PERMIT FACT SHEET

General Information

Permit Number:	WI-0049344-05-0
Permit Name:	Dewatering Operations
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

Wisconsin Statutes and regulations require 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 permit are issued by the 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 approves coverage, 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 dewatering operation discharges to waters of the state to protect public health and water quality of groundwater and surface water within the state of Wisconsin.

General Permit Description

This general permit is applicable to facilities with point source discharges of water from the dewatering of low areas such as pits, trenches, ponds, etc., that do not contain process wastes. The wastewaters covered under this general permit are primarily contaminated with total suspended solids (TSS), with no other pollutants of concern requiring treatment for removal beyond simple gravity settling. Oil and grease may be associated with these discharges as a result of the presence of machinery near the pit or trench. Examples of some facilities that may be regulated by this general permit include: construction pits, sewer extension construction, pipe trenches, stormwater pond dewatering, and other similar operations. The following is a description of each category covered under the permit:

Construction Trenches and Pits

Construction trenches or pits are dug for the installation or replacement of utilities (i.e. sanitary sewer, lift station, watermain, storm sewer, electrical lines, gas lines, and etc.), the placement of foundations or footings for buildings, or other construction digging activities. During excavation, high groundwater may be encountered or stormwater may have accumulated in the trenches or pits. Therefore, dewatering systems are placed in the trenches, pits, or low areas to pump and convey the water away from the construction site so construction can continue. Dewatering wells may be placed in the ground prior to excavation to lower the groundwater table to an appropriate level.

Hydrovacing

Hydrovacing is a process that uses high pressure water to cut the soil and a vacuum truck to remove the slurry to make a trench. Hydrovacing is typically used in utility projects where mechanical excavation may be difficult. The removed hydrovac slurry may be held in a bermed containment area or comparable containment (i.e. open top tank) at the site or disposed of at a licensed disposal facility. The water in the slurry will be drained and evaporated as it sits. The drainage water may be directed to groundwater or surface water. Once the slurry is dry, the material may be reused as backfill for the trench or incorporated as subsoil on approved areas.

Stormwater Pond Maintenance

Maintenance is necessary for a stormwater pond to operate as designed on a long-term basis. Periodic dredging is a necessary part of pond maintenance. Stormwater pond dredging occurs approximately once every ten years. Dredging is conducted to remove any built-up sediment and increase the storage capacity of the pond. For dredging to occur, the pond is generally drained to improve access and sediment removal. Disposal of sediment from stormwater ponds are regulated by the Solid Waste Management Program under ch. NR 528, Wis. Adm. Code. Other maintenance activities involving drainage of the pond may include: embankment and side slope repairs, control structure repairs, pipe repairs, or other rehabilitation activities.

Treatment Structure Maintenance

Many sedimentation basins, treatment ponds or lagoons, and sumps will be put out of service for redundancy purposes. Rainwater and/or groundwater may accumulate in these structures over time. However, these structures may need to come back online as other treatment structures require maintenance or repair; or they will need to be rehabilitated. Therefore, the rainwater and/or groundwater water will need to be pumped out. Additionally, many treatment facilities may not have the hydraulic capacity to treat these waters and many facilities may not accept this wastewater as it may affect the treatment at the plant.

Typical Treatment for Dewatering Operations

Dewatering wastewater may be removed for treatment by siphoning, pumping, or other means. A variety of treatment equipment may be used, but treatment commonly consists of seepage or settling. Common

types of seepage areas include: ponds, trenches, low areas, and grassed swales. Common types of settling equipment include: steel tanks, concrete tanks, and ponds (lined and unlined). A few important design considerations for settling equipment include: inlet structure, outlet structure, overall dimensions and shape, prevention of short circuiting, maintaining hydraulic capacity, preventing of carryover of removed particles, unhindered settling depth, sludge compaction, sludge removal, overflow rate, and hydraulic retention time. Treatment equipment may have baffles, inclined plates, chemical addition, etc. Solids removed during treatment are stored and disposed of in a manner to prevent any pollutant from the materials from entering the waters of the state.

The above described gravity settling system can usually achieve a level below 40 mg/L at start-up provided it is designed with sufficient retention time and operated properly. Sediment build up will reduce the retention time and must be removed to stay within the operation design capacity.

