in significant adverse impacts to wetland functional values, significant adverse impacts to water quality or other significant adverse environmental consequences pursuant to s. NR 103.08(4)(a), Wis. Adm. Code. If the department determines that the proposed discharge will not meet the wetland requirements in Section 7.3.1 and Section 7.3.2 and in ch. NR 103, Wis. Adm. Code and the proposed discharge will result in significant adverse impacts to wetland functional values, significant adverse impacts to water quality or other significant adverse environmental consequences, the permittee must apply for coverage under for an individual permit or find an alternative discharge location such as discharging to groundwater to potentially remain eligible for this general permit.

8 Standard Requirements

According to s. NR 205.08(2), Wis. Adm. Code, the department may include general conditions (standard requirements) in general permits.

8.1 General Conditions for General Permits

8.1.1 Delegation of Signature Authority

The delegation of signature authority requirements for general permit are based on s. NR 205.07(1)(g), Wis. Adm. Code.

8.1.2 Permit Coverage Transfers

The transfer of permit coverage requirements for general permits are based on s. NR 203.136(1)(p), Wis. Adm. Code, s. 283.53(2d)(d), Wis. Stats, and 40 CFR Part 122.61(b).

8.1.3 Permit Coverage Terminations

The termination of permit coverage requirements for general permits are based on s. NR 203.136(3), Wis. Adm. Code, s. 283.53(2h), Wis. Stats, and 40 CFR Part 122.64(c).

8.1.4 Continuation of an Expired General Permit

The continuation of an expired general permit is based on s. NR 205.07(1)(n), Wis. Adm. Code and 40 CFR Part 122.28(b)(2)(i).

8.2 General Conditions for WPDES Permits

The general conditions or standard requirements are included from s. NR 205.07(1), Wis. Adm. Code and are required to be included in all WPDES permits issued by the department. Conditions not from s. NR 205.07(1), Wis. Adm. Code, will be cited below.

8.2.1 Duty to Comply

This condition is included by reference from s. NR 205.07(1)(a), Wis. Adm. Code.

8.2.2 Property Rights

This condition is included by reference from s. NR 205.07(1)(c), Wis. Adm. Code.

8.2.3 Inspection and Entry

This condition is included by reference from s. NR 205.07(1)(d), Wis. Adm. Code.

8.2.4 Recording of Results

This condition is included by reference from s. NR 205.07(1)(e), Wis. Adm. Code.

8.2.5 Records Retention

This condition is included by reference from s. NR 205.07(1)(f), Wis. Adm. Code.

8.2.6 Signatory Requirement

This condition is included by reference from s. NR 205.07(1)(g), Wis. Adm. Code.

8.2.7 Proper Operation and Maintenance

This condition is included by reference from s. NR 205.07(1)(j), Wis. Adm. Code.

8.2.8 Duty to Mitigate

This condition is included by reference from s. NR 205.07(1)(k), Wis. Adm. Code.

8.2.9 Duty to Provide Information

This condition is included by reference from s. NR 205.07(1)(L), Wis. Adm. Code.

8.2.10 Need to Halt or Reduce Activity Not a Defense

This condition is included by reference from s. NR 205.07(1)(o), Wis. Adm. Code.

8.2.11 Sampling Procedures

This condition is included by reference from s. NR 205.07(1)(p), Wis. Adm. Code.

8.2.12 Testing Procedures

This condition is included by reference from s. NR 205.07(1)(p), Wis. Adm. Code.

8.2.13 Laboratory Certification or Registration

This condition is included by reference from s. NR 219.037, Wis. Adm. Code.

8.2.14 Effluent Limits Less than LOD or LOQ

This condition is included by reference from s. NR 106.07(6), Wis. Adm. Code.

8.2.15 More Frequent Monitoring

This condition is included by reference from s. NR 205.07(1)(r), Wis. Adm. Code.

8.2.16 Noncompliance and Other Reporting

This condition is included by reference from s. NR 205.07(1)(s), Wis. Adm. Code.

8.2.17 Other Information

This condition is included by reference from s. NR 205.07(1)(t), Wis. Adm. Code.

8.2.18 Bypassing

This condition is included by reference from s. NR 205.07(1)(u), Wis. Adm. Code.

8.2.19 Permit as Enforcement Shield

This condition is included by reference from s. NR 205.07(1)(x), Wis. Adm. Code.

