

Wisconsin Pollutant Discharge Elimination System (WPDES) General Permit for Transportation Separate Storm Water System (TS4, Permit No. WI-S066800-2: Fact Sheet – April 2023

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Purpose

The Wisconsin Department of Transportation (DOT) is currently covered under Wisconsin Pollutant Discharge Elimination System (WPDES) Permit No. WI-S066800-1. The Wisconsin Department of Natural Resources (DNR) is proposing to reissue WPDES Permit No. WI-S066800-2 to continue the coverage of storm water discharges from the DOT's state-owned and operated transportation separate storm sewer system (TS4).

This state-wide general permit authorizes storm water discharges to waters of the state from the TS4 that is owned, operated, and maintained by the DOT and located within the relevant boundaries of a municipality covered under a municipal separate storm sewer system (MS4) permit issued by the Department. The TS4 general permit requires the DOT to develop, implement, and maintain storm water management programs to reduce the discharge of pollutants from the TS4 to waters of the state. Waters of the state includes surface waters, groundwater, and wetlands.

This fact sheet summarizes the DNR's process and rationale for developing and issuing the TS4 permit.

Authority to Issue WPDES Permits

The Federal Water Pollution Control Act of 1972 (Public Law 92-500), also called the Clean Water Act (CWA), requires that all point sources discharging pollutants to waters of the U.S. obtain a wastewater discharge permit. These permits specify the conditions under which wastewater can be discharged so that water quality standards for receiving waters are met. In 1974, the United States Environmental Protection Agency (USEPA) delegated the authority for issuing these permits in the State of Wisconsin to the DNR. The DNR exercises its permitting authority through the WPDES permit program authorized under ch. 283, Wis. Stats.

The DNR has the authority to issue two types of permits for the discharge of pollutants to waters of the state: 1) individual WPDES permits and 2) general WPDES permits. The DNR issues individual WPDES permits when the interaction between pollutant discharges and water quality is complex. These permits are tailored to the specific conditions of the facility with the discharge. The DNR issues general WPDES permits to broad classes of dischargers or discharges where environmental protection can be achieved through a set of general provisions that apply to all dischargers or discharges in that category. The proposed permit is a general permit.

This permit is issued under the statutory authority granted to the DNR pursuant s. 283.33, Wis. Stats. (Storm water discharge permits) and implements applicable federal and state law relating to MS4s, including TS4s located within the limits of permitted MS4s. The TS4 is the MS4 that is owned and operated by the DOT. The specific federal requirements for MS4 permits are found in 33 U.S.C. § 1342 (p)(3)(b) and 40 CFR § 122.26. The specific state requirements for MS4 permits are found in subch. I of ch. NR 216, Wis. Adm. Code.

This factsheet highlights and summarizes the most significant differences from the 2018 WPDES TS4 General Permit for storm water associated with discharges from the DOT, as a state-owned and operated transportation separate storm sewer system (TS4) permittee. This factsheet does not describe all conditions of the TS4 general permit, as many of them are self-explanatory.

The Department of Natural Resource's Regulation of Storm Water from the TS4

In Wisconsin, WPDES permits are issued by the DNR with federal oversight from the USEPA. The DNR is responsible for the issuance, reissuance, modification, and enforcement of all WPDES permits issued for discharges into the waters of the state, except discharges occurring in Indian Country which are regulated directly by the USEPA. No person may legally discharge to waters of the state without a WPDES permit issued under this authority.

In 1987, Congress amended the CWA, authorizing a national program of comprehensive storm water pollution control for MS4s, certain industries, and construction sites. In 1993, ch. 147, Wis. Stats., (now ch. 283, Wis. Stats.) was amended to include storm water as a "point source" discharge and to require that the DNR promulgate administrative rules for permitting the discharge of storm water. As a result, the DNR created ch. NR 216, Wis. Adm. Code, for permitting storm water discharges from certain municipalities that own or operate MS4s, storm water discharges associated with industrial activity, and storm water discharges associated with land disturbing construction activity. Under 2015 Wisconsin Act 307, chs. 30 and 283, Wis. Stats. were amended to remove an exemption from permitting storm water discharges associated with transportation activity under the direction and supervision of the DOT. Accordingly, ch. NR 216, Wis. Adm. Code now sets the framework for the DNR to issue the TS4 general permit for the discharge of storm water to waters of the state from the TS4 that is owned, operated, and maintained by the DOT.

In November 2016, the USEPA promulgated the MS4 General Permit Remand Rule (40 CFR Part 122). The USEPA amended its regulations governing how small MS4s obtain coverage under NPDES general permits. The final MS4 General Permit Remand Rule establishes two alternative approaches an NPDES permitting authority can use to issue and administer small MS4 general permits that address a partial remand of the USEPA's Phase II storm water regulations by the U.S. Court of Appeals for the Ninth Circuit. Both approaches ensure that the permitting authority establishes the necessary clear, specific, and measurable goals for the MS4 to "reduce the discharge of pollutants from the MS4 to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the CWA." Referred to as the "MS4 permit standard," both approaches ensure that the public participation requirements of the CWA are met. For more information on the MS4 General Permit Remand Rule, use a standard Internet search engine and type in "EPA remand rule."

