Wisconsin Pollutant Discharge Elimination System Permit for Municipal Separate Storm Sewer System, Permit No. WI- S049891-4: Fact Sheet – April 2025

Purpose

The City of South Milwaukee is currently covered under Wisconsin Pollutant Discharge Elimination System (WPDES) Permit No. WI- S049891-3. The WPDES permit expired on June 11, 2018. The Wisconsin Department of Natural Resources (Department) is proposing to reissue WPDES Permit No. WI- S049891-4 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 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 group 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 establishing, working towards, and evaluating measurable goals for each of the six minimum control measure programs. Permittees satisfy 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. The Department also considered findings and discussions which occurred during the City's MS4 Audit conducted in December 2023. 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 South Milwaukee Permit, comply with measurable goals, and 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 South Milwaukee Permit and additional clarity is provided below.

Permit Structure
The Permit is broken down into five sections. Section I outlines the applicability and general storm water permit requirements. Section II includes the storm water program requirements. Section III contains a schedule of when specific permit requirements must be completed and/or submitted. Sections IV and V are standard conditions and definitions, respectively.

I. Applicability
The proposed permit does not add additional requirements to this section. However, some conditions have been expanded or added for additional clarity. 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 which 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 (e.g., storm water associated with an industrial storm water permittee) are authorized to be discharged to the Permittee's MS4. [1]

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.D Shared Responsibility
The proposed permit added the Shared Responsibility condition to clarify information needed for the Department to approve cooperative efforts.

I.J. Impaired Waters
Within the previous permit, the requirements for this section (Impaired Waters) were located within Section I.G and Section II.H. The new permit consolidated these two sections into one (Section I.J). However, the conditions of Impaired Waters have not changed.

As with the previous permit, 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 stormwater 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 (SWMP) 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 because the previous permit did not 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. Existing and new SWMP documents describing the Permittee's approach to each minimum control measure must be submitted to the Department by April 1, 2027. As written program procedures are required for each of the six stormwater management programs, written program procedures will not be discussed within each of

[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.

the six stormwater program sections described later within this factsheet. The Permittee should reference this section for assistance or contact its local stormwater specialist.

Consistent with the previous permit, this permit also requires the Permittee to establish measurable goals for each of its six storm water management programs. As the Permittee has six programs, the Permittee will have at least six measurable goals – one for each of its programs. Though this is also not a new requirement, the reissued permit contains specific measurable goal conditions. By the dates listed in the permit, the Permittee is required to submit a document which identifies its program's measurable goal and describes how its goal was identified. The document will provide the anticipated action(s) the Permittee will take to work towards its goal and anticipated metrics that will be used to evaluate the success of its actions towards its goal. Though establishing measurable goals is not a new condition, the requirement to provide the measurable goal and describe how it was identified with anticipated action and metrics is new.

To provide additional clarity, an explanation of measurable goals, its intent, potential mechanisms to identify and measure success, and example measurable goals is provided below. As measurable goals are required for each of the six stormwater management programs, measurable goals will not be discussed within each of the six stormwater program sections described later within this factsheet. The Permittee should reference this section for assistance or contact its local stormwater specialist.

Measurable Goals
The MS4 permit lists specific conditions the Permittee must implement to better the quality of its stormwater discharge. Implementation of these specific conditions are best management practices known to reduce and/or eliminate stormwater pollutants, regardless of the municipality. For example, to reduce the discharge of sediment and construction materials from construction sites, the permit requires the Permittee to inspect construction sites and take action to address noncompliance. However, as each MS4 permittee is unique (i.e., municipalities face different stormwater challenges, have different resources and needs, and implement stormwater activities differently), the MS4 permit does not include specific conditions each MS4 should implement to reduce its discharge of stormwater pollutants to the maximum extent practicable (MEP – part of the MS4 permit standard). These actions must be determined by the individual Permittee.

