



Department of  
Environmental  
Conservation

DRAFT

OCTOBER 2016

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

Effective Date:

Expiration Date:

Stu Fox  
Deputy Chief Permit Administrator

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Authorized Signature

Date

Address: NYS DEC  
Division of Environmental Permits  
625 Broadway, 4th Floor  
Albany, N.Y. 12233-1

## Preface

Pursuant to Section 402 of the Clean Water Act (“CWA”), *small municipal separate storm sewer systems* (“small MS4s”), located in *urbanized areas* (“UA”) and those *additionally designated* by New York State are unlawful unless the *MS4 Operator* of the *small MS4* is 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 an NPDES-approved program with permits issued in accordance with the *Environmental Conservation Law* (“ECL”).

Only those *small MS4 operators* who *develop and implement a stormwater management program* (SWMP) and obtain permit coverage in accordance with Part II of this *SPDES general permit* are authorized to *discharge stormwater* from their *small MS4* under this *SPDES general permit*.

An *MS4 Operator* authorized under GP-0-15-003 as of the effective date of GP-0-17-002, shall be permitted to discharge in accordance with this renewed permit upon written notification from the *Department* that a complete NOI has been received.

An *MS4 operator* may<sup>1</sup> obtain coverage under this *SPDES general permit* by submitting a Notice of Intent (NOI) to the address provided on the NOI form. For newly regulated MS4s, authorization under this *SPDES general permit* is effective upon written notification from the *Department* of the receipt of a complete NOI. Copies of this *SPDES general permit* and the NOI for New York are available by calling (518) 402-8109 or at any Department of Environmental Conservation (*Department*) regional office (Appendix F). They are also available on the *Department’s* website:

Submitting an NOI is an affirmation that they agree to the terms and conditions of this permit including the *development* or update of a SWMP in accordance with the schedule of compliance.

### **NOTE**

All italicized words within this *SPDES General Permit* are defined in Part XII. Acronyms and Definitions

<sup>1</sup> The term “may” is used to recognize that there are circumstances under which the *operator* is ineligible for coverage under this *SPDES general permit* because of exclusionary provisions of this permit. *Operators* that are excluded from coverage under this *SPDES general permit* as provided for in Part I, for example, are not authorized to *discharge* under this permit. This clarification also applies to situations in which an NOI has been submitted; submission of an NOI by an entity excluded from *SPDES general permit* coverage does not authorize the *small MS4* to *discharge stormwater* runoff under the authority of this *SPDES general permit*.

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## Part I. PERMIT COVERAGE AND LIMITATIONS

### A. Permit Authorization

1. This SPDES general permit authorizes *discharges* of stormwater to surface water of New York State from *Small Municipal Separate Storm Sewer Systems* (MS4s) as defined in 40 CFR 122.26(b)(16), including:
  - a. MS4s located either fully or partially within an urbanized area as determined by the latest Decennial Census by the US Bureau of Census as of the effective date of this permit (the 2010 Census)(*automatically designated areas*); If the *small MS4* is not located entirely within an urbanized area, only the portion of the MS4 that is located within the urbanized area is regulated under 40 CFR §122.32(a)(1); or
  - b. MS4s located in areas *additionally designated* by New York State as requiring a permit per 40 CFR §122.32(a)(2).
2. Small MS4s that are authorized to *discharge* under this permit will fall under one of the following categories:
  - a. Traditional Land Use Control MS4 Operators - Cities, Towns and Villages with land use authority.
  - b. Traditional Non-Land Use Control MS4 Operators - Counties without land use authority.
  - c. Non-Traditional MS4 Operators:
    - i. State, federal, county and other publicly owned properties such as State university campuses, prisons, hospitals, military installations public housing authorities, school and other special districts.
    - ii. State transportation agencies such as NYSDOT and Thruway Authority.

This permit contains conditions specific for each of these categories.
3. *Discharges* through MS4 outfalls from the following sources are authorized by this permit provided they do not violate ECL Section 17-0501. If the *Department* or 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 such *discharges* by

following the *illicit discharge* minimum control measure (MCM) requirements found in Parts VI.C and VII.C, depending on the MS4 category

- a. Dechlorinated<sup>2</sup> water line flushing
  - b. landscape irrigation
  - c. diverted stream flows
  - d. rising ground waters
  - e. uncontaminated ground water infiltration (as defined at 40 CFR35.2005(20))
  - f. uncontaminated ground water
  - g. *discharges* from potable water sources
  - h. foundation drains
  - i. air conditioning condensate
  - j. irrigation water
  - k. springs
  - l. water from crawl space and basement sump pumps
  - m. footing drains
  - n. lawn and landscape watering runoff provided that all pesticides and fertilizers have been applied in accordance with the manufacturer's product label;
  - o. water from individual residential car washing
  - p. flows from riparian habitats and wetlands
  - q. dechlorinated<sup>1</sup> swimming pool *discharges*
  - r. residual street wash water
  - s. *discharges* or flows from emergency firefighting activities
  - t. testing of firefighting equipment (water only suppression equipment)
  - u. fire hydrant flushing
  - v. dechlorinated<sup>2</sup> water reservoir *discharges*
  - w. any SPDES permitted *discharge*.
4. Stormwater *discharges* associated with industrial activity are exempt from the requirements of this SPDES general permit if the *discharges* are in

<sup>2</sup> Dechlorinated shall mean having a chlorine residual of  $\leq 0.1$  mg/l.



compliance with a different SPDES general permit or an individual SPDES permit.

**B. Limitations on Coverage**

The following are not authorized by this *SPDES general permit*:

1. Stormwater *discharges* that may adversely affect an endangered or threatened species unless the MS4 Operator has obtained a permit issued pursuant to 6 NYCRR Part 182 or the *Department* has issued a letter of non-jurisdiction. All documentation necessary to demonstrate eligibility shall be maintained in the SWMP plan.
  
2. Stormwater *discharges* which adversely affect properties listed or eligible for listing in the National Register of Historic Places, unless the covered entity is in compliance with requirements of the National Historic Preservation Act and has coordinated with the appropriate State Historic Preservation Office any activities necessary to avoid or minimize impacts.
  
3. Stormwater *discharges*, the permitting of which is prohibited under 40 CFR 122.4 and/ or 6 NYCRR 750-1.3;

**Part II. OBTAINING PERMIT COVERAGE**

A. MS4 Operators seeking authorization to *discharge* under the terms and conditions of this permit must submit the appropriate NOI indicated below in accordance with Part X.J (Signatory Requirements) and in accordance with the following schedule:

Type of permit coverage	Deadline to submit	Form to file with the <i>Department</i>
Newly designated	Within 180 days of written notification from the <i>Department</i>	Notice of Intent to Obtain Coverage
MS4 Operators continuing coverage from GP-0-15-003	Within 30 days of effective date of this permit.	Notice of Intent to Continue Coverage

**Table 1**

Through submission of the NOI to continue coverage, the MS4 Operator certifies that he/she has read and understands the new requirements and agrees to

comply with the terms and conditions of this permit including the provisions to update the SWMP in accordance with the schedule contained in Appendix C

Changes in Operator or appropriate signatories is addressed in Part X.J

B. MS4 Operators shall submit the appropriate form to:

**NOTICE OF INTENT**  
**NYS DEC, Bureau of Water Permits**  
**625 Broadway, 4<sup>th</sup> Floor**  
**Albany, NY 12233-3505**

C. MS4 Operators who submit a complete NOI are authorized to *discharge* stormwater under the terms and conditions of this permit upon written notification from DEC that a complete NOI has been received.

## Part III. Special Conditions

### A. Discharge Compliance with Water Quality Standards

1. The MS4 Operator shall implement the required controls contained in Parts III through IX of this permit to reduce the *discharge* of pollutants. The *Department* expects that compliance with the conditions of this permit will assure MS4 *discharges* meet applicable water quality standards.
2. It shall be a violation of the *Environmental Conservation Law* (ECL) for any *discharge* authorized by this SPDES general permit to either cause or contribute to a violation of water quality standards as contained in Part 700-705 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York.
3. The MS4 Operator must take all necessary actions to ensure *discharges* comply with the conditions of this permit. If at any time an MS4 operator becomes aware (e.g., through self-monitoring or by notification from the *Department*) that a *discharge* directly or indirectly causes, or has the reasonable potential to cause or contribute to the violation of an applicable water quality standard, the MS4 operator must implement corrective actions and the MS4 Operator must document these actions in the SWMP Plan.
4. Compliance with this permit does not preclude, limit, or eliminate any enforcement activity as provided by the Federal and/or State law. Additionally, if violations of applicable water quality standards occur, then coverage under this SPDES general permit may be terminated by the *Department* in accordance with 6 NYCRR 750-1.21 (e), and the *Department* may require an application for an alternative SPDES general permit or individual SPDES permit may be issued.

### B. Water Quality Improvement Strategies for Impaired Waters

#### 1. Impaired Waters without an approved TMDL

For sewer sheds to outfalls discharging to an impaired water listed in Appendix D, the MS4 Operator must *develop* and implement the pollutant specific best management practices (*BMPs*) (found in Part VIII) targeted towards the pollutant of concern causing the impairment. MS4 Operators implementing these pollutant specific *BMPs* in addition to the *BMPs* listed in Parts VI and VII will constitute compliance with Part III.A of this permit.

#### 2. Impaired Waters with approved TMDLs

- a. In addition to the *BMPs* listed in Parts VI and VII, MS4 Operators discharging to waters within the watersheds listed in Table 2 must implement the *BMPs* and applicable retrofit plans as specified in Part IX to achieve the pollutant load reductions specified in the referenced TMDL.

- b. Where retrofits are required, each MS4 Operator is responsible for an individual load reduction as specified in the applicable TMDL Implementation Plan specified in Part IX. MS4 Operators may form a Regional Stormwater Entity (RSE) to implement stormwater retrofits collectively whereby compliance with the pollutant reduction requirements would be achieved on a regional basis. In this case, the load reduction requirement for each participating MS4 will be aggregated to create an RSE load reduction that will allow design and installation of retrofits where they are most feasible without restricting MS4 Operators to site retrofits within their municipal boundaries. Each member of an RSE is in compliance if the aggregate reduction number associated with the retrofit plans is met. If the aggregate number is not met, each of the participating MS4s would be deemed non-compliant until such time as they had met their individual load reduction requirements.

TMDL	POC	Part IX
Phase II Phosphorus TMDLs for Reservoirs in the NYC Watershed, June 2000	Phosphorus	A
Total Maximum Daily Load (TMDL) for Phosphorus in Lake Carmel <sup>3</sup> , October 2016		
Total Maximum Daily Load (TMDL) for Phosphorus in Palmer Lake <sup>2</sup> , March 2015		
Impaired Waters Restoration Plan For Greenwood Lake – Total Maximum Daily Load for Total Phosphorus, September 2005	Phosphorus	B
Updated Phosphorus Total Maximum Daily Load for Onondaga Lake, June 2012		
Total Maximum Daily Load (TMDL) for Phosphorus in Lake Oscawana, September 2008		
Peconic Bay Pathogens TMDL, September 2006	Pathogens	C
Pathogen Total Maximum Daily Loads for Shellfish Waters in Oyster Bay Harbor and Mill Neck Creek, September 2003		
Shellfish Pathogen TMDLs for 27 303(d) listed Waters, September 2007		
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)	Nitrogen	D

**Table 2**

<sup>3</sup> Compliance with the requirements within Part IX.A will achieve the reductions specified by the approved TMDLs for these waters.

## Part IV. Stormwater Management Program Requirements

MS4 Operators must *develop* implement and enforce a Stormwater Management Program (SWMP) to reduce pollutants to the maximum extent practicable (MEP) that may enter into and be discharged from their separate storm sewer system.

### A. SWMP Plan

The MS4 Operator shall *develop* and implement a written (hardcopy or electronic unless otherwise specified in this permit) SWMP Plan. The SWMP Plan shall be signed in accordance with Part X.J – Signatory Requirements.

The SWMP Plan is the document used by the MS4 Operator to describe and detail the activities and measures that will be implemented to meet the terms and conditions of this permit and shall be updated and/or modified during the permit term as the MS4 Operator's activities are modified, changed or updated to meet current permit conditions.

The SWMP Plan must contain, at a minimum, all required activities, measures and documentation required by this permit and specified in Appendix A of this permit.

#### 1. Availability of SWMP Plan

The SWMP Plan shall be made readily available to MS4 Operator's management and staff responsible for implementation, the *Department* and U.S. Environmental Protection Agency (USEPA) staff.

The MS4 Operator shall also ensure that copies of the SWMP Plan are available for public inspection during normal business hours at a location that is accessible to the public. The location of the SWMP Plan must be published with outreach and public participation materials and kept current.

#### 2. Timeframes for SWMP Development or Updates

- a. Newly designated MS4s must *develop* their SWMP in accordance with the timeframes set forth in the schedule contained in Appendix C.
- b. MS4 Operators authorized under GP-0-15-003 shall continue to fully implement their existing SWMP until the timeframes set forth in the schedule contained in Appendix C at which time the MS4 Operator must have updated the appropriate sections of the SWMP Plan

### B. Administrative Requirements

#### 1. SWMP Coordinator

The MS4 Operator must designate in writing a Stormwater Program Coordinator who will oversee the coordination and implementation of the Stormwater Management Program. The Stormwater Program Coordinator must be familiar with all aspects of the Stormwater Management Program, coordinate all elements of the program to ensure they are working together,

compile all necessary information, and address any concerns about stormwater management and compliance with the MS4 General Permit. The SWMP Coordinator must be knowledgeable in the principles and practices of stormwater management and the MS4 General Permit requirements. SWMP Coordinators must receive four hours of training endorsed by the *Department* in stormwater management and the requirements of this permit.

## 2. *Sharing Resources*

- a. MS4 Operators may rely upon other entities to assist with any portion of the SWMP development, implementation or enforcement. These entities may consist of other MS4 Operators, a Coalition of MS4 Operators, other public entities (e.g. non-MS4 entities), or a private third party contractor. Regardless of the mechanism to share resources, there must be an agreement in place that:
  - i. Is legally binding;
  - ii. Is documented in writing;
  - iii. Is signed and dated by all parties including the certification statement below;
  - iv. Identifies the activities that the entity will be responsible for including the particular MCM, the location and type of work;
  - v. includes the name, address and telephone number of the contact person representing the entity;
  - vi. Is kept up-to-date and is part of the SWMP Plan; and
  - vii. Is retained by each MS4 Operator for the duration of the permit term.
- b. Certification Statement:

“I certify under penalty of law that I understand and agree to comply with the terms and conditions of the (MS4 Operator’s name) stormwater management program and agree to implement any corrective actions identified by the (MS4 Operator’s name) or a representative. I also understand that the (MS4 Operator’s name) must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System (“SPDES”) General Permit for Stormwater Discharges from the Municipal Separate Storm Sewer Systems (“MS4 GP”) and that it is unlawful for any person to directly or indirectly cause or contribute to a violation of water quality standards. Further, I understand that any non-compliance by (MS4 Operator’s name) will not diminish, eliminate, or lessen my own liability.”
- c. Irrespective of any agreements, each individual MS4 Operator remains legally responsible for obtaining its own permit coverage, for filing the NOI and satisfying all GP-0-15-003 requirements and for its own *discharges*.

### 3. Staffing Plan/Organizational chart

Individual SWMP components may be developed, implemented or enforced by different departments associated with the MS4 Operator, or other entities as described in Part IV.B.2. The MS4 Operator must *develop* a written staffing plan that clearly identifies individuals, including those identified in Part IV.B.2, and the roles and responsibilities associated with each required element of the program. Throughout this permit, there are requirements for development of procedures that will require training for individuals responsible for implementing portions of the program. These individuals must be included in the staffing plan/organizational chart along with a description of the components of the plan they will be responsible to implement. The staffing plan must describe how information will be communicated and coordinated among all responsible parties.