Permit conditions were developed for the TS4 to meet the permit standards: reduce pollutants to the maximum extent practicable (MEP), protect local water quality, and meet CWA Standards. This permit requires continued implementation of six minimum control measure programs, development a storm

water management plan to make progress towards the reduction goals outlined in the USEPA-approved Lower Fox basin, Lower Green Bay, Lake St. Croix, Red Cedar River, Milwaukee River, Wisconsin River and Upper Fox and Wolf Basin TMDLs, and completion of special requirements during the permit term which provide improvements in water quality. Permittees satisfy the permit standard through successful implementation of the storm water management programs and compliance with the WPDES permit.

This permit incorporates USEPA's clarification on permit requirements, specifically to address 40 CFR § 122.34 (a), that "Terms and conditions . . . must be expressed in clear, specific, and measurable terms." To accomplish this, permit provisions that included caveat terms such as "if feasible" or "as necessary" are revised to provide more clarity on when a specific action is required.

Additionally, in December 2015, the USEPA promulgated the NPDES Electronic Reporting Rule (40 CFR Parts 9, 122, 123, 124, 127, 403, 501, and 503). This regulation requires the electronic reporting and sharing of NPDES program information. The USEPA identifies specific NPDES information, or data elements, that NPDES permitting authorities, such as the DNR, are to electronically collect, manage, and share with the USEPA. The DNR's electronic reporting system was built to collect these data elements. The eReporting system can be accessed here:
<https://dnr.wi.gov/topic/stormwater/municipal/eReporting.html>.

The revised permit requires DOT to comply with the Electronic Reporting Rule, so DOT will be submitting their annual reports in the DNR ePermitting system to ensure that the public has access to the data that is collected and reported regarding the activities supporting each of the storm water management programs required in the TS4 permit.

The DNR considered annual reports, storm water management plan documents, and responses to the request for information provided by the DOT when developing the permit conditions. Meetings were held with the DOT throughout the development process to discuss permit conditions, definitions and requirements set forth in the permit. The following document provides an explanation for major permit requirements and summarizes changes from the previous permit.

Permit Overview

This proposed TS4 general permit, Permit No. WI-S066800-2, was modeled after the transportation general permit, No. WI-S066800-01 (issued June 2018). The proposed permit includes the conditions required by updates to s. NR 216.07, Wis. Adm. Code, which consists of the following six categories, or minimum control measures (MCMs):

- Public Education and Outreach
- Public Involvement and Participation
- Illicit Discharge Detection and Elimination
- Construction Site Pollutant Control
- Post-Construction Storm Water Management
- Pollution Prevention

This proposed permit follows federal and state requirements and provides flexibility for the DOT to develop, implement, maintain, and evaluate its TS4 programs to help determine appropriate methods for meeting permit requirements. The objective is for the DOT to design a storm water management

program that accomplishes the following: reduces the discharge of pollutants to the "maximum extent practicable" (MEP); protects water quality; and satisfies the appropriate water quality requirements of the CWA.

The TS4 general permit is limited to use by the DOT and will not be used to provide permit coverage to a storm water discharge from another entity or discharges within Indian Country. Regulated MS4s not carried out under the direction and supervision of the DOT, require coverage under the MS4 general permit (Permit No. WI-S050075-3) or an individual permit.

This proposed permit requires the DOT to maintain its programs developed and implemented under the previous version of the TS4 Permit, comply with measurable goals, and to summarize its efforts toward meeting the permit requirements in an annual report. In addition, this proposed permit continues to require compliance with the developed urban area performance standard of s. NR 151.13, Wis. Adm. Code. A summary of the most significant changes from the previous version of the TS4 Permit and additional clarity is provided below.

In summary, the TS4 general permit requires the DOT to comply with the following:

- Reduce pollutants that discharge through its TS4 to waters of the state via the development, implementation, and maintenance of programs with clear, specific, and measurable goals for public education and outreach, public involvement and participation, illicit discharge detection and elimination, construction site pollutant control, post-construction pollutant control, pollution prevention under the direction and supervision of DOT operations, including meeting the 20% total suspended solids developed urban area performance standard.
- Follow federal and state requirements that provides the flexibility for the DOT to develop, implement, maintain, and evaluate its TS4 programs to help determine appropriate methods for meeting permit requirements. This proposed general permit allows the DOT to comply with the permit requirements either individually or in a collective arrangement with other municipalities. The DOT is responsible for meeting all the applicable requirements for its TS4. However, the DOT may find that collectively pooling resources with other municipalities will be more efficient and cost-effective to comply with certain requirements.
- Develop and provide information on proposed programs and clear, specific, and measurable goals to be submitted to the DNR in accordance with a compliance schedule for review and comment. The DNR will have up to six months to review proposed programs before the programs are to be implemented.
- Develop, complete, and annually update a storm sewer system map.
- Analyze the DOT's pollutant loading contribution and develop an implementation plan to make progress toward complying with approved Total Maximum Daily Loads (TMDL), where applicable.
- Submit an annual report summarizing the DOT's efforts at meeting the permit requirements.

Permit Structure

The TS4 is broken down into six sections and contains two appendices. Section 1 outlines the applicability; Section 2 outlines the six MCMs noted above and includes the storm water program requirements; Section 3 includes the TMDL requirements; Section 4 contains a schedule of when specific permit requirements must be completed; Section 5 includes standard storm water permit conditions; Section 6 includes definitions for terms used in this permit; Appendix A provides a list of permitted MS4s located either within or separate from an Urbanized Area; and Appendix B provides tables identifying the TMDL Load Reductions Necessary to Meet TMDL Wasteload Allocations for the USEPA approved TMDLs noted above.

