



DRAFT

FACT SHEET

for

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL
CONSERVATION
SPDES GENERAL PERMIT
for
STORMWATER DISCHARGES

from

MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)

Permit No. GP-0-17-002

Issued Pursuant to Article 17, Titles 7, 8 and Article 70
of the Environmental Conservation Law

October 2016

Pursuant to Section 402 of the Clean Water Act (CWA), discharges from small municipal separate storm sewer systems (MS4s), located in urbanized areas and those additionally designated by the New York State Department of Environmental Conservation (DEC), must be authorized by a National Pollutant Discharge Elimination System (NPDES) permit or by a state permit program. New York's State Pollutant Discharge Elimination System (SPDES) is a NPDES-approved program with permits issued in accordance with titles 7 and 8 of Article 17 of the Environmental Conservation Law.

The SPDES General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4 General Permit), currently GP-0-15-003, is due to expire on April 30, 2017. To retain the ability to administratively extend the MS4 General Permit under State Administrative Procedure Act §401 and 6 NYCRR 621.11, DEC must publicly notice a draft renewal 180 days prior to expiration of the current permit – November 1, 2016. If additional changes to the permit are needed based on the final MS4 Remand Rule or public comments received, a revised draft permit may be re-noticed

DEC proposes to renew and modify GP-0-15-003, which when finalized, will be GP-0-17-002. GP-0-17-002 will be effective for a five (5) year term and will cover discharges of stormwater to surface waters of the State from small MS4s as defined in 40 CFR Part 122.26(a)(1)(v), 122.26(b)(8), and 122.26(b)(16)-(19).

Continuation of Coverage

Once final, MS4 Operators currently covered under GP-0-15-003 will be required to submit of a Notice to Continue Coverage under GP-0-17-002 certifying that they have read and understand the requirements of GP-0-17-002 and will update their SWMP to meet the terms and conditions of GP-0-17-002 in accordance with the schedule of compliance contained in Appendix C. Interim milestone dates have been identified as required by 6 NYCRR 750-1.14.

Newly designated MS4 Operators will be required to submit a Notice of Intent and certify that they agree to develop their SWMP in accordance with the schedule contained in Appendix C for newly designated MS4s.

Background

Due to litigation on GP-0-10-002, it has been over 6 years since the last full renewal and modification of the MS4 General Permit. In 2010, Natural Resources Defense Council, Riverkeeper, Waterkeeper Alliance and other environmental organizations (collectively, Petitioners) filed an Article 78 Petition challenging GP-0-10-002. Because the litigation was still in the appeals process when GP-0-10-002 was due for renewal in 2015, DEC renewed the MS4 General Permit essentially unchanged.

EPA MS4 Remand Rule

Many of the same petitioners who challenged GP-0-10-002 also made a petition to the United States Court of Appeals for the Ninth Circuit for the Environmental Protection Agency (EPA) to make changes to the regulations governing small MS4 permits - Environmental Defense Center, et al v EPA 344 F.3d 832 (9th Cir 2003) (MS4 Phase II Remand Rule). Through resolution of that petition, on January 6, 2016, EPA proposed revisions to the small MS4 regulations.¹ Under the settlement, EPA must finalize the proposed rulemaking by November 17, 2016.

Under EPA's proposed *Traditional Approach*, the permitting authority (DEC) must articulate, in sufficient detail within the text of the general permit, what is required to meet the minimum statutory and regulatory requirements (i.e Maximum Extent Practicable - MEP), and to ensure that the applicable requirements are enforceable and understandable to the MS4 Operator and the public. The Stormwater Management Program (SWMP) developed by the MS4 Operator would simply reflect the applicable requirements contained in the general permit. Under this construct, the Notice of Intent (NOI) would just serve as a notice of the intention of the MS4 Operator to discharge in accordance with the MS4 GP.

Basis of Permit

DEC developed this draft MS4 GP renewal to most closely align with the *Traditional Approach* of the proposed MS4 Remand Rule (as described in the January 6, 2016 Federal Register and proposed strike out version of rule changes for Option 1)). The proposed changes to 40 CFR 122.34(a) as provided in the strike out version of the rule changes requires permit conditions that establish requirements that are "clear, specific, and measurable".

EPA has developed model permit language as to how permit language should be written to be "clear, specific and measurable" and compiled a number of examples where small MS4 general permits have already included requirements that EPA has indicated would be consistent with the proposed Traditional Approach. DEC consulted the following EPA guidance and identified areas of GP-0-15-001 where additional clarity or specificity was needed:

- *MS4 Permit Improvement Guide*²

¹ Federal Register, Volume 8, No. 3 National Pollutant Discharge Elimination System (NPDES) Municipal Storm Sewer System General Permit Remand – Proposed revisions to 40 CFR 122.33 (<https://www.epa.gov/npdes/npdes-stormwater-proposed-ms4-general-permit-remand-rule>)

² EPA. 2010. *MS4 Permit Improvement Guide*. Office of Wastewater Management. Washington, DC. 10-001.