In summary, measurable goals should drive action which encourages enhancement of the Permittee's own program and consequently, further reduce its stormwater pollutants to the MEP. Measurable goals may be simple, complex, based on a known or perceived need, a want, or expand upon required permit conditions. However, measurable goals should go beyond the specific conditions identified in the permit. Example measurable goals, how they can be identified, actions that could be taken, and how they can be measured are provided below.

Lastly, it is important for the goal to be measurable so the Permittee can determine if its actions taken to reach its goal was successful. If the goal was reached, the Permittee may determine its actions were successful and continue to implement similar actions in the future. However, if the goal was not reached, the Permittee may determine alternative actions are necessary. To make a goal measurable, MS4 Permittees may set a quantitative goal (i.e., number based) or qualitative goal (i.e., narrative based). The examples below provide both quantitative and qualitative measurable goals for reference.

Example of Measurable Goals, Methods to Identify, Actions to Take, and Metrics to Measure Success

Example 1: If a Permittee identifies noncompliance issues at construction sites are not resolved in a timely manner, it may identify this as an area for improvement and set a measurable goal that 50% or more noncompliance sites return to compliance within 24 hours. To achieve this goal, the Permittee may choose to implement a variety of actions such as providing education to construction applicants during plan review, utilizing more enforcement, conducting more inspections, etc. To measure the success of this ***quantitative*** measurable goal, the Permittee should count the number of noncompliance sites that returned to compliance within 24 hours after implementing its chosen actions. If 50% or more noncompliant sites returned to compliance within 24 hours, the Permittee may determine its actions were suitable. If less than 50% of noncompliant sites returned to compliance within 24 hours, the Permittee may determine alternative actions are necessary to achieve its goal.

Example 2: If a Permittee collecting residential leaves observes potted plants and other vegetation are placed within residential leaf piles, it may identify this as an area for improvement and set a measurable goal of reducing the amount of potted plants and other vegetation observed within residential leaf piles. To achieve this goal, the Permittee may choose to implement a variety of actions such as providing passive education to residents via its website/newsletter/social media/door hangers, providing active education via in-person education events, sending notice of violation letters to offending residents, etc. To measure the success of this ***qualitative*** measurable goal, the Permittee could ask leaf collection staff if they observe less potted plants and other vegetation, assign someone to assess potential improvement by observing the residential leaf piles, or count the amount of potted plants/other vegetation pre- and post- actions. If the Permittee assessment indicates its actions successfully met its goal, the Permittee may determine its actions were suitable. If the Permittee assessment indicates its actions did not successfully meet its goal, the Permittee may determine alternative actions are necessary to achieve its goal.

Example 3: A Permittee recently adopted a downtown redevelopment plan which has a large focus on aesthetics. To encourage downtown visitors to keep the area clean, the Permittee plans to install educational signage and/or install waste containers. As the Permittee already intends to implement these activities, the Permittee may choose to utilize these actions for a program measurable goal.

> The Permittee may set a ***quantitative*** goal of installing a certain amount of signage or waste containers and, to measure its success, count the number of signs or waste containers installed. If the Permittee met its goal, they may choose to establish another measurable goal such as this in the future. If the Permittee did not achieve its goal, it should determine what additional steps are needed in the future to achieve the goal.
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> The Permittee may also set a ***qualitative*** goal of reducing the amount of litter observed in the downtown area. To achieve this goal, the Permittee may choose to install educational signage or waste containers. To measure its success, the Permittee could observe litter pre- and post-installation. If the Permittee assessment indicates its actions successfully met its goal, the Permittee may determine its actions were suitable. If the Permittee assessment indicates its actions did not successfully meet its goal, the Permittee may determine alternative actions are necessary to achieve its goal.

Example 4: If a Permittee cannot identify a measurable goal based on a known or perceived need (Example 1 and 2) or want (Example 3), the Permittee may choose to set a measurable goal based upon

existing permit conditions. For example, the permit requires implementation of specific conditions because they are known best management practices (e.g., screening outfalls is a known best management practice to identify potential illicit discharges). Using outfall screenings as an example, the Permittee may choose to increase its outfall screening frequency or screen additional outfalls so it may identify potential illicit discharges that may otherwise been missed.