Key differences between the previous TS4 general permit and reissued permit include the following (numbering corresponds to the TS4 general permit sections):

Signature Page and Throughout: The TS4 general permit applies to only one applicant, the Wisconsin Department of Transportation, therefore “DOT” is used instead of “landowner” and “Permittee”.

Section 1 Applicability

This permit applies to the Wisconsin Department of Transportation as listed on the cover page of the permit. No other TS4s or MS4s are covered by the reissued permit. The proposed permit added both conditions and clarification in code references.

Section 1.2 Authorized Discharges. The permit covers all areas within the jurisdiction of the DOT. If the DOT acquires new areas (e.g., expanding the right-of-way) during the term of the permit within an urbanized area, these new areas are now considered the jurisdiction of the DOT and the permit conditions apply to these areas. Clarified language includes acknowledgement of the volume of runoff from adjacent areas (run-on to the TS4) that contribute to the volume of water moved by the TS4. The run-on needs to be considered in the overall efficacy of storm water best management practices and may contribute to best management practice (BMP) maintenance needs.

Updates add clarity on TS4 discharges covered under this permit. The DOT is required to implement BMPs in its permitted area to reduce its discharge of storm water pollution to waters of the state. Through implementing these BMPs, the DOT is authorized to discharge storm water point source discharges from its TS4 to waters of the state.

Section 1.3 Water Quality Standards was reworded to improve clarity.

Section 1.4 Outstanding and Exceptional Resource Waters was reworded to provide clarity of existing antidegradation requirements.

Section 1.5 Impaired Waterbodies was changed to reflect the date for submitting the DOT’s annual TS4 report. Each year, the DOT is required to determine whether any part of its TS4 discharges to a listed impaired waterbody and where so, include a written section in its storm water management program that discusses the management practices and control measures it will implement as part of its program to reduce, with the goal of eliminating, the discharge of each pollutant of concern that contributes to the impairment of the waterbody.

As transportation systems and right-of-ways (ROWs) expand, alteration of the land by development can increase the discharge of pollutants such as oil and grease, heavy metals, and nutrients. The DOT must meet design criteria for new and redevelopment and implement pollution prevention practices as described in their stormwater management plan to prevent a new or increased discharge of a pollutant of concern to an impaired waterbody from the TS4.

Section 1.7 Endangered and Threatened Resources was updated to include applicable code references.

Section 1.8 Historic Property was updated to provide clarity about the historic property requirements in state statute.

Section 1.10 Implementation. In the previous permit, section 1.10 was named “Start of Permit Coverage”. As the cover page specifies the start date, “Start of Permit” was removed as it was redundant. This section has been changed to discuss Implementation of the permit which was section 1.11 in previous version.

Section 1.11 Exclusions discusses exclusions from permit coverage.

Section 1.11.3 Agricultural Facilities and Practices was added to include agricultural facilities and practices as being an exempt discharge not covered under this permit.

Section 1.11.4 Storm Water Discharges from WPDES Permittees was added to clarify the exemption of DOT from other storm water discharges with WPDES permits.

Section 2 Storm Water Management Programs

The title was changed from “permit conditions” to “storm water management programs” to clarify the organization of the permit. Additional details were added to this section to define the requirements more clearly for each of the six storm water management programs (also known as MCMs). The permit conditions were tailored to meet the DOT’s storm water management program with clear, specific, and measurable goals adapted to the DOT. An example of sections removed relate to ordinance development because that is not applicable to the DOT. This section was also reorganized to separate the Storm Water Quality Management (SWQM) requirements out of the Pollution Prevention Program section.

This permit requires development of written storm water management program (SWMP) documents describing how the DOT will comply with the permit’s requirements for each of the six MCMs, consistent with s. NR 216.07, Wis. Adm. Code. This is not a new requirement, but rather a clarification because the previous permit did not require written program documents. As explained in the USEPA Rule Remand, “the written SWMP provides [the DNR] something concrete to review to understand how the MS4 will comply with permit requirements and implement its storm water management program.” This also provides an opportunity for the DNR to assess compliance with the permit requirements. The DOT is expected to develop written documents if they do not already exist and submit them to the Department. Existing and new SWMP documents describing the DOT’s approach to each minimum control measure must be submitted to the DNR by the specified timelines.

The permit also requires DOT to establish and work towards achieving measurable goals for all six MCMs. As with written program documents, this is not a new requirement, but rather a clarification.

At a minimum, the measurable goals should contain descriptions of actions DOT will take to reach each goal, the frequency, and dates for such actions, what is anticipated to be achieved by each goal, and a quantifiable target to measure progress toward achieving each goal. Goals establish a baseline against which future progress at reducing pollutants to the MEP can be measured.

The DOT should use the measurable goals to:

- Address specific water quality problems and pollutants in the TS4 area;
- Protect a significant water resource in your area (e.g., a public water supply, cold water fishery, etc.);
- Build upon existing municipal activities;
- Use an existing State or local program to meet one or more of the MCM requirements.

For additional information on developing measurable goals, please see the EPA guidance on their website: <https://www3.epa.gov/npdes/pubs/measurablegoals.pdf>.

2.1 Public Education and Outreach Program

Public education and outreach are critical elements of a successful storm water program. Knowledge and understanding from the public improve overall community compliance and support for the programs and the objective of improving water quality.

2.1 was updated from establishing to implementing a Public Education and Outreach Program.

2.1.1 was changed from exclusively DOT staff to include county staff, consultants, and contractors to account for DOT utilizing other entities to complete some of the required components of this permit, such as street cleaning and winter road management activities.