http://water.epa.gov/polwaste/npdes/stormwater/upload/ms4permit_improvement_guide.pdf

- *MS4 General Permit Compendium: Examples of Six Minimum Control Measure Provisions.*³
- *Municipal Separate Storm Sewer System Permits—Post-Construction Performance Standards & Water Quality-Based Requirements: A Compendium of Permitting Approaches (2014)*
- *Center for Watershed Protection's guide on Illicit Discharge Detection and Elimination (IDDE): A Guidance Manual for Program Development and Technical Assistance*⁴

In anticipation of difficulties associated with developing a general permit that meets the proposed rule modifications and potential impacts to MS4 Operators, DEC established the MS4 GP subcommittee to advise DEC on contemplated changes. This subcommittee consisted of representatives of MS4 coalitions, non-traditional MS4s, watershed protection committees, and environmental groups. DEC engaged the MS4 GP subcommittee to provide feedback on areas of the general permit where comparison with EPA guidance indicated more specificity was needed. Potential options were discussed with the subcommittee and recommendations were incorporated into the draft MS4 renewal when there was general consensus. Staff used best professional judgement on issues where there was not general consensus but is soliciting further input as part of the public comment period.

In conformance with the proposed MS4 Phase II Remand Rule, DEC has established within the draft MS4 permit renewal, itself, all requirements that MS4 Operators must meet, including specific tasks, BMP design requirements, performance requirements, schedules for implementation and maintenance and frequency of action, to meet the standard applicable to MS4s (to reduce pollutants to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of the CWA).

Maximum Extent Practicable (MEP)

EPA has stated⁵ that in each permit issued under the proposed MS4 Phase II Remand Rule, the permitting authority (DEC) must include permit conditions that establish in specific, clear and measurable terms what is required to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. Maximum extent practicable (MEP) is the statutory standard that describes the level of pollutant reduction that MS4 operators must achieve, but also includes a recognition that the effort may need to be increased under some circumstances. EPA further notes that implementation of best management practices (BMPs) designed to control stormwater runoff from the MS4 is generally the most appropriate approach for reducing pollutants to satisfy the MEP standard. Pursuant to 40 CFR §122.44(k), the draft MS4 renewal requires MS4 Operators to

³ EPA, 2015, MS4 Compendium: Examples of Six Minimum Control Measure Provisions, Office of Water,

⁴ www.cwp.org

⁵ [Docket No. EPA-HQ-OW-2015-0671](#)

control stormwater discharges through BMPs, including development and implementation of a comprehensive stormwater management program (SWMP) as the mechanism to achieve the required pollutant reductions.

EPA views the MEP standard in the CWA as an iterative process. MEP should continually adapt to current conditions and BMP effectiveness. To satisfy this requirement, the draft MS4 renewal includes requirements for tracking data collected through implementation of the minimum control measures (MCMs). MS4 Operators must analyze this information identify trends, patterns, areas of concern and common problems and adjust the program based on new information to focus their resources on areas of greatest concern. For example, the permit requires MS4 Operators to collect and track information on illicit discharges and annually evaluate the information to focus their efforts on areas with the greatest number of past illicit discharges and also on the sources of illicit discharges most commonly found. As information on sources of illicit discharges becomes available, additional public outreach should be focused on these areas and illicit discharge sources.

Water Quality Standards

The draft MS4 renewal includes required control measures that will reduce the discharge of pollutants. Parts I through V and X apply to all MS4 Operators. The MCMs for traditional land use MS4s are listed in Part VI while those for traditional non-land use control MS4s and non-traditional MS4s are listed in Part VII. Parts III.B, VIII (impaired waters without an approved TMDL) and IX (impaired waters with an approved TMDL) list additional requirements for all MS4 Operators discharging to impaired waters.

DEC expects that compliance with the conditions of the permit will assure compliance of MS4 discharges with applicable water quality standards.

Impaired Waters without TMDLs

GP-0-15-003 included enhanced requirements beyond the six MCMs for discharges to impaired waters - "no-net increase" for impaired waters without a Total Maximum Daily Load (TMDL) and enhanced BMPs for waters with an EPA-approved TMDL to achieve the specific MS4 reduction in the TMDL. There has been a significant amount of confusion and scrutiny surrounding the "no-net increase" requirement despite repeated attempts by DEC to better explain the requirement. While the requirement was included in GP-0-15-003 to ensure that new development did not result in pollutant loads that would negate the progress made with the six MCMs, MS4s did not fully understand how to comply and environmental groups stated that this requirement does not actually reduce the amount of pollutants added to a waterbody. The MS4 GP subcommittee indicated that the "no-net increase" was overly complicated and recommended specific requirements to achieve pollutant reductions. The draft MS4 renewal proposes to replace the "no-net increase" requirement with BMPs targeted towards the pollutant of concern causing the impairment. In addition to the requirements contained in Parts I thru VI or VII (depending on the type Ms4 Operator), Part VIII of the draft MS4 renewal

includes specific BMPs targeted towards Nitrogen, Phosphorus, Pathogens, Silt/Sediment and Floatables. These additional BMPs are appropriate for discharges to impaired waters until a TMDL has been approved with specific reduction requirements.