The use of filtering systems must meet the same requirements as the gravity settling systems. A system of filter bags or tubes consisting of properly sized geo-textile is filled with dewatering water. Some water pressure may be applied. A filter cake develops on the inside of the bags and also acts as a filter. These systems should have a method to re-circulate filtered water back through the system until the filter cake is developed and a level below 40 mg/L is met before discharging. The filter bags or tubes must be serviced to remove collected sediment and maintain filtering capacity.

With high levels of colloidal clay, there may be a need to use a flocculating agent to achieve a level below 40 mg/L. In these cases, the design should include provisions to add a flocculent. Please note that chemical additives used to flocculate colloidal clay must be reviewed to determine compliance with this permit.

The presence of oil and grease at levels exceeding a level of 15 mg/L may require the use of an oil/water separator. Discharges from a properly sized and operated oil/water separator can easily meet a level below 15 mg/L of oil and grease.

General Permit Summary

This general permit establishes applicability criteria, obtaining permit coverage requirements, discharge requirements, best management practice and plan requirements, reporting and recordkeeping requirements, and standard requirements for dewatering operation discharges. 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 highlights changes in permit conditions that the department proposes to make when reissuing the Dewatering Operations 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.

Changes from Previous Permit

- The discharges covered in Section 1.1 has been expanded to clearly define all applicable discharges under this permit. The following discharges were added to the discharges covered under Section 1.1:
    - Discharges from dewatering well systems;
    - Discharges from the dewatering of sediment removed during hydrovacing a trench or pit;
    - Discharges from the dewatering and/or maintenance of stormwater ponds;
    - Discharges from the dewatering and/or maintenance of sedimentation basins, treatment ponds or lagoons, and sumps that are out of service and filled with only rainwater and/or groundwater;
    - Discharges from dewatering operations in response to an emergency; and
    - Discharges from other similar wastewaters;
- The discharges not covered in Section 1.2 has been expanded to clearly define all discharges not applicable under this permit. The following discharges were added to the discharges not covered under Section 1.2:
    - Discharges from dewatering operations that are carried out under the supervision and direction of the Wisconsin Department of Transportation (DOT) in accordance with s. 30.2022, Wis. Stats and ch. TRANS 401, Wis. Adm. Code;
    - Discharges from the operation and maintenance of vehicles and/or equipment;
    - Discharges from the washing of vehicles and/or equipment;
    - Discharges containing municipal, domestic, or process wastewater;
    - Discharges to a publicly-owned treatment works (POTW);
    - Discharges containing water treatment additives where the additive use is not approved in writing by the Department;
    - Discharges that 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;
    - Increased discharges to 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.
    - Discharges of hazardous substances that are required to be reported under ch. NR 706, Wis. Adm. Code.
    - Discharges that will adversely impact endangered and threatened species, including causing an incidental take, 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.
    - 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., 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.

- Discharges from properties within tribal lands. The Tribe or U.S. EPA regulates discharges from tribal lands (land owned by or held in trust for the tribes and land within recognized reservation boundaries);

1.1 Discharges Covered

This permit is applicable to discharges from the dewatering operations, including pumping or draining water from construction trenches or pits, dewatering well systems and other similar wastewaters that are discharged directly to surface waters or indirectly to groundwaters via seepage. The department may require other similar discharges to meet the requirements of this general permit if the department finds that the general discharge in question is innocuous.

Note: Any pit/trench dewatering system [high capacity pump(s)] with the capacity to withdraw 70 gpm or more must be approved by the Bureau of Drinking Water and Groundwater and comply with annual reporting requirements. If the dewatering requires a high capacity well, and the total proposed design pump capacity is 70 gpm or more, the operator must fill out a high capacity well application (Form #3300-228): http://dnr.wi.gov/topic/wells/highcapacity.html.

Applicants operating a high capacity dewatering well system within the Great Lakes basin that may withdraw water in amounts averaging 100,000 gallons per day or more in any 30-day period will be issued the appropriate Water Use Permit (http://dnr.wi.gov/topic/WaterUse/permits.html) based on the information submitted with their high capacity well application.

1.2 Discharges Not Covered

According to 40 CFR 122.28(a)(4)(ii), general permits may exclude specified sources from coverage. Below is an explanation for all discharges not covered under the permit.