8.2.20 Severability

This condition is included by reference from 33 USC 1251.

8.3 General Conditions for non-POTW Permits

These general conditions are applicable to non-POTWs with general permits and are included from s. NR 205.07(3), Wis. Adm. Code.

8.3.1 Removed Substances

This condition is included by reference from s. NR 205.07(3)(a), Wis. Adm. Code.

8.3.2 Spill Reporting

This condition is included by reference from s. NR 205.07(3)(b), Wis. Adm. Code.

8.3.3 Planned Changes

This condition is included by reference from s. NR 205.07(3)(c), Wis. Adm. Code.

8.3.4 Duty to Halt or Reduce Activity

This condition is included by reference from s. NR 205.07(3)(e), Wis. Adm. Code.

9 Summary of Reports Due

The summary of reports due has been updated for informational purposes for permittees or applicants to keep track of the due dates of required reports.

Major Changes from Previous Permit

- The general permit name has changed from “Hydrostatic Test Water or Water Supply System Water” to “Operation and Maintenance of Industrial Potable and Non-Potable Water Systems and/or Hydrostatic Testing of Petroleum Systems”. This name change was made as this permit is now applicable to discharges from industrial facilities that perform maintenance of their water system or hydrostatic testing of petroleum systems.
- Application for Permit Coverage requirements have been added to the permit under Section 2 to provide instruction and guidance to applicants on how to apply for coverage under this general permit.
- Effluent limitations and monitoring for total residual chlorine have been added to the permit under Section 3. Monitoring for total residual chlorine is depending upon if the permittee adds chlorine-based additives to the water prior to discharge or the source water already contains chlorine or chlorine compounds.
- Monitoring for total phosphorus have been added to the permit under Section 3. Monitoring for total phosphorus is depending upon if the permittee adds phosphorus containing additives to the water prior to discharge or the source water already contains phosphorus or phosphorus compounds.
- Sampling frequency and reporting reduction requirements has been added to the permit for recurring flushing discharges under Section 3.2.3.
- The permit now requires that monitoring results be submitted on an electronic discharge monitoring report (eDMR) instead of a paper annual report under Section 5. The monitoring forms are due 21 days after the end of the reporting permit. The eDMR shall be submitted regardless if there is a discharge or not during any reporting period.
- The section on requirements for all discharges have been removed. The requirements on reporting monitoring results has been moved to Section 5 and design requirements for dikes and berms has been removed.
- Information on the policy and regulations on water treatment additives has been added to the permit in Section 6.
- Information and policy on antidegradation, impaired waters, total maximum daily loads, and wetlands have been added to the permit under Section 7.

Attachments

A. Definitions

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Date: 06/22/2021

Attachment A – Definitions

The definitions of terms used in this general permit are based on their applicability to the type of operations and activity covered under this general permit. The definitions of these terms are included by reference from department guidance, 40 CFR 122.2, ch. 283, Wis. Stats. and chs. NR 200, NR 205, NR 206, NR 211 and NR 218, Wis. Adm. Code. Definitions not specifically outlined in this section can be found in Wisconsin Administrative Code, Wisconsin Statutes, or 40 CFR. Each term is provided with its code reference. If the terms below are found to be inconsistent with the definition in code, permittees shall refer to the code definition.

Annual Sampling Frequency

Annual sampling frequency means sampling the discharge once per calendar year (January 1st – December 31st). If there is no discharge during a calendar year, the permittee shall state this on the discharge monitoring report form.

Continuous Discharge

Continuous discharge means a facility that discharges 24 hours per day on a year-round basis except for temporary shutdowns for maintenance or other similar activities. (*s. NR 205.03(9g), Wis. Adm. Code*)

Daily Maximum Discharge Limitation

Daily maximum discharge limitation means the highest allowable daily discharge concentration or loading for a certain pollutant. (*40 CFR 122.2*)

Daily Sampling Frequency

Daily sampling frequency means sampling the discharge once in a 24-hour day. If there is no discharge during a daily, the permittee shall state this on the discharge monitoring report form.

