Wisconsin Pollutant Discharge Elimination System Permit for Municipal Separate Storm Sewer System, Permit No. WI- S049867-4: Fact Sheet – August 2024

Purpose

The City of Sheboygan is currently covered under Wisconsin Pollutant Discharge Elimination System (WPDES) Permit No. WI- S049867-3. The WPDES permit expired on October 19, 2019. The Wisconsin Department of Natural Resources (Department) is proposing to reissue WPDES Permit No. WI- S049867-4 to continue the coverage of storm water discharges from this municipally owned or operated municipal separate storm sewer system (MS4) permittee. The proposed permit requires the MS4 permittee to develop, implement, and maintain storm water management programs to reduce the discharge of pollutants from the MS4 to waters of the state.

This fact sheet summarizes the Department's process and rationale for developing and issuing the MS4 permit.

The Department's Authority to Issue WPDES Permits

This permit is issued under the statutory authority granted to the Department pursuant s. 283.33, Wis. Stats. (Storm water discharge permits) and implements applicable federal and state law relating to MS4s. 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.

The Department's Regulation of Storm Water from the MS4

In Wisconsin, WPDES permits are issued by the Department with federal oversight from the United States Environmental Protection Agency (USEPA). The Department 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 Clean Water Act (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 Department promulgate administrative rules for permitting the discharge of storm water. As a result, the Department 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.

General Approach to Permit Development

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. In addition to establishing two alternative approaches to obtaining permit coverage, the rule clarifies that the permitting authority must establish 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 Clean Water Act." Referred to as the "MS4 permit standard," both approaches ensure that the public participation requirements of the CWA are met. The Department is applying the Comprehensive approach to issue this permit. Under the Comprehensive approach, all requirements are contained within the permit.

Permit conditions were developed to meet the MS4 permit standard: reduce pollutants to the maximum extent practicable (MEP), protect local water quality, and meet CWA Standards. This permit requires continued implementation of the six minimum control measure programs and development of a storm water management plan to make progress towards the reduction goals outlined in the Northeast Lakeshore TMDL. The Permittee satisfies the MS4 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 Department, are to electronically collect, manage, and share with the USEPA. The Department's electronic reporting system was built to collect these data elements. The Permittee can locate the eReporting system here: https://dnr.wi.gov/topic/stormwater/municipal/eReporting.html.

The Department considered annual reports, storm water management plan documents, and responses to the request for information provided by the Permittee when developing the permit conditions. An initial meeting was held with the Permittee to discuss permit conditions. Additional correspondences with the Permittee subsequently occurred to further discuss requirements. The following document provides an explanation for major permit requirements and summarizes changes from the previous permit.

Applicability

This permit applies to the MS4 listed on the cover page of the permit. No new MS4s are covered by the reissued permit.

Overview and Significant Changes from the Previous Version of the Permit

The proposed permit includes the conditions required by s. NR 216.07, Wis. Adm. Code, which consists of the following six categories, or minimum control measures:

- 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 Permittee to develop, implement, maintain, and evaluate its MS4 programs to help determine appropriate methods for meeting permit requirements.

This proposed permit requires the Permittee to maintain its programs developed and implemented under the previous version of the City of Sheboygan 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 City of Sheboygan Permit and additional clarity is provided below.

Permit Structure
The Permit is broken down into six sections. Section I outlines the applicability and general storm water permit requirements. Sections II includes the storm water management program requirements. Section III (Special Conditions) includes Total Maximum Daily Load (TMDL) requirements. Section IV contains a schedule of when specific permit requirements must be completed. Section V and VI are standard conditions and definitions, respectively.

I. Applicability
The proposed permit does not add additional conditions to this section. However, some conditions warranted clarification. Clarification of these conditions are described below.

I.A. Permitted Area
The permit covers all areas within the jurisdiction of the Permittee. If the Permittee acquires new areas (e.g., annexation) during the term of the permit, these new areas are now considered the jurisdiction of the City and the permit conditions apply to these areas.

I.B. Authorized Discharges
The Permittee is required to implement best management practices in its permitted area to reduce its discharge of storm water pollution to waters of the state. Through implementing these best management practices, the Permittee is authorized to discharge storm water point source discharges from its MS4 to waters of the state.

Permit section II.C.1 requires the Permittee to have a municipal ordinance or other regulatory mechanism that prohibits illicit discharge, spilling or dumping of non-storm water substances or material into the Permittee's MS4 or waters of the state. The municipal ordinance or other regulatory mechanism must also identify non-stormwater discharges or flows that are not considered illicit discharges (e.g., discharges from potable water sources, foundation drains, and air conditioning condensation that are not significant sources of pollutants to waters of the state).

Non-stormwater discharges to the Permittee's MS4 that are not considered illicit (e.g., discharges from potable water sources, foundation drains, and air conditioning condensation that are not significant sources of pollutants to waters of the state) and storm water discharges from regulated WPDES

permittees[1] (e.g., storm water associated with an industrial storm water permittee), are authorized to be discharged to the Permittee's MS4.