## C. Mapping

1. The MS4 Operator must *develop* and maintain a map to facilitate a clear understanding of the MS4 and serve as a planning tool to allow for prioritization of efforts and facilitate management decisions. The map must show the entire small MS4 conveyance system within the regulated area and contain the following components:
  - Location of all outfalls with priority rating identified
  - Urbanized area boundaries
  - *additionally designated area* boundaries
  - Names and location of all surface waters of the state within the regulated area
    - Classification
    - Impairment and POC, if applicable
      - TMDL watershed areas
  - Location of all interconnected MS4 outfalls with name and contact of MS4 Operator.
  - Location and type of conveyance – closed pipe or open drainage
    - Drop Inlet, catch basin and manhole locations
    - Number and size of connections to catch basins and manholes
    - Direction of flow.
  - Catch basins (Part VI.6.3 and Part VII.6.3)
  - Roads
  - Land area draining to MS4 (i.e. sewersheds).
  - Land Cover areas
  - Topography (USGS Quadrangle Map or better)
  - Areas of Concern
    - Areas served by sanitary sewer
    - Areas served by septic system
    - Commercial/industrial areas

- Post Construction Stormwater Management Practices (see Part VI.E.3 and VII.E.2)
  - Municipal facilities (see Part VI.F.5 and Part VII.F.4)
  - Locations of suspected, confirmed and corrected illicit *discharges*
2. The required format, scale and detail of the map shall be appropriate to facilitate a clear understanding of the system (unless specified otherwise).
  3. The map shall be updated annually to reflect newly discovered information and required corrections or modification.
  4. The map shall be annually updated to reflect revised prioritization as new information becomes available

#### **D. SWMP Minimum Control Measures**

The SWMP must include the following program components (also known as Minimum Control Measures or MCMs) that, when implemented together will reduce the *discharge* of pollutants into receiving waters to the MEP. This permit includes measurable goals (time lines and quantifiable goals) for each MCM to reduce the *discharge* of pollutants and satisfy the MEP standard.

- MCM 1 – Public Education & Outreach Program to increase public awareness on pollutant generating activities and behaviors specific to the MS4, to change behavior and increase public participation in local programs so that pollutants in storm water are reduced
- MCM 2 – Public Participation Program to involve the public in activities and decisions that relate to stormwater pollution
- MCM 3 –Illicit *Discharge* Detection and Elimination program to manage the MS4 so that it is not used to convey pollutants associated with flows not directly attributable to precipitation runoff.
- MCM 4 – Construction Site Runoff Control Program to ensure appropriate control measures are selected and implemented by the owner or operator of a construction site to ensure pollutants from construction sites do not enter the MS4.
- MCM 5 – Post Construction Stormwater Management Program to ensure that post construction stormwater management practices are selected, designed, installed and maintained for long term performance in removing pollutants from stormwater runoff associated with new development and redevelopment.
- MCM 6 – Pollution Prevention and Good Housekeeping Program to identify and implement appropriate practices so that municipal facilities and infrastructure/operations are minimized to the MEP.

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 and IX list additional requirements for all MS4 Operators discharging to impaired waters.

### E. Legal Authority

The MS4 Operator must, to the extent allowable by State and local law, *develop* adequate legal authority to control pollutant *discharges* into and from the MS4 and to meet the requirements of this permit. To be adequate:

1. For MS4 Operators with the ability to enact an ordinance, by-law or other regulatory mechanism the legal authority must be certified by the attorney representing the MS4 Operator as being equivalent to the applicable model law referenced in Parts VI.C.1, VI.D.2 and VI.E.2;
2. For MS4 Operators without the ability to enact an ordinance, by-law or other regulatory mechanism, legal authority must be established through an available mechanism that:
  - a. Is legally binding;
  - b. Is documented in writing;
  - c. Is agreed to and signed by all parties, including the certification statement below;
  - d. Identifies the activities that the entity will be responsible for as well as individual within the MS4 who will oversee compliance;
  - e. includes the name, address and telephone number of the contact person representing the entity;
  - f. Is kept up-to-date and is part of the SWMP Plan; and
  - g. Is retained by MS4 Operator for the duration of the permit term.

#### Certification Statement:

"I certify under penalty of law that I understand and agree to comply with the terms and conditions of the (MS4 Operator's name) stormwater management program and agree to implement any corrective actions identified by the (MS4 Operator's name) or a representative. I also understand that the (MS4 Operator's name) must comply with the terms and conditions of the New York State Pollutant *Discharge* Elimination System ("SPDES") General Permit for Stormwater Discharges from the Municipal Separate Storm Sewer Systems ("MS4 GP") and that it is unlawful for any person to directly or indirectly cause or contribute to a violation of water quality standards. Further, I understand that any non-compliance by (MS4 Operator's name) will not diminish, eliminate, or lessen my own liability."

### F. Enforcement Measures & Tracking

#### 1. *Enforcement Response Plan*

The MS4 Operator must *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.

The ERP must describe how the MS4 Operator will use the following types of enforcement responses or combination of responses based on the type, 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:

- a. Verbal Warnings;
- b. Written Notices;
- c. Citations (with Fines);
- d. Stop Work Orders;
- e. Withholding of Plan Approvals or Other Authorizations affecting the facility's ability to *discharge* to the MS4; and
- f. Additional Measures, supported in local legal authorities, such as collecting against the project's bond or directly billing the responsible party to pay for work and materials to correct violations.

Efforts to obtain a voluntary correction of deficiencies through informal enforcement, such as verbal warnings or written notices, should not exceed 60 days in duration (from the time of the MS4 Operator's initial determination until a return to compliance).

## **2. Enforcement Tracking**

The MS4 Operator must track instances of non-compliance. The enforcement case documentation must include, at a minimum, the following:

- a. Name of owner/operator of facility or site of violation;
- b. Location of stormwater source (i.e., construction project, industrial facility);
- c. Description of violation;
- d. Required schedule for returning to compliance;
- e. Description of enforcement response used, including escalated responses if repeat violations occur or violations are not resolved in a timely manner;
- f. Accompanying documentation of enforcement response (e.g., notices of noncompliance, notices of violations);

- g. Any referrals to different departments or agencies; and
- h. Date violation was resolved.

## Part V. Program Evaluation, Recordkeeping, Reporting and Certification

### A. Program Evaluation

For each year of permit coverage, the MS4 Operator must conduct an annual evaluation of its compliance with the terms and conditions of this permit and submit this evaluation with an Annual Report. The annual evaluation documentation shall also be maintained as part of the SWMP Plan.

### B. Recordkeeping

The *MS4 Operator* must keep records required by this *SPDES general permit* as specified in Appendix A for at least five (5) years after they are generated. Records must be submitted to the *Department* within a reasonable specified time period of a written *Department* request for such information.

### C. Reporting

#### 1. Report Submittal

Reports may be submitted electronically to the *Department* at the following email address: [stormwater\\_info@dec.ny.gov](mailto:stormwater_info@dec.ny.gov).

Hard copy reports may be mailed to the *Department* at the following address:

NYS DEC "MS4 Coordinator"  
Bureau of Water Permits  
625 Broadway, 4th Floor  
Albany, NY 12233-3505

#### 1. Annual Reports

- a. The MS4 Operator shall submit annual reports each year of the permit term using forms provided by the *Department*. Failure to submit a complete annual report shall constitute a permit violation.
- b. The annual report shall summarize the activities performed throughout the reporting period (March 10 to March 9). The annual report is due no later than June 1 following the end of the reporting period.
- c. The annual reports shall contain the following information:
  - Annual evaluation of compliance with the permit terms and conditions.
  - Status of compliance with TMDL requirements, if applicable and as required by Part IX of this permit.
  - Notice that a small MS4 is relying on another entity to satisfy some or all of its permit obligations (if applicable);
  - A summary of the public comments received on the annual report at the public presentation required in Part VI.B.2. or VII.B.2 and, as

appropriate, how the small MS4 will respond to comments and modify the program in response to the comments;

- Specific reporting requirements for each of the SWMP requirements as stated in the following subsections listed in Appendix B.

### **3. Interim Progress reports.**

In accordance with 6 NYCRR Part 750-1.14, MS4 Operators within the watersheds listed in Part IX must submit to the *Department* interim progress reports no later than December 1 of each year. These interim progress reports will identify the activities that have been performed during the period of March 10 through September 9 of each year, which demonstrates that there is progress being made by the *MS4 Operator* towards completion of the reduction requirements, prescribed in Part IX. Progress made during the period of September 10 through March 9 shall be reported with the annual report that is due no later than June 1 of each year.

### **4. Shared Annual Reporting**

MS4 Operators working together to implement their SWMPs may complete and submit a shared annual report to satisfy the reporting requirements specified in Part V.C.2. The shared annual report must outline and explain group activities, but also include the tasks performed by each individual *MS4 Operator*.

On or before the reporting deadline (June 1), each *MS4 Operator* within the group, must:

- a. Sign the certification section of the annual report to take responsibility for all of the information in the annual report, which includes specific endorsement or acceptance of the shared annual report on behalf of the individual *MS4 Operator*;
- b. Publicly present their draft annual report as required by Part VI.C.2.b or VII.C.2.b and ensure that local public officials and members of the public are informed about the individual MS4 Operator's program, activities and compliance status; and
- c. Submit for inclusion with the group annual report, a summary of any comments received and responses to those comments related to the individual *MS4 Operator's* contribution.

### **5. Certification**

All reports specified within this Part must be signed and certified in accordance with the signatory requirements in Part X.J.

## Part VI. Minimum Control Measures (MCMs) for Traditional Land Use Control

In addition to the requirements contained in Parts I thru V, traditional land use control MS4 Operators must comply with the MCMs contained in this Part.

### A. MCM1 – Public Education and Outreach

The MS4 Operator shall *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.

#### 1. Program Development

##### a. Identify Significant Areas of Concern

The MS4 Operator must identify the areas where pollutant generating activities are occurring to target education and outreach efforts; including the following:

- Areas contributing to impaired waterbodies (See Part VIII and Appendix D)
- TMDL watersheds (See Part IX)
- Areas prone to erosion
- Areas contributing to waterbodies of significant value (drinking water supply, public bathing beaches, shellfishing, high recreation value)
- Densely populated residential areas
- Hot Spot Areas (remediation sites, clusters of industrial activity, salt storage, etc.)
- Areas where a high number of *construction activities* are occurring
- Areas with a high number of *illicit discharges*

##### b. Define Education Goals

- i. The MS4 Operator must document in the SWMP plan how increased education and outreach will assist with implementation of their stormwater program to reduce the potential for pollutants to be generated from each area identified to protect or restore water quality.
- ii. The education and outreach program shall be 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).

c. **Define Target Audience**

For each area of concern identified in Part VI.A.1.a, the MS4 Operator must identify in the SWMP, the applicable target audience(s) and associated pollutant generating activities that the outreach and education will address. If one or more of the following target audiences or activities are not present within the area of concern, the MS4 Operator must document this determination in the SWMP. Target audiences and potential pollutant generating activities include:

*Residents (both full time and seasonal)*

- Residential car washing
- Vehicle fluid changing and general auto maintenance.
- Pet and other animal waste
- Off-pavement automobile parking
- Home and garden care activities (pesticides, herbicides, and fertilizers)
- Disposal of household hazardous waste (e.g. paints, cleaning products)
- Swimming pool draining
- Snow removal activities
- Litter generation
- Benefits of using techniques that keep water onsite and/or reduce imperviousness (rain barrels, rain gardens, porous pavers, permeable concrete, porous asphalt, etc.)

*Commercial (includes business, retail stores, restaurants, etc.)*

- Lawn maintenance (pesticides, herbicides and fertilizers)
- Building maintenance and the use of detergents
- Improper application of salt or other anti-icing materials and how to minimize their use
- Improper storage of salt or other deicing materials (cover and prevent runoff to MS4 or contamination of ground water)
- Improper storage of materials (pollution prevention and good housekeeping)
- Improper management of waste materials and dumpster areas
- Improper management of parking lot surfaces (vacuuming or sweeping)
- Vehicle fluid changing and general vehicle maintenance (washing of vehicles and maintenance)

- Benefits of using techniques that keep water onsite and/or reduce imperviousness (rain barrels, bioretention, rain gardens, porous pavement, green roofs, etc.)

*Institutions (hospitals, churches, colleges, schools, etc.)*

- Lawn maintenance (pesticides, herbicides and fertilizers)
- Building maintenance and the use of detergents
- Improper application of salt or other anti-icing materials and how to minimize their use
- Improper storage of salt or other deicing materials (cover and prevent runoff to MS4 or contamination of ground water)
- Improper storage of materials (pollution prevention and good housekeeping)
- Improper management of waste materials and dumpster areas
- Improper management of parking lot surfaces (vacuuming or sweeping)
- Improper disposal of swimming pool water
- Vehicle fluid changing and general vehicle maintenance (washing of vehicles and maintenance)
- *Illicit discharges*
- Benefits of using techniques that keep water onsite and/or reduce imperviousness (rain barrels, bioretention, rain gardens, porous pavement, green roofs, etc.)

*Construction (developers, contractors, design professionals)*

- Improper erosion and sediment control
- Improper stormwater management control
- Benefits of using techniques that keep water onsite and/or reduce imperviousness (rain barrels, bioretention, rain gardens, porous pavement, green roofs, etc.)
- Requirements for coverage under the SPDES Construction General Permit

*Industrial (factories, recyclers, auto salvage, mines, etc.)*

- Vehicle and Equipment inspection and maintenance
- Material Storage (good housekeeping and pollution prevention)
- Improper management of waste materials and dumpster areas



- Improper application of salt or other anti-icing materials and how to minimize their use
- Improper storage of salt or other deicing materials (cover and prevent runoff to MS4 or contamination of ground water)
- Improper management of parking lot surfaces (vacuuming or sweeping)
- Illicit *Discharges*
- Benefits of using techniques that keep water onsite and/or reduce imperviousness (rain barrels, bioretention, rain gardens, porous pavement, green roofs, etc.)
- Requirements for coverage under the SPDES Multi-Sector General Permit

## **2. Program Implementation**

The MS4 Operator must identify the method for distribution of the messages using one of the following methods:

- Printed materials (mail inserts, brochures and newsletters)
- Electronic materials (websites)
- Mass media (newspapers, public service announcements on radio or cable, etc.)
- Workshops or focus groups
- Displays in public areas (town halls, library, parks, etc.)
- Social Media (facebook, twitter, blogs, mass emails)

The MS4 Operator shall deliver an annual educational message to each identified target audience listed in Part VI.A.1.c.

## B. MCM 2 - Public Involvement / Participation

### 1. Public Participation

The MS4 Operator must provide opportunities to involve the public in the review, *development* and implementation of the SWMP. MS4 Operators must *develop* and implement a public involvement/participation program that includes the following elements:

- a. The MS4 Operator must provide at least one of the following opportunities for public involvement/participation on the *development* and implementation of the SWMP:
  - citizen advisory group on stormwater management
  - public hearings or meetings
  - citizen volunteers to educate other individuals about the program
  - program coordination with other pre-existing programs
  - volunteer monitoring efforts
  - reporting concerns about activities or behaviors observed
  - Stewardship activities such as:
    - beach cleanups
    - wetland restorations
    - volunteer water quality monitoring
    - Storm drain stenciling
    - Conducting surveys
    - Tree plantings
    - BMP maintenance
    - Adopt a highway/stream/lake/beach/catch basin
    - Educational activities including distribution of materials
- b. The MS4 Operator must inform the public and staff of the opportunities for their involvement and how they can become involved using at least one of the following methods:
  - public notice
  - website postings
  - newsletters
  - announcements posted within the community
  - advertisements
  - social media

- c. The MS4 Operator must identify a local point of contact to receive and respond to public concerns regarding stormwater management and compliance with the MS4 general permit requirements. The name or title of this contact and telephone number must be published in public outreach and public participation materials.