Construction Sites Covered Under a Storm Water Permit: If a discharge is appropriately covered by the Construction Site Stormwater Runoff WPDES General Permit (No. WI-S067831), then this permit does not apply to the discharge. The stormwater runoff general permit applies to construction sites that will disturb more than one acre of land. This process is intended to avoid duplicate permitting of a facility. Note that the stormwater runoff general permit does not typically cover high capacity dewatering well systems and may not cover dewatering of significant amounts of groundwater. Discharges routed around or by-passing the storm water runoff control system are not covered by the stormwater runoff general permit and may need to be covered by this general permit. Note that in the case of generally clean groundwater, it may be practical to by-pass the storm water system.

DOT Dewatering Operations: This permit does not apply to discharges from dewatering operations that are carried out under the supervision and direction of the Wisconsin Department of Transportation (DOT) under ch. TRANS 401, Wis. Adm. Code. In accordance with s. 30.2022(1p), Wis. Stats, transportation activities affecting waters of the state, as defined in s. 281.01 (18), Wis. Stats., are not subject to the prohibitions or permit or approval requirements specified under s. 29.601, 30.11, 30.12, 30.123, 30.19, 30.195, 30.20, 59.692, 61.351, 61.353, 62.231, 62.233, or 87.30; or under chs. 281 and 283, except s. 283.33; or under chs. 285 or 289 to 299, Wis. Stats.

Other Dewatering Operations: This permit does not authorize discharges from dewatering operations discharges (e.g. storage of coal, salt, food by-products, or other facilities) that have wastewater contaminated with pollutants other than total suspended solids or residual oil and grease. The permit does not contain the controls necessary for other pollutants. These discharges likely require the limitations and oversight associated with an individual permit.

Contaminated Groundwater: Since pit dewatering discharges may include intercepted groundwater that is contaminated, this permit contains a condition that states that this permit does not authorize discharges of contaminated groundwater (treated or untreated). This permit does not contain the

conditions and limitations necessary for adequate regulation of contaminated groundwater discharges. The Contaminated Groundwater from Remedial Action Operations WPDES General Permit (No. WI-0046566) may be more appropriate to cover discharges in these situations.

Operation and Maintenance of Vehicles and/or Equipment: This permit does not apply to the release of oils and other pollutants from operation and maintenance of vehicles and/or equipment at the construction site. Instead this permit may authorize minor spills or drippage of oil and grease from vehicles and/or equipment while in use near the pit or trench.

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). Instead this permit applies to discharges from dewatering systems for construction pits or trenches.

Municipal, Domestic, or Process Wastewater: Any discharge containing municipal, domestic or process wastewaters as described in chs. NR 210, and NR 221 to NR 297, Wis. Adm. Code, are not authorized under this permit.

Publicly-Owned Treatment Works: Any portion of wastewater directed to a Publicly-Owned Treatment Works (POTW) is not covered under this general permit. Rather, this general permit applies only to direct discharges to waters of the state (i.e. discharges to storm sewers or other conveyances to a surface water, or seepage to the groundwater).

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 wastewater 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, 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://dnrmaps.wi.gov/sl/?Viewer=SWDV) to identify the outstanding and exceptional resource waters in the county where the discharge will occur.

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.

Increased Discharges: According to s. NR 207.02(6)(a), Wis. Adm. Code, an "Increased discharge" means any change in concentration, level or loading of a substance which would exceed an effluent limitation specified in a current WPDES permit. If a facility proposes an increased discharge to 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 is not authorized under this permit. An evaluation of the proposed increased discharge would need to be conducted in accordance with the antidegradation requirements of ch. NR 207, Wis. Adm. Code. Regulation of increased discharges require the oversight, monitoring and discharge limitations of an individual permit as effluent limitations in a general permit cannot be modified for an individual discharger.

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.

Discharges within Tribal Lands: The department does not issue WPDES permits within Tribal lands due to the state delegation agreement with U.S. EPA. In such instances, the Tribe or U.S. 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.