II. A. Public Education and Outreach

The previous permit required the City of South Milwaukee 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 Permittee participated in Southeastern Wisconsin Watersheds Trust's Respect Our Waters campaign to provide broad education and outreach to the entire Milwaukee River Basin watershed along with other MS4 permittees located within the watershed.

Similar to the previous permit, the reissued permit also requires educating on each topic identified in the permit at least once during the permit term, with a minimum of 3 topics being addressed each year and continues to allow incorporative cooperative efforts with other entities not regulated by this permit (e.g., Southeastern Wisconsin Watersheds Trust). However, unlike the previous permit, this permit requires using at least two Active/Interactive Mechanisms each year, and for each topic addressed, identify the targeted pollutants of concern, the targeted audience, delivery mechanism, and the entity responsible for implementation. These additional requirements are consistent with other MS4 permits across the state.

Consistent with the previous permit, this permit also requires the Permittee to establish a measurable goal for its Public Education and Outreach program. Though not a new requirement as previously described, the reissued permit requires the Permittee to develop and submit a document identifying its measurable goal and describing how the goal was identified, anticipated action the Permittee will take to work towards its goal, and metrics that will be used to evaluate the success of its actions taken to work towards its goal. Though establishing measurable goals is not a new condition, the requirement to provide the measurable goal information is new. However, this additional requirement is balanced by removing the requirement to prioritize education topics each year.

Lastly, the permit requires the Permittee to submit a summary of the actions taken to achieve its measurable goal along with evaluation results and proposals for 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]

Examples of Active and Passive Public Education and Outreach Delivery Mechanisms

Active/Interactive Mechanisms	Passive Mechanisms
• Educational activities (school presentations, summer camps) • Informational booth at event • Targeted group training (contractors, consultants, etc.)	• Passive print media (brochures at front desk, posters, etc.) • Distribution of print media (mailings, newsletters, etc.) via mail or email • Media offerings (radio and TV ads, press release,

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

• Government event (public hearing, council meeting) • Workshops • Tours • Other	etc.) • Social media posts • Signage • Website • Other

*This Table is also provided within the permit – See Table 2 within the permit.

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 a similar requirement but identifies more specific activities for public input and clarifies expectations for measurable goals and written program. The Permittee must allow for public comment and consider comments on annual reports, storm water management plan revisions, and adoption of storm water related ordinances. 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 implemented its Illicit Discharge Detection and Elimination (IDDE) program since first obtaining its MS4 permit. The reissued permit builds upon the existing program but provides more clarity to measurable goals, specific response actions, and adds greater emphasis to the elimination component of the IDDE program.

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, is 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.

<u>Dry Weather Outfall Screening</u>

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.

<u>Dry Weather Outfall Screening: Visual Observations and Field Analysis</u>

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 observations and field analysis results. 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 and a summary of the results should be submitted with the annual report.

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.

Dry Weather Outfall Screening: Location and Frequency

Prioritization of outfalls to screen is an effective practice to identify illicit discharges and eliminate the pollutant loads. As with the previous permit, this permit calls for screening 20% of all major outfalls each year so that at the end of the permit term, all major outfalls have been screened. Similar to the previous permit, this permit also requires screening of priority outfalls and re-screening of outfalls which previously exhibited evidence of an illicit discharge. Given some of the requirements surrounding re-screening and priority outfalls have changed, additional information has been provided below.

Re-Screening MS4 Outfall with Previous Signs of Illicit Discharge

The previous permit required the Permittee re-screen any major outfall each year which showed evidence of illicit discharge under the preceding permit term. Although the intent of this requirement has not changed (i.e., re-screen to ensure the illicit discharge was successfully eliminated and/or has not reoccurred), the re-screening location and frequency has changed. Rather than re-screening each major outfall each year which showed signs of illicit discharges from the previous permit term, this permit requires re-screening occur at any MS4 outfall which exhibited signs of an illicit discharge – not just major outfalls which exhibited illicit discharge signs. However, this permit limits the re-screening frequency to only the following year. In other words, if any MS4 outfall screened exhibited signs of an illicit discharge during year 1, the Permittee is required to re-screen that outfall in year 2. If the outfall no longer exhibits signs of illicit discharge during year 2, the Permittee is no longer required re-screen that outfall the following year. However, if during year 2 the outfall exhibits signs of an illicit discharge, the Permittee is required to re-screen that outfall the following year, or years, until the outfall no longer shows signs of an illicit discharge.