Impaired Waters with TMDLs

GP-0-15-003 includes enhanced requirements beyond the six MCMs for discharges to impaired waters where EPA has approved a TMDL requiring reductions in pollutant load from MS4s beyond what can be achieved through the 6 MCMs⁶. In addition to the BMPs listed in Parts I through VI or VII, depending on the type of MS4 Operator, MS4 Operators discharging to waters within the watersheds with approved TMDLs (identified in Table 2 of the draft MS4 renewal) must implement the BMPs and applicable retrofit plans as specified in Part IX to achieve the pollutant load reductions specified in the referenced TMDL.

Pollutant specific BMPs have been added to Parts IX.A, IX.B and IX.D to build upon the work that was completed during the last permit cycles. The draft MS4 renewal references the Stormwater Interactive Mapper – Watershed Improvement Strategy Layer to identify where the Part IX requirements apply. Errors in the Stormwater Interactive Mapper data layers have been corrected and are presented on DEC's website⁷ for review and comment. Once the draft MS4 renewal is finalized, the Stormwater Interactive Mapper will be updated to reflect the corrected layers.

Part IX.A – New York City East of Hudson Watershed MS4s

Part IX.A of GP-0-15-003 includes watershed specific BMPs to implement the requirements specified in the *Croton Watershed Phase II Implementation Plan, DEC (January 2009)* for the New York City East of Hudson Watershed. Additional pollutant specific BMPs have been added to build upon the work completed during the last permit cycles.

In conformance with 6 NYCRR 750-1.14, a compliance schedule has been added to implement the on-going retrofit program to achieve the pollutant load reductions specified in the *Croton Watershed Phase II Implementation Plan*. MS4 Operators in these watersheds must report on progress with the retrofit program and source control programs by submission of progress reports as specified in Part V.C.3.

The following TMDLs were recently approved by EPA: *Total Maximum Daily Load (TMDL) for Phosphorus in Lake Carmel, October 2016* and *Total Maximum Daily Load (TMDL) for Phosphorus in Palmer Lake, March 2015*. As these waters are located within the East of Hudson Watershed, compliance with the requirements

⁶ Although EPA approved TMDLs for Long Island Sound and Chesapeake Bay, the TMDL reduction required for New York's MS4 contribution can be achieved through implementation of the 6 MCMs.

⁷ <http://www.dec.ny.gov/chemical/41392.html>

within Part IX.A will achieve the reductions specified by the approved TMDLs for these waters

Part IX.B – Other Phosphorus Watershed MS4s

Part IX.B of GP-0-15-003 includes watershed specific requirements to implement TMDL requirements for MS4 discharges to the following Phosphorus impaired watersheds: Greenwood Lake, Onondaga Lake and Oscawana Lake.

Greenwood Lake: DEC has drafted and is publicly noticing for comment along with the draft MS4 renewal, the "Greenwood Lake Watershed TMDL Implementation Plan." This draft Implementation Plan includes strategies to reduce the regulated sources of Phosphorus in New York State and to reduce unregulated sources through voluntary action on the part of Greenwood Lake watershed stakeholders. The draft Implementation Plan identifies reduction requirements for the Town of Warwick, Village of Greenwood Lake, NYSDOT and Orange County. This implementation plan proposes a target phosphorus reduction to be accomplished through stormwater retrofits and identifies how reduction credits will be assigned. This phosphorus reduction stormwater retrofit requirement is apportioned among the four MS4s in the Greenwood Lake watershed.

The draft MS4 renewal includes enhanced BMPs consistent with the draft Greenwood Lake Watershed TMDL Implementation Plan. In conformance with 6 NYCRR 750-1.14, a compliance schedule has been added to implement the retrofit program to achieve the pollutant load reductions specified in the draft Greenwood Lake Watershed TMDL Implementation Plan. Progress with retrofits and enhanced BMPs must be reported with interim progress reports as specified in Part V.C.3.

Oscawana Lake & Onondaga Lake: Watershed-wide stormwater phosphorus load reductions are anticipated due to voluntary compliance with the Dishwasher Detergent and Nutrient Runoff Law which was signed into law on July 15, 2010. This law restricts the sale and application of fertilizers containing phosphorus for lawns and will eliminate phosphorus in dishwashing detergents sold in NY State. The state of Minnesota⁸ studied the effects of this type of legislation on stormwater concentrations, and reported a 15-30% reduction in phosphorus loading due to use of phosphorus-free fertilizer. DEC anticipates phosphorus reduction in stormwater runoff due to compliance with the Nutrient Runoff Law combined with the phosphorus reduction due to compliance with the six minimum control measures and phosphorus specific BMPs are sufficient to achieve the TMDL reduction requirements. Therefore, the draft MS4 renewal does not include schedules for retrofit plans for Onondaga Lake or Oscawana Lake.