2 Obtaining Permit Coverage

2.1 Submittal of a Notice of Intent

In accordance with s. NR 205.08(3), Wis. Adm. Code, on a case−by−case basis the department may by letter require a discharger to submit a notice of intent (NOI) to be covered by a general permit. Additionally, general permits shall specify the deadlines for submitting NOI to be covered under the permit as specified by 40 CFR 122.28(b)(2)(iii). Therefore, the applicant must submit a complete NOI under the general permit to the department at least thirty (30) business days before the expected start date of discharge. As of December 21, 2020, all NOIs submitted in compliance with this section must be submitted electronically by the discharger in compliance with 40 CFR 122.28(b)(2)(i) and 40 CFR 127.

2.2 Incomplete NOI

In accordance with s. 283.37(6), Wis. Stats., the department may require the owner or operator to submit information regarding any discharge. Therefore, the department may require an applicant to submit data necessary to complete any deficient NOI, any additional data other than that requested in the NOI or a new complete NOI where the deficiencies are extensive or the appropriate form has not been used.

2.3 Granting of Coverage

In accordance with s. NR 205.08(3), Wis. Adm. Code, following receipt of a complete NOI, the department shall issue a determination on whether a discharger is covered by a general permit. Additionally, general permits shall specify whether a discharger that has submitted a complete and timely notice of intent to be covered in accordance with the general permit and that is eligible for coverage under the permit, is authorized to discharge in accordance with the permit upon receipt of notification of inclusion by the department pursuant to 40 CFR 122.28(b)(2)(iv). Therefore, the permit requires that the applicant receive a coverage letter from the department prior to commencing discharge to the waters of the state. Upon receipt of the coverage letter, the applicant is hereby granted coverage and authorized to discharge to the waters of the state under the general permit. If the applicant has not received a coverage letter from the department, they are not permitted to discharge.

Note: 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.

3 Discharge Requirements

3.1 Surface Water Discharge Requirements

Surface water 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 wastewater to creeks, streams, ponds, marshes, bays, reservoirs, rivers, lakes, or other surface water within the state of Wisconsin. This section also applicable to discharges to wetlands with a hydrological connection to surface waters. The following surface water discharge requirements are based on surface water narrative criteria to prevent exceedance of surface water standards.

Objectionable Deposits: The discharge shall not contain pollutants that will cause objectionable deposits on the shore or in the bed of a body of water in such amounts as to interfere with public rights in waters of the state based on s. NR 102.04(1)(a), Wis. Adm. Code.

Floating or Submerged Material: The discharge shall not contain pollutants that will cause floating or submerged debris, oil, scum or other material in such amounts as to interfere with public rights in waters of the state based on s. NR 102.04(1)(b), Wis. Adm. Code.

Unsightliness: The discharge shall not contain pollutants that will produce color, odor, taste or unsightliness in such amounts as to interfere with public rights in waters of the state based on s. NR 102.04(1)(c), Wis. Adm. Code.

Toxic Substances: The discharge shall not contain substances in concentrations or combinations which are toxic or harmful to humans 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 pursuant to s. NR 102.04(1)(d), Wis. Adm. Code.

Discharge Rate: The discharge flow rate shall be controlled along the discharge path to prevent the addition of sediment or turbidity from entering the receiving surface water. This is a practice to control industrial activities so that the conditions stated for objectionable deposits, floating or submerged material, unsightliness, and toxic substances are met at all times and under all flow and water level conditions pursuant to s. NR 102.04(1), Wis. Adm. Code.

Erosion Control: The discharge flow rate shall be controlled to prevent erosion at the end of pipe and within the receiving water. This is a practice to control industrial activities so that the conditions stated for objectionable deposits, floating or submerged material, unsightliness, and toxic substances are met at all times and under all flow and water level conditions pursuant to s. NR 102.04(1), Wis. Adm. Code.

Visible Oil Sheen or Film: The discharge shall not contain any visible oil sheen or film. This is a practice to control industrial activities so that the conditions stated for objectionable deposits, floating or submerged material, unsightliness, and toxic substances are met at all times and under all flow and water level conditions pursuant to s. NR 102.04(1), Wis. Adm. Code.

Visible Solids or Foam: The discharge shall not contain any visible solids or foam. This is a practice to control industrial activities so that the conditions stated for objectionable deposits, floating or submerged material, unsightliness, and toxic substances are met at all times and under all flow and water level conditions pursuant to s. NR 102.04(1), Wis. Adm. Code.