2.1.1.3 was added to include illicit discharge as a topic for DOT's education and outreach program.

2.1.1.4 was added to include pollution prevention during mowing and drainage system maintenance as a topic in DOT's education and outreach program.

2.1.1.5 was added to include salt storage regulations and winter road maintenance best practices to reduce chloride pollution as a topic in DOT's education and outreach program. Chlorides are a growing concern in Wisconsin, and State of Wisconsin is working across various agencies to increase awareness of the issues and how to minimize impacts through good winter management practices.

2.1.1.6 was added to include education on the topics of habitat, bank stability and flood resilient design considerations for culverts and bridges for DOT to include in its education and outreach program.

2.1.3 was adjusted to maintain a publication (instead of a pamphlet) to give DOT some flexibility in implementation.

2.1.3.1-2.1.3.5 were added to specify the subject matter to be included in the written publication (formerly a pamphlet): importance of addressing vehicle fluid leaks promptly, disposing of household fluids and waste, proper disposal of recreational vehicle holding tanks, recommended vehicle washing practices and actions that the DOT is undertaking to prevent storm water pollution.

2.1.4 removed the term funding. DOT shall continue to promote the research itself and not funding for it.

2.1.5 combines 2.1.5 and 2.1.7 from the previous version of the permit.

2.1.6 was added to incorporate the measurable goal requirement from EPA. Measurable goals are required to be established and implemented for each of the storm water management programs in the permit. Measurable goals can be used to evaluate the effectiveness of individual control measures and the storm water management program holistically. These goals are described in the Phase II rule as BMP design objectives or goals that quantify the progress of program implementation and the performance of BMPs. They are objective markers or milestones that permittees (and the permitting authority) will use to track the progress and effectiveness of BMPs in reducing pollutants to the MEP. Measurable goals are designed to be a key part of reducing storm water pollution to the MEP.

2.2 Public Involvement and Participation Program

The public can provide essential perspectives, insights, and assistance through having an active role in both developing and implementing the storm water program. When the public is active and involved it can result in broader public support, reducing obstacles when implementing elements of the program, the public can provide a broad base of expertise and input, and can provide a conduit to implementing other related programs in the watershed.

2.2 was updated from establishing to implementing the Public Involvement and Participation program. The program was established in the previous permit term.

2.2.2 was updated to include local officials' meetings in addition to the public meetings for 100% of mega-major and 50% of construction projects and projects with storm water components.

2.2.3 was added to encourage DOT to optimize opportunities to collaborate with permitted MS4s and local officials during the scoping of projects to foster relationships and improve water quality by assessing the most appropriate BMPs and BMP location(s).

2.2.4 removed the two times per year requirement for the Adopt-A-Highway program. The Adopt-A-Highway program is not required by this permit.

2.2.6 was added to include additional public participation requirements to engage with each municipality within the TS4 boundaries at least once per permit term. This is intended to encourage collaboration between the entities and improve existing partnerships to meet permit requirements collectively or work towards the common goal of TMDL compliance.

2.2.7 was moved in the permit. It was 2.1.6 in the previous issuance of the permit.

2.2.8 was added at the request of DOT to include its participation with the National Cooperative Highway Research Program to improve the storm water quality research.

2.2.9 was added to include the development, submittal, and implementation of measurable goals for its Public Involvement and Participation program per the EPA Remand rule. Please see the explanation of measurable goals above in 2.1.6.

2.3 Illicit Discharge Detection and Elimination Program

The illicit discharge detection and elimination program is designed to identify non-storm water discharges being conveyed through the TS4 to waters of the state. This is accomplished through field screening, mapping and investigation and enforcement, as needed.

Field screening is an effective way to identify illicit discharges or illicit connections to storm water pipes. Based upon the sampling result for a specific pollutant, the DOT may need to take additional action. For example, the concentration of ammonia detected at the outfall may require the DOT to collect a sample for lab analysis and complete a sewershed investigation to find the source. Other times, only follow up monitoring is needed. The DOT has the flexibility to determine the action levels and corresponding response steps provided the pollutants and specified parameter action levels are identified in the written IDDE field screening procedures or similar document. The DNR has developed guidance to assist with developing parameter action levels, and the DOT is encouraged to adapt their IDDE programs based upon the results of screening and characteristics of the sewersheds. The IDDE field screening procedures or similar document shall also explain when a certified lab sample needs to be collected, as these are more accurate and hold greater weight during enforcement, if needed.

The DOT will screen 20% of major outfalls once a year, resulting in all the major outfalls being screened during the permit term. Any major outfall showing evidence of illicit discharges or exceeding a parameter action level, needs to continue to be monitored at least once per year. It is recommended a schedule of annual outfalls screening be added to DOT's IDDE written procedure to more easily demonstrate permit compliance.

Outfall screening consists of visual observation, field analysis, and documentation. The DOT should have an inspection form or similar document to record the results of the visual observation monitoring. If flowing water is observed at the outfall, a field analysis should be conducted to determine the source of the flow and the appropriate parameter action levels followed. Documentation of field screening activities should be kept for at least 5 years. A summary of the results needs to be submitted with the annual report. This can be a spreadsheet summarizing the sample results for each outfall.

The DOT also needs to maintain a system for documenting illicit discharge activities, including complaints, referrals, and investigation activities. Records should be kept for at least 5 years.