## 2. Public input

### a. Availability of SWMP plan

The MS4 Operator shall ensure that copies of the SWMP plan are made available in accordance with Part IV.A.1.

### b. Public Notice requirements for annual report.

- i. By May 1 following each reporting year, and prior to submitting the final annual report to the *Department*, the MS4 Operator must provide the opportunity for the public to review and comment on the SWMP development and implementation. This requirement may be satisfied by either:

- o Presentation of the draft annual report at a regular meeting of an existing board, such as planning, zoning or other board. It may also be a separate meeting specifically for stormwater or if requested by the public. The public must have the ability to ask questions about and make comments on the report during that presentation;

or,

- o Posting of the draft annual report on a website. The website must provide information on the timeframes and procedures to submit comments and/or request a meeting. If a public meeting is requested by two or more persons, the MS4 must hold such a meeting.

- ii. Presentation of the draft annual report must be in a format that is compliant with Article 7 of the NYS Public Officers Law (the Open Meetings Law), if applicable.

### c. Consideration of Public Input

The final annual reports submitted to the *Department* shall include a summary of comments received and shall describe how the SWMP development or implementation was influenced by the public input received. Comments received after the final annual report is submitted shall be reported with the following year's annual report. The MS4 Operator must take into account relevant comments in the following year.

## C. MCM 3 - Illicit Discharge Detection and Elimination

The MS4 Operator must *develop*, implement and enforce a proactive program to systematically find and eliminate illicit *discharges*, including illegal dumping, to

the MS4. An illicit *discharge* is defined as any *discharge* to the MS4 that is not composed entirely of stormwater except allowable *discharges* identified in Part I.A.3 of this permit. At a minimum, this program must include the following elements:

### 1. *Legal Authority*

- a. The MS4 Operator must *develop* and maintain adequate legal authority to control how the MS4 is used, including:
  - i. A prohibition of illicit *discharges*, spills or other release of pollutants;
  - ii. A prohibition of unauthorized connections into the small MS4;
  - iii. To require compliance and take enforcement action;
  - iv. To require installation, implementation and maintenance of control measures;
  - v. To receive and collect information related to the introduction of pollutants into the MS4; and
  - vi. To access property for inspection.
- b. To be adequate, the legal authority must be certified by the attorney representing the MS4 Operator as being equivalent to 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).

### 2. *Illicit Discharge Prevention Program*

The MS4 Operator must provide education to public employees, businesses and the general public on illicit *discharges* to prevent releases into the MS4. Specifically:

- a. What types of *discharges* are allowable;
- b. What is an illicit *discharge* and why is it prohibited;
- c. The environmental hazards associated with illicit *discharges* and improper disposal of waste;
- d. Proper handling and disposal practices for the most common behaviors within the community (i.e. septic care, car washing, household hazardous waste, swimming pool draining or other activities resulting in illicit *discharges* to the MS4); and
- e. How to report illicit *discharges* (e.g. spills and dumping) they may observe

### 3. *Hotline*

The MS4 Operator must establish a hotline for the public to report illicit *discharges*. The MS4 Operator must document reports including name of the reporting individual (if provided), date of the report, location of the illicit

*discharge*, nature of the illicit *discharge* and follow up actions taken or needed (including response times), inspection outcomes and any enforcement taken.

#### 4. **Illicit Discharge Detection Program**

##### a. Identification of Priority Areas

The MS4 Operator must:

- i. Identify areas contributing to the MS4 with a high illicit *discharge* potential using the screening factors identified in Table 14 of the “Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessment, Center for Watershed Protection, October 2004” (IDDE Guidance Manual);
- ii. Prioritize outfalls with the following considerations:
  - a) High Priority Outfalls
    - o Outfalls serving areas with a high illicit *discharge* potential;
    - o Outfalls discharging to impaired waters;
    - o Outfalls discharging to sensitive or high quality waters including but not limited to public beaches, recreational areas, drinking water supplies and shellfishing areas;
    - o Major Outfalls (as defined in 40CFR 122.26(b)(5)); and,
    - o Citizen complaints on more than three separate occasions in any 12 month period.
  - b) Low Priority Outfalls – All other outfalls not described as High Priority
- iii. Show the priority areas and associated outfalls on the map developed to comply with Part IV.C of this permit;
- iv. Prioritize new outfalls as they are constructed or discovered; and
- v. Update the priority listing annually based on information gathered as part of the inspection program and in conjunction with the IDDE Guidance Manual.

##### b. Outfall Inspection Program

The MS4 Operator must:

- i. Provide annual training for all individual(s) responsible for outfall inspection and sampling on the MS4 Operator’s outfall inspection procedures;

- ii. Inspect all outfalls in the regulated area during dry weather (at least 48<sup>4</sup> hours after the last runoff-producing event) at the following frequencies:
  - a) Inspect High Priority Outfalls at least once per year
  - b) Inspect Low Priority Outfalls (20% per year)
- iii. Document all outfall inspections using the ORI Field Sheets or use their own form provided it records the same information.
- iv. Sample all flowing outfalls with any physical indicator of an illicit *discharge* (i.e. odor, color, turbidity or floatables) as follows:

Indicator Parameter	Action Level
Ammonia	≥50 mg/l
Chlorine	>0.1 mg/l
Conductivity	≥2000 μS/cm
Color	≥500 units
pH	≤5 or ≥9
Potassium	≥20
Turbidity	≥1000 NTU
Surfactants	≥25 mg/l

**Table 3**

- a) Sampling may be done with field test kits or field instrumentation that are sufficiently sensitive to detect the parameter below the action level and are not subject to 40 CFR Part 136 requirements for approved methods and certified laboratories.
- b) Document the results of outfall sampling including test results using the inspection form (Part VI.C.4.b.iii).
- c) Initiate track down procedures for *discharges* that exceed any action level within the timeframes specified in Part VI.C.5.d.
- v. Re-inspect, within 30 days of initial inspection, non-flowing outfalls with physical indicators of intermittent or transitory *discharges* (i.e. outfall damage, outfall deposits or stains, abnormal vegetation growth, poor receiving water quality and biological growth on pipe surfaces) utilizing techniques described in Chapter 12.6 of the IDDE Guidance Manual or equivalent.
- vi. Track outfall inspection frequencies and results:
  - o Annually analyze data collected to identify trends, patterns, areas of concern and common problems to guide ongoing illicit *discharge*

<sup>4</sup> Prolonged dry periods (48-72 hours after the last runoff event) during the non-growing season with low *groundwater* levels are optimal for conducting inspections

elimination efforts, revise priorities and improve efficiencies with track down procedures.

- o Re-prioritize outfalls based on results of the annual analysis, hotline reports and identified changes to the potential for water quality impacts.

vii. Initiate or refer<sup>5</sup> track down procedures in accordance with timeframes specified in Part VI.C.5.d

### **5. Illicit Discharge Track Down Program**

The MS4 Operator must *develop* and implement written track down procedures to identify the source of illicit *discharges* and the responsible party, specifying:

- a. Provisions for annual training for individual(s) responsible for conducting track down procedures;
- b. Track down methods described in Chapter 13 of IDDE Guidance Manual or equivalent
- c. How progress with track down will be documented;
- d. Time frames for initiating track down:
  - i. Initiate track down procedures for flowing outfalls with obvious illicit *discharges* (a severity score of 3 for any physical indicator as described in Section 11.7 of the IDDE Guidance) immediately but no later than 24 hours of discovery;
  - ii. Initiate track down procedures for obvious *discharges* of sanitary wastewater that would affect bathing areas during bathing season, shell fishing areas or public water intakes and report orally or electronically to the Regional Water Engineer and local health department within 2 hours of discovery of the *discharge*; and
  - iii. Initiate track down procedures for all other illicit *discharges* no later than 5 days of discovery.

### **6. Illicit Discharge Elimination Program**

The MS4 Operator must *develop* and implement written procedures to eliminate illicit *discharges* specifying:

- a. Time frames for elimination:
  - i. *Discharges* that pose a significant threat to human or environmental health shall be eliminated immediately but no later than 24 hours;

<sup>5</sup> If trackdown is conducted by individuals or entities other than those conducting the outfall inspections.

- ii. Initiate elimination procedures for all other illicit *discharges* no later than 5 days of identification of responsible party; and
  - iii. Where identification of a responsible party or when elimination of an illicit *discharge* within 60 days of its identification is not possible, the MS4 Operator shall provide advanced written notice to the Regional Water Engineer within 30 days of becoming aware of the illicit *discharge*.
- b. Provisions for escalating enforcement and tracking, both consistent with the ERP required in Part IV.F of this permit;
  - c. Provisions to confirm and verify the corrective action is complete; and
  - d. Annual evaluation of timeframes to eliminate illicit *discharges* and identify how efficiencies with elimination procedures may be improved.

#### **D. MCM 4 - Construction Site Stormwater Runoff Control**

The MS4 Operator must *develop*, implement and enforce a program to ensure construction sites are effectively controlled,<sup>6</sup> to reduce pollutants from construction related activities that have the potential to discharge to the MS4.

##### **1. Applicable Construction Activities/Projects**

The construction site stormwater runoff control program must address sites with *construction activities* within the municipal boundaries<sup>7</sup> that:

- a. result in a total land disturbance of greater than or equal to one acre; and,
- b. disturb less than one acre if part of a larger common plan of development or sale; or
- c. disturb greater than 5000 sf in the East of Hudson Watershed.

##### **2. Legal Authority**

- a. The MS4 Operator must *develop* and maintain adequate legal authority to ensure applicable construction activities are effectively controlled including:
  - i. To require a SWPPP with erosion and sediment controls that meet or exceed the New York State Standards and Specifications for Erosion & Sediment Control, August 2016;

<sup>6</sup> Projects that comply with the terms and conditions of the NYS SPDES General Permit for Stormwater Discharges from Construction Activity or an individual SPDES permit for stormwater for which they obtained coverage and local erosion & sediment control requirements are considered to be effectively controlled.

<sup>7</sup> NYSDEC, Final Designation Criteria for Identifying Regulated Municipal Separate Storm Sewer Systems (MS4s), January 2010 – Criteria 3 - Automatically designated areas are extended to Town, Village or City boundaries for construction site runoff control.



- ii. To require construction site operators control waste such as discarded building materials, concrete truck washout, chemicals, litter and sanitary waste that may cause adverse impacts to water quality;
  - iii. To access property to inspect;
  - iv. To require compliance and take enforcement action;
  - v. To require installation, implementation and maintenance of control measures; and,
  - vi. To receive and collect information related to compliance with the approved SWPPP.
- b. To be adequate, the legal authority must be certified by the attorney representing the MS4 Operator as being equivalent to the State's draft Sample Local Law for Stormwater Management and Erosion and Sediment Control.

### **3. Construction Program Education and Outreach**

The MS4 Operator must educate all those involved in the construction activity itself, as well as municipal staff and other individuals involved in the review of SWPPPs, inspections and related enforcement on:

- o When the construction site stormwater control program applies;
- o To whom they apply;
- o The procedures for submission of SWPPPs;
- o Construction site inspection process;
- o Enforcement process/expectations for compliance; and,
- o Other procedures associated with the control of stormwater runoff from applicable construction activities.

### **4. Construction Site Inventory/Inspection Tracking**

The MS4 Operator must *develop* and maintain a written inventory of all projects with construction activities discharging to the MS4. The inventory must include:

- o Location of the project
- o Owner/operator contact information
- o Receiving waterbody
- o Priority rating (see Table 4)
- o Construction project SPDES identification number
- o SWPPP approval date
- o Inspection History (Dates and ratings)

- Current status of the project (i.e. active, temporarily shut down, completed<sup>8</sup>).

The inventory must be kept up to date as new construction projects are approved and projects are completed or re-prioritized.

**5. Construction Site Prioritization**

The MS4 Operator must assess potential risks to water quality impacts and identify high priority sites for inspection using Table 4. (See Part VI.D.9). Projects may be re-prioritized once high risk areas\* are completed and final stabilization is achieved for those areas.

Risk Factors to determine High Priority Construction Sites
Projects with a direct conveyance (tributary, channel, ditch, storm sewer, etc..) to a surface water of the State that is: <ul style="list-style-type: none"> <li>• Listed as impaired on the Impaired waters Map for Silt/sediment, Phosphorus or Nitrogen listed as the POC; or,</li> <li>• Classified as AA-S, AA with filtration avoidance determination, A; or,</li> <li>• Classified with a Trout (T) or Trout Spawning (TS) designation.</li> </ul>
Projects with >5 acres of disturbed earth at any one time.
Projects with earth disturbance within 100 feet of any lake or pond*
Projects within 50 feet of any rivers or streams (perennial or seasonal)*
Projects with >1 acre of disturbance on D slopes on the USDA Soil Survey for the County in which the disturbance will occur*
Projects with >1 acre disturbance of soils with a high, very high or extreme erosion risk as identified on Table 2.5 of the New York State Standards & Specifications for Erosion & Sediment Control, July 2016.*

**Table 4**

**6. SWPPP Review**

The MS4 Operator must:

- a. Ensure individual(s) responsible for SWPPP review receive two (2) hours of *Department* endorsed SWPPP review training and four (4) hours of

<sup>8</sup> Construction projects listed on the inventory must be inspected and tracked as described in Part IV.D.7 until a final site inspection has been completed as specified in Part IV.D.10.

*Department* endorsed training in proper erosion and sediment control principles from a Soil & Water Conservation District or other endorsed entity.

- b. Review all SWPPPs for applicable construction activities for conformance with the requirements of the SPDES General Permit for Stormwater Associated with Construction Activities (GP-0-15-002).
- c. Assess potential risks to water quality impacts for new projects using risk factors contained in Table 4 and identify high priority sites for MS4 oversight inspection.
- d. Document SWPPP review using the SWPPP review form prepared by the *Department* or their own form provided it documents the same information.
- e. Notify construction site owner/operators that their SWPPP has been accepted using the MS4 SWPPP Acceptance Form created by the *Department* and required by the SPDES General Permit for Stormwater Associated with Construction Activities (GP-0-15-002). The principal executive officer, ranking elected official, or duly authorized representative (see Part X.J) shall document their determination by signing the MS4 SWPPP Acceptance Form.

## **7. Pre-Construction Oversight**

Prior to commencement of construction activities, the MS4 Operator must conduct and document a pre-construction inspection/meeting with the owner/operator of the construction activity to:

- a. Ensure erosion & sediment controls as specified in the approved SWPPP are in place;
- b. Confirm the approved project has received coverage under the SPDES General Permit for Stormwater Associated with Construction Activities (GP-0-15-002) or an individual SPDES stormwater permit;
- c. Verify contractors and subcontractors selected by the owner/operator of the construction activity have identified at least one individual that has received four (4) hours of *Department* endorsed training in proper erosion and sediment control principles from a Soil & Water Conservation District or other endorsed entity as required by the SPDES General Permit for Stormwater from Construction Activities (GP-0-15-002); and,
- d. Review the MS4 oversight inspection process and expectations for compliance.

## **8. Construction Site Inspections**

The MS4 Operator must:

- a. Ensure MS4 Inspectors receive two (2) hours of *Department* endorsed training on MS4 Oversight Inspections and four (4) hours of *Department* endorsed training in proper erosion and sediment control principles from a

Soil & Water Conservation District or other endorsed entity every three (3) years.