3.2 Groundwater Discharge Requirements

Groundwater discharge means any wastewater that is allowed to infiltrate or seep into the soil from a permeable surface including but not limiting to any drain field, agricultural field, ditch, swale, depression, trench or pit, adsorption pond, infiltration pond, rain garden, prairie, or vegetative area that may impact groundwater quality. This section also applicable to discharges to wetlands with a

hydrological connection to groundwater only. The following groundwater discharge requirements are based on practices used by similar land treatment activities provided in ch. NR 214, Wis. Adm. Code. The provided practices will help prevent the runoff of the discharge into surface waters.

Discharge Location: The groundwater discharge shall occur on grass, soil, gravel areas, or seepage areas to the extent possible and infiltration of the discharge shall be maximized. This practice is based on s. NR 214.14(2)(a), Wis. Adm. Code.

Discharge Rate: The discharge flow rate shall be limited to a rate that can infiltrate into the soil surface. This practice is based on s. NR 214.14(2)(a), Wis. Adm. Code.

Runoff Control: The discharge flow rate shall be controlled to prevent runoff from the site into surface waters. This practice is based on s. NR 214.17(4)(d)3., Wis. Adm. Code.

Rainfall Events: The water may not be discharged during any rainfall events that cause runoff from the site into surface waters except if the infiltration area is located such that runoff from the area cannot enter a surface water. This practice is based on s. NR 214.14(3)(f), Wis. Adm. Code.

Erosion Control: The discharge flow rate shall be limited to prevent erosion when the vegetative cover has not developed sufficiently to anchor the soil and create the filter mat necessary for effective infiltration. This practice is based on s. NR 214.15(3)(d), Wis. Adm. Code.

Adequate Design: Wastewater discharges to absorption or seepage pond systems shall be limited so that the discharge volume combined with the precipitation from a 10−year frequency, 24−hour duration rainfall event does not reduce the available freeboard to less than one foot below the top of the dike. This condition is based on absorption pond systems in s. NR 214.12(3)(f), Wis. Adm. Code.

Winter Operations: Discharges to groundwater may be allowed during frozen conditions provided infiltration is adequate to prevent long term ponding or pooling of water. Since infiltration decreases in the winter, the department may require storage during cold weather when feasible. This practice is based on s. NR 214.15(3)(e), Wis. Adm. Code.

Toxic Substances: The discharge shall not contain substances in concentrations or combinations which are toxic or harmful to humans in amounts found to be of public health significance, nor shall substances be present in amounts that will have a significant damaging effect on groundwater quality. This is based on s. NR 140.02(4), Wis. Adm. Code.

Groundwater Quality: The concentration of any wastewater parameter that may impact groundwater quality shall be limited at the point of discharge to a value that will minimize the concentration of the substance in the groundwater to the extent technically and economically feasible and prevent exceedance of the preventive action limit (PAL) in the groundwater. This condition is based on s. NR 214.14(3)(b), Wis. Adm. Code.

3.3 Additives

On April 23rd, 2015, the department released guidance entitled "Water Quality Review Procedures for Additives" (3400-2015-03), which is available at http://dnr.wi.gov/topic/wastewater/Guidance.html. This guidance document establishes procedures to calculate secondary acute and chronic values for water-applied or land-applied additives pursuant to ss. NR 105.05 and 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. 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.

4 Best Management Practice (BMP) Requirements

Explanation of Requirements

Clean Water Act (CWA) sections 402(a)(1) and (2) gives the permitting authority the ability to include BMPs in permits on a case-by-case basis to carry out the provisions of the CWA. Section NR 205.10, Wis. Adm. Code provides that permits may contain BMPs to control or abate the discharge of pollutants when any of the following are true:

a. **They are authorized under CWA section 304(e).**

   The BMPs for these classes or categories of discharges are not authorized under CWA section 304(e).

b. **They are authorized under CWA section 402(p) for the control of stormwater discharges.**

   These classes or categories of discharges are considered a wastewater discharge and therefore these BMPs are not authorized under CWA section 402(p).