This permit also requires training on the DOT's illicit discharge procedure for those staff responsible for implementing the illicit discharge program at least once during the permit term. For example, training on how a potential illicit discharge is responded to (e.g., If a complaint is called in by a resident, or a DPW crewmember observes an illicit discharge, how is it communicated to the person responsible for investigation and follow up?). The method for training (e.g., in-person, email with training information, or a training video) is determined by the DOT. A summary of the training method should be included in the program's written procedure.

2.3 was updated from planning for the program to implementing the Illicit Discharge Detection and Elimination program.

2.3.1 was 2.3.6 in the previous issuance of the permit.

2.3.3 increased the screening quantity from 10 to 20 percent of all major outfalls per year. Further definition for the outfalls to be screened for IDDE being located within the DOT ROW and included that DOT may have a memorandum of understanding with any municipality to support screening efforts.

2.3.3.1 was added to give clear and specific goals to the screening process.

2.3.3.2 was added to give clear and specific goals to the field analysis process for IDDE screening.

2.3.4 was updated to include the sampling component of the IDDE program and to integrate screening observations into the maintenance operations of the TS4 for the IDDE program.

2.3.6 has a statutory reference incorporated for additional clarity.

2.3.7 was added to have DOT establish measurable goals for the Illicit Discharge Detection and Elimination Program. See section 2.1.6 for more information on establishing measurable goals.

2.4 Construction Site Pollutant Control Program

Construction sites are required to be regulated by DOT to reduce pollutants entering the TS4 from the discharge of sediment and construction materials from construction sites. This program includes: a cooperative program with DNR through the issuance and implementation of the Transportation Construction General Permit (TCGP), update and implement a written erosion and sediment control compliance procedure, a regulatory mechanism requiring the implementation of erosion and sediment controls to the standards established in ch. NR 151, Wis. Adm. Code, establishing and following procedures for site plan review of construction plans that consider potential water quality impacts prior to submittal to DNR, procedures for site inspection and enforcement of control measures and recordkeeping for these activities, using established regulatory mechanism to compel compliance. Determine the appropriate best management practices (BMPs) complying with permit conditions for this minimum control measure.

2.4 was updated from planning for the program to implementing the Construction Site Pollutant Control Program. This permit continues the requirement to implement a construction site pollutant control program to reduce the discharge of sediment from construction sites. The requirements are similar to the last permit and the changes are intended to add clarity to the permit and process. Before submitting a NOI for coverage under the TCGP, the DOT shall confirm that erosion, sediment control and storm water plans for projects meet the requirements found in s. NR 216.46, Wis. Adm. Code and the performance standards of s. NR 151.25, Wis. Adm. Code. Minor modifications were made throughout this section to be reflective of current DOT and DNR operations.

2.4.1.1 was added to further refine and enhance the existing DNR-DOT permitting process. DOT will review the materials prior to submitting to DNR. Pre-review by DOT is intended to reduce the comments and revisions that would be necessary, thereby reducing staff time reviewing multiple iterations of projects.

2.4.2 has additional language noting that the DOT manual Chapter 10 needs to have standards consistent with DNR storm water standards found in chs. NR 216 and NR 151, Wis. Adm. Code.

2.4.3 was added to detail the elements required in the written procedures for the construction site pollutant control program.

2.4.3.1 was added to clarify that the written construction procedure must include repairing or replacing erosion control BMPs within 24 hours of when the deficiency is noted per s. NR 216.48(4)(b), Wis. Adm. Code.

2.4.3.2 was added to establish the need for plan amendments to be completed if the approved plan fails to reduce the impacts of pollutants (sediment) being discharged from construction practices.

2.4.3.3 was added to establish that DOT must have and use appropriate mechanisms for addressing noncompliance with performance standards to include mechanisms used to compel compliance with these standards.

2.4.3.4 was added to define the tracking requirements for the construction program including active sites, inspections, compliance, and corrective actions used during the reporting year.

2.4.4 establishes the requirement for DOT to establish measurable goals for the construction program. See 2.1.6 for more information on establishing measurable goals.

2.5 Post-Construction Storm Water Management Program

Post-construction storm water management in areas undergoing new development or redevelopment is necessary as runoff from these areas has been shown to significantly affect receiving waterbodies. Impacts include an increase in the type and quantity of pollutants in stormwater runoff. As runoff flows over areas altered by development, it picks up harmful sediment and chemicals such as oil and grease, pesticides, heavy metals, and nutrients (e.g., nitrogen and phosphorus). These pollutants often become suspended in runoff and are carried to receiving waters, such as lakes, ponds, and streams. Once deposited, these pollutants can enter the food chain through small aquatic life, eventually entering the tissues of fish and humans. Also, post-construction runoff may increase the quantity of water delivered to the waterbody due to storm events. Increased impervious surfaces (e.g., parking lots, driveways, and rooftops) interrupt the natural cycle of gradual percolation of water through vegetation and soil. Instead, water is collected from surfaces such as asphalt and concrete and routed to drainage systems where large volumes of runoff quickly flow to the nearest receiving water. The effects of this process include streambank scouring and downstream flooding, which often lead to a loss of aquatic life and damage to property. The post construction program mitigates long-term impacts of development on storm water runoff through monitoring the efficacy of post-construction BMPs and addressing maintenance requirements to maintain their functionality.

2.5 was updated from planning to implementing the post-construction program. A reference to the administrative code was also added. The post-construction program is intended to control the quality of storm water discharges from the MS4 after construction is complete. The discharges should be controlled for the life of the site or until redevelopment takes place.