As a reminder, if the Permittee discovers any signs of an illicit discharge, it is required to conduct its investigation and elimination procedure. This section will be discussed in more detail later on.

Priority Outfalls Requirements

As with the previous permit, the Permittee is required to screen 20 percent of its priority outfalls each year so that by the end of the permit term, each priority outfall has been screened at least once. As with the pervious permit, the Permittee is responsible for determining which MS4 outfall is considered priority. As described in the Department's IDDE Guidance,[4] outfalls should be prioritized based on illicit discharge potential in the contributing drainage area rather than solely on pipe or drainage area size. However, the Permittee may identify priority outfalls based on other factors. For example, if a Permittee has not conducted routine outfall screenings in a specific drainage area, they may choose an outfall within that area.

[4] The Department's IDDE Guidance can be accessed here: https://dnr.wisconsin.gov/topic/Stormwater/publications.html

Unlike the previous permit, this permit requires the Permittee to include within its written program procedure a list of its priority outfalls and the rationale used to determine the priority status. As priority outfalls may not have been reassessed for some time, the Department highly encourages the Permittee to re-evaluate its priority outfalls. Lastly, as the Permittee may identify new priority outfalls during the permit term, the Permittee shall continue to screen at least 20 percent of its currently identified priority outfalls until new priority outfalls have been identified.

For additional clarity, the Permittee shall conduct the following outfall screening:

- Each year, at least 20 percent of all **major** outfalls shall be screened, so that at the end of the permit term all priority outfalls have been screened.
- Each year, at least 20 percent of all **priority** outfalls shall be screened, so that at the end of the permit term all priority outfalls have been screened.
- **Any** outfall that exhibited evidence of an illicit discharge during the previous year shall be screened the following year.
    - This follow-up screening is intended to confirm the illicit discharge was eliminated or further investigation is needed.
    - If the follow-up screening no longer exhibits evidence of an illicit discharge, the Permittee is not required to conduct further follow-up screenings. However, if the follow-up screening exhibits signs of an illicit discharge, the Permittee shall begin investigation, work to eliminate the source, and conduct another follow-up screening the next year to confirm the illicit discharge was eliminated or further investigation is needed.

Enforcement Response

Section II.C.2.c) of the new permit requires development of an enforcement response plan that documents how the MS4 will enforce its illicit discharge ordinance. The enforcement response plan is intended to provide clarity and consistency in enforcement actions the Permittee will complete once an illicit discharge is identified. 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. The enforcement response plan must also identify the person responsible for responding to illicit discharge reports.

Investigation and Elimination Procedures

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, the investigation techniques to employ, and the 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. 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, notice of noncompliance (NON) letter, etc.).

Similar to the previous permit, this permit requires the Permittee to eliminate identified illicit discharges or connections. However, where the previous permit required the removal of the discharge or connection within three working days to the maximum extent practicable, this permit requires the Permittee to take appropriate actions to expeditiously eliminate the identified illicit discharge or connection. Additionally, although this permit continues to require the Permittee remove or eliminate an identified illicit discharge as soon as possible, the Department recognizes there may be situations where eliminating the illicit discharge or connection will take time. 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. As such, this permit includes a new requirement to notify the Department if an identified illicit discharge will take more than 30 days to eliminate. This notification is required to occur within 45 days of discovery of the illicit discharge. This additional requirement is balanced by removing the condition to submit inspection reports to the Department for outfalls with known or suspected illicit discharges within 30 days of outfall inspections.