Domestic Wastewater

Domestic wastewater means the type of wastewater normally discharged from plumbing facilities in private dwellings or commercial domestic establishments and includes, but is not limited to, sanitary, bath, laundry, dishwashing, garbage disposal and cleaning wastewaters. (*s. NR 205.03(14), Wis. Adm. Code*)

Estimated

Estimated used to specify the type of sample for flow measurement, means a reasonable approximation of the average daily flow based on water balance, an uncalibrated weir, or any of the methods included in s. NR 218.05(3)(b), Wis. Adm. Code, disregarding requirements for continuously recording flow. (*s. NR 218.04(15), Wis. Adm. Code*)

Grab Sample

Grab sample means a single sample taken at one moment of time or a combination of several smaller samples of equal volume taken in less than a 2-minute period. Where the term is used in connection with monitoring temperature or pH it means a single measurement. (*s. NR 218.04(10), Wis. Adm. Code*)

Monthly Average Discharge Limitation

Monthly average discharge limitation means the highest allowable average of daily discharge concentrations or loadings for a certain pollutant over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. (*40 CFR 122.2*)

Monthly Sampling Frequency

Monthly sampling frequency means sampling the discharge once per calendar month (Jan., Feb. March, April, May, June, July, Aug., Sept., Oct., Nov. and Dec.). If there is no discharge during a calendar month, the permittee shall state this on the discharge monitoring report form.

Municipal Wastewater

Municipal wastewater means the mixture of domestic, process and other wastewater tributary to any given municipal sanitary sewage or treatment system. (*s. NR 205.03(19), Wis. Adm. Code*)

Point Source

Point source means a discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft from which pollutants may be discharged either into the waters of the state or into a publicly owned treatment works except for a conveyance that conveys only storm water. This term does not include agricultural storm water discharges and return flows from irrigated agriculture. (*s. 283.01(12)(a), Wis. Stats.*)

Practicable Alternatives

Practicable alternatives means available and capable of being implemented after taking into consideration cost, available technology and logistics in light of overall project purposes. (*s. NR 103.07(2), Wis. Adm. Code*)

Privately Owned Treatment Works

Privately owned domestic sewage treatment works means those facilities which treat domestic wastewater and are owned and operated by nonmunicipal entities or enterprises such as mobile home parks, restaurants, hotels, motels, country clubs, resorts, etc., which are permitted under ch. 283, Wis. Stats. (*s. NR 206.03(18), Wis. Adm. Code*)

Process Wastewater

Process wastewater means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product, and is likely to contain in solution or suspension various components of such raw materials or products. (*s. NR 205.03(30), Wis. Adm. Code*)

Publicly Owned Treatment Works

Publicly owned treatment works or POTW means a treatment works which is owned by a municipality and any sewers that convey wastewater to such a treatment works. This definition includes any devices or systems used by a municipality in the storage, treatment, recycling, and reclamation of municipal sewage or liquid industrial wastes. The term also means the municipality or local unit of government which has jurisdiction over the indirect discharges to, and the discharges from, such a treatment works. (*s. NR 211.03(30), Wis. Adm. Code*)

Quarterly Sampling Frequency

Quarterly sample frequency means monitoring four times per year; once anytime during each of the four annual quarters (Jan.-Feb.-March, April-May-June, July-Aug.-Sept., Oct.-Nov.-Dec.). If there is no discharge during a quarter, the permittee shall state this on the discharge monitoring report form.

Surface Waters

Surface waters means waters of the state except wells and other groundwater. Cooling lakes, farm ponds and facilities constructed for the treatment of wastewaters are also excluded from this definition. (*s. NR 200.03(18), Wis. Adm. Code*)

Waters of the State

Waters of the state means those portions of Lake Michigan and Lake Superior within the boundaries of Wisconsin, all lakes, bays, rivers, streams, springs, ponds, wells, impounding reservoirs, marshes, water courses, drainage systems and other surface or groundwater, natural or artificial, public or private within the state or under its jurisdiction, except those waters which are entirely confined and retained completely upon the property of a person. (*s. NR 205.03(44), Wis. Adm. Code*)

Weekly Average Discharge Limitation

Weekly Average discharge limitation means the highest allowable average of daily discharge concentrations or loadings for a certain pollutant over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week. (*40 CFR 122.2*)

Weekly Sampling Frequency

Weekly sampling frequency means sampling the discharge once per calendar week which begins on Sunday and ends on Saturday. If there is no discharge during a calendar week, the permittee shall state this on the discharge monitoring report form.