2.5.1 was updated with the current permit number and noting a procedural improvement of the applications being reviewed for compliance with standards established in Wis. Adm. Code by DOT prior to submittal to DNR.

New to this permit is the requirement for the DOT to develop and maintain a procedure to capture the drainage area from new projects for future use in updating storm water pollution prevention modelling.

2.5.3 was added to address the need for modelling efforts that had not been completed in the previous permit term. DOT needs to establish a procedure to delineate and define the drainage areas from new projects to update its storm water modelling required to demonstrate compliance with chs. NR 151 and NR 216, Wis. Adm. Code.

2.5.4 was added to clarify the BMP inventory requirement. The DOT shall develop an inventory of all DOT-owned or operated post-constructed BMPs and shared BMPs constructed on or after January 1, 2004. The inventory shall include:

- DOT-owned BMPs are BMPs owned by the DOT, regardless of date of construction.
- DOT-operated BMPs are privately-owned BMPs that the DOT has long-term maintenance agreement, regardless of date of construction.

2.5.4.1 was added to update the timeline from development to implementation and establish a priority for how to accomplish the required inspections.

2.5.4.2 was added to clearly identify the documentation and reporting requirements for the post-construction storm water management program.

2.5.5 was added to include the requirement to establish measurable goals for the pollution prevention program. See 2.1.6 for more information on establishing measurable goals.

2.6 Pollution Prevention Program

The pollution prevention activities consist of multiple programs and training which are employed to reduce municipal sources of pollution. These activities include winter road management, nutrient management, street sweeping and catch basin cleaning, management of leaves and grass clippings, good housekeeping at municipal properties, and employee training. Each of the programs is described in more detail below.

2.6 was updated from planning to implementing the pollution prevention program.

2.6.1 was added to specify the activities that are required to be completed.

2.6.1.1 was 2.6.2.1 in the previous permit. It was expanded to incorporate specifics for record keeping and reporting in the annual report.

2.6.1.2 was 2.6.2.2 in the previous permit. It was expanded to explain how the results of the catch basin cleaning will be quantified and where it will be documented in the annual report.

Street sweeping and catch basin activities are an effective way to remove large sediment particles that would otherwise be washed away during precipitation events. This permit requires the DOT to track the number of lane miles swept, number of catch basins cleaned and the weight in tons of material collected annually. If DOT uses street sweeping or catch basin cleaning as part of their efforts to meet a performance standard or TMDL reduction goal, the sweeping and cleaning frequencies must be consistent with those identified in the pollutant loading analysis.

2.6.1.3 was 2.6.2.3 in the previous permit. The provision has been modified to clarify how to manage the collected waste materials from previous activities, the storage, dewatering and disposal of this waste.

In accordance with Wisconsin's solid waste laws and regulations, material collected from street sweeping and catch basin activities is considered solid waste and must be disposed of in an appropriate manner. If the DOT stages this solid waste material prior to disposal, BMPs should be employed to prevent contamination with storm water runoff. Dewatering and drying of this solid waste material should be done in a manner that does not allow for liquid generated from this material to discharge to waters of the state (surface, ground, or wetland) as this is considered a non-storm water discharge and is not authorized by this permit. All material should be disposed of in a landfill unless the DOT has an approved beneficial reuse exemption from the DNR Solid Waste Program.

2.6.1.4 was 2.6.2.4 in the previous permit.

2.6.1.5 Winter Road Maintenance was 2.6.2.5 in the previous permit. It has been expanded to clarify that DOT must develop and implement a salt minimization strategy and some of the elements that the strategy must incorporate include temperature, precipitation event, road conditions and other factors that would warrant a change in the type of management technique implemented.

2.6.1.5.1-3 were added to specify required elements in the Winter Road Maintenance efforts such as equipment calibration, staff training, and tracking of deicers used by month and lane-mile.

This permit continues the requirement for DOT to only apply road salt or deicers in quantities required to maintain public safety. To reduce overapplication of salt and deicers, this permit requires the DOT to develop and implement a salt application, salt reduction strategy, or similar document which describes the conditions, equipment, and strategy which will be followed during deicing events. The permit also requires training on the salt reduction strategy for county, municipal or contractors involved in deicing operations at least every other year.

The permit requires annual calibration for salt application machinery. The DOT's winter road management program should describe how calibration is completed for each piece of equipment. If the salt application machinery is owned by another entity, there will be language in the contract or agreement to ensure it is completed by the contractor to the same specifications or better.

Factory calibration is not considered acceptable for annual calibration as new machinery has been shown to significantly over apply salt based on factory settings. Calibration is critical for properly using the quantity of deicers used for reporting on the annual report.

2.6.1.6 was added to explain that where DOT uses contractors to complete Winter Road Maintenance activities, the concepts specified above must be incorporated into the contract language to ensure they continue to be completed on behalf of DOT.

2.6.2 was 2.6.5 in the previous permit. This permit continues the requirement for municipal garages, storage areas, and other public works related facilities (e.g., composting facilities) with the potential to generate storm water pollution to have storm water pollution prevention plans (SWPPP) for each site under DOT control. These sites would normally be covered by an industrial storm water permit, but to

avoid the need for multiple permits, the requirements for these industrial sites have been incorporated in the TS4 permit. The requirements for each SWPPP include a map of the site, potential sources of pollution, drainage patterns and discharge locations, description of housekeeping activities, and description of BMPs to reduce the runoff of pollutants from the site.

If the DOT operates at a site without a SWPPP, one must be developed by September 30, 2024, to be submitted with the annual report. New SWPPPs must be submitted to the DNR for review.