c. **Numeric effluent limitations are infeasible.**

   The discharges from dewatering operations are very small and infrequent. The pollutant concentration and loading and volume of the water from these discharges would be quite variable over time. Ultimately the concentrations and volumes of wastewater would be difficult to measure in a way that provides useful chemical analyses. Additionally, it may be hard to get a sample that is representative of the actual discharge to surface water as many dewatering operation discharges are indirect. For example, the discharge occurs on the ground surface prior to reaching surface water or in a lengthy storm sewer pipe before reaching an outfall into the surface water. So, it may be challenging to develop effluent guidelines or water quality based effluent limitations from any provided data. Nevertheless, treating the discharge to a certain numeric effluent limit will provide a level of protection of water quality standards. Therefore, numeric effluent limitations are not infeasible.

d. **The practices are reasonably necessary to achieve effluent limitations and standards or carry out the purpose and intent of the CWA.**

   Without implementation of the developed BMPs, the discharge will not achieve the effluent limitations, exceed surface water quality standards, and violate the CWA. Therefore, the developed BMPs for discharge from dewatering operations would provide reasonable pollutant control to achieve effluent limitations, protect water quality standards, and fulfill the objectives and goals of the CWA.

Since Part d. is true, the permit can contain BMPs to control or abate the discharges from dewatering operations to the waters of the state. BMP requirements will ensure the discharge is consistent with the discharge requirements in Section 3.

4.1 Visual Inspection Log

Visual inspections and a record of these inspections in a log of the discharge will allow the permittee to determine if the discharge will be consistent with the discharge requirements in Section 3. If there is an inconsistency then the discharge shall cease until the inconsistency is resolved.

4.2 Good Housekeeping and Maintenance Strategies

The permittee shall implement good housekeeping and maintenance strategies to prevent the discharge of pollutants to surface waters or groundwaters. These strategies are based on preventive

measures at construction sites, erosion control plan requirements for construction sites, and other practices found in similar wastewater general permits for other states.

4.3 Erosion and Sediment Control Practices

These practices are added to control the flow rate velocity to prevent the pollutants from entering surface waters from runoff or erosion during discharge to either surface water or groundwater. These practices are based on erosion control best management practices used at construction sites for stormwater.

4.4 Treatment Control Practices

If treatment is necessary to correct the discharge inconsistency per Section 4.1.3, the permittee shall implement treatment practices that will control the effluent quality prior to discharge to surface waters or groundwater. The threshold level provided for total suspended solids (TSS) of 40 mg/L is achievable by application of best practicable control technology currently available for these types of discharges. This established effluent level is based on the average of the best performance of typical treatment technologies used for TSS removal. This determination was based on best professional judgment in accordance with s. NR 220.21, Wis. Adm. Code. The threshold level for oil & grease of 15 mg/L is achievable by application of best practicable control technology currently available for these types of discharges. This established effluent level 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.

4.5 Seven (7)-Day Discharge Notification

Permittees that have statewide or municipal-wide coverage for temporary discharges under this permit, the permittee shall notify the department at least seven (7) calendar days prior to discharge to the waters of state. The method of notification (phone message, email, letter, etc.) will be a process agreed upon by the permittee and the department. The notification shall include a description of their discharge strategies and discharge location pursuant to s. 283.37(6), Wis. Stats. The best management practice plan shall contain a description of this seven-day notification and the agreed upon method of notification. 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. The permittee shall also notify the department seven (7) calendar days after discontinuing the discharge.

4.6 Contaminated Groundwater Screening

The permittee shall screen the area of the dewatering operation for the potential to encounter contaminated groundwater. This contaminated groundwater screening will prevent the discharge of contaminated groundwater into the waters of the state and establish procedures if contaminated groundwater is encountered. This screening is based on the site assessment component in the storm water construction technical standard for dewatering (Code No. 1061).

5 Best Management Practice (BMP) Plan

5.1 Operate Consistent with an Approved BMP Plan

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 the permit in accordance with s. NR 205.07(1)(j), Wis. Adm. Code. Therefore, to evaluate this condition the department requires the permittee to properly operate and manage all discharge activities consistent with and in compliance with a department approved BMP plan. The BMP plan shall be consistent with the requirements of the permit.

5.2 Submittal of the BMP Plan

According to s. 283.37(6), Wis. Stats., the department may require the owner or operator to submit information regarding any discharge. Therefore, the department requires the permittee to submit a BMP plan to the department for approval at the time the NOI is submitted, or within sixty (60) calendar days from the date of reissuance of this general permit. If an applicant applies for coverage during the term of this general permit (prior to the expiration date), the permittee shall submit the BMP plan with the NOI. The department coverage letter will explicitly indicate approval of the BMP plan. Permittees shall notify the department when the BMP plan is amended to determine if the amendment requires department approval.