The IDDE investigation and elimination procedures should also include specific notification procedures. Though these notification procedures are not new to the permit, the requirement to describe how the Permittee implements its notification procedures within the written program is new. The Permittee shall include in its written program procedure a requirement to immediately notify 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 an adjacent MS4 or identifies an illicit discharge originating from an adjacent MS4.

Lastly, 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.

Training

This permit also 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. 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?). The method for training (e.g., in-person, email with training information, or a training video) is determined by the Permittee. A summary of the training method should be included in the program's written procedure.

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 which 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 the latest DNR wetland and waterway permitting requirements that could apply to a site.

New requirements in this permit include written plan review procedures, specific construction site inspection frequencies, and written enforcement procedures. The Permittee also needs to include in the construction program documents how they will respond to information submitted from the public, including complaints.

Plan Review and Permitting

The Permittee's plan review 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. 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.

Erosion Control Inspections

The inspection frequencies within Table 3 of the permit are intended to provide clarity to the construction program requirements and are consistent with other MS4 permits in the state. Some permittees may require inspection of smaller sites or more frequent inspection frequencies, but at a minimum, the MS4 Permittee must complete inspections according to Table32. All active sites greater than 1 acre need to be inspected every 45 days 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 5 years.

Enforcement Response

New to the permit is the requirement for the Permittee to develop an enforcement response plan or similar document. The enforcement response plan should describe how and when the Permittee will use the enforcement provisions in its 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.

Training

Lastly, this permit requires training on the Permittee's construction site pollutant control program at least once during the permit term. Training on the Permittee's own procedure is a best management practice and should help ensure the Permittee's program is being implemented as intended. The anticipated training content (e.g., training on the entire program or training on specific aspects of the program) and participants is determined by the Permittee but should be described in the written program procedure.

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 MS4 with inspection and enforcement authority.

Plan Review and Permitting

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.[5] 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.[6]

Post-Construction BMP Inventory

New to this permit is the requirement for the Permittee to develop a BMP Inventory. An inventory of post-construction BMPs is critical for documenting future Total Maximum Daily Load (TMDL) requirements and can be used to help track required BMP inspections, maintenance needs, completed maintenance, or other documentation notes. The BMP Inventory must 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 structural BMPs owned by the Permittee, regardless of date of construction.
- Municipally operated BMPs are structural BMPs, regardless of date of construction, which are not owned by the Permittee, but for which the Permittee has an obligation to ensure the BMP is maintained. For example, a privately owned BMP or BMP owned by a different entity (e.g., a neighboring community) in which the Permittee has a long-term maintenance agreement and thus, can ensure said BMP is maintained.
- As required by the Permittee's previous MS4 permit, each Permittee has been required to obtain long-term maintenance authority on privately owned BMPs constructed within its community on or after June 1, 2006. The inventory must include these BMPs and provide confirmation of whether long-term maintenance agreements exist.

For each BMP, the inventory must identify:

- BMP name, location, BMP type, year constructed, and ownership.
- Confirmation of whether each of the following exists for each BMP:
    - Record drawing.
    - 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 legal authority to inspect and maintain a privately owned BMP, if needed.

  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.

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

Post-Construction BMP Inspection and Maintenance Procedures

Also new to this permit is the requirement for the Permittee to develop written program documents describing its municipally owned and municipally operated BMP inspection and maintenance procedures. As inspection and maintenance procedures often differ between municipally owned and municipally operated BMPs, these inspection and maintenance procedures were separated into two permit conditions for additional clarity. For example, a permittee is typically responsible for inspecting and maintaining its own municipally owned BMPs. However, though a permittee must ensure municipally operated BMPs (e.g., a private BMP in which the Permittee has long-term maintenance authority) are being inspected and maintenance according to the long-term maintenance requirement (e.g., a long-term maintenance agreement), typically, the BMP owner is responsible for inspecting and maintaining its own BMP.

The written procedures should include information such as who is responsible for conducting inspections, pursuing maintenance and, inspection frequencies.