- b. Inspect all sites with construction activity at the following frequencies:
  - i. High priority sites identified from Table 4 must be inspected at least once every 30 calendar days after the pre-construction inspection described in Part VI.D.
  - ii. Low priority sites must be inspected at least once during active construction in addition to the pre-construction inspection described in Part VI.D.8; and inspection at project completion as described in Part VI.D.10. If the project duration extends for more than one year, at least one inspection shall be conducted per year.
  - iii. Follow up inspections must confirm corrective actions are completed within identified timeframes.
- c. Document all inspections using the MS4 Construction Site Inspection Form developed by the *Department*. MS4 Operators may use their own form, provided it records the same information

#### **9. Construction Project Close-out**

Perform a final site inspection or accept the construction site owner/operator's qualified inspector final inspection certification required by the SPDES General Permit for Stormwater Associated with Construction Activities (GP-0-15-002) documenting:

- Final stabilization has been completed;
- All post-construction Stormwater Management Practices (SMPs) included in the final SWPPP have been constructed as approved and are operating;
- Provisions are in place for long-term operation and maintenance of the SMPs; and,
- Post-Construction SMPs have been added to the Post-Construction SMP Inspection & Maintenance Inventory required in Part VI.E.3
- Sign Notice of Termination (NOT) required by SPDES General Permit for Stormwater Associated with Construction Activities (GP-0-15-002) for projects determined to be complete (See Part X.J – Signatory Requirements).

#### **10. Public Complaints**

Receive, follow up and track complaints regarding construction site stormwater runoff and document the following:

- Date complaint received
- Nature of complaint;

- Site location;
- Contact information for follow up, if provided (may be anonymous)
- Inspection date
- Follow up actions taken or needed
- Completion date of follow up actions.

#### **E. MCM 5 - Post Construction Stormwater Management**

The MS4 Operator must *develop*, implement and enforce a program to control the *discharge* of pollutants to the MS4 through the proper operation and maintenance of stormwater management practices (SMPs) constructed on new or redeveloped sites.

##### **1. Applicable Post Construction Stormwater Management Practices**

The post construction stormwater management program must include post construction SMPs that have the potential to *discharge* to the MS4<sup>9</sup> that include the following:

- SMPs directly discharging to the MS4 that have been installed as part of any SPDES General Permit for Stormwater Discharges from Construction Activity or individual SPDES permit (since March 10, 2003);
- All new SMPs constructed as part of the construction runoff control program (MCM 4 - Part VI.D);
- All SMPs owned or operated by the MS4 Operator;
- SMPs discovered to *discharge* through the MS4; and,
- *Green Infrastructure* practices located within the MS4 sewershed that have the potential to *discharge* to the MS4 if not maintained.

##### **2. Legal Authority for Post Construction SMP (design, construction and maintenance)**

- a. The MS4 Operator must *develop* and maintain adequate legal authority to require post construction runoff controls for new development and redevelopment projects and ensure post construction stormwater management practices are properly operated and maintained.

The MS4 Operator must have the authority to:

- i. Require a SWPPP for each applicable construction activity described in Part VI.D.1 that requires post-construction SMPs in conformance

<sup>9</sup> NYSDEC, Final Designation Criteria for Identifying Regulated Municipal Separate Storm Sewer Systems (MS4s), January 2010 – Criteria 3 – Automatically designated areas are extended to Town, Village or City boundaries for post construction stormwater management for new development and redevelopment.

with the SPDES General Permit for Stormwater Discharges Associated with Construction Activity, GP-0-15-002.

- ii. Require post construction SMPs meet the sizing criteria specified in the New York State Stormwater Management Design Manual and performance criteria (or *equivalent*), including Operation & Maintenance Plans for long term maintenance;
  - iii. Require installation, implementation and maintenance of post-construction SMPs;
  - iv. Require verification of maintenance of post-construction SMPs (if conducted by private entities)
  - v. Receive and collect information related to compliance with the approved SWPPP;
  - vi. Access property to inspect post construction SMPs after construction activity is complete; and
  - vii. Require compliance and take enforcement action.
- b. To be adequate, the legal authority must be certified by the attorney representing the MS4 Operator as being equivalent to the State's draft Sample Local Law for Stormwater Management and Erosion and Sediment Control.

### 3. *Post Construction SMP Inventory & Tracking*

The MS4 Operator must *develop* and maintain an inventory of post-construction SMPs that include the following information:

- Location of practice (street address or coordinates)
- Type of practice
- Receiving waterbody
- Date practice was installed
- Ownership
- Responsible party for maintenance, if different from owner.
- Location of documentation depicting O&M requirements and legal agreements for practice.
- Frequency for inspection of practice (specified by the Operations & Maintenance plan (O&M plan) in approved SWPPP as described in Part VI.E.4.
- Inspection and maintenance history that tracks the following:
  - Date of last inspection
  - Inspection results
  - Actions taken in accordance with Enforcement Response Plan (ERP) for private SMPs.
  - Dates for corrective actions to be completed
  - Status of corrective action
  - Projected date of next inspection

The inventory must be kept up to date as new post construction SMPs are approved or discovered.

### 4. *SWPPP Review*

The MS4 Operator must incorporate into the SWPPP review procedures developed for Part VI.D.7 the following elements for review of post construction SMPs:

- a. Individuals responsible for review of post construction SMPs must be qualified professionals or under the supervision of a *qualified professional*.
- b. Post construction SMPs must be reviewed for conformance with the New York State Stormwater Management Design Manual (2015), or *equivalent*. Specifically:
  - i. All post-construction SMPs must meet the sizing criteria contained in the New York State Stormwater Management Design Manual (2015)

- ii. Deviations from the performance criteria of the Design Manual must demonstrate that they are *equivalent*.
- c. The SWPPP must include an O&M plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post-construction stormwater management practice. The O&M plan shall identify the entity that will be responsible for the long term operation and maintenance of each practice.

#### **5. Post Construction Inspection & Maintenance Program**

The MS4 Operator must:

- a. Ensure individual(s) responsible for inspection and maintenance will receive training<sup>10</sup>.
- b. Inspect each post construction SMP identified in the Post Construction SMP Inventory at the frequency specified in the O&M plan contained in the approved SWPPP (Part IV.E.4).
- c. Document inspections:
  - o Inspection Date
  - o Name & Signature of Inspector
  - o Project location
  - o Inventory Reference Number
  - o Current ownership
  - o A description of the condition of the structural stormwater control measure including the quality of: vegetation and soils; inlet and outlet channels and structures; embankments, slopes, and safety benches; catch basins; spillways, weirs, and other control structures; and sediment and debris accumulation in storage and forebay areas as well as in and around inlet and outlet structures;
  - o Photographic documentation of all critical structural stormwater control measure components; and
  - o Specific maintenance issues or violations found that need to be corrected by the property owner or operator along with deadlines and re-inspection dates.
- d. Initiate follow-up actions (i.e maintenance, repair, or higher level inspection) within 30 days of inspection.

<sup>10</sup> DEC has developed training modules to accompany the DEC draft Maintenance Guidance for Stormwater Management Practices, September 7, 2016.



- e. Initiate enforcement provisions within 60 days if follow-up actions not complete.

## **F. MCM 6 – Pollution Prevention and Good Housekeeping**

The MS4 Operator shall *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 shall 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.

### **1. Facilities and Operations Assessment**

The MS4 Operator must assess each municipal facility and operation within the regulated area and update or *develop* written procedures/protocols (or facility specific SWPPPs for high priority facilities) to meet the MCM6 requirements within 3 years of the effective date of this permit.

In conducting the assessments, the MS4 Operator must use the Municipal Facility/Operation Assessment form to document the assessment; and either:

- a. Certify compliance with the terms and conditions of this permit; or,
- b. Implement corrective actions according to the following schedule and certify the facility is in compliance with the terms and conditions of this permit:
  - i. For situations that pose a significant threat to human health or the environment, corrective actions must be initiated immediately (24 hours of discovery).
  - ii. For situations that do not pose an immediate threat to human health or the environment, corrective actions must be initiated within 7 days of inspection and completed within 30 days of inspection.
  - iii. For corrective actions that require special funding or construction that will take longer than 30 days to complete, a schedule must be prepared that specifies interim milestones that will ensure compliance in the shortest reasonable time. Progress shall be reported with the annual report.
  - iv. All facilities and operations must be in compliance with the terms and conditions of this permit within 3 years of the effective date of this permit

## 2. **Best Management Practices for all Municipal Operations & Facilities**

The MS4 Operator must document and implement the following *Best Management Practices* (BMPs) to minimize the *discharge* of pollutants associated with *municipal operations* and *municipal facilities* within the regulated area. Municipal operations and facilities must:

### a. **Minimize exposure of materials**

Exposure of materials to rain, snow, snowmelt, and runoff must be minimized with the following BMP considerations:

- locate industrial materials and activities inside or protect them with storm resistant coverings;
- use grading, berming, or curbing to divert stormwater away from material handling areas and prevent runoff of contaminated flows away from these areas;
- locate materials, leaky or leak prone equipment and vehicles, and activities so that leaks are contained in existing containment and diversion systems or other protected areas;
- clean up spills and leaks promptly using dry methods (e.g., absorbents) to prevent the *discharge* of pollutants;
- use drip pans and absorbents under or around leaky vehicles and equipment or store indoors where feasible; use spill/overflow protection equipment; drain fluids from equipment and vehicles prior to on-site storage or disposal;
- perform all cleaning operations indoors, under cover, or in bermed areas that prevent runoff and run-on and also that capture any overspray; and
- ensure that all washwater drains to a proper collection system (i.e., not the stormwater drainage system).
- Minimize exposure of chemicals by replacing with a less toxic alternative

Note: The *discharge* of vehicle and equipment washwater, including tank cleaning operations, is not authorized by this permit. These wastewaters must be covered under a separate *SPDES* permit, discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements, or disposed of otherwise in accordance with applicable law.

### b. **Use Good Housekeeping practices**

Use good housekeeping practices so that all exposed areas that are potential sources of pollutants are kept clean and orderly: sweep at regular intervals, keep materials orderly and labeled, and store materials in appropriate containers.

c. Follow a Preventive Maintenance program

Implement a preventative maintenance program that includes routine inspection, testing, maintenance, and repair of all industrial equipment and systems to prevent leaks, spills and other releases

d. Implement Spill Prevention and Response

Minimize the potential for leaks, spills and other releases that may be exposed to stormwater and *develop* plans for effective response to such spills if or when they occur. At a minimum, the MS4 Operator must implement:

- Procedures for plainly labeling containers (e.g., “Used Oil,” “Spent Solvents,” “Fertilizers and Pesticides,” etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur;
- Preventative measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling;
- Procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. Employees who may cause, detect, or respond to a spill or leak must be trained in these procedures and have necessary spill response equipment available; and,
- Procedures for notifying the appropriate facility personnel, emergency response agencies, and regulatory agencies. Any spills must be reported in accordance with 6 NYCRR Part 750-2.7

e. Stabilize exposed soils

Exposed soils must be stabilized to minimize onsite erosion and sedimentation, and the resulting *discharge* of pollutants. In conducting assessments of facilities and right-of-ways, the MS4 Operator must consider:

- Areas at the facility or right-of-way that, due to topography, land disturbance (e.g., construction) or other factors, have potential for significant soil erosion.
- Whether structural, vegetative, and/or stabilization BMPs are needed to limit erosion.
- Whether velocity dissipation devices (or equivalent measures) are needed at *discharge* locations and along the length of any outfall channel to provide a non-erosive flow velocity from the structure to a water course.

- Whether controls conform to the *New York Standards and Specifications for Erosion and Sediment Control (2016)*, or *equivalent*.

This document is available

at: <http://www.dec.ny.gov/chemical/29066.html>.

f. **Manage stormwater runoff**

- Runoff from each facility or operation must be managed to prevent or reduce the *discharge* of pollutants. This may include management practices that divert runoff from areas that are potential sources of pollutants; contain runoff in such areas; or reuse, infiltrate or treat stormwater to reduce the *discharge* of pollutants.
- All municipally owned or operated stormwater treatment practices, such as water quality swales, retention/detention basins, infiltration structures, proprietary treatment devices or other similar practices, must be inspected and maintained per the requirements of Part VI.E.5

g. **Manage vegetated areas and open space on municipal property**

Maintain parks and vegetated areas on municipal property and right of ways:

- Specify proper use, storage, and disposal of pesticides, herbicides, and fertilizers including minimizing the use of these products and using only in accordance manufacturer's instruction.
- Use lawn maintenance and landscaping practices that are protective of water quality. Protective practices include reduced mowing frequencies, proper disposal of lawn clippings, and use of alternative landscaping materials (e.g., drought resistant planting).
- Place pet waste disposal containers and signage concerning the proper collection and disposal of pet waste at all parks and open space where pets are permitted.
- Address waterfowl congregation areas where needed to reduce waterfowl droppings from entering the MS4.
- Address erosion or areas with poor vegetative cover, especially if the erosion is within 50 feet of a surface water.

h. **Minimize exposure of deicing materials**

Enclose or cover storage piles<sup>11</sup> of salt, or piles containing salt, used for deicing or maintenance of paved surfaces. Implement appropriate measures (e.g., good housekeeping, routine sweeping, diversions,

<sup>11</sup> Piles do not need to be enclosed or covered if stormwater runoff from the piles is not discharged or if discharges from the piles are authorized under another SPDES permit

containment) to minimize exposure resulting from adding to or removing materials from the pile.

i. **Train Employees**

Provide training to all employees who work in areas where materials or activities are exposed to stormwater and employees who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel). Training must cover the proper procedures, specific control measures, and documentation requirements. Training shall be conducted at least annually (or more often if employee turnover is high or if inspection or assessment identify problems with implementation). The MS4 Operator must ensure that employees receive and use training;

j. **Eliminate non-stormwater discharges**

Eliminate non-stormwater *discharges* not authorized by a SPDES permit. See Part I.A.3 for a list of non-stormwater *discharges* authorized by this permit.

k. **Ensure that waste, garbage and floatable debris are not discharged**

Keep exposed areas free of waste, garbage and debris or intercept them before they are discharged.

- Manage dumpsters and other waste management equipment at municipal buildings. Dumpsters must be covered and emptied at appropriate frequencies to contain waste materials.
- Manage trash containers at parks and open space (scheduled cleanings; sufficient number).
- Pick up trash and debris on municipal property and rights of way.
- Clean out catch basins at appropriate frequencies (see Part VI.F.3)

l. **Minimize generation of dust and off-site tracking of raw, final, or waste materials**

Routinely sweep parking lots and paved areas at municipal buildings and facilities at appropriate intervals.

m. **Require third party entities to comply**

Require third party entities performing *municipal operations* as contracted services, including but not limited to street sweeping, snow removal, and lawn/grounds care, to meet permit requirements as the requirements apply to the activity performed (See Part IV.B.2).

n. Document BMPs

Instruct management and staff on the prescribed *BMPs* that must be followed for the activities or operations conducted with written procedures/protocols that must:

- Provide sufficient instruction on the *BMPs* to be implemented and documentation requirements
- Be available to the management and staff that will be called upon to use them for low priority facilities and operations.
- Be included in facility specific SWPPPs for high priority facilities identified in Part VI.F.4.b and facilities where stormwater is associated with industrial activity identified in Part VI.F.5.

o. Maintain all BMPs

All *BMPs* must be maintained in effective operating condition.

Nonstructural *BMPs* must be diligently maintained (e.g., spill response supplies available, personnel appropriately trained). If structural *BMPs* need to be replaced or repaired, the necessary repairs or modifications shall be made as expeditiously as possible in accordance with the following timeframes:

- Corrective actions must be performed for *BMPs* that are found to be in need of maintenance or modification before the next anticipated storm event, or as necessary to maintain the continued effectiveness of stormwater controls.
- If corrective actions prior to the next anticipated storm event is impracticable, they must be initiated within 7 days and completed within 30 days of inspection.

p. Assess Compliance:

The MS4 Operator must evaluate compliance through facility inspections and assessment of municipal operations at a frequency appropriate for the potential risk of pollutant *discharge* to surface waters of the State: Specifically,

- High priority facilities shall be inspected as specified in the facility specific SWPPP as prescribed in Part VI.F.4.c.
- Low priority facilities shall be inspected at least once every 5 years as described in Part VI.F.6.
- Municipal operations shall be assessed annually.

q. **Document Compliance**

The MS4 Operator shall track and document inspections and assessments, including any deficiencies, and identify corrective actions to be taken using the Municipal Facility/Operation Assessment Form.