⁸ <https://www.pca.state.mn.us/sites/default/files/stormwaterresearch-fertilizer.pdf>

Part IX.C – Pathogen Impaired Watershed MS4s

The EPA approved the following TMDL documents for waterbodies impaired for pathogens on Long Island:

- *Pathogen Total Maximum Daily Loads for Shellfish Waters in Oyster Bay Harbor and Mill Neck Creek, September 2003*
- *Peconic Bay Pathogens TMDL, September 2006*
- *Shellfish Pathogen TMDLs for 27 303(d) listed Waters, September 2007*

In conformance with 6 NYCRR 750-1.11, GP-0-15-003 included additional requirements as set forth in Part IX.C of the MS4 General Permit to address pathogens as the pollutant of concern for the portion of their storm sewershed in any of the TMDL watersheds.

The approved TMDLs that formed the basis of the MS4 General Permit conditions made certain assumptions as to the percentage of stormwater load attributed to MS4s. In advance of the deadlines specified in Table IX.C, MS4 Operators expressed concerns. Chief among those MS4 Operator concerns was that the TMDLs and permit conditions developed from them, wrongly assumed either that the source of the impairment was solely MS4s or dramatically overestimated the MS4 contribution. In response, DEC finalized a Retrofit Program Plan Guidance Document for Pathogen Impaired Waters on Long Island (2013 Guidance Document). In accordance with the 2013 Guidance Document, the 45 MS4 Operators, located within the watersheds of the pathogen impaired waterbodies and listed in Part IX.C of the MS4 General Permit, submitted storm sewershed mapping and land use data which allowed both the MS4s and NYSDEC to better understand the extent and location of the storm sewer systems. This new information suggests that the TMDL assumptions may have overestimated the true MS4 contribution to the impairment. Through this data gathering process, DEC received information that the contribution from MS4s was much smaller than the TMDLs assumed. In fact, it was determined in many cases that not all MS4 Operators owned or operated stormwater systems that discharged to the impaired waterbodies. A total of 22 MS4s have certified to not having a discharge to 60 of the watersheds in the TMDLs. Those MS4 Operators that reported a discharge to a TMDL waterbody, delineated and characterized the land area contributing to the MS4 (the sewershed). The submission of the MS4 sewersheds confirmed that the assumption/characterization of the TMDL to use the entire topographic watershed as the contributing land area was not a realistic representation of the MS4s contribution. The cause for such a disparity in contributing area is from the local historical planning practices of infiltrating stormwater wherever possible. Stormwater is routinely directed to dry wells and recharge basins where it is infiltrated and is no longer a contributor to surface water.

Given the inaccuracies identified, DEC will propose to withdraw these TMDLs pending revision. In the interim, the MS4 renewal proposes to continue the on-going source controls as specified in GP-0-15-003 but will hold retrofit requirements in abeyance.

Part IX.D Nitrogen Watershed MS4s

GP-0-15-003 required sewer system mapping of MS4s discharging to waters identified in the *TMDL for Nitrogen in the Peconic Estuary Program Study Area, Including Waterbodies Currently Impaired Due to Low Dissolved Oxygen: the Lower Peconic River and Tidal Tributaries; Western Flanders Bay and Lower Sawmill Creek; and Meetinghouse Creek, Terry Creek and Tributaries (September 2007)*. The submission of the MS4 sewersheds by MS4 Operators discharging to waters subject to the Peconic Nitrogen TMDL also confirmed very limited storm sewersheds due to the same development practices described for Part IX.C. The draft MS4 renewal does not propose retrofits for these sewersheds. MS4 Operators discharging to the waters listed in Part IX.D will continue to implement and submit semi-annual progress reports on enhanced BMPs to ensure the MS4 discharges are controlled.

Storm Water Management Program

SWMP Plan

The MS4 Operator is required to develop a SWMP document that describes how they will meet the control requirements in the permit. (See 40 CFR 122.34(a)). Part IV of the draft MS4 renewal requires a written SWMP plan. The SWMP plan is a consolidation of all of the MS4 Operator's relevant ordinances or other regulatory requirements, the description of all programs and procedures (including standard forms to be used for reports and inspections) that will be implemented and enforced to comply with this permit and to document the selection, design, and installation of all stormwater control measures. Appendix A of the draft MS4 renewal specifies the records that must be included in the written SWMP plan.

SWMP Coordinator

The stormwater management program developed to meet this permit must be an integrated program that may involve several departments or agencies. To satisfy MEP, stormwater programs must be adjusted as new information becomes available. This requires a centralized contact that manages the overall program and ties the different program elements together so that issues are communicated and adjustments can be made. Therefore, the draft MS4 renewal requires the MS4 Operator designate in writing a Stormwater Program Coordinator. The MS4 Operator does not need to hire a specific individual but needs to identify the individual and ensure they meet the minimum qualifications/training requirements specified in the MS4 renewal. DEC intends to develop and deliver this training

through partnership agreements with Soil & Water Conservation Districts similar to other training offered under the SPDES General Permit for Stormwater from Construction Activity (CGP).