Given the Permittee must develop a BMP Inventory, the Permittee may consider including inspection and maintenance procedure information within its BMP Inventory. An example BMP Inventory which includes inspection and maintenance procedure information is provided below. In addition to organizing the required information, Permittees may also find its BMP Inventory useful to schedule and/or track the required inspections.

Lastly, while BMPs should be inspected per its operation and maintenance plan or long-term maintenance requirement, the permit sets a minimum expectation that each BMP be inspected at least once every 5 years.

Example BMP Inventory with inspection and maintenance information.

BMP Name	BMP Location	BMP Type	BMP Year Constructed	BMP Ownership	Confirmation of: • Record Drawing • O&M Plan • Long-term maintenance authority	Required Inspection Frequency *Must be at least every five years.*	Person(s) responsible for inspection and maintenance

Enforcement of Long-Term Maintenance Requirements for Municipally Operated BMPs

Lastly, the Permittee must develop a written document describing how it will enforce long-term maintenance requirements for municipally operated BMPs when noncompliance is discovered. For example, if a private BMP owner did not submit its required inspection report, the written procedure should describe the Permittee's process for obtaining the inspection report (e.g., sending a letter to the private BMP owner). If a private BMP owner is not conducting the required maintenance, the written procedure should describe the Permittee's process for ensuring maintenance will be completed in a timely manner. For example, if after a written warning the private BMP owner does not provide reasonable assurance its BMP will be maintained, the Permittee may escalate enforcement mechanisms (e.g., the Permittee conducts the maintenance and bill the property owner).

II. F. Pollution Prevention

Pollution prevention activities are employed to reduce municipal sources of pollution. This section consists of multiple sub-programs, trainings, and at least one measurable goal for the Permittee's pollution prevention program. The maintenance requirements for municipality owned or operated BMPs has been moved to the post-construction section because this requirement fits within the BMP inspection and maintenance requirements.

The sub-programs include winter road management, nutrient management, street sweeping and catch basin cleaning, management of leaves and grass clippings, and Storm Water Pollution Prevention Plans for municipal properties. The Permittee is required to submit written program procedures for each of its sub-programs.

If a sub-program is not being implemented to any extent within the Permittee's community, and is therefore not applicable, a written program describing implementation is not required. However, it is recommended the Permittee submit documentation confirming the sub-program is not being implemented. For example, if a Permittee does not have any applicable properties requiring a nutrient management plan, it is recommended the Permittee provide a statement confirming this.

If a sub-program is being implemented by an entity which is not the Permittee, the Permittee is required to submit a written program describing how its sub-program is being implemented and how the Permittee is ensuring implementation is consistent with permit requirements. For example, if a neighboring community or private contractor is conducting winter road management on behalf of a Permittee, the Permittee must submit a written program procedure describing how the sub-program activities are being implemented and describe how the Permittee is ensuring permit conditions are met (e.g., describing how the Permittee is ensuring calibration is occurring at least annually).

If a sub-program is being implemented to any extent, the Permittee is required to submit a written program describing how activities of the sub-program are being implemented. For example, if a Permittee does not collect leaves but, its residents may bring collected leaves to one of its municipal properties, the Permittee should describe this in its written program.

Winter Road Management

The Wisconsin Department of Transportation (WisDOT) Highway Maintenance Manual - Chapter 6, contains guidelines on winter maintenance including application of road salt and other deicers. [7] This and additional resources, such as those provided by Wisconsin Salt Wise,[8] and Minnesota Pollution Control Agency, [9] can be used to assist with evaluating and/or revising the Permittee's salt reduction strategy.

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 maintain a record showing equipment was calibrated. Factory calibration is not considered acceptable for annual calibration as new machinery has been shown to significantly over apply salt based on

[7] 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.
[8] Resources provided by Wisconsin Salt Wise can be found at: https://www.wisaltwise.com/
[9] Minnesota Pollution Control Agency's Smart Salting for Roads Manual can be found at: https://www.pca.state.mn.us/sites/default/files/p-tr1-13.pdf

factory settings.[10] 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, the Permittee is required to provide training on its own salt reduction strategy at least every other year. As previously described, training is a best management practice and should help ensure the strategy is implemented as intended. The anticipated training and participants is determined by the Permittee, but should be described in the written program procedure.