**3. Municipal Facilities**

a. **Inventory of Municipal Facilities**

The MS4 Operator shall *develop* and maintain a prioritized inventory of all municipal facilities located within the regulated area. Facilities that have coverage under a separate SPDES permit (either individual or MSGP) must comply with the terms and conditions of that permit and the requirements set forth in this Part are not applicable. Facilities that have filed a Certificate of No Exposure are also not subject to the requirements set forth in this Part. These facilities must be included on the inventory of municipal facilities specified below.

The facility inventory must document the following information:

- Facility name and address
- Facility Priority (high, low, MSGP)
- Standard Industrial Classification (SIC) Code (if applicable)
- SPDES ID or No Exposure ID(if applicable)
- Latitude/Longitude of facility
- Receiving Water
- Facility Contact information
- Facility Priority
- Status of facility specific SWPPP (if high priority)
- Location of SWPPP
- Type of activities present on site

The facility inventory must be kept up to date to include new facilities and operations as they are added.

b. **High Priority Facilities**

The following types of facilities have been identified by the *Department* as high priority facilities based on the typical pollutant sources and activities present and their potential for water quality impacts. Facility specific Stormwater Pollution Prevention Plans (SWPPPs) must be *developed* for these facilities as outlined in Part VII.F.4.c:

- Fleet maintenance facilities including bus, taxi, police, fire and other vehicle maintenance.

- Public works facilities/ DPW garages
  - Salt storage facilities
  - Equipment storage yards where equipment maintenance is performed
- c. Facility specific SWPPP required for High Priority Facilities.  
 Within 2 years of the effective date of this permit, MS4 Operators shall *develop* and implement a facility-specific stormwater pollution prevention plan (SWPPP) for each high priority facility within the regulated area.

i. *SWPPP Contents*

a) Pollution Prevention Team

The facility specific SWPPP shall identify the individuals (by name or title) that are responsible for *developing*, implementing, maintaining, and revising the facility's SWPPP. Responsibilities of each individual on the team must be listed. The activities and responsibilities of the team shall address all aspects of the facility's SWPPP.

b) General Site Description

A written description of the nature of the activity(ies) occurring at the facility with a potential to *discharge* pollutants including, at minimum:

- A general description of the pollutant generating activities occurring in each drainage area.
- A general description of the path of stormwater within the facility.
- A description of runoff from adjacent property, if present, containing significant quantities of pollutants of concern to the facility (the owner or operator may include an evaluation of how the quantity or quality of the stormwater running onto the facility impacts the facility's stormwater *discharges*)
- The general path of stormwater flows between the facility and the nearest surface water body(ies) and/or location(s) where stormwater enters an MS4, if applicable.
- Receiving waters - The name of the nearest receiving water(s), including intermittent streams and the areal extent and description of wetlands (mapped and federally regulated wetlands) that may receive *discharges* from the facility.
- Municipal separate storm sewer systems - If stormwater is discharged to an MS4 owned or operated by a different entity, the SWPPP must identify the MS4 operator and the receiving



water to which their MS4 *discharges*. Contact information for that MS4 Operator must be included in this section.

- Other SPDES permitted *discharges* - The SWPPP must describe any *discharges* that are currently covered by another SPDES permit at the facility.
- Impervious surface estimate - Provide an estimate of the percent imperviousness of the site.
- Location of sensitive areas (e.g. impaired waters; listed threatened & endangered species or their critical habitat; historic properties, etc.)
- Size of the property in acres.

c) Summary of potential pollutant sources

The SWPPP shall identify each separate area at the facility where industrial materials or activities are exposed to stormwater. Industrial materials or activities include, but are not limited to material handling equipment or activities, industrial machinery, raw materials, intermediate products, byproducts, final products, or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product.

d) Spills and Releases

The SWPPP must clearly identify areas where potential spills or releases can contribute to pollutants in stormwater *discharges* and their accompanying drainage points. For areas that are exposed to precipitation or that otherwise drain to a stormwater conveyance at the facility, the plan must include a list of spills or releases of petroleum and hazardous substances or other pollutants that may adversely affect water quality that occurred during the three-year period prior to the date of the SWPPP preparation. The list must be updated whenever spills or releases occur in exposed areas of the facility. This permit does not relieve the MS4 Operator of any reporting or other requirements related to spills or other releases of petroleum or hazardous substances.

e) Site Map

The SWPPP must include a site map identifying the following:

- i) Size of the property in acres
- ii) Location and size of significant structures and impervious surfaces

- iii) Location of each outfall labeled with the outfall identification, including outfalls with discharges authorized under other SPDES permits
- iv) The approximate outline of the drainage area to each outfall
- v) Locations of haul and access roads
- vi) Rail cars and tracks
- vii) Direction of stormwater flow using arrows to show which ways stormwater will flow
- viii) Location of all receiving waters in the immediate vicinity of the facility, indicating if any of the waters are impaired and, if so, whether they have TMDLs established for them
- ix) Location of all separate storm sewers and where the stormwater discharges to them
- x) Location of all stormwater conveyances, including ditches, pipes, and swales
- xi) Locations where stormwater flows have significant potential to cause erosion
- xii) Location and source of runoff from adjacent property containing significant quantities of pollutants and/or volume of concern to the facility
- xiii) Locations of the following activities where such activities are exposed to precipitation or run-on:
  - o Fueling stations
  - o Vehicle and equipment maintenance and/or cleaning areas
  - o Loading/unloading areas
  - o Locations used for the treatment, storage or disposal of wastes
  - o Liquid storage tanks
  - o Processing and storage areas
  - o Locations where significant materials, fuel or chemicals are stored and transferred
  - o Locations where vehicles and/or machinery are stored when not in use
  - o Transfer areas for substances in bulk
- xiv) Locations of identified potential pollutant sources

- xv) Location and description of non-stormwater discharges, including but not limited to those listed in Parts I.A.3
- xvi) Locations where major spills or leaks have occurred
- xvii) Locations of all stormwater monitoring points
- xviii) Locations of all existing structural BMPs

d. **Stormwater Best Management Practices (BMPs)**

The facility-specific SWPPP must document the location and type of *BMPs* selected, installed and implemented at the facility to meet Part VI.F.2). In addition, if the facility includes vehicle and/or equipment maintenance activities, the following *BMPs* are required for those areas:

- Containment measures for vehicles with fluid leaks (i.e. store vehicles with fluid leaks indoors, utilize drip pans or other containment measures until repaired.)
- Control measures for fueling areas including:
  - Cover fueling areas, where possible
  - Use spill/overflow protection and cleanup equipment;
  - Use dry clean up methods; and,
  - Minimize stormwater run-on/runoff from fueling area.
- Control measures to ensure vehicle wash waters are not discharged to the MS4 or to surface waters. Wash equipment/vehicles in a designated and/or covered area where wash water is collected to be recycled or discharged to the sanitary sewer.
- Good housekeeping measures such as:
  - Maintain a clean work area - remove contaminants from floors, drains and catch basins using "dry" methods;
  - Use non-hazardous cleaners. Use non chlorinated solvents instead of chlorinated solvents;
  - Repair or replace any leaking containers;
  - Use steam cleaning /pressure washing instead of solvent for parts cleaning;
  - Store waste fluids in properly capped, labeled storage containers;
  - Store batteries in leak-proof, compatible (i.e. non-reactive) containers;
  - Rinse grass from lawn care equipment on permeable (grassed) areas;

- Protect against pollution if outside maintenance is necessary (cover storm receivers, use secondary containment vessels, etc.)

e. High Priority Facility Assessments

i. Quarterly Visual Monitoring

- a) The MS4 Operator must conduct quarterly visual monitoring of the outfalls discharging stormwater from fueling areas, storage areas, vehicle and equipment maintenance/fueling areas, material handling areas and similar potential pollutant generating areas:
- Samples must be collected and visually examined at least once in each of the following three month periods:
    - January through March,
    - April through June,
    - July through September, and
    - October through December
  - All samples must be collected from *discharges* resulting from a *qualifying storm event*. Storm event data must be recorded.
  - No analytical tests are required to be performed on the samples for the purpose of meeting the visual monitoring requirements.
  - The visual examination must document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and any other obvious indicators of stormwater pollution.
  - The visual examination of the sample must be conducted in a well-lit area.
  - Where practicable, the same individual should carry out the collection and examination of *discharges* for the entire permit term for consistency.
  - The MS4 Operator must document the visual examination using the Quarterly Visual Monitoring Form, (signed and certified as required by Part X.J) to record:
    - Outfall location
    - Examination date and time
    - Personnel conducting the examination
    - Nature of the *discharge* (runoff or snowmelt)
    - Visual quality of the stormwater *discharge* (including observations of color, odor, clarity, floating solids, settled

solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution.

- Probable sources of any observed stormwater contamination; and,
- Actions taken or proposed to be taken to eliminate those sources.

b) Corrective and follow up actions - If the visual examination indicates the presence of color, odor, floating solids, settled solids, suspended solids, foam, oil sheen, or other indicators of stormwater pollution, the MS4 Operator must, at minimum, complete and document the following actions:

- Evaluate the facility for potential sources.
- Remedy the problems identified.
- Revise the facility specific SWPPP.
- Perform an additional visual inspection during the first qualifying storm event following implementation of the corrective action. If the first qualifying storm event does not occur until the next quarterly monitoring period, this follow up action may be used as the next quarterly visual inspection.

ii. Dry weather monitoring

Outfalls at high priority facilities shall be inspected annually for dry weather *discharges*. Dry weather *discharges* encountered shall be addressed in accordance with the *illicit discharge* detection and elimination procedures *developed* in accordance with Part VII.C.

iii. Annual comprehensive inspections

Annual inspections shall be performed to assess compliance with the BMPs identified in the SWPPP using the Municipal Facility/Operation Assessment Form.

f. Low Priority Facilities

The following municipally owned facilities have been identified by the *Department* as low priority facilities based on the typical pollutant sources and activities present and their low risk for water quality impacts.

- Cemeteries

- Vehicle and/or equipment storage facilities where no vehicle and/or equipment maintenance is performed
- Incinerators
- Materials storage yards
- Pesticide storage facilities
- Prisons or correctional facilities
- Public buildings, including schools, libraries, police stations, fire stations, municipal buildings, and similar buildings
- Parks
- Parking lots
- Golf courses
- Swimming pools

The MS4 Operator must *develop* and implement written procedures outlining *BMPs* for the types of activities that occur in these low priority facilities as described in Part VI.F.2. A facility-specific SWPPP is not required.

**g. Municipal Facilities with Stormwater Discharges Associated with Industrial Activity**

- i. If an MS4 Operator owns or operates any *municipal facilities* with stormwater *discharges* associated with industrial activity (as defined by 40 CFR Part 122.26(b)(14)(i) through (ix) and (xi)) that does not currently have coverage under the SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP) and has not filed a Certificate of No Exposure for that facility, the MS4 Operator must *develop* a facility specific SWPPP as describe in Part VI.F.5.c to cover those facilities under this Permit. MS4 Operators must identify on the NOI, the facilities that will be covered under this permit.
- ii. Table 5 lists the *municipal facilities* that require coverage under MSGP and the applicable Sector:

Facility	Sector
Airports	S
Asphalt or concrete batch plants	D
Composting facilities	C
Concrete Batch Plants	E

Hazardous Waste Disposal Facilities	K
Hazardous Waste Handling & Transfer Facilities	K
Landfills, operating or closed	L
Marinas	Q
Mines and gravel pits	J
Recycling facilities	N
Solid waste handling and transfer facilities	N
Vehicle and fleet maintenance facilities	P
Treatment Works (WWTPs)	T

**Table 5**

iii. **Facility Specific SWPPP Requirements**

The facility specific SWPPP developed for the facilities listed in this Part must comply with the SWPPP requirements contained in the *SPDES Multi Sector General Permit for Stormwater Associated with Industrial Activity, GP-0-12-001 (MSGP)* (Parts III and Part VIII for the applicable Sector(s)).

iv. **Facility Specific Inspection/Assessment Requirements**

The MS4 Operator must assess facility compliance as specified in Part IV of the MSGP. However, monitoring results shall be reported with the MS4 annual report on forms provided by the *Department*. Record retention shall comply with the requirements contained in Part V.B of this permit.

v. **Corrective Actions**

Corrective actions must be completed as specified in Part IV of the MSGP. Documentation regarding corrective actions taken shall be submitted with the MS4 annual report and kept with the facility specific SWPPP.

**4. Municipal Infrastructure Operations & Maintenance**

The MS4 Operator must ensure that MS4 infrastructure (i.e. storm sewer system components, roadways, bridges and associated rights of way) is maintained in a timely manner to reduce the *discharge* of pollutants from the MS4.

a. **Municipal Storm Sewer System (MS4) Operations & Maintenance**

*i. Catch Basin Inspection & Maintenance Program*

The MS4 Operator shall document and implement a plan to optimize catch basin inspection and cleaning so that catch basins are cleaned before exceeding 50% of *sump capacity*.

The MS4 Operator shall *develop* a prioritized catch basin inventory based on the volume of trash/debris generated in the surrounding land use or captured in the catch basin.

- Catch basins serving areas with a high potential to generate trash/debris shall be considered high priority:
  - Commercial areas;
  - Industrial areas;
  - Areas with concentrated construction activities;
  - History of complaints or flooding;
  - Other areas known to generate significant amounts of trash/debris based on institutional knowledge of staff
- As part of the *development* of a comprehensive map, catch basins shall be inspected to determine the level of trash debris captured:
  - Catch basins found to be >50% sump capacity shall be cleaned and assigned a high priority
  - Catch basins found to be <50% sump capacity shall be assigned a moderate priority;
  - Catch basins with no debris shall be assigned a low priority.

Inspect catch basins at the following frequency:

- High priority catch basins – once (1) per year
- Moderate priority catch basins – once every two (2) years year
- Low priority catch basins – once every five (5) years

Catch basin inspections and cleaning must be documented in a log that records:

- date of inspection
- level of trash debris captured (no debris, <50% sump capacity, >50% sump capacity)
- date of clean out
- Log must be available for inspection by EPA or DEC.

Annually report the number of catch basins inspected, number cleaned and total mass or volume of debris removed with the annual report.

After 2 inspection/clean out cycles have been completed, evaluate inspection findings for trends or patterns to optimize the catch basin



inspection and maintenance program and make adjustments to the overall stormwater program. For example:

- Adjust inspection frequency
- Adjust public education and outreach to target areas with high volumes of trash and debris to reduce the amount generated in those areas (reduce burden on municipality to inspect and clean out).

Consider enhanced *BMPs* for trash and debris such as trash receptacles, adopt a trash can program, increased street sweeping, etc.

Materials removed from catch basins must be properly managed so that:

- Water removed during the catch basin cleaning process and waste material will not reenter the MS4 or surface waters of the US.
- Material removed from catch basins is screened for contamination and any debris containing trash or waste materials are managed as solid waste.
- Screened/uncontaminated material is managed so that it will not reenter the MS4.
  