Mapping

While GP-0-15-003 required MS4 Operators to map the MS4 outfalls and preliminary sewer sheds, the draft MS4 renewal requires MS4 Operators to develop and maintain a system map. There was a general consensus of the MS4 GP Subcommittee that a system map is needed to facilitate a clear understanding of the MS4 and serve as a planning tool to allow for prioritization of efforts and facilitate management decisions. With the exception of MS4s discharging to impaired waters, the permit does not specify the format (electronic or hard copy) provided that the map provides a clear understanding of the system. The complexity of the MS4 will dictate the format of the map where more complex systems will likely require GIS while paper maps may be sufficient for smaller, less complex systems. However, those portions of the MS4 discharging to impaired waters must be in GIS format.

Enforcement Response Plan

The draft MS4 renewal requires MS4 Operators develop and implement an enforcement response plan (ERP) which clearly describes the action(s) to be taken for violations of the local laws for illicit discharge (Part VI.C.1), construction (Part VI.D.3) and post-construction (Part VI.E.2). The ERP must address repeat and continuing violations through progressively stricter response (escalation of enforcement) as needed to achieve compliance with the terms and conditions of this permit.

It is critical that the MS4 have the authority to initiate a range of enforcement actions to address the variability and severity of noncompliance. Enforcement responses to individual violations must consider criteria such as magnitude and duration of the violation, effect of the violation on the receiving water, compliance history of the operator, and good faith of the operator in compliance efforts. Particularly for construction sites, enforcement actions must be timely in order to be effective.

Adequate Legal Authority

Adequate legal authority is required to implement and enforce most parts of the SWMP. (See 40 CFR 122.34(b)(3)(ii)(B), (b)(4)(ii)(A), and (b)(5)(ii)(B)). Without adequate legal authority the MS4 Operator would be unable to perform many vital SWMP functions such as performing inspections, requiring installation of control measures, and ensuring compliance. DEC recognizes that traditional MS4 and a non-traditional MS4 (such as a DOT, military base, or university) will have different legal authority available to them. Non-traditional MS4 Operators often cannot pass "ordinances" or may not have enforcement authority like a typical municipality, so legal authority may consist of other mechanisms such as policies, standards, or specific contract language. Although these differences exist, all MS4s must have

the legal authority to develop, implement, and enforce the program. Part IV.F of the draft MS4 renewal provides the details for the legal authority for both MS4 Operators with and without the ability to enact an ordinance, by-law or other regulatory mechanism.

Minimum Control Measures (MCMs)

The draft MS4 renewal includes requirements that ensure MS4 Operators develop⁹ and implement, or continue to implement, the six MCMs as required in 40 CFR 122.34 during the permit term.

MCM 1 – Public education and Outreach Program

As required by 40 CFR 122.34(b)(1), the draft MS4 renewal requires implementation of a public education program to distribute educational materials to their community¹⁰ about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff. The draft MS4 renewal requires MS4 Operators to develop and implement an education and outreach program to educate the general public on significant stormwater issues that are relevant to the MS4. The goal of the education and outreach program is to increase knowledge, change pollutant generating behaviors and improve program effectiveness so that pollutants are reduced.

The MS4 Operator must identify the areas where pollutant generating activities are occurring to target education and outreach efforts towards behaviors and activities that pose the greatest risk of pollutants to enter and discharge from the MS4. The education and outreach program should be integrated with the other program elements and adjusted to address issues identified through receipt of information from the public and implementation of the other control measures (MCMs 3, 4, 5 and 6).

MCM 2 – Public Participation Program

Citizens who take an active role in the decision making process take ownership in the program and therefore, are more likely to adhere to the program elements and will provide less resistance to program policies. Encouraging the public to frequently participate and offer information on a volunteer basis will provide an economic benefit by maximizing resources, in addition to shorter implementation schedules. To address the goals of MCM 2 and as required by 40 CFR 122.34(b)(2), the draft MS4 renewal requires MS4 Operators develop and implement a formal program to involve the public in activities and decisions that relate to the issues of stormwater

⁹ When used in the context of the draft MS4 renewal, the word “develop” means to update or create depending on whether the MS4 Operator is continuing coverage or newly designated

¹⁰ Non-Traditional and Traditional Non-Land Use MS4 Operators should consider their public/community to be employees (i.e. staff, faculty); user Population/Visitors; clients; customers; students; tenants; and contractors or developers working for MS4 Operator,

pollution. MS4 Operators must provide opportunities for public participation, including public notice and opportunity for comment on the annual report, and inform them of those opportunities and how they can become more involved.

MCM 3 – Illicit Discharge Detection and Elimination Program

An illicit discharge is defined as any discharge to an MS4 that is not composed entirely of stormwater, except allowable discharges as set forth in 40 CFR 122.26(b)(2) and 6 NYCRR 750-1.2(a)(27). Part I.A.3 of the draft MS4 renewal provides the list of non-stormwater discharges that are allowable under the MS4 renewal provided they do not violate ECL Section 17-0501. If DEC or the MS4 Operator determines that one or more of the *discharges* are in violation of ECL Section 17-0501, the identified *discharges* shall be considered illicit and the MS4 Operator must eliminate them. MS4 Operators are encouraged to include public education and outreach activities directed at reducing pollution from these discharges.