Though these discharges are authorized, they may not be illicit. If the Permittee discovers an illicit discharge originating from an authorized source (e.g., from a regulated WPDES permittee), the Permittee is expected to implement its Illicit Discharge Detection and Elimination program according to Permit Section II.C.

I.C and I.D Individual and Shared Responsibility
The proposed permit separates the individual and shared responsibility conditions to clarify information needed for the Department to approve cooperative efforts.

I.J. Impaired Waters
The Permittee is required to determine whether any part of its MS4 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 communities expand, alteration of the land by development can increase the discharge of pollutants such as oil and grease, heavy metals, and nutrients. The Permittee must meet design criteria for new and redevelopment and implement pollution prevention practices as described in their storm water management plan to not establish a new or increased MS4 discharge of a pollutant of concern to an impaired waterbody.

II. Storm Water Management Program
This permit requires development of written storm water management program documents describing how the Permittee will comply with the permit's requirements for each of the six minimum control measures, consistent with s. NR 216.07, Wis. Adm. Code. This is not a new requirement, but rather a clarification, as the previous permit did not clearly require written program documents. As explained in the USEPA Rule Remand, "the written SWMP provides [the Department] something concrete to review to understand how the MS4 will comply with permit requirements and implement its storm water management program."[2] This also provides an opportunity for the Department to assess compliance with the permit requirements. The Permittee is expected to develop written documents if they do not already exist and submit them to the Department.

This permit also requires the Permittee to have measurable goals for each of its storm water management programs. While a measurable goal for each storm water management program is not a new requirement – clear, specific, and measurable permit conditions surrounding measurable goals are new. Within each storm water management program, the permit identifies the Permittee's measurable goal. These measurable goals were proposed by the Permittee during the permit drafting process. Additionally, these measurable goal permit conditions require the Permittee describe within its written program procedures, anticipated actions it will take to reach its measurable goal, and metrics that will

[1] The Department's statewide website can assist in identifying regulated WPDES permittees that may discharge into the Permittee's MS4: https://uadnrmaps.wi.gov/H5/?viewer=SWPV. The Permittee should also identify all WPDES permittees in its jurisdiction as required by Permit Section II.H.
[2] 81 Federal Register 89339, December 9, 2016.

be used for evaluating progress. Lastly, the permit requires the Permittee submit a summary of the actions taken to achieve each measurable goal, evaluation results, and propose measurable goals for the next permit term. The Department will consider the proposed measurable goals and other information submitted with the reapplication package to develop the next permit.[3]

Although each of the six storm water management programs include permit conditions which identify each of the programs' measurable goal, require a description of anticipated actions and metrics, and submission of summary actions, results, and proposed measurable goals for the next permit term, this factsheet will not describe these changes in each of the six storm water management programs below.

II. A. Public Education and Outreach

The previous permit required the City of Sheboygan to increase awareness of how the combined actions of human behavior influence storm water pollution and its effects on the environment. The Permittee was to prioritize education topics identified in the permit, address all education topics at least once during the permit term with a minimum of 3 topics each year, identify target audiences, and establish measurable goals. The previous permit also allowed the Permittee to incorporate cooperative efforts with other entities not regulated by this permit (e.g., an education consortium) provided a mechanism was developed and implemented to track the results of these cooperative efforts and reported with the MS4 annual report.

Consistent with the previous permit, this permit will require the Permittee to address all identified education topics at least once during the permit term with a minimum of 3 topics each year, track and report the education topics and target audiences, and have measurable goal. Additionally, this permit also allows cooperative efforts with other entities not regulated by this permit. As discussed with the Permittee during the drafting process, the City may continue to incorporate activities provided by Sheboygan County Stormwater Coalition[4] given a mechanism to track the results of these cooperative efforts is implemented and reported with the MS4 annual report. However, the Permittee is ultimately responsible for demonstrating compliance. Thus, the Permittee should ensure its mechanism to track cooperative activities is adequate and the cooperative effort is described within the City's Public Education and Outreach written program procedure.

New to this permit is the requirement to use at least two Active/Interactive Mechanisms each year. Table 2 within the permit provides examples of Active/Interactive Mechanisms and Passive Mechanisms. However, examples provided in this table are not inclusive. The intent of this permit condition is to engage with the public. Therefore, the Permittee may implement an active/interactive mechanism not provided in the table or, implement a mechanism that may seem passive but, can be used in an active/interactive way. For example, though "social media posts" are considered a passive mechanism, "social media" can be active/interactive if it engages with the public. For instance, because groups of people could not meet in-person during the COVID-19 pandemic, typical in-person active/interactive events (i.e., Adopt-a-Storm Drain event) could not occur. Therefore, some Permittees pivoted from meeting in person to implementing their active/interactive events using social media (i.e., the public was encouraged to Adopt-a-Storm Drain by themselves, then, upload a picture to a social media platform).

[3] Consistent with ss. NR 216.01 and 216.07, Wis. Adm. Code.