- Employees responsible for catch basin clean out must be trained on:
  - Proper handling and disposal procedures for materials removed;
  - Signs/evidence of suspect or illicit discharges and procedures for referral/follow-up if illicit discharges are encountered.

ii. Stormwater Management Practice Maintenance

All municipally owned or operated stormwater treatment practices such as water quality swales, retention/detention basins, infiltration structures, proprietary treatment devices or other similar practices must be inspected and maintained per the requirements of Part VI.E.5.

b. Roads, Bridges & Right of Ways

i. Sweeping

The MS4 Operator must *develop* and implement procedures for sweeping and/or cleaning municipal streets, parking lots or other paved areas at municipal facilities:

- All streets and parking lots (except rural uncurbed roads with no catch basins or high speed limited access highways) shall be swept and/or cleaned a minimum of once per year in the spring (following winter activities such as sanding).
- Streets in business districts, commercially zoned areas and any other area where catch basin inspections identify high volumes of trash and debris shall be swept monthly.
- The MS4 Operator shall report in each annual report the number of lane miles cleaned or the volume or mass of material removed.

ii. Road and Right of Way Maintenance & Repairs

The MS4 Operator shall implement *Best Management Practices* for road and parking lot maintenance, including pothole repair, pavement marking, sealing, and re-paving that include provisions to:

- Pave, mark and seal in dry weather;
- Manage materials (i.e. paints, sealants, lubricants, etc....) to minimize exposure;
- Select less toxic alternatives (i.e. paints, sealants, etc...) where available.
- Stage road operations and maintenance activity (patching, potholes) to reduce spillage. Cover catch basins and manholes during this activity;
- Clean up fluid leaks or spills from paving equipment/materials immediately;
- Restrict the use of herbicides/pesticide application to roadside vegetation;
- Maintain roadside vegetation; select vegetation with a high tolerance to road salt and drought resistant planting; minimize mowing frequencies; and, properly dispose of lawn clippings.
- Address erosion or poor vegetative cover in right-of-way areas especially if the erosion is within 50 feet of a surface water

iii. Winter Road Maintenance

The MS4 Operator shall *develop* and implement the following *BMPs* for winter road maintenance, including the use and storage of salt and sand:

- Enclose or cover storage piles of salt, or piles containing salt, used for deicing or maintaining paved surfaces;

- Implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from storage piles;
- Routinely calibrate equipment to control salt/sand application rates.
- Minimize the use of sodium chloride and other salts, and evaluate opportunities for use of alternative materials; and
- Ensure that routine snow disposal activities do not result in disposal of snow into waters of the United States.

For purposes of this MS4 Permit, salt shall mean any chloride-containing material used to treat paved surfaces for deicing, including sodium chloride, calcium chloride, magnesium chloride, and brine solutions.

*iv. Bridge Maintenance & Repairs*

The MS4 Operator shall *develop* and implement procedures for bridge maintenance activities that includes provisions for:

- Containment and proper disposal of paint chips and dust resulting from surface preparation, grinding, sanding or washing bridges;
- Use of tarps, booms and vacuums during painting and blasting activities;
- Good housekeeping methods for storage of paints, cleaners and other surface preparation materials;
- Proper disposal of debris and waste material;
- Regular clearing of debris from scupper drains;
- Considerations for use of calcium magnesium acetate for deicing around bridges to minimize corrosion;
- Sweeping debris from bridge deck and structure prior to washing

*c. New Construction & Land Disturbances*

The MS4 Operator must *develop* and implement procedures to ensure municipal projects comply with the SPDES General Permit for Stormwater associated with Construction Activity (GP-0-15-002) including provisions for SWPPP review and oversight of contractors.

## Part VII. MCMs for Traditional non-Land Use Control & Non-Traditional MS4s

In addition to the requirements contained in Parts I thru V, traditional non-land use and non-traditional MS4 Operators must comply with the MCMs contained in this Part. These MS4 Operators should consider their public to be:

- Employees (i.e. staff, faculty)
- User Population/Visitors
- Clients
- Customers
- Students
- Tenants
- Contractors & Developers working for MS4 Operator

### A. MCM 1 - Public Education and Outreach

1. The MS4 Operator shall *develop* and implement an education and outreach program to educate their general public on significant stormwater issues that are relevant to their 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.
2. All MS4 Operators must *develop* and implement an on-going public education and outreach program designed to describe to the general public the impacts of stormwater on water quality, the general sources of stormwater pollutants and the steps they can take to reduce pollutants in stormwater runoff (general stormwater message). The MS4 Operator must deliver a general stormwater message using one of the following methods:
  - Printed materials (mail inserts, brochures and newsletters)•
  - Electronic materials (websites)
  - Mass media (newspapers, public service announcements on radio or cable, etc.)
  - Workshops or focus groups
  - Displays in public areas (town halls, library, parks, billboards, vehicles, etc.)
  - Social Media (Facebook, twitter, blogs, mass emails)

3. In addition to the general stormwater message, MS4 Operators must educate their public (or applicable target audience) on the following stormwater program initiatives/updates as they are developed as required by this permit:
  - o Illicit Discharge Detection program (Part VII.C.2)) Construction site runoff program (Part VII.D)
  - o Post Construction SMP Maintenance (Part VII.E)
  - o Good Housekeeping/Pollution Prevention (Part VII.F)
  - o Enforcement Response Plan (Part IV.F)
  - o Pollutant Specific Programs (Part VIII)
  - o On-site sanitary system inspection program (applicable Traditional Non-Land Use MS4 Operators in Part IX))

For each initiative, identify the opportunities for public participation to assist with implementation (how they can help identify areas of concern, expectations for compliance, how to report problems)

4. The education and outreach program shall be 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)

## **B. MCM 2 - Public Involvement / Participation**

### **1. Public Participation**

The MS4 Operator must provide opportunities to involve their public in the review, development and implementation of the SWMP. MS4 Operators must *develop* and implement a public involvement/participation program that includes the following elements:

- a. The MS4 Operator must provide at least one of the following opportunities for public involvement/participation on the development and implementation of the SWMP:
  - o citizen advisory group on stormwater management
  - o citizen volunteers to educate other individuals about the program
  - o program coordination with other pre-existing programs
  - o volunteer monitoring efforts
  - o reporting concerns about activities or behaviors observed
  - o Stewardship activities such as:

- beach cleanups
  - wetland restorations
  - volunteer water quality monitoring
  - Storm drain stenciling
  - Conducting surveys
  - Tree plantings
  - BMP maintenance
  - Adopt a highway/stream/lake/beach/catch basin
  - Educational activities including distribution of materials
- b. The MS4 Operator must inform their public of the opportunities for their involvement and how they can become involved using one or more of the following methods to reach all entities listed in Part VII.B.1.a:
- public notice
  - website postings
  - newsletters, paychecks, bulletin boards
  - announcements posted within the MS4 Operator's facilities (service areas, lobbies, employee break rooms, rest stops, etc)
  - advertisements
  - social media
  - staff training
- c. The MS4 Operator must identify a local point of contact to receive and respond to public concerns regarding stormwater management and compliance with the MS4 general permit requirements. The name or title of this contact and telephone number must be published in public outreach and public participation materials

## **2. Public Input**

### **a. Availability of SWMP plan**

The MS4 Operator shall ensure that copies of the SWMP plan are made available in accordance with Part IV.A.1.

### **b. Public Notice requirements for annual report.**

- i. By May 1 following each reporting year, and prior to submitting the final annual report to the *Department*, the MS4 Operator must provide the opportunity for their public to review and comment on the SWMP development and implementation. This requirement may be satisfied by either:

- o Presentation of the draft annual report at a regular meeting of an existing board. It may also be a separate meeting specifically for stormwater or if requested by the public. The public must have the ability to ask questions about and make comments on the report during that presentation;

or,

- o Posting of the draft annual report on a website; the website must provide information on the timeframes and procedures to submit comments and/or request a meeting. If a public meeting is requested by two or more persons, the MS4 must hold such a meeting.
- ii. Presentation of the draft annual report must be in a format that is compliant with Article 7 of the NYS Public Officers Law (the Open Meetings Law), if applicable.

c. **Consideration of Public Input**

The final annual reports submitted to the *Department* shall include a summary of comments received and shall describe how the SWMP development or implementation was influenced by the public input received. Comments received after the final annual report is submitted shall be reported with the following year's annual report. The MS4 Operator must take into account relevant comments in the following year.

**C. MCM 3 - Illicit Discharge Detection and Elimination**

The MS4 Operator must *develop*, implement and enforce a proactive program to systematically find and eliminate illicit *discharges*, including illegal dumping, to the MS4. An illicit *discharge* is defined as any *discharge* to the MS4 that is not composed entirely of stormwater except allowable *discharges* identified in Part I.A.3 of this permit. At a minimum, this program must include the following elements:

**1. Legal Authority**

The MS4 Operator must *develop* and maintain adequate legal authority to control how the MS4 is used, including:

- a. A prohibition of illicit *discharges*, spills or other release of pollutants;
- b. A prohibition of unauthorized connections into the small MS4;
- c. To require compliance and take enforcement action;
- d. To require installation, implementation and maintenance of control measures;
- e. To receive and collect information related to the introduction of pollutants into the MS4; and

- f. To access property for inspection.

The legal authority must meet the substantive requirements contained in 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) as specified in Part IV.E of this permit.

## **2. Illicit Discharge Prevention Program**

The MS4 Operator must provide education to their public on illicit *discharges* to prevent releases into the MS4. Specifically:

- a. What types of *discharges* are allowable;
- b. What is an illicit *discharge* and why is it prohibited;
- c. The environmental hazards associated with illicit *discharges* and improper disposal of waste;
- d. Proper handling and disposal practices for the most common behaviors within the community (i.e. septic care, car washing, household hazardous waste, swimming pool draining or other activities resulting in illicit *discharges* to the MS4); and
- e. How to report illicit *discharges* (e.g. spills and dumping) they may observe

## **3. Hotline**

The MS4 Operator must establish a hotline for the public to report illicit *discharges*. The MS4 Operator must document reports including the name of the reporting individual (if provided), date of the report, location of the illicit *discharge*, nature of the illicit *discharge* and follow up actions taken or needed (including response times), inspection outcomes and any enforcement taken.

## **4. Illicit Discharge Detection Program**

### **a. Identification of Priority Areas**

The MS4 Operator must:

- i. Identify areas contributing to the MS4 with a high illicit *discharge* potential using the screening factors identified in Table 14 of the “*Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessment, Center for Watershed Protection, October 2004*” (IDDE Guidance Manual);
- ii. Show the priority areas and associated outfalls on the map *developed* to comply with Part IV.C of this permit;
- iii. Prioritize new outfalls as they are constructed or discovered; and,
- iv. Update the priority listing annually based on information gathered as part of the inspection program and in conjunction with the IDDE Guidance Manual;

- a) High Priority Outfalls



- Outfalls serving areas with a high illicit *discharge* potential;
  - Outfalls discharging to impaired waters
  - Outfalls discharging to sensitive or high quality waters including but not limited to public beaches, recreational areas, drinking water supplies and shellfishing areas
  - Major Outfalls (as defined in 40CFR 122.26(b)(5))
  - Citizen complaints on more than three separate occasions in any 12 month period.
- b) Low Priority Outfalls – All other outfalls not described as High Priority

**b. Outfall Inspection Program**

The MS4 Operator must:

- i. Provide annual training for all individual(s) responsible for outfall inspection and sampling on the MS4 Operator’s procedures;
- ii. Inspect all outfalls in the regulated area during dry weather (at least 48<sup>12</sup> hours after the last runoff-producing event) at the following frequencies:
  - a) Inspect High Priority Outfalls at least once per year
  - b) Inspect Low Priority Outfalls (20% per year)
- iii. Document all outfall inspections using the ORI Field Sheets or use their own form provided it records the same information.
- iv. Sample all flowing outfalls with any physical indicator of an illicit *discharge* (i.e. odor, color, turbidity or floatables) as follows:

Indicator Parameter	Action Level
Ammonia	≥50 mg/l
Chlorine	>0.1 mg/l
Conductivity	≥2000 μS/cm
Color	≥500 units
pH	≤5 or ≥9
Potassium	≥20
Turbidity	≥1000 NTU
Surfactants	≥25 mg/l

**Table 6**

<sup>12</sup> Prolonged dry periods (48-72 hours after the last runoff event) during the non-growing season with low *groundwater* levels are optimal for conducting inspections

- a) Sampling may be done with field test kits or field instrumentation that are sufficiently sensitive to detect the parameter below the action level and are not subject to 40 CFR Part 136 requirements for approved methods and certified laboratories.
- b) Document the results of outfall sampling including test results using the inspection form (See Part VII.C.4.b.iii),
- c) Initiate track down procedures for *discharges* that exceed any action level within the timeframes specified in Part VII.C.5.d.
  - o Re-inspect, within 30 days of initial inspection, non-flowing outfalls with physical indicators of intermittent or transitory *discharges* (i.e. outfall damage, outfall deposits or stains, abnormal vegetation growth, poor receiving water quality and biological growth on pipe surfaces) utilizing techniques described in Chapter 12.6 of the IDDE Guidance Manual or equivalent.
  - o Track outfall inspection frequencies and results:
    - Annually analyze data collected to identify trends, patterns, areas of concern and common problems to guide ongoing illicit *discharge* elimination efforts, revise priorities and improve efficiencies with track down procedures.
    - Re-prioritize outfalls based on results of the annual analysis, hotline reports and identified changes to the potential for water quality impacts.
  - o Initiate track down procedures in accordance with timeframes specified in Part VII.C.5.d.

### **5. Illicit Discharge Track Down Program**

The MS4 Operator must *develop* and implement written track down procedures to identify the source of illicit *discharges* and the responsible party, specifying:

- a. Provisions for annual training for individual(s) responsible for conducting track down procedures;
- b. Track down methods described in Chapter 13 of IDDE Manual or equivalent
- c. How progress with track down will be documented;
- d. Time frames for initiating track down:

- i. Initiate<sup>13</sup> track down procedures for flowing outfalls with obvious illicit *discharges* (a severity score of 3 for any physical indicator as described in Section 11.7 of the IDDE Guidance) immediately but no later than 24 hours of discovery;
- ii. Initiate track down procedures for obvious *discharges* of sanitary wastewater that would affect bathing areas during bathing season, shell fishing areas or public water intakes and report orally or electronically to the Regional Water Engineer and local health department within 2 hours of discovery of the *discharge*; and
- iii. Initiate track down procedures for all other illicit *discharges* no later than 5 days of discovery.

#### **6. Illicit Discharge Elimination Program**

The MS4 Operator must *develop* and implement written procedures to eliminate illicit *discharges* specifying:

- a. Time frames for elimination:
  - i. *Discharges* that pose a significant threat to human or environmental health shall be eliminated immediately but no later than 24 hours;
  - ii. Initiate elimination procedures for all other illicit *discharges* no later than 5 days of identification of responsible party; and
  - iii. Where identification of a responsible party or elimination of an illicit *discharge* within 60 days of its identification is not possible, the MS4 Operator shall provide advanced written notice to the Regional Water Engineer within 30 days of becoming aware of the illicit *discharge*.
- b. Provisions for escalating enforcement and tracking, both consistent with the ERP required in Part IV.F of this permit;
- c. Provisions to confirm and verify the corrective action is complete; and
- d. Annual evaluation of timeframes to eliminate illicit *discharges* and identify how efficiencies with elimination procedures may be improved.

<sup>13</sup> or refer to the appropriate agency with the authority to act

## D. MCM 4 - Construction Site Stormwater Runoff Control

The MS4 Operator must *develop*, implement and enforce a program to ensure construction sites are effectively controlled,<sup>14</sup> to reduce pollutants from construction related activities that have the potential to discharge to the MS4.

### 1. *Applicable Construction Activities/Projects*

The construction site stormwater runoff control program must address sites with *construction activities* permitted, approved, funded or owned/operated by the MS4 Operator within the regulated area that:

- result in a total land disturbance of greater than or equal to one acre; and,
- disturb less than one acre if part of a larger common plan of development or sale; or
- disturb greater than 5000 sf in the East of Hudson Watershed.

For *construction activities* where the MS4 Operator is listed as the owner/operator on the Notice of Intent for coverage under the SPDES General Permit for Stormwater from Construction Activities, GP-0-15-002 (CGP), the MS4 Operator must ensure compliance with the CGP. The additional requirements for oversight described in this Part are not needed.