5.3 BMP Plan Content

The BMP plan shall, at a minimum, describe the information provided in the permit under this section. The information provided in the BMP plan will help the department determine and track compliance with the requirements in the permit. Additionally, the information will help the permittee properly operate and manage all discharge activities.

5.4 BMP Plan Access

To ensure the BMP plan is properly followed, the permittee shall ensure that on-site personnel directly involved with discharge activities have access to the BMP plan at all times while at the discharge location(s).

5.5 BMP Plan Training

Similar to training component for storm water pollution prevention plans in ch. NR 216, Wis. Adm. Code, the permittee shall provide training to employees directly involved with discharge activities on the BMP plan.

6 Dewatering Operations in Response to an Emergency

Section 6 has been added to permit to help the department track these discharges and it allows permittees to report dewatering operation discharges as result of emergency in a streamlined fashion. This streamlining will help limit the loss of services for an extended period of time and prevent the loss of life, personal injury or severe property damage while still providing reasonable pollutant control to fulfill the objectives and goals of the Clean Water Act (CWA).

6.1 Permittee Responsive Actions

Whenever dewatering operations occur in response to an emergency, the permittee shall take all feasible steps to control the discharge and follow the discharge requirements stated in Section 4 and conforms with the BMP plan prior to discharge. This condition is based on responsive actions for sanitary sewer overflows in s. NR 210.21(3), Wis. Adm. Code.

6.2 Reporting Requirements

These reporting requirements are based on s. NR 205.07(1)(s), Wis. Adm. Code.

6.2.1 Notification within 24 Hours

The permittee shall notify the department by telephone or email as soon as practicable, but no later than 24 hours from the time the permittee becomes aware of the emergency and the need to dewater at the site. The permittee shall explain their dewatering and discharge plans or strategies.

6.2.2 Written Report Within 5 Days

The permittee shall, no later than five business days from the conclusion of the discharge, provide to the department the information identified in this section of permit in a written report.

7 Impaired Waters & TMDL Requirements for Surface Water Discharges

7.1 Report Discharge to an Impaired Surface Water

Permittees are required to report on the NOI, if the wastewater is suspected to contain a pollutant of concern that discharges to an impaired surface water or a surface water with a State and EPA approved Total Daily Maximum Load (TMDL) allocation. The permittee does not need to report all pollutants of concern only those pollutants for which the receiving water of the discharge is impaired for or has an approved TMDL. If a facility discharges a pollutant of concern to a 303(d)-listed impaired water body, the goal is to minimize the pollutant discharge as much as possible as part of an overall state effort to reduce the pollutant loading to the water body. The department updates the section 303(d) list approximately every two years. The updated list is effective upon approval by EPA. According to s. NR 212.72(9), Wis. Adm. Code, a "Pollutant(s) of concern" means any pollutant discharged that has an applicable technology-based effluent limitation (TBEL), a wasteload allocation from a TMDL or watershed analysis, or is identified as needing a water quality-based effluent limitation (WQBEL) to meet water quality standards.

7.2 TMDL Compliance

Permittees discharging a pollutant of concern that is subject to an approved TMDL under this general permit shall meet the requirements of a State and Federally approved TMDL allocation for their discharge location that is in effect on the effective date of this permit. Existing pollutant discharges covered under this permit are expected to be consistent with the baseline allocation granted to Wisconsin general permit discharges in all State and EPA approved TMDLs in effect on the effective date of this permit.

For this general permit, the most common pollutants of concern may be total suspended solids (TSS) and phosphorus discharges to sediment or phosphorus impaired water bodies. The permittee can use the impaired water search tool (http://dnr.wi.gov/water/impairedSearch.aspx) or the surface water data viewer (SWDV) (http://dnrmaps.wi.gov/sl/?Viewer=SWDV) to identify waters impaired in the county that the discharge will occur.