To satisfy 40 CFR 122.34(b)(3)(B), the draft MS4 renewal requires MS4 Operators develop and maintain adequate legal authority to control how the MS4 is used and prohibit non-stormwater discharges by adopting¹¹ the *New York State Department of Environmental Conservation Model Local Law to Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer Systems, April 2005* (NYS Model IDDE Law), or equivalent. The draft MS4 renewal permit also requires the development of a comprehensive, proactive Illicit Discharge Detection Elimination (IDDE) program consisting of the following elements: MS4 system mapping, identification of priority areas, a hotline for reporting of illicit discharges, outfall inspections, field screening and action levels for certain dry weather discharges, IDDE source identification (track down) and IDDE elimination.

DEC used the Center for Watershed Protection's guide on Illicit Discharge Detection and Elimination (IDDE): A Guidance Manual for Program Development and Technical Assistance¹² (IDDE Manual) in establishing the requirements for the IDDE program. Consistent with this guidance, the MS4 Operator must identify priority areas within the MS4 service area most likely to have illicit discharges and focus detection efforts in areas with the highest potential for illicit discharge. In addition, the MS4 Operator must annually analyze data collected to identify trends, patterns, areas of concern and time frames to track down and eliminate illicit discharges to revise priorities and improve program efficiencies.

The draft MS4 renewal also includes more specific requirements for outfall inspections with the proposed frequency based on the illicit discharge potential and receiving water. The MS4 GP subcommittee discussed the criteria for prioritization of outfalls and frequencies for inspection. While there was general agreement with the

¹¹ MS4 Operators without the ability to enact an ordinance, by-law or other regulatory mechanism must have mechanism that meets the substantive requirements

¹² www.cwp.org

prioritization criteria and proposed frequency for high priority outfalls, some members felt that there needed to be a reduction of frequency for low priority outfalls. The draft MS4 renewal proposes to increase the inspection requirements from once every 5 years to annual for high priority outfalls while keeping the inspection frequency for low priority outfalls on a 5 year cycle. However, the MS4 Operator may elect to provide training and use volunteer groups to monitor low priority outfalls.

The MS4 renewal also includes provisions for Illicit Discharge Prevention program that includes education and outreach to inform public employees, businesses and the general public of the hazards associated with illegal wastes, the types of discharges allowed, the types of discharges not allowed, proper handling and disposal practices and how to report illicit discharges (see 40 CFR 122.34(b)(3)(D)).

MCM4 – Construction Site Storm Water Runoff Control Program

Stormwater discharges from construction sites generally includes sediment and other pollutants such as phosphorus and nitrogen, turbidity, pesticides, petroleum derivatives, construction chemicals, and solid wastes that may become mobilized when land surfaces are disturbed. As set forth in 40 CFR 122.34(b)(4), the draft MS4 renewal requires the MS4 Operator to develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more.

GP-0-15-003 required that an MS4 Operator review and accept a Stormwater Pollution Prevention Plan (SWPPP) before coverage can be obtained under the CGP. MS4 Operators must also then enforce compliance with that SWPPP. The draft MS4 renewal continues to require MS4 Operators to provide this compliance oversight for applicable construction activities¹³. MS4 Operators must: review all SWPPPs for conformance with the New York State Standards & Specifications for Erosion & Sediment Controls and the SPDES General Permit for Stormwater from Construction Activities (or equivalent) and inspect all construction sites. The following changes are proposed:

Legal authority: 40 CFR 122.34(b)(4)(A) requires permits to include provisions to enact, to the extent allowed by State, Tribal or local law, an ordinance or other regulatory mechanism as part of the construction program. While previous versions of the MS4 general permit required MS4 Operators adopt a law,

¹³ Part VII.D describes applicable construction activities for Non Traditional and Traditional Land Use MS4 Operators to be those permitted, approved, funded or owned/operated by the MS4 Operator. Where the MS4 Operator is listed as the owner/operator on the Notice of Intent for coverage under the CGP, the MS4 Operator must ensure compliance with the CGP. The additional requirements for oversight described in this Part VII are not needed

ordinance or other regulatory mechanism equivalent to one of the versions of the NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment, the sample laws were last updated before the 2010 MS4 General Permit was issued and are now inconsistent with many of the requirements of the current CGP. To address this concern, DEC worked with the NYS Department of State through the Community Risk & Resiliency Act (CRRA) Model Law effort to prepare the “Draft Sample Local Law for Stormwater Management and Erosion and Sediment Control, October 21, 2016.” This sample law provides updates to reflect the current requirements of the CGP and proposed draft MS4 renewal. As part of the public notice requirements for the draft MS4 renewal, DEC is also seeking comments on the updated local laws. There are two versions of the Draft Sample Local Law available for review. When finalized, the MS4 renewal will require MS4 Operators to adopt the basic version that includes, among other changes, green infrastructure practices as specified in the New York State Stormwater Management Design Manual. Although not required, MS4 Operators are encouraged to consider the second version which provides additional resiliency provisions that allow communities to require a more detailed green infrastructure site planning process and consider riparian buffers and other sensitive natural resources.