### 2. *Legal Authority*

- a. The MS4 Operator must *develop* and maintain adequate legal authority to ensure applicable *construction activities* are effectively controlled, including:
  - i. To require a SWPPP with erosion and sediment controls that meet the New York State Standards and Specifications for Erosion & Sediment Control, August 2016, or *equivalent*;
  - ii. Require post construction SMPs as required by CGP meet the sizing criteria specified in the New York State Stormwater Management Design Manual and performance criteria (or *equivalent*), including Operation & Maintenance Plans for long term maintenance
  - iii. To require construction site operators control waste such as discarded building materials, concrete truck washout, chemicals, litter and sanitary waste that may cause adverse impacts to water quality;

<sup>14</sup> Projects that comply with the terms and conditions of the NYS SPDES General Permit for Stormwater Discharges from Construction Activity or an individual SPDES permit for stormwater for which they obtained coverage and local erosion & sediment control requirements are considered to be effectively controlled.

- iv. To access property to inspect erosion and sediment controls during construction and post construction controls after construction is complete;
- v. To require compliance and take enforcement action;
- vi. To require installation, implementation and maintenance of control measures including post construction SMPs; and,
- vii. To receive and collect information related to compliance with the approved SWPPP including verification of maintenance of post-construction SMPs (if conducted by private entities)

The legal authority must meet the substantive requirements contained in the State's draft Sample Local Law for Stormwater Management and Erosion and Sediment Control as specified in Part IV.E of this permit.

### **3. Construction Program Education and Outreach**

The MS4 Operator must educate all those involved in the *construction activity* itself, as well as municipal staff and other individuals involved in the review of SWPPPs, inspections and related enforcement on:

- a. When the construction site stormwater control program applies;
- b. To whom they apply;
- c. The procedures for submission of SWPPPs;
- d. Construction site inspection process;
- e. Enforcement process/expectations for compliance; and,
- f. Other procedures associated with the control of stormwater runoff from applicable *construction activities*.

### **4. Construction Site Inventory/Inspection Tracking**

The MS4 Operator must *develop* and maintain a written inventory of all projects with *construction activities* discharging directly to the MS4. The inventory must include:

- a. Location of the project
- b. Owner/operator contact information (if other than MS4 Operator)
- c. Receiving waterbody
- d. Priority rating, if applicable (see Part VII.D.6)
- e. Construction project SPDES identification number
- f. SWPPP approval date
- g. Inspection History (Dates and ratings)

- h. Current status of the project (i.e. active, temporarily shut down, completed<sup>15</sup>).

The inventory must be kept up to date as new construction projects are approved and projects are completed or re-prioritized.

**5. Construction Site Prioritization**

The MS4 Operator must assess potential risks to water quality impacts and identify high priority sites for inspection using Table 7. (See Part VII.D.9). Projects may be re-prioritized once high risk areas\* are completed and final stabilization is achieved for those areas.

Risk Factors to determine High Priority Construction Sites
Projects with a direct conveyance (tributary, channel, ditch, storm sewer, etc..) to a surface water of the State that is: <ul style="list-style-type: none"> <li>• Listed as impaired on the Impaired Waterbodies Map for Silt/sediment, Phosphorus or Nitrogen listed as the POC; or,</li> <li>• Classified as AA-S, AA with filtration avoidance determination, A; or</li> <li>• Classified with a Trout (T) or Trout Spawning (TS) designation.</li> </ul>
Projects with >5 acres of disturbed earth at any one time.
Projects with earth disturbance within 100 feet of any lake or pond*
Projects within 50 feet of any rivers or streams (perennial or seasonal)*
Projects with >1 acre of disturbance on D slopes on the USDA Soil Survey for the County in which the disturbance will occur*
Projects with >1 acre disturbance of soils with a high, very high or extreme erosion risk as identified on Table 2.5 of the New York State Standards & Specifications for Erosion & Sediment Control, July 2016.*

**Table 7**

**6. SWPPP Review**

The MS4 Operator must:

- a. Ensure individual(s)<sup>16</sup> responsible for SWPPP review receive two (2) hours in *Department* endorsed SWPPP review training and four (4) hours of *Department* endorsed training in proper erosion and sediment control principles from a Soil & Water Conservation District or other endorsed

<sup>15</sup> Construction projects listed on the inventory must be inspected and tracked as described in Part VII.D.9 until a final site inspection has been completed as specified in Part VII.D.10.

<sup>16</sup> Except qualified professionals

- entity. Individuals responsible for review of post construction SMPs must be qualified professionals or under the supervision of a qualified professional.
- b. Review all SWPPPs for applicable construction activities for conformance with the requirements of the SPDES General Permit for Stormwater Discharges from Construction Activities (GP-0-15-002). Including:
    - i. Erosion and Sediment Controls must be reviewed for conformance with the New York State Standards & Specifications for Erosion and Sediment Control (2016), or *equivalent*; and,
    - ii. Post construction SMPs must be reviewed for conformance with the New York State Stormwater Management Design Manual (2015). Specifically:
      - 1) All post-construction SMPs must meet the sizing criteria contained in the CGP and NYS Stormwater Management Design Manual.
      - 2) Deviations from the performance criteria of the Design Manual must demonstrate that they are *equivalent* (include definition).
      - 3) The SWPPP must include an O&M plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post-construction stormwater management practice. The plan shall identify the entity that will be responsible for the long term operation and maintenance of each practice.
  - c. Assess potential risks to water quality impacts for new projects where the MS4 Operator is not listed as the owner/operator on the NOI for the SPDES General Permit for Stormwater Discharge from Construction Activities (GP-0-15-002) using the risk factors contained in Table 7 and identify high priority sites for inspection (Part VII.D.9).
  - d. Document SWPPP review using the SWPPP review form prepared by the *Department* or their own form provided it documents the same information.

### **7. Pre-Construction Oversight**

Prior to commencement of applicable construction activities, the MS4 Operator must conduct and document a preconstruction inspection/meeting with the owner/operator listed on the SPDES General Permit for Stormwater from Construction Activities (GP-0-15-002) NOI and contractor(s) responsible for implementing the SWPPP for the construction activity to:

- a. Ensure erosion & sediment controls as specified in the approved SWPPP are in place;

- b. Confirm the approved project has received coverage under the SPDES General Permit for Stormwater from Construction Activities (GP-0-15-002) or an individual SPDES stormwater permit;
- c. Verify contractors and subcontractors selected by the owner/operator of the construction activity have identified at least one individual that has received four (4) hours of *Department* endorsed training in proper erosion and sediment control principles from a Soil & Water Conservation District or other endorsed entity as required by the SPDES General Permit for Stormwater from Construction Activities (GP-0-15-002); and,
- d. Review the MS4 Operator's oversight inspection process and expectations for compliance.

### **8. Construction Site Inspections**

For applicable construction projects, approved, permitted or funded by the MS4 Operator, the MS4 Operator must conduct oversight inspections:

- a. MS4 Inspectors must receive two (2) hours of *Department* endorsed training on MS4 Oversight Inspections and four (4) hours of *Department* endorsed training in proper erosion and sediment control principles from a Soil & Water Conservation District or other endorsed entity every three (3) years.
- b. All projects must be inspected at the following frequencies:
  - o High priority sites identified in Table 7 must be inspected at least once every 30 calendar days after the pre-construction inspection described in Part VII.D.8.
  - o Low priority sites must be inspected at least once during active construction in addition to the pre-construction inspection described in Part VII.D.8 and inspection at project completion as described in Part VII.D.10. If the project duration extends for more than one year, at least one inspection shall be conducted per year.
  - o Follow up inspections must confirm corrective actions are completed within identified timeframes.
- c. All inspections are documented using the MS4 Construction Site Inspection Form (Appendix E) developed by the *Department*. MS4 Operators may use their own form, provided it records the same information.

### **9. Construction Project Closeout**

Perform a final site inspection or accept the construction site owner/operator's qualified inspector final inspection certification required by the SPDES General Permit for Stormwater from Construction Activities (GP-0-15-002) documenting:

- o Final stabilization has been completed;



- All post-construction SMPs included in the final SWPPP have been constructed as approved and are operating;
- Provisions are in place for long-term operation and maintenance of the SMPs; and,
- Post-Construction SMPs have been added to the Post-Construction SMP Inspection & Maintenance Inventory required in Part VII.E.3.

### **10. Handling Public Complaints**

Receive, follow up and track complaints regarding construction site stormwater runoff and document the following:

- Date complaint received;
- Nature of complaint;
- Site location;
- Contact information for follow up, if provided (may be anonymous);
- Inspection date;
- Follow up actions taken or needed; and,
- Completion date of follow up actions.

## **E. MCM 5 - Post Construction Stormwater Management**

The MS4 Operator must *develop*, implement and enforce a program to control the *discharge* of pollutants to the MS4 through the proper operation and maintenance of existing stormwater management practices and those constructed on new or *redeveloped* sites as required under Part VII.D.

### **1. Applicable Post Construction Stormwater Management Practices**

The post construction stormwater management program must include post construction stormwater management practices (SMPs) that include the following:

- All SMPs located on property owned or operated by the MS4 Operator;
- SMPs directly discharging to the MS4 that have been installed as part of the CGP or individual SPDES permit (since March 10, 2003) where there is a contractual agreement for maintenance;
- All new SMPs constructed as part of the construction runoff control program (Part VII.D – MCM 4); and,

- o Other SMPs discovered to *discharge* directly to the MS4 provided a contractual agreement for maintenance is established<sup>17</sup>.

## **2. Post Construction SMP Inventory & Tracking**

The MS4 Operator must *develop* and maintain an inventory of applicable post-construction SMPs that includes the following information:

- a. Location of practice (street address or coordinates);
- b. Type of practice;
- c. Receiving waterbody;
- d. Date practice was installed;
- e. Ownership;
- f. Responsible party for Operation and Maintenance, if different from owner;
- g. Location of documentation depicting O&M requirements for practice and legal agreements in place;
- h. Frequency for inspection of practice (specified by the Operations & Maintenance (O&M plan) in approved SWPPP as described in Part VII.D.7.
- i. Inspection and maintenance history that tracks the following:
  - i. Date of last inspection;
  - ii. Inspection results;
  - iii. Actions taken in accordance with contractual agreement for private SMPs;
  - iv. Dates for corrective actions to be completed;
  - v. Status of corrective action; and,
  - vi. Projected date of next inspection.

The inventory must be kept up to date as new post construction SMPs are constructed or discovered.

## **3. Post Construction Inspection & Maintenance Program**

The MS4 Operator must:

<sup>17</sup> SMPs where the MS4 Operator cannot ensure maintenance are illicit connections addressed through Part VII.C.

- a. Ensure individual(s) responsible for inspection and maintenance will receive training<sup>18</sup>.
- b. Ensure each post construction SMP identified in the Post Construction SMP Inventory is inspected at the frequency specified in the O&M plan contained in the approved SWPPP (Part VII.D.7).
- c. Document inspections:
  - o Inspection Date
  - o Name & Signature of Inspector
  - o Project location
  - o Inventory Reference Number
  - o Current ownership
  - o A description of the condition of the post-construction SMP including:
    - quality of vegetation and soils;
    - inlet and outlet channels and structures;
    - embankments, slopes, and safety benches;
    - catch basins;
    - spillways, weirs, and other control structures; and,
    - sediment and debris accumulation in storage and forebay areas as well as in and around inlet and outlet structures;
  - o Photographic documentation of all critical structural stormwater control measure components; and,
  - o Specific maintenance issues or violations found that need to be corrected by the property owner or operator along with deadlines and re-inspection dates.
- d. Initiate follow-up actions (i.e. maintenance, repair, or higher level inspection) within 30 days of inspection.
- e. Initiate enforcement provisions for privately owned SMPs within 60 days if follow-up actions not complete.

#### **F. MCM 6 – Pollution Prevention and Good Housekeeping**

The MS4 Operator shall *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 shall address all *municipal operations* and *municipal facilities* that contribute or potentially

<sup>18</sup> DEC has developed training modules to accompany the DEC draft Maintenance Guidance for Stormwater Management Practices, September 7, 2016.

contribute POCs to the MS4 and to surface waters of the State through direct drainage within the regulated area.

### **1. Facilities and Operations Assessment**

The MS4 Operator must assess each municipal facility and operation within the regulated area and update or *develop* written procedures/protocols (or facility specific SWPPPs for high priority facilities) to meet the MCM 6 requirements within 3 years of the effective date of this permit. In conducting the assessments, the MS4 Operator must:

- a. Use the Municipal Facility/Operation Assessment Form to document the assessment; and either,
  - i. Certify compliance with the terms and conditions of this permit; or,
  - ii. Implement corrective actions according to the following schedule and certify compliance with the terms and conditions of this permit:
    - a) For situations that pose a significant threat to human health or the environment, corrective actions must be initiated immediately (24 hours of discovery) for situations that pose a significant threat to human health or the environment.
    - b) For situations that do not pose an immediate threat to human health or the environment, corrective actions must be initiated within 7 days of inspection and completed within 30 days of inspection.
    - c) For corrective actions that require special funding or construction that will take longer than 30 days to complete, a schedule must be prepared that specifies interim milestones that will ensure compliance in the shortest reasonable time. Progress shall be reported with the annual report.
    - d) All facilities and operations must be in compliance with the terms and conditions of this permit within 3 years of the effective date of this permit.

### **2. Best Management Practices for all Municipal Operations & Facilities**

The MS4 Operator must document and implement the following best management practices (*BMPs*) to minimize the *discharge* of pollutants associated with *municipal operations* and *municipal facilities* within the regulated area. Municipal operations and facilities must:

- a. **Minimize exposure of materials**

Exposure of materials to rain, snow, snowmelt, and runoff must be minimized with the following BMP considerations:

  - o Locate industrial materials and activities inside or protect them with storm resistant coverings;

- Use grading, berming, or curbing to divert stormwater away from material handling and storage areas and prevent runoff of contaminated flows from these areas;
- Locate materials, leaky or leak prone equipment and vehicles, and activities so that leaks are contained in existing containment and diversion systems or other protected areas;
- Clean up spills and leaks promptly using dry methods (e.g., absorbents) to prevent the *discharge of pollutants*;
- Use drip pans and absorbents under or around leaky vehicles and equipment or store indoors where feasible; use spill/overflow protection equipment; drain fluids from equipment and vehicles prior to on-site storage or disposal;
- Perform all cleaning operations indoors, under cover, or in bermed areas that prevent runoff and run-on and also that capture any overspray; and
- Ensure that all wash water drains to a proper collection system (i.e., not the stormwater drainage system).
- Minimize exposure of chemicals by replacing with a less toxic alternative

Note: The *discharge* of vehicle and equipment washwater, including tank cleaning operations, is not authorized by this permit. These wastewaters must be covered under a separate *SPDES* permit, discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements, or disposed of otherwise in accordance with applicable law.

**b. Use Good Housekeeping practices**

Use good housekeeping practices so that all exposed areas that are potential sources of pollutants are kept clean and orderly: sweep at regular intervals; keep materials orderly and labeled; and, store materials in appropriate containers.

**c. Follow a Preventive Maintenance program**

Implement a preventative maintenance program that includes routine inspection, testing, maintenance, and repair of all industrial equipment and systems to prevent leaks, spills and other releases

**d. Implement Spill Prevention and Response**

Minimize the potential for leaks, spills and other releases that may be exposed to stormwater and *develop* plans for effective response to such spills if or when they occur. At a minimum, the MS4 Operator must implement:

- Procedures for plainly labeling containers (e.g., “Used Oil,” “Spent Solvents,” “Fertilizers and Pesticides,” etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur;
- Preventative measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling;
- Procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. Employees who may cause, detect, or respond to a spill or leak must be trained in these procedures and have necessary spill response equipment available; and,
- Procedures for notification of the appropriate facility personnel, emergency response agencies, and regulatory agencies. Any spills must be reported in accordance with 6 NYCRR Part 750-2.7

e. **Stabilize exposed soils**

Exposed soils must be stabilized to minimize onsite erosion and sedimentation, and the resulting *discharge* of pollutants. In conducting assessments of facilities and rights-of-way, the MS4 Operator must consider:

- Areas at the facility or right-of-way that, due to topography, land disturbance (e.g., construction) or other factors, have potential for significant soil erosion.
- Whether structural, vegetative, and/or stabilization *BMPs* are needed to limit erosion.
- Whether velocity dissipation devices (or equivalent measures) are needed at *discharge* locations and along the length of any outfall channel to provide a non-erosive flow velocity from the structure to a water course.
- Whether controls conform to the New York Standards and Specifications for Erosion and Sediment Control (2016), or *equivalent*.