[4] The Permittee is a member of the Sheboygan County Stormwater Coalition – a group led by the Sheboygan County Planning & Conservation Department which includes entities within Sheboygan County. The group works together towards a consistent, cost-effective, and efficient approach to stormwater and erosion control education.

Unlike the previous permit, this permit removes the requirement to prioritize the broad education topics each year. Instead, this permit focuses on taking actions towards its measurable goal. Further clarity on permit expectations is provided below. Please note, though each of the six storm water management program includes the same permit conditions and expectations, additional clarity will not be provided for the remaining storm water management programs discussed in this factsheet.

During the permit drafting process, the Permittee proposed a measurable goal for its Public Education and Outreach program of *increasing the diversion rate of recyclables from the landfill*. Within the Permittee's written public education and outreach program document, the Permittee shall describe anticipated actions to achieve its goal and metrics that will be used for evaluating progress on the measurable goal. Given the Permittee's goal is qualitative, metrics used to measure success could be qualitative, however, quantitative metrics are also appropriate. To measure if implemented actions (e.g., increased social media posts) were successful in reaching the goal of increasing the diversion rate of recyclables from the landfill, the Permittee could measure the success of its actions by:

- *Qualitative metric example*: conduct a survey to determine if residents believe they are recycling more or, conduct a meeting with staff involved with the landfill to determine if recyclables have noticeably decreased.
- *Quantitative metric example*: determining the quantity of recyclable materials in landfills before implementing efforts (i.e., social media posts) and after implemented efforts.

After measuring the success of implemented actions, the Permittee will determine if implemented actions were adequate. If the measurable goal was achieved, this may indicate actions were adequate and the Permittee may choose to implement similar actions in the future. However, if the measurable goal was not achieved, this may indicate actions were not adequate and the Permittee should not continue with similar action in the future. Additionally, if the metrics used to measure success were inconclusive, the Permittee should consider different metrics and/or setting a qualitative measurable goal in the future.

II. B. Public Involvement and Participation

The previous permit required the Permittee to implement a program to notify the public of activities required by the permit, to encourage input from the public regarding these activities, and include measurable goals. The new permit contains similar requirements but identifies more specific activities for public input and clarified expectations for measurable goals and written program procedures. The Permittee must allow for public comment and consider comments on annual reports, storm water management plan revisions, adoption of storm water related ordinances, and development of benchmarks for TMDL pollutant reduction. Lastly, to satisfy the eReporting Rule, the Permittee need to track and report the delivery mechanism and target participants for each activity.

II. C. Illicit Discharge Detection and Elimination (IDDE)

The Permittee has been implementing an Illicit Discharge Detection and Elimination (IDDE) program since obtaining its first MS4 permit. The reissued permit builds upon the existing program but provides clarity to specific response actions, adding a greater emphasis to the elimination part of the IDDE. Additionally, with each of the storm water management programs, this permit provides clear permit conditions for measurable goals and written programs.

Both the existing and reissued permit require the Permittee to have an ordinance or regulatory provision which prohibits non-storm water discharges into the MS4 system or waters of the state. The ordinance coupled with inspection and enforcement authority are necessary for the Permittee to prevent illicit discharges or improper disposal. As these are existing requirements, the Department expects the Permittee to already be enforcing an ordinance or regulatory mechanism.

Section II. C. 2.c) of the new permit requires development of an enforcement response plan that describes how the Permittee will enforce its illicit discharge ordinance when a responsible party is identified. The enforcement response plan is intended to provide clarity and consistency in enforcement actions the Permittee will complete once an illicit discharge is identified. At minimum, the enforcement response plan must identify:

- All enforcement mechanisms available to the Permittee. This includes formal mechanisms such as citations and informal mechanisms such as verbal warnings.
- The person(s) responsible for utilizing enforcement mechanisms. If persons vary or multiple persons are needed to utilize a mechanism, the written procedure should describe this. For example, although the Public Works Director determines a citation will be issued, the Director must request a citation from local law enforcement.
- The typical enforcement procedure and associated timeframe for escalated enforcement.
    - The enforcement response to all identified illicit discharges may not be the same (e.g., consider illegal dumping verses cross connections), so the Permittee may identify specific actions for all illicit discharges or identify actions for certain types of discharges.
    - If the Permittee determines escalated enforcement is needed, the typical associated timeframe to compel compliance should be described. For example, within 24 hours of discovering an illicit connection, the Public Works Director issues a letter to the responsible party (e.g., stop work order, cease and desist, notice of noncompliance, notice of violation, etc.) allowing 24 hours to stop the illicit discharge. If after 24 hours, the responsible party has not stopped the illicit discharge, the Public Works Director will issue a citation each day, up to 3 calendar days, until the illicit discharge has stopped. If after 3 calendar days, the responsible party has not stopped the illicit discharge, the Permittee will utilize its authority to correct the illicit discharge and bill back the responsible party.