Construction Site inventory: To effectively conduct inspections, the MS4 Operator must know where construction activity is occurring. The draft MS4 renewal requires a construction site inventory that tracks information such as project size, disturbed area, distance to any waterbody or flow channel, when the erosion and sediment control/stormwater plan was approved by the MS4 Operator, and whether the project is covered by the CGP. This inventory will allow the MS4 Operator to track and target its inspections

Construction Site Inspections: While GP-0-15-003 required that “all sites must be inspected where the disturbance is one acre or greater,” a frequency of inspection is not specified and additional specificity was required to meet the proposed revisions to 40 CFR 122.34(a) requirements for “clear, specific and measurable” limits. The draft MS4 renewal permit requires inspections of construction sites based on a prioritized ranking of sites. The MS4 Operator must assess potential risks to water quality impacts and identify high priority sites for inspection. The draft renewal includes criteria (Table 4 of draft MS4 renewal) for high priority construction sites based on the nature of the construction activity, topography, the characteristics of soils and receiving water quality. The Vermont Construction General Permit risk based standard¹⁴ (modified to reflect NYS terminology and criteria) formed the basis of the criteria in Table 4 of the draft MS4 renewal. High priority construction sites must be inspected more frequently (monthly) based on risk to water quality. The draft MS4 renewal also includes provisions that allow MS4 Operators to reprioritize projects and reduce MS4

¹⁴ <http://dec.vermont.gov/watershed/stormwater/permit-information/applications-fees/stormwater-construction-discharge-permits>

compliance oversight inspections as risk is diminished. Low priority sites must be inspected at least once during active construction in addition to the pre-construction inspections and inspection at project completion. If the project duration extends for more than one year, at least one inspection must be conducted per year.

Other changes made to the draft MS4 renewal to provide clear, specific and measureable limits include requirements for:

- Documentation and data elements to be recorded for all construction site inspections;
- Pre- construction inspections;
- Project close out inspections;
- Documentation and data elements for all SWPPP review;
- Documentation and follow up of construction related complaints; and,
- Minimum training requirements for SWPPP reviewers and construction site inspectors.

MCM 5 Post Construction SMPs

Inspection and maintenance of post-construction control measures is key to ensuring the protection of water quality. If control measures are not inspected and maintained they could become sources of pollution rather than reducing it. The stormwater regulations require MS4 Operators develop and implement a program to address post-construction discharges from new development and redeveloped sites, and ensure the long-term operation and maintenance of these controls. (See 40 CFR 122.34(b)(5)). The draft MS4 renewal permit requires post-construction SMPs that must be designed, constructed and maintained in conformance with the New York State Stormwater Management Design Manual (2015), or *equivalent*. The design manual specifies design criteria for post construction SMPs that infiltrate, evapotranspire, or harvest and use stormwater, with the aim of maintaining or restoring the pre-development stormwater runoff conditions at the site.

Legal Authority: 122.34(b)(5)(B) requires an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State, Tribal or local law. The “Draft Sample Local Law for Stormwater Management and Erosion and Sediment Control” developed by NYSDOS in cooperation with DEC incorporates provisions to satisfy the legal authority requirements. Adoption of this updated local law under MCM 4 will satisfy the requirements of 122.34(b)(5)(B).

SWPPP Review: Under MCM 4, MS4 Operators must review all SWPPPs for applicable construction activities for conformance with the requirements of the CGP. MCM 5 requires MS4 Operators incorporate into the SWPPP review procedures, additional elements to ensure all post-construction SMPs meet the sizing criteria contained in the New York State Stormwater Management Design Manual (2015). Deviations from the performance criteria of the Design Manual must be demonstrated to be equivalent. When conducting SWPPP review, MS4

Operators must ensure the SWPPP includes adequate provisions for long term maintenance as required by the CGP. Specifically, the O&M plan must include inspection and maintenance schedules and actions to ensure continuous and effective operation of each post-construction stormwater management practice. The O&M plan must also identify the entity that will be responsible for the long term operation and maintenance of each practice. Post construction inspections must be conducted at the frequency specified in the O&M manual of the approved SWPPP. In addition, the MS4 renewal requires documentation of specific data elements and time frames for corrective actions.

Post Construction SMP Inventory: To effectively conduct inspections and maintain post- construction SMPs, the MS4 Operator must have an inventory of practices and track maintenance activities. The draft MS4 permit specifies the minimum data elements that must be tracked to ensure long term performance of post construction SMPs. The draft MS4 renewal specifies the post construction SMPs and data elements to be included in the inventory.