7.3 New or Increased Pollutant Discharge to a 303(d) Listed Impaired Surface Water

Federal Statutes, 40 CFR 122.4, prohibits the issuance of a WPDES permit to a new source or new discharger that will contribute to a violation of a water quality standard in a 303(d)-listed water. Also, an increased discharge of a pollutant of concern that would cause or contribute to a violation of a water quality standard in a 303(d)-listed water is not to be allowed. Therefore, this general permit specifies that a permittee may not establish a new pollutant of concern discharge to a 303(d)-listed impaired water body or significantly increase the discharge of a pollutant of concern to an impaired water body unless the new or increased discharge does not contribute to the receiving water impairment, or the new discharge is consistent with a department finalized TMDL allocation for the impaired water body as determined by the department. The general permit cannot be used if this requirement is not met for a new discharge.

In response to a NOI, the department will evaluate the proposed pollutant discharge amount and receiving water to determine if the above requirement can be met. A variety of options are available to the applicant to reduce the discharge of the pollutant of concern, with the goal of eliminating the pollutant discharge, such as on-site capture or an alternate discharge location.

8 Standard Requirements

Both the current permit and new permit provide a Standard Requirements (SR) section that contains conditions and requirements that are, for the most part, applicable to all industrial permittees.

Changes from Previous Permit

Changes to the standard requirements section include:

- SR Section 8.2.1: The permit now explains requirements on how to delegate signature authority for a duly authorized representative.
- SR Section 8.2.2: The permit now explains requirements on how to transfer permit coverage to a new permittee.
- SR Section 8.2.3: The permit now explains requirements on how to terminate permit coverage.
- SR Sections 8.3.1-8.3.2, 8.3.6-8.3.10, 8.3.13, and 8.3.14. These sections are required to be included all WPDES permit issued by the department.

8.1 Reporting Requirements

According to s. NR 205.08(2), Wis. Adm. Code, the department may include reporting requirements in general permits. The reporting requirements are included by reference from ss. NR 205.07(1) and (3), Wis. Adm. Code.

8.2 General Conditions for General Permits

According to s. NR 205.08(2), Wis. Adm. Code, the department may include general conditions in general permits. The general conditions for general permits are included by reference from 40 CFR Parts 122.28(b)(2)(i), 122.61(b) and 122.64(c), and s. NR 205.07(1)(i), Wis. Adm. Code.

8.3 General Conditions for WPDES Permits

The general conditions for WPDES permits are included by reference from s. NR 205.07(1) and (3), Wis. Adm. Code, and 33 USC 1251.

9 Summary of Reports Due

A summary of reports due has been added for informational purposes for permittee and to be consistent with individual WPDES permits.

Appendix A - Definitions

The standard definition section is provided to permittees to help clearly define terms used throughout the permit. The definitions are provided from 40 CFR 122.2 and chs. NR 200, NR 211, and NR 205, Wis. Adm. Code. Definitions not specifically outlined in this section can be found in Wisconsin Administrative Code, Wisconsin Statutes, or 40 CFR. If the terms defined in the permit are found to be inconsistent with the definition in code, permittees shall refer to the code definition.

Appendix B – Notice of Intent Form

The contents of the notice of intent (NOI) shall be specified in the general permit and shall require the submission of information necessary for adequate program implementation pursuant to 40 CFR 122.28(b)(2)(ii). The NOI, at a minimum, shall include 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 40 CFR Appendix A to Part 127. Authorized state programs may

require regulated entities to submit more data than what is listed in Appendix A. All NOI must be signed and certified in accordance with s. NR 205.07(1)(g), Wis. Adm. Code.

Other Changes from Previous Permit

- The name of the permit has been changed from "Pit/Trench Dewatering" to "Dewatering Operations" as not all wastewater discharges come from pit/trench dewatering.
- Requirements for all covered facilities has been removed with regard to dikes and berms. These requirements are inconsistent with Wisconsin Administrative Codes.
- Surface water and groundwater discharge monitoring and reporting requirements has been removed from the previous permit. These requirements have been replaced with BMP requirements as they are necessary to achieve effluent limitations and standards and carry out the purpose and intent of the Clean Water Act. Additionally, the BMP requirements will help alleviate burdensome monitoring for permittees and minimize efforts of the department for these low risk discharges.
- Section for visible foam and floating solids has been removed from the permit as this is covered under the discharge requirements in Section 3.

Prepared by:

Trevor J. Moen
Wastewater Engineer
Bureau of Water Quality

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