Dry weather field screening remains an effective way to identify illicit discharges or which storm water pipes may have illicit connections. Dry weather screenings should occur when flow should not be present. Typically, this is 48-72 hours after a rain event. However, based on the precipitation event and size of drainage area, the amount of time may change. As with the previous permit, the Permittee needs to identify pollutant parameter action levels used during outfall screening. Based upon the sampling result for a specific pollutant, the Permittee may need to take additional action. For example, the concentration of ammonia detected at the outfall may require the Permittee to collect a sample for lab analysis and complete a sewer shed investigation to find the source. Other times, only follow up monitoring is needed. The Permittee 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 Department has developed guidance to assist with developing parameter action levels, and the Permittee is encouraged to adapt their IDDE programs based upon the results of screening and characteristics of the sewer

sheds. 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.

Similar to the previous permit, the Permittee is required to screen major and priority outfalls. The Permittee is required to screen 20 percent of all major outfalls each year, all priority outfalls at least once during the permit term, and any outfall which showed evidence of an illicit discharge or exceeded a parameter action level during the previous screening.[5] It is highly recommended a schedule of annual outfalls screening be provided in the IDDE written procedure to more easily demonstrate permit compliance.

Prioritization of outfalls to screen is an effective practice to identify illicit discharges and eliminate the pollutant loads. Similar to the previous permit, this permit calls for identifying priority outfalls – any MS4 outfall, not just major outfalls, which has a high likelihood of illicit discharge based upon multiple variables. The Permittee should consider hydrological conditions, total drainage area of the site, population density of the site, traffic density, age of the structures or buildings in the area, history of the area and land use types when selecting priority outfalls. New to this permit, the Permittee shall provide within its written program procedure a list of priority outfalls with explanation why these outfalls were identified as priority.

Outfall screening consists of visual observation, field analysis, documentation, and potentially lab analysis. The Permittee should have an inspection form or similar document to record the results of visual observation. 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. If general observations and screening indicate the presence of illicit discharge, and the source cannot be readily identified, the Permittee should collect a water sample for lab analysis. The water sample should then be analyzed for parameters to aid in determining the source of illicit discharge. 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 final requirement of the IDDE program is investigation and elimination procedures for responding to known or suspected illicit discharges. Where enforcement response procedures outline how the ordinance is enforced once an illicit contributor is identified, the investigation and elimination procedures outline the actions the Permittee will take to respond when illicit discharges are suspected or identified through screening, notification, complaints, or other sources. The Permittee should have procedures for immediately investigating portions of the MS4 suspected to contain illicit discharge based upon field screening, complaints, visual observation or other relevant information. These procedures shall identify the person responsible, the response time, investigation techniques to employ, and equipment necessary. The Permittee must also have a plan for responding to spills which discharge into or out of the storm sewer, including prevention and containment.

The permit changes the response time for eliminating illicit discharges or connections. The previous permit required the removal of the discharge or connection within three working days to the maximum extent practicable and, if the source had not been identified or observed within 6 months, required the City to maintain written documentation of the actions undertaken, including additional investigation requirements. This permit requires the City to take appropriate actions to expeditiously eliminate the

[5] If an outfall showed signs of an illicit discharge or exceeded a parameter action level, the Permittee should screen this outfall the following year to confirm the illicit discharge was resolved or determine if further investigation is needed.

illicit discharge. For public sources, this can mean beginning to take steps to stop the illicit discharge. For private sources, this can mean beginning to use the enforcement response procedures (written notice, NON, etc.). Within the 30-day time period, an initial assessment of feasibility to remove the discharge should be made. If the illicit discharge cannot be removed within 30 days, the Permittee shall contact its local MS4 storm water specialist via email or telephone. Within 45 days, the Permittee must submit an illicit discharge elimination plan to the Department which identifies the actions and timeframe the Permittee will follow to remove the illicit discharge. For example, if a force main is leaking into a storm sewer under a major roadway, significant resources and time may be needed to plan and complete the repair. The Permittee will be expected to follow the submitted elimination plan and remove the illicit connection as soon as practicable.

The IDDE investigation and elimination procedures should also include specific notification procedures. The Permittee shall include in its written program procedure immediately notifying the Department within 24 hours of identifying a spill or release of hazardous substance into or from its MS4. Advance notification of dye testing is also required because dyes are often confused with illicit dumping. Finally, the Permittee should contact an adjacent MS4 if it identifies an illicit discharge which flows into the adjacent MS4's storm sewer system or property under the jurisdiction of the adjacent MS4. Additionally, the Permittee should contact an adjacent MS4 if it identifies an illicit discharge originating from an adjacent MS4's storm sewer system or property under its jurisdiction.

The Permittee 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.

Lastly, this permit requires training on the Permittee's illicit discharge procedure for those staff responsible for implementing the illicit discharge program at least once during the permit term. Training on the Permittee's procedures helps to ensure actions are conducted as intended and is considered a best management practice. However, training mechanism (i.e., in-person meeting, passive educational materials), content, and personnel are determined by the Permittee. A description of the training and participants should be included in the program's written procedure and a summary of the training(s) and participants shall be documented and maintained for at least five years.

The following scenarios provide insight as to why training has been identified as a best management practice for MS4 Permittees.