Post Construction SMP Inspections & Maintenance: GP-0-15-003 requires inspections and maintenance of post-construction SMPs by trained staff. To provide clear, specific and measureable limits, the draft MS4 renewal includes provisions for training individuals responsible for inspection and maintenance of post construction SMPs. On September 7, 2016, DEC publicly noticed for review and comment, the DEC draft Maintenance Guidance for Stormwater Management Practices¹⁵. Although the comment period has closed on this guidance, the document is available on the DEC website (<http://www.dec.ny.gov/chemical/41392.html>). Once finalized, this guidance will be incorporated into the New York State Stormwater Management Design Manual and will be required for construction projects in development of O&M plans under the CGP. DEC has developed training modules to accompany the DEC draft Maintenance Guidance for Stormwater Management Practices, September 7, 2016 that may be used to satisfy the training requirements for individuals responsible for conducting inspections and maintenance.

MCM 6 Pollution Prevention & Good Housekeeping for Municipal Operations & Facilities

As specified in 40 CFR 122.34(b)(6), the draft MS4 renewal requires the MS4 Operator *develop* and implement a pollution prevention/good housekeeping program for municipal operations and municipal facilities to ensure the MS4 Operator's own activities do not contribute pollutants to surface waters of the State. The good housekeeping/pollution prevention program must address all municipal operations and municipal facilities that contribute or potentially contribute POCs to the MS4 and to surface waters of the State through direct drainage within the regulated area

¹⁵ <http://www.dec.ny.gov/chemical/41392.html>

Inventory: The draft MS4 renewal requires a comprehensive inventory and map of municipal facilities to better understand their locations within the MS4 service area and their potential to contribute stormwater pollutants. The facility inventory will also serve as a basis for setting up periodic facility assessments and developing, where necessary, facility stormwater pollution prevention plans.

Assessment Schedule: GP-0-15-003 required that facilities be assessed every three years but does not specify the BMPs or contents of the assessment. The draft MS4 renewal would require MS4 Operators to continue on this schedule and perform an assessment of all municipal facilities and operations for compliance with the terms and conditions of the final renewal. Within 3 years of the effective date of the final permit, the MS4 Operator will be expected to certify compliance for all facilities and operations.

Best Management Practices: To provide clear, specific and measurable limits, the draft MS4 renewal includes specific BMPs to minimize the discharge of pollutants associated with all municipal operations and facilities including requirements to:

- Minimize Exposure of materials
- Utilize Good Housekeeping practices
- Include a Preventive Maintenance program
- Include a Spill Prevention and Response program
- Stabilize exposed areas and control runoff
- Manage stormwater runoff
- Minimize exposure of deicing materials.
- Include provisions to train all employees
- Eliminate non-stormwater discharges
- Ensure that waste, garbage, and floatable debris are not discharged
- Minimize generation of dust and off-site tracking of raw, final, or waste materials
- Require third party entities to comply
- Maintain all BMPs
- Assess compliance using the Municipal Facility/Operation Assessment Form developed by DEC.
- Document compliance

High Priority Facilities: DEC has identified certain facilities (highway garages, facilities with vehicle or equipment maintenance and salt storage facilities) to be high priority based on the typical pollutant sources and activities present and their potential for water quality impacts. Facility-specific SWPPPs must be developed for these facilities. The draft MS4 renewal includes specific requirements for the SWPPP including quarterly visual monitoring of stormwater discharges, annual dry weather inspection of outfalls and annual assessment of BMPs.

Low Priority Facilities: Low priority facilities must document and implement the above listed BMPs but a facility-specific SWPPP is not required. Rather MS4 Operators must have written procedures/protocols that instruct management and staff on the prescribed BMPs that must be followed for the activities or operations conducted at the facility. Such procedures must provide sufficient instruction on the BMPs to be implemented and be available to the management and staff that will be called upon to use them. Low priority facilities must be inspected/assessed at least one every 5 years.

Facilities Subject to MSGP: GP-0-15-003 requires municipal operations and facilities that would otherwise be subject to the NYS Multi-sector General Permit (MSGP, GP-0-12-001) for industrial stormwater discharges to prepare and implement provisions in the SWMP that comply with MSGP provisions for SWPPPs, inspections, monitoring and corrective actions. Audits of MS4 Operators and feedback from the MS4 GP subcommittee indicated these requirements were confusing as to facilities that would “otherwise be subject to the MSGP.” The draft MS4 renewal specifically lists out the facilities, their associated sectors and MSGP requirements that apply.

Infrastructure Maintenance: Storm sewer systems need maintenance to ensure that structures within the storm sewer that are meant to reduce pollutants do not become sources of pollution. Regularly maintaining catch basins prevent the accumulation of pollutants that are later released during rain events as well as blockages, backups, and flooding. The draft MS4 renewal permit requires routine maintenance of MS4 infrastructure (i.e. storm sewer system components, roadways, bridges and associated rights of way) and specifies BMPs to reduce the *discharge* of pollutants from the MS4. The MS4 Operator must document and implement a plan to optimize catch basin inspection and cleaning so that catch basins are cleaned before exceeding 50% of *sump capacity* and regular sweeping of municipal streets, parking lots or other paved areas at municipal facilities. The draft MS4 renewal specifies a tiered maintenance schedule for the storm sewer infrastructure components, with the highest priority areas being maintained at the greatest frequency. The draft renewal specifies priorities based on the land use within the MS4 area, the condition of the receiving water and the amount and type of material that typically accumulates in an area.