Quarterly visual inspections should be conducted at each site, and inspections documented. Additionally, an annual inspection should be completed for each site. Any deficiencies found during the inspections should be corrected and the SWPPP updated. Updated SWPPPs should be submitted with the annual report any time revisions are made.

The DOT is required to provide training to staff involved in pollution prevention activities. The trainings should include pollution prevention activities and their impacts on storm water quality (e.g., road salt contributions to chloride impairments) and the DOT's implementation of these activities (e.g., type and amount of product used for the various conditions, areas which receive product, etc.). One training event must be held during the permit term to cover each pollution prevention topic, except Winter Road Management, which education must occur every other year.

2.6.2.2.1-2.6.2.2.4 was 2.6.5.2.1-2.6.5.2.4 in the previous permit.

2.6.2.3 was 2.6.5.3 in the previous permit.

2.6.2.4 was added to define what is required for quarterly facility inspections of DOT facilities located in the TS4 that require SWPPPs. The DOT is required to conduct wet weather screenings at storm water discharge outfalls within the first 30 minutes of precipitation/discharge and complete physical observations of the discharge for indications of storm water pollution such as color, sheen, turbidity, floating solids, foam, or other visual indications of contamination.

2.6.2.4.2 was added to define what is required for annual facility inspections of DOT facilities located in the TS4 that require SWPPPs. Inspections include a review of the SWPPP for consistency with facility features and operations, if inconsistencies are identified, an amendment shall be completed and submitted to the DNR with the next annual report. The inspection also includes a review of BMPs and their condition to ensure they are in effective working order. If a practice is found to be ineffective, a new practice shall be implemented and the SWPPP shall be updated to reflect the change.

2.6.3 was 2.6.5.5 in the previous permit and was updated to include details of required training including the following elements: spills response and prevention, open space maintenance, fleet and building maintenance, TS4 and BMP maintenance. The training is required to be completed for staff working at the facilities with SWPPPs within the TS4 at least once a permit term.

2.6.4 was 2.6.5 in the previous permit.

2.6.5 was added to include the development and implementation of measurable goals. See 2.1.6 for more information on establishing measurable goals.

Section 2.7 Storm Water Quality Management

The DOT is expected to maintain all BMPs used to achieve their existing control level in accordance with s. 281.16 (2) and (3), Wis. Stats. Maintenance and continued operation of BMPs is necessary to prevent backsliding.

2.7 was added to clearly establish the water quality standards for the TS4 and the modelling requirements to determine the level of compliance with the standards. The SWQM concepts are continued from the previous permit, except for the requirement to develop a plan to achieve a 20% TSS reduction from the pre-2004 urbanized area.

2.7.1-2.7.2 was moved to the SWQM section from the Pollution Prevention Section (2.6) from the previous permit. The updated SWQM section establishes modeling requirements to ensure DOT is meeting the required baseline of 20% Total Suspended Solids reductions.

2.8 Storm Sewer System Maps

2.8 has added storm sewer mapping components to be consistent with the updates to ch. NR 216, Wis. Adm. Code, including major and minor outfalls, location of other WPDES permit holders discharging to the TS4, TMDL watershed boundaries, DOT facilities requiring SWPPPs.

2.8.1.1 was 2.7.1.2 in the previous permit. It has been updated to include a schedule to make annual improvements and completion of the mapped storm sewer system by the end of the permit term.

2.8.1.1.1 was added to promote a compliance schedule for completion of the storm sewer system map.

2.8.1.2 was 2.7.1.1 in the previous permit. Was updated to include a deadline for incorporation of the census boundaries no later than one year after publication of the census maps. They shall be submitted to DNR with the next annual report after completion.

2.8.1.3 was added to be consistent with the revisions in ch. NR 216, Wis. Adm. Code.

2.8.1.3.1 was 2.7.1.2 in the previous permit.

2.8.1.4 was added to be consistent with ch. NR 216, Wis. Adm. Code updates.

2.8.1.5 was 2.7.1.3 in the previous permit.

2.8.1.6-2.8.1.8 were added to be consistent with ch. NR 216, Wis. Adm. Code updates.

2.8.2 was 2.7.2 in the previous version of the permit.

Section 2.9 Annual Report

2.9 was reorganized but has language consistent with section 2.8 of the previous permit other than the changes noted below.

2.9.3 was added to accurately reflect the updates from section 2.8 regarding the storm sewer mapping and reflecting updated administrative code.

2.9.5 was added to include reporting on TMDL requirements noted in Section 3 of the permit.

2.10 Reapplication for Permit Coverage

2.10 was added to establish compliance status of DOT with each of the permit sections. It defines the requirements for reapplication for continued permit coverage. The permit reapplication requirements are expanded from the previous permit term and specify additional information the DOT must submit 180 days prior to permit expiration (by January 2, 2028). The application will require submission of measurable goals for each MCM and TMDL pollutant load reduction benchmarks. The DOT must also include an explanation of how the proposed actions and benchmarks reduce pollutants to the MEP and provide assurance the TMDL reduction goals will be achieved in the future. The DNR will consider the application package and any other relevant information to develop the next permit. These conditions will help establish updated permit goals for subsequent permit terms.

2.11 Amendments was 2.9 in previous version of the permit.

Section 3 Total Maximum Daily Load Requirements

This section was separated and amended to clearly define the TMDL permit requirements for the TS4. The standards have been defined consistently with other municipal permittees, including requirements and the DOT's waste load allocations. The requirements include establishing what the status of pollutant reductions has been and a plan for how to reach the waste load allocations as defined in Appendix B in tables B1-B7.