1. A Permittee utilizing a consultant to conduct dry-weather outfall screenings expects the consultant to immediately investigate the source of a potential illicit discharge. However, the consultant is unaware of this expectation and the potential source is not immediately investigated.
2. A resident calls the main phone number of municipality (i.e., City Hall) to report a spill. However, municipal personnel are not aware of the individual responsible for investigating and responding to the spill complaint.

II. D. Construction Site Pollutant Control

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. The Permittee is expected to have a construction site ordinance in place which requires construction plans meet the performance standards in ch. NR 151, Wis. Adm Code, allows for inspection and enforcement to ensure compliance with

performance standards, and requires site operators to properly manage waste materials on construction sites.

The requirement for the Permittee to notify landowners of other potentially required permits has been removed. This requirement has been removed because it is the landowner's responsibility to obtain all applicable permits, and the municipality does not always know what are the latest DNR wetland and waterway permitting requirements that could apply to a site.

New requirements in this permit include written program procedures describing how the Permittee will implement its program consistent with permit conditions and specific construction site inspection frequencies.

The Permittee's erosion control plan review and permitting procedures should identify the steps construction site operators will follow to obtain a construction permit and the procedures the plan review staff (MS4 Permittee) will follow to review and issue construction site permits. If the Permittee implements actions not required by the permit (e.g., pre-construction meeting) this should be included in the written program. Additionally, if there are variations in the procedure (e.g., a City engineer reviews all private development applications while the City's Director of Public Works reviews all public development applications), this should also be clearly described in the written program procedure. The procedures should also describe how the Permittee will consider water quality impacts through its plan review process as required in s. NR 216.07 (4) (b), Wis. Adm. Code. The considerations can be in the form of a checklist or specific BMPs for certain site conditions but must describe a consistent process or evaluation that is applied to all sites within the Permittee's jurisdiction. For example, the Permittee may require certain BMPs on high slope or large sites or additional barriers if the site is adjacent to wetlands or other waterbodies. The Permittee may also require identification of portable toilets on constructions sites and require them to be on impervious surfaces and in locations of low traffic to limit bacteria runoff.

Also new to this permit is the requirement to develop a written program procedure describing the Permittee's erosion control inspection procedures. The document should include person(s) responsible and describe how inspections are recorded and maintained. This permit also includes inspection frequencies that are intended to provide clarity to the construction program requirements and are consistent with other MS4 permits in the state. Though the Permittee may require additional inspection (e.g., inspection of smaller sites or more frequent inspection frequencies), at a minimum, the Permittee must complete inspections at all construction sites, including municipal projects, with one acre or more of land disturbance, and sites of less than one acre if they are part of a larger common plan of development or sale, according to Table 3. New projects must be inspected within the first two weeks of commencement of land disturbing activity, all active sites must be inspected at least once every 45 days, all temporarily stabilized and inactive sites must be inspected at least once every 60 day, and follow-up inspections are required until issues are resolved. The Permittee is also required to keep record of all inspections and follow-up for at least 5 years.

Similar to the IDDE program, the Permittee must develop an enforcement response plan describing how and when the Permittee will use the enforcement provisions in their local ordinance to ensure the discharge of sediment and pollutants is controlled accordingly. For example, a permittee may elect to issue a stop work order after an initial inspection and follow-up inspection 7 days later, to a site which has not installed erosion and sediment control practices but has begun mass site grading.

Lastly, this permit requires staff implementing the Permittee's Construction Site Pollution Control program receive training at least once during the permit term. Training on the Permittee's procedures helps to ensure actions are conducted as intended and is considered a best management practice. However, the training mechanism (i.e., in-person meeting, passive educational materials), content, and personnel to be selected are determined by the Permittee. A description of the training and participants should be included in the program's written procedure and a summary of the training(s), and participants shall be documented and maintained for at least five years.

II. E. Post-Construction Storm Water Management

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. This permit continues the requirement for the Permittee to have an ordinance or regulatory mechanism that applies to sites of specific size and requires post-construction standards equal to or more restrictive than ch. NR 151, Wis. Adm. Code, and Department technical standards. The ordinance should also require a storm water management plan for the site, permit application and associated fees, long-term maintenance for post-construction BMPs, and provide the Permittee with inspection and enforcement authority.

Similar to the construction site program, the permit requires written procedures the Permittee will employ for reviewing plans for sites which require post-construction BMPs. The procedures should describe the Permittee's review process and items the Permittee reviews to consider water quality impacts.[6] These may include wellhead protection barriers near drinking water sources or additional controls for developments in TMDL areas. The procedures should also describe how Permittee reviews requests for regional storm water controls if proposed by the site developer.[7]

New to this permit is the requirement for the Permittee to develop and maintain a BMP Inventory for tracking post-construction BMPs. Tracking post-construction BMPs is critical for documenting TMDL progress, as well as ensuring BMPs are functioning as designed and meeting the performance standards. The BMP inventory should include all municipally owned or operated, post-constructed BMPs and all privately owned BMPs constructed on or after June 1, 2006.