Although not required by a specific permit condition, the Permittee should continuously evaluate its salt reduction strategy and all of its programs, to identify potential improvements and to reduce pollutants to the maximum extent practicable. The Department encourages the Permittee to consider utilizing its required trainings as a mechanism to identify potential improvements. For example, some MS4 permittees in the state have implemented evaluation meetings with salt application crews as part of its required trainings. While some MS4 permittees conduct these meetings at the beginning and/or end of each winter season, others have conducted these meeting before and/or after each winter event. During these evaluation meetings, staff responsible for determining the application rates (e.g., DWP Director or DPW Superintendent) meet with application crews to discuss implementation outcomes and potential improvements.

Nutrient Management:
Nutrient management plans are required for fertilizer and nutrient application on any municipally controlled properties (parks, athletic fields, golf courses, lawns, etc.) with five acres or more of pervious area. Nutrient management plans must be based on soil samples for each individual property that is applicable. For additional information, please refer to DNR Technical Standard 1100, Interim Turf Nutrient Management and additional guidance found here: https://dnr.wisconsin.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. If the Permittee uses street sweeping or catch basin cleaning as part of their efforts to meet a performance standard or other permit goal, the sweeping and cleaning frequencies must be consistent with those identified in the pollutant loading analysis.

Collected street sweeping material is considered solid waste and must be disposed of in an appropriate manner. If the Permittee stages this solid waste material prior to final disposal, BMPs shall 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

[10] This finding is based on a previous discussion between Department staff and Mary Jo Lange, former Director of Public Works for the City of Cudahy, in 2020. Testing of a new truck in 2018 was over applying salt by 92%.

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.

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 the Permittee's 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, identification and description of potential sources of pollution, drainage patterns and discharge locations, and all structural and non-structural BMPs, such as good housekeeping activities and training, which are utilized to reduce the runoff of pollutants from the site. SWPPPs shall be revised as needed to be consistent with current site conditions and activities. Updated SWPPPs should be submitted to the Department upon completion or with that reporting year's MS4 Annual Report.

Each year, at least one annual facility site inspection must be conducted, and documentation of the inspection must be maintained. Any deficiencies found during the inspections should be corrected. Inspections are also necessary to determine the effectiveness of the SWPPP. For example, if multiple stains are observed during an inspection, this may indicate the SWPPP is ineffective at preventing spills. The Permittee may determine revisions to the spills training is needed, relocation or removal of the pollutant source is needed, and/or additional BMPs are needed. The SWPPP should be updated to reflect these revisions and submitted to the Department.

To further clarify that SWPPPs must be evaluated to determine their effectiveness, the reissued permit requires each SWPPP be evaluated at least once per permit term. If the Permittee determines SWPPP revisions are not required, the SWPPP must still indicate the required evaluation occurred. For example, the SWPPP should contain a cover page or appendix indicating when evaluations occurred and what revisions were made.

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.

Internal Education Training

The Permittee is required to provide training to municipal 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 Permittee'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.

II. G. Storm Water Quality Management

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. 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 October 2, 2029). The permit reapplication requires the submission of information, such as proposed program modifications, information about current and future measurable goals, etc. which the Department will consider along with any other relevant information to develop the next permit.[11]

The reapplication information must be submitted to the Department's eReporting system. This electronic system, available at: https://dnr.wi.gov/permits/water/ is the same internet-based system used to submit the MS4 Annual Reports. However, unlike the MS4 Annual Report, information required for the reapplication package will not be submitted on Department forms. Permittees shall provide the information in a written format of their choosing.

III. Implementation Schedule

The implementation schedule for new and updated permit requirements which apply to the Permittee is listed in Table 4. However, this section does not list all required actions. For example, this section does not list the required erosion control inspections. The Permittee shall comply with the all permit conditions contained within 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

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

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

Permit Drafter

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