3.1 was added to provide a clear description of how TMDL data is summarized and submitted to DNR. The summary must include modelling results per TMDL reachshed for the estimated no-controls condition, and the existing percent reduction from no-controls. The summary must include differentiation for modelling. The differentiation must be made for which modelling includes run-on from outside of the ROW and which excludes it. The previous version of the permit included a modelling discrepancy that is being remedied on a project-by-project basis by DOT through this permit.

3.2 was added to establish a list of anticipated projects in the TMDL area that will require a Transportation Construction General Permit (TCGP) in or draining to a TMDL in the TS4. The list must be organized by TMDL, reachshed and identify any projects for which DOT anticipates obtaining additional ROW to complete the project. The list helps establish potential areas for new BMPs or BMP enhancements to meet WLAs.

3.3 was added to analyze the potential areas for new BMPs or BMP enhancements to meet WLAs with a construction schedule. Where no BMP additions or improvements are proposed, a justification shall be provided to show what factors were used to make that decision.

3.4 was added to provide a status update on the TMDL WLAs in the annual report in 2027.

3.5 was added to establish requirements for the Bacteria WLAs in the Milwaukee River Basin TMDL. The conditions are comparable to other MS4s within the Milwaukee River Basin TMDL but are modified to reflect the realities of the area and bacteria sources DOT has under their jurisdiction in the TS4.

3.5.1 was added for DOT to inventory the potential sources of fecal coliform and E. coli entering its TS4. This inventory needs to be completed in tabular format with the findings mapped.

3.5.2 was added for DOT to establish a bacteria source elimination plan consisting of strategy, prioritization, and how DOT will collaborate with adjacent MS4s to complete the actions in the plan.

Section 4 Implementation Schedule

This section has been updated to reflect the schedule of this permit term's requirements. To address deficiencies from the previous permit, a compliance schedule has been established to clearly provide achievable benchmarks to reach permit requirements within this permit term.

Section 5 General Conditions was updated to Standard Conditions

The standard conditions are established in code and are consistent across other WPDES permits. This was included in Section 4 of the previous permit.

5.6-5.23 were added for consistency with other WPDES permits.

Section 6 Definitions

The definitions section was expanded to include additional terms to clarify the requirements of the permit, including Best Management Practice, Corrective Actions, DNR, DOT, Illicit Connection, "New TS4 discharge of pollutants" or "new TS4 discharge of a pollutant," and reachshed. The section has been rearranged and renumbered to include the additional terms in alphabetical order along with the terms defined in the previous version of the permit.

6.1 added definition for Best Management Practice.

6.3 added definition for Corrective Action.

6.4 added definition for DNR.

6.5 added definition for DOT.

6.6 was the same as the definition found in section 5.2 of the previous version of the permit.

6.7 added definition of Illicit Connection.

6.12 added clarification on Maximum Extent Practicable (MEP) from ch. NR 151, Wis. Adm. Code to better represent the application of the concept.

6.16 added definition for "New TS4 discharge of pollutants" to address antidegradation requirements.

6.18 definition was updated for clarity.

6.19 was added to define Reachshed, as it is used for TMDL modeling, mapping, and planning purposes.

Notes have been added to the following sections to convey additional consideration or assist with interpretation of the permit condition:

- **1.5.2** contains a note of maintenance practices examples.

- **1.10** contains a note explaining when and how ch. Trans 401, Wis. Adm. Code would be determined to meet or exceed the standards established in chs. NR 151 and NR 216, Wis Adm. Code consistent with language from the TCGP.
- **2.2.7** contains a note explaining the roles and responsibilities of the Standards Oversight Council (SOC) in developing and maintaining technical standards which establish the minimum criteria for implementation of BMPs.
- **2.4.1** contains an updated note to reflect the current version of the TCGP.
- **2.4.3.3** contains a note to describe what is meant by corrective actions using commonly employed examples used by other MS4s.
- **2.5.1** contains a note that was updated to include the current permit version of the TCGP.
- **2.5.4** contains a note that includes the code, ch. NR 528, Wis. Adm. Code, which establishes the process to regulate sediment removal from storm water management structures.
- **2.6.2.4.1** contains a note, including a link, to an optional form for the Quarterly Visual Monitoring Report. If this form is not used, the alternative document shall contain all the information noted on the provided form.
- **2.4.2.4.2** contains a note, including a link, for an optional reporting form for the Annual Facility Site Compliance Inspections. If this form is not used, the alternative document shall contain all the information noted on the provided form.
- **2.7.2** contains a note clarifying that only areas of urban land use are required to be included in the modeling for compliance with SWQM or TMDL requirements with a link to formal guidance provided by the DNR.
- **3.5.2** contains a note defining the two types of bacteria considered sources in the Milwaukee River Basin TMDL as fecal coliform and *E. coli*.
- **5.8** contains a note citing the statute and procedure for response of notification or detection of discharges of hazardous substance.
- **5.9** contains a note with a link for details on what state and federal reportable quantities are for spills.

Permit Drafter

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Public Comments

Please direct comments by e-mail to or in writing to Storm Water Program c/o Brooke Robinson, Wisconsin DNR, 141 NW Barstow St., Room 180, Waukesha, WI 53188; The deadline for submittal of public comments is by 5:00 p.m. on November 30, 2023.