- Municipally owned BMPs are BMPs owned by the Permittee, regardless of date of construction.
- Municipally operated BMPs are privately owned BMPs that the Permittee has long-term maintenance agreement, regardless of date of construction.
- Required by the Permittee's previous MS4 permit, the Permittee has been required to obtain long-term maintenance authority on privately owned BMPs constructed on or after June 1, 2006. The inventory must include these BMPs and provide confirmation of whether long-term maintenance agreements exist.

This BMP inventory must include:

- BMP name, location, BMP type, year constructed, and ownership (i.e., municipally or privately owned).
- Confirmation of whether each of the following exists for each BMP:
    - Record drawing.

[6] As required by s. NR 216.07 (5) (b), Wis. Adm. Code.
[7] As required by s. NR 216.07 (5) (c), Wis. Adm. Code.

- An operation and maintenance plan with inspection procedures and schedule.
- For privately-owned BMPs, long-term maintenance agreements or written documentation of the Permittee's ability to inspect and maintain a privately owned BMP.

Note: To utilize privately owned BMPs towards pollutant reduction goals, the Permittee must have a maintenance agreement in place or have regulatory authority to maintain or require maintenance of the private BMPs.

Although the Department expects the Permittee to already be inspecting and maintaining post-construction BMPs as required by its own ordinance, or ensuring BMPs are inspected and maintained as required by maintenance agreements, this permit adds the requirement to describe its post-construction BMPs inspection and maintenance procedure for municipally owned and operated BMPs. As maintenance agreements typically require the private BMP owner to inspect and maintain the BMP, the Permittee's written procedures should describe how the Permittee verifies municipally operated BMPs are inspected and maintained. For example, if the Permittee sends letters to private BMP owners, this action, and additional information such as the person responsible for sending letters, how and where reports are submitted, the person responsible for reviewing and maintaining submitted reports, should be described.

New to this permit is the requirement to develop a written procedure describing how the Permittee will enforce its long-term maintenance agreements when noncompliance is discovered. For example, if the private BMP owner is not submitting its required inspection and maintenance records, the written procedure should describe how the Permittee will obtain the required reports so BMP inspection and maintenance can be verified. If the private BMP owner is not conducting the required maintenance, the written procedure should describe how the Permittee will compel compliance. Though the Permittee may be typically successful in compelling compliance with verbal or written warnings, the written procedure should describe all actions that could be used to compel compliance. For example, if after written warnings and/or notice of violation letters, the BMP owner has not provided reasonable assurance the BMP will be maintained, the Permittee's written procedure should describe escalated steps, such as its ability to make repairs and bill the property owner.

Lastly, while BMPs should be inspected per its operation and maintenance plan or long-term maintenance agreement, the permit sets a minimum expectation that all municipally owned and operated BMPs are inspected at least once every 5 years. Though the Permittee determines how it will track the required inspections, the Department highly recommends the Permittee include a schedule of required inspections to ensure inspections occur and to more easily demonstrate permit compliance.

II. F. Pollution Prevention

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.

The maintenance requirements for municipality owned or operated BMPs has been moved to the post-construction section because this requirement fits within the BMP maintenance and tracking requirements for Section II. E.

Winter Road Management

This permit continues the requirement for municipalities to not apply road salt or deicers in quantities larger than required to maintain public safety. To reduce overapplication of salt and deicers, this permit requires the Permittee 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 Wisconsin Department of Transportation (WisDOT) Highway Maintenance Manual - Chapter 6, contains guidelines on winter maintenance including application of road salt and other deicers. This document can be used to assist with development of the Permittee's salt reduction strategy.[8]

The permit requires annual calibration for salt application machinery. The Permittee's winter road management program should describe how calibration is completed for each piece of equipment and a record showing equipment was calibration must be maintained. Factory calibration is not considered acceptable for annual calibration as new machinery has been shown to significantly over apply salt based on factory settings.[9] Calibration is also key for properly using the quantity of deicers used for reporting on the annual report. To ensure the strategy is being accurately implemented the Permittee is required to provide training on its salt reduction strategy to municipal staff involved in deicing operations every other year.

Lastly, to identify potential improvements to its salt reduction strategy, the Permittee should evaluate its strategy at least once each year. At minimum, the quantity of deicing products used and application rates, should be evaluated. However, it is the Permittees responsibility to determine when and how the evaluation occurs. For example, some Permittees evaluate the quantity used and application rates after each storm, while others evaluate at the end of each winter season. Though not required by the permit, the Permittee may choose to incorporate this evaluation into the required training.

Nutrient Management:

Nutrient management plans are required for fertilizer application on all municipally controlled properties (parks, athletic fields, golf courses, lawns, etc.) with five acres of pervious area. This includes soil samples for each individual property. For additional information, please refer to DNR Technical Standard 1100, Interim Turf Nutrient Management and additional guidance found here: https://dnr.wi.gov/topic/stormwater/standards/turf_nutrient.html.

Street Sweeping and Catch Basin Cleaning:

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 Permittee to track the number of lane miles swept, number of catch basins cleaned and the weight in tons of material collected annually. If Permittee 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.

[8] Wisconsin Department of Transportation (WisDOT) Highway maintenance manual -Chapter 6. https://wisconsindot.gov/Pages/doing-bus/local-gov/hwy-mnt/mntc-manual/chapter06.aspx The WisDOT highway salt storage requirements are contained in ch. Trans 277, Wis. Adm. Code.

[9] Based on discussions with Mary Jo Lange, former Director of Public Works for the City of Cudahy, testing of a new truck in 2018 found the truck was over applying salt by 92%.

Collected material is considered solid waste and must be disposed of in an appropriate manner. If the Permittee stages this solid waste material prior to disposal, BMPs should be employed to prevent contamination with storm water runoff. Dewatering and drying 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 Permittee has an approved beneficial reuse exemption from the DNR Solid Waste Program.

Management of Leaves and Grass Clippings

Collection of leaves is an effective measure for reducing nutrient input from urban storm water runoff. While many BMPs are designed to settle out solid materials, leaf matter leaches dissolved phosphorus, which is not captured by traditional settling devices. Collection of leaves before precipitation is essential for reducing dissolved phosphorus contributions from the MS4.

This permit requires the Permittee to provide a description of their leaf collection program including the methodology and equipment used for collection, the frequency and timing of collection, and instructions for residents and landowners on where to locate leaves for collection. Consistent with the previous permit, the Permittee must identify where leaves are disposed of and track the quantity of leaves collected on an annual basis.

Storm Water Pollution Prevention Planning

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 Permittee 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 MS4 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 Permittee operates at a site without a SWPPP, one must be developed and implemented. New SWPPPs must be submitted to the Department for review.

Annual facility compliance inspections and quarterly visual inspections should be conducted at each site, and inspections must be documented and maintained. 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.

Employee Training

The Permittee's previous permit required education of appropriate municipal and other personnel involved in implementing the Pollution Prevention program. To provide clarity, this permit removed the condition which encompassed the entire program and employee training has been incorporated into pollution prevention sub-program (i.e., winter road management).

The Permittee is required to provide training to municipal staff involved in the pollution prevention sub-programs as required by the permit. A description of the training and participants should be included in the written procedure and a summary of the training(s) and participants shall be documented and maintained for at least five years.

II. G. Storm Water Quality Management
The storm water quality management conditions are continued from the previous permit. The Permittee 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.

II. J. Annual Report
To implement the USEPA eReporting Rule requirements, the permit requires the Permittee submit its annual reports and other permit compliance documents electronically through the Department's electronic reporting system.

II. K. Reapplication for Permit Coverage
The permit reapplication requirements are expanded from the previous permit term and specify additional information the Permittee must submit 180 days prior to permit expiration (by February 1, 2029). The reapplication will require submission of proposed actions to implement during the next permit term, including a description of how the proposed actions will reduce pollutants to the MEP, evaluation results and updates of various permit conditions, and a fiscal analysis. Please refer to the permit for all required materials. The Department will consider the reapplication package and any other relevant information in developing the next permit.[10]

III. Special Conditions
The Special Conditions section is new to this permit and includes requirements to address the Northeast Lakeshore TMDL. The Northeast Lakeshore (NEL) TMDL was approved on October 30, 2023. These new special conditions are required because additional BMPs and controls beyond those currently employed by the Permittee are needed to attain water quality standards.[11]

When developing the Special Conditions section, the Department's goal was to provide the Permittee the required time to develop plans for addressing its assigned Waste Load Allocations (WLAs). This permit requires completion of TMDL Pollutant Load Reduction Evaluation for TSS and TP, a WLA Attainment Analysis for TSS and TP, and establishment of WLA Benchmarks for TSS and TP. Further explanation of TMDL permit conditions is provided below.

III. A. 1 TMDL Pollutant Load Reduction Evaluation for TSS and TP
The first step in the TMDL planning process is identifying which reaches the MS4 discharges to and the associated reduction goal. Section III. A. 1. requires updates to the MS4 map identifying the specific TMDL reach boundaries, structural BMPs and associated drainage areas, and excluded areas. For any excluded areas, the MS4 should specify why the area will not be included in the load reduction evaluation.

Once the individual TMDL subwatersheds and drainage areas are identified, the Permittee is required to estimate the pollutant loading from each watershed with and without controls. The difference between the with controls and without controls pollutant loading is the load reduction. The calculated

[10] Consistent with ss. NR 216.01 and 216.07, Wis. Adm. Code.
[11] Sawyers, A.D. and Best-Wong, A. November 26, 2014. Revisions to the November 22, 2002 Memorandum "Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs." USEPA office of Watershed Management

load reductions can then be compared to the reach goal to determine how much additional control is needed for each reach.

Lastly for each BMP, the Permittee needs to compile a tabular summary documenting the pollutant removal efficiency of the BMP, area treated, and a maintenance agreement for any privately owned BMP. Any privately owned BMP without a maintenance agreement should not be included in the pollutant load reduction evaluation. Though the permit requires the identified information be included in a tabular format, the Permittee may choose how the tabular format is presented. However, to provide additional clarity, an example tabular format (Table 4) is provided within the permit.

Most permittees in Wisconsin utilize WinSLAMM software to develop load reduction estimates, but permittees are not required to use this program. Permittees may use other computer programs or methods provided the evaluation methods are similar or equivalent and are approved for use by the Department. The Department envisions equivalent methodology could be a well-designed monitoring strategy, collecting outfall/pipe flow and concentration which can be used for data-based decisions and analysis. In either case, the Permittee should develop its modeling or equivalent methodology to be easily updated based upon changes to the individual watershed. Rather than updating the whole model, it will be more cost effective to update one model or subset of models. This will be a useful approach for evaluating progress in future permit terms.

As the Permittee chose to utilize WinSLAMM, permit conditions for the TMDL Pollutant Load Reduction Evaluation for TSS and TP require files that are specific to WinSLAMM for additional clarity. Modeling input and output summary files should be submitted in .txt format. Drainage system image should be submitted in .pdf format. If additional information is needed to determine compliance (i.e., WinSLAMM model files), this may be requested by the Department.

III. A. 2. WLA Attainment Analysis for TSS and TP

The WLA Attainment Analysis requires the Permittee to evaluate how the WLA can be fully achieved. This analysis shall include identifying the type and number of BMPs necessary to achieve the reduction goals, financial costs of such BMPs, and other resources needed. This analysis is not a commitment of action the Permittee must implement. Rather, this analysis should be used to better plan for future actions the Permittee can commit to implementing in future permit cycles such as the WLA Benchmarks for TSS and TP (Section III.A.3).

If the analysis does not provide reasonable assurance WLA will be achieved by utilizing current practices, the Permittee should consider implementing alternatives such as Water Quality Trading or adopting more stringent development and redevelopment standard. One alternative the Permittee must evaluate and consider is updates to their development and redevelopment standards. The Permittee will need to look at historical development rates and projected future development and estimate the pollutant load reductions if the minimum TSS and TP removal requirement are increased. The Permittee shall evaluate setting the load reduction requirement at the TMDL reach goal and at a level which provides the additional level of control needed which the municipality cannot supply via public projects. The Permittee may enact an ordinance that is municipal-wide, targets individual TMDL reachsheds, or designated areas within the permitted MS4, balancing required TMDL reductions, parcel size, and the impact of other treatment options. Increasing redevelopment reductions is one tool in moving toward TMDL compliance.

III. A. 3. Establishment of Wasteload Allocation (WLA) Benchmarks for TSS and TP
Where the TMDL pollutant load reduction evaluation for TSS and TP shows TMDL WLAs have not been met, the Permittee must develop pollutant load reduction benchmarks for those parameters and submit them with the permit application package. The Department expects the TMDL benchmarks to be permit cycle (5-year basis) targets used to assess progress towards meeting the final WLA goal. The Permittee should continue to iteratively manage its storm water programs to reduce pollutants and identify the TMDL benchmarks accordingly.

TMDL benchmarks should reflect structural controls the Permittee can commit to implementing during the next permit term. The benchmarks should provide the expected pollutant reductions, associated cost, and proposed date of implementation. The Department's intends to include these benchmarks as future permit conditions as allowed by s. NR 216.07, Wis. Adm. Code.[12] If proposed benchmarks do not provide reasonable assurance WLA will be achieved, the Department may request additional information or alternative benchmarks. Nonstructural controls can be included where effectiveness information is available.

IV. Implementation Schedule
The implementation schedule for new and updated permit requirements which apply to the Permittee is listed in Table 5 of the proposed permit. Tables 3 does not list all the requirements of the permit.

Additional Information
The proposed WPDES permit, fact sheet, and other MS4-related information are available from the Department's website as indicated below. Web links to pertinent state statutes and administrative codes are also provided.

DNR WPDES Permits on Public Notice website:
http://dnr.wi.gov/topic/Wastewater/PublicNotices.html

DNR Storm Water Runoff Permits website:
http://dnr.wi.gov/topic/stormwater/

DNR Municipal Storm Water Permits website:
http://dnr.wi.gov/topic/stormwater/municipal/

DNR Storm Water Technical Standards, Models and BMPs website:
http://dnr.wi.gov/topic/stormwater/standards/

Chapter 283, Wis. Stats.:
https://docs.legis.wisconsin.gov/statutes/statutes/283.pdf

Chapter NR 151, Wis. Adm. Code:
https://docs.legis.wisconsin.gov/code/admin_code/nr/100/151.pdf

Chapter NR 216, Wis. Adm. Code:
https://docs.legis.wisconsin.gov/code/admin_code/nr/200/216.pdf

[12] Section NR 216.07, Wis. Adm. Code. Permit Requirements. The Department shall issue permits using the information provided by the applicant and other pertinent information when developing permit conditions.

Permit Drafter

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