This document is available at: <http://www.dec.ny.gov/chemical/29066.html>.

f. **Manage stormwater runoff**

- Runoff from each facility or operation must be managed to prevent or reduce the *discharge* of pollutants. This may include management practices that divert runoff from areas that are potential sources of pollutants; contain runoff in such areas; or reuse, infiltrate or treat stormwater to reduce the *discharge* of pollutants.
- All municipally owned or operated stormwater treatment practices, such as water quality swales, retention/detention basins, infiltration structures, proprietary treatment devices or other similar practices,

must be inspected and maintained per the requirements of Part VII.E.3.

g. **Manage vegetated areas and open space on municipal property**

Maintain parks and vegetated areas on municipal property and rights of way:

- Specify proper use, storage, and disposal of pesticides and herbicides including minimizing the use of these products and using only in accordance manufacturer's instruction.
- Properly dispose of grass clippings from municipally-owned lawns where grass clipping collection equipment is used. Grass clippings shall be disposed of in a compost pile or a proper containment device so that they cannot enter the small MS4 or surface waters;
- Comply with the zero phosphorus fertilizer law for municipal properties. The application of any phosphorus-containing fertilizer (as labeled) shall only be allowed following a proper soil test and analysis documenting that soil phosphorus concentrations are inadequate;
- For MS4 Operators that provide yard waste collection services, effectively communicate pick up schedules so yard waste does not decay and release phosphorus to the storm sewer system. Leaves shall be disposed of in a compost pile or a proper containment device so that they cannot enter *small MS4s* or surface waters;
- Use lawn maintenance and landscaping practices that are protective of water quality. Protective practices include reduced mowing frequencies, proper disposal of lawn clippings, and use of alternative landscaping materials (e.g., drought resistant planting).
- Place pet waste disposal containers and signage concerning the collection and proper disposal of pet waste at all parks and open space where pets are permitted.
- Address waterfowl congregation areas where needed to reduce waterfowl droppings from entering the MS4.
- Address erosion or areas with poor vegetative cover especially if the erosion is within 50 feet of a surface water.
- Utilize native plant material to lessen the frequency of mowing and the use of chemicals to control vegetation.

h. **Minimize exposure of deicing materials**

Enclose or cover storage piles<sup>19</sup> of salt, or piles containing salt, used for deicing or maintenance of paved surfaces. Implement appropriate measures (e.g., good housekeeping, routine sweeping, diversions,

<sup>19</sup> Piles do not need to be enclosed or covered if stormwater runoff from the piles is not discharged or if discharges from the piles are authorized under another SPDES permit

containment) to minimize exposure resulting from adding to or removing materials from the pile.

i. **Train Employees**

Provide training to all employees who work in areas where materials or activities are exposed to stormwater and employees who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel). Training must cover the proper procedures, specific control measures, and documentation requirements. Training shall be conducted at least annually (or more often if employee turnover is high or if inspection or assessment identify problems with implementation). The MS4 Operator must ensure that employees receive and use training;

j. **Eliminate non-stormwater discharges**

Eliminate non-stormwater *discharges* not authorized by a SPDES permit. See Part I.A.3 for a list of non-stormwater *discharges* authorized by this permit.

k. **Ensure that waste, garbage and floatable debris are not discharged**

Keep exposed areas free of waste materials or provide a means to capture them before they are discharged. Manage dumpsters and other waste management equipment at municipal buildings. Dumpsters must be covered and emptied at appropriate frequencies to contain waste materials.

- Manage trash containers at parks and open space (scheduled cleanings; sufficient number).
- Pick up trash and debris on municipal property and rights of way
- Clean out catch basins at appropriate frequencies (see Part VII.F.3)

l. **Minimize generation of dust and off-site tracking of raw, final, or waste materials**

Routinely sweep parking lots and paved areas at municipal buildings and facilities at appropriate intervals.

m. **Require third party entities to comply**

Require third party entities performing *municipal operations* as contracted services, including but not limited to street sweeping, snow removal, and lawn/grounds care, to meet permit requirements as the requirements apply to the activity performed(See Part IV.B.2).



n. Document BMPs

Instruct management and staff on the prescribed *BMPs* that must be followed for the activities or operations conducted with written procedures/protocol that must:

- Identify the individual(s) responsible for implementing the *BMPs*;
- Provide sufficient instruction on the *BMPs* to be implemented and documentation requirements;
- Be available to the management and staff that will be called upon to use them for low priority facilities and operations; and,
- Be included in facility specific SWPPPs for high priority facilities identified in Part VII.F.4.b and facilities where stormwater is associated with industrial activity identified in Part VII.F.5.

o. Maintain all BMPs

All *BMPs* must be maintained in effective operating condition. Nonstructural *BMPs* must be diligently maintained (e.g., spill response supplies available, personnel appropriately trained). If structural *BMPs* need to be replaced or repaired, the necessary repairs or modifications shall be made as expeditiously as possible in accordance with the following timeframes:.

- Corrective actions must be performed for *BMPs* that are found to be in need of maintenance or modification before the next anticipated storm event, or as necessary to maintain the continued effectiveness of stormwater controls.
- If corrective actions prior to the next anticipated storm event is impracticable, they must be initiated within 7 days and completed within 30 days of inspection.

p. Assess Compliance:

The MS4 Operator shall use the Municipal Facility/Operation Assessment Form to evaluate compliance through facility inspections and assessment of municipal operations at a frequency appropriate for the potential risk of pollutant *discharge* to surface waters of the State: Specifically,

- High priority facilities shall be inspected as specified in the facility specific SWPPP as prescribed in Part VII.F.4.c.
- Low priority facilities shall be inspected at least once every 5 years as described in Part VII.F.6
- Municipal operations shall be assessed annually.

q. **Document Compliance**

The MS4 Operator shall document and track inspections and assessments including any deficiencies and follow-up actions to be taken using the Municipal Facility/Operation Assessment Form.

**3. Municipal Facilities**

a. **Inventory of Municipal Facilities**

The MS4 Operator shall *develop* and maintain a prioritized inventory of all municipal facilities located within the regulated area. Facilities that have coverage under a separate SPDES permit (either individual or MSGP) must comply with the terms and conditions of that permit and the requirements set forth in this Part are not applicable. Facilities that have filed a Certificate of No Exposure are also not subject to the requirements set forth in this Part. These facilities must be included on the inventory of municipal facilities specified below.

The facility inventory must document the following information:

- Facility name and address
- Facility Priority (high, low, MSGP)
- Standard Industrial Classification (SIC) Code (if applicable)
- SPDES ID or No Exposure ID(if applicable)
- Latitude/Longitude of facility
- Receiving Water
- Facility Contact information
- Facility Priority
- Status of facility specific SWPPP (if high priority)
- Location of SWPPP
- Type of activities present on site

The facility inventory must be kept up to date to include new facilities and operations as they are added.

b. **High Priority Facilities**

The following types of facilities have been identified by the *Department* as high priority facilities based on the typical pollutant sources and activities present and their potential for water quality impacts. Facility specific Stormwater Pollution Prevention Plans (SWPPPs) must be *developed* for these facilities as outlined in Part VII.F.4.c:

- Fleet maintenance facilities including bus, taxi, police, fire and other vehicle maintenance.
  - Public works facilities/ DPW garages
  - Salt storage facilities
  - Equipment storage yards where equipment maintenance is performed
- c. **Facility specific SWPPP required for High Priority Facilities.**  
 Within 2 years of the effective date of this permit, MS4 Operators shall *develop* a facility-specific stormwater pollution prevention plan (SWPPP) for each high priority facility within the regulated area.

i. **SWPPP Contents**

a) Pollution Prevention Team

The facility specific SWPPP shall identify the individuals (by name or title) that are responsible for *developing*, implementing, maintaining, and revising the facility's SWPPP. Responsibilities of each individual on the team must be listed. The activities and responsibilities of the team shall address all aspects of the facility's SWPPP.

b) General Site Description

A written description of the nature of the activity(ies) occurring at the facility with a potential to *discharge* pollutants including, at minimum:

- A general description of the pollutant generating activities occurring in each drainage area.
- A general description of the path of stormwater within the facility.
- A description of runoff from adjacent property, if present, containing significant quantities of pollutants of concern to the facility;
- The general path of stormwater flows between the facility and the nearest surface water body(ies) and/or location(s) where stormwater enters an MS4, if applicable;
- Receiving waters - The name of the nearest receiving water(s), including intermittent streams and the areal extent and description of wetlands (mapped and federally regulated wetlands) that may receive *discharges* from the facility.
- Municipal separate storm sewer systems - If stormwater is discharged to an MS4 owned or operated by a different entity, the SWPPP must identify the MS4 operator and the receiving

water to which their MS4 *discharges*. Contact information for that MS4 Operator must be included in this section.

- Other SPDES permitted *discharges* - The SWPPP must describe any *discharges* that are currently covered by another SPDES permit at the facility.
- Impervious surface estimate - Provide an estimate of the percent imperviousness of the site.
- Location of sensitive areas (e.g. impaired waters; listed threatened & endangered species or their critical habitat; historic properties, etc.)
- Size of the property in acres.

c) Summary of potential pollutant sources

The SWPPP shall identify each separate area at the facility where materials or activities are exposed to stormwater. Materials or activities include, but are not limited to material handling equipment or activities, industrial machinery, raw materials, intermediate products, byproducts, final products, or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product.

d) Spills and Releases

The SWPPP must clearly identify areas where potential spills or releases can contribute to pollutants in stormwater *discharges* and their accompanying drainage points. For areas that are exposed to precipitation or that otherwise drain to a stormwater conveyance at the facility, the plan must include a list of spills or releases of petroleum and hazardous substances or other pollutants that may adversely affect water quality that occurred during the three-year period prior to the date of the SWPPP preparation. The list must be updated whenever spills or releases occur in exposed areas of the facility. This permit does not relieve the MS4 Operator of any reporting or other requirements related to spills or other releases of petroleum or hazardous substances.

e) Site Map

The SWPPP must include a site map identifying the following:

- i) Size of the property in acres
- ii) Location and size of significant structures and impervious surfaces

- iii) Location of each *outfall* labeled with the *outfall* identification, including *outfalls* with *discharges* authorized under other *SPDES* permits
- iv) The approximate outline of the drainage area to each *outfall*
- v) Locations of haul and access roads
- vi) Rail cars and tracks
- vii) Direction of stormwater flow using arrows to show which ways stormwater will flow
- viii) Location of all receiving waters in the immediate vicinity of the facility, indicating if any of the waters are impaired and, if so, whether they have *TMDLs* established for them
- ix) Location of all storm sewers and where the stormwater *discharges* to them
- x) Location of all stormwater conveyances including ditches, pipes, and swales
- xi) Locations where stormwater flows have significant potential to cause erosion
- xii) Location and source of runoff from adjacent property containing significant quantities of *pollutants* and/or volume of concern to the facility
- xiii) Locations of the following activities where such activities are exposed to precipitation or run-on:
  - o Fueling stations
  - o Vehicle and equipment maintenance and/or cleaning areas
  - o Loading/unloading areas
  - o Locations used for the treatment, storage or disposal of wastes
  - o Liquid storage tanks
  - o Processing and storage areas
  - o Locations where significant materials, fuel or chemicals are stored and transferred
  - o Locations where vehicles and/or machinery are stored when not in use
  - o Transfer areas for substances in bulk.
- xiv) Locations of identified potential pollutant sources
- xv) Location and description of non-stormwater *discharges*, including but not limited to those listed in Parts I.C.3

- xvi) Locations where major spills or leaks have occurred
- xvii) Locations of all stormwater monitoring points
- xviii) Locations of all existing structural *BMPs*

d. **Stormwater Best Management Practices (BMPs)**

The facility-specific SWPPP must document the location and type of *BMPs* selected, installed and implemented at the facility to meet Part VII.F.2. In addition, if the facility includes vehicle and/or equipment maintenance activities, the following *BMPs* are required for those areas:

- Containment measures for vehicles with fluid leaks (i.e. store vehicles with fluid leaks indoors, utilize drip pans or other containment measures until repaired.)
- Control measures for fueling areas including:
  - Cover fueling areas, where possible
  - Use spill/overflow protection and cleanup equipment;
  - Use dry cleanup methods; and,
  - Minimize stormwater run-on/runoff from fueling area.
- Control measures to ensure vehicle wash waters are not discharged to the MS4 or to surface waters. Wash equipment/vehicles in a designated and/or covered area where wash water is collected to be recycled or discharged to the sanitary sewer.
- Good housekeeping measures such as:
  - Maintain a clean work area - remove contaminants from floors, drains, catch basins, using "dry" methods;
  - Use non-hazardous cleaners. Use non chlorinated solvents instead of chlorinated solvents;
  - Repair or replace any leaking containers;
  - Use steam cleaning /pressure washing instead of solvent for parts cleaning;
  - Store waste fluids in properly capped, labeled storage containers;
  - Store batteries in leak-proof, compatible (i.e. non-reactive) containers;
  - Rinse grass from lawn care equipment on permeable (grassed) areas;
  - Protect against pollution if outside maintenance is necessary (cover storm receivers, use secondary containment vessels, etc.)

e. High Priority Facility Assessments

i. Quarterly Visual Monitoring

- c) The MS4 Operator must conduct quarterly visual monitoring of the outfalls discharging stormwater from fueling areas, storage areas, vehicle and equipment maintenance/fueling areas, material handling areas and similar potential pollutant generating areas:
- Samples must be collected and visually examined at least once in each of the following three month periods:
    - January through March,
    - April through June,
    - July through September, and
    - October through December
  - All samples must be collected from *discharges* resulting from a *qualifying storm event*. Storm event data must be recorded.
  - No analytical tests are required to be performed on the samples for the purpose of meeting the visual monitoring requirements.
  - The visual examination must document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and any other obvious indicators of stormwater pollution.
  - The visual examination of the sample must be conducted in a well-lit area.
  - Where practicable, the same individual should carry out the collection and examination of *discharges* for the entire permit term for consistency.
  - The MS4 Operator must document the visual examination using the Quarterly Visual Monitoring Form, signed and certified in accordance with Part X.J, to record:
    - Outfall location
    - Examination date and time
    - Personnel conducting the examination
    - Nature of the *discharge* (runoff or snowmelt)
    - Visual quality of the stormwater *discharge* (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution.

- Probable sources of any observed stormwater contamination; and,
  - Actions taken or proposed to be taken to eliminate those sources.
- d) Corrective and follow up actions - If the visual examination indicates the presence of stormwater pollution (e.g., color, odor, floating solids, settled solids, suspended solids, foam, oil sheen, or other indicators), the MS4 Operator must, at minimum, complete and document the following actions:
- Evaluate the facility for potential sources.
  - Remedy the problems identified.
  - Revise the facility specific SWPPP.
  - Perform an additional visual inspection during the first qualifying storm event following implementation of the corrective action. If the first qualifying storm event does not occur until the next quarterly monitoring period, this follow up action may be used as the next quarterly visual inspection.

ii. Dry weather monitoring

Outfalls at high priority facilities shall be inspected annually for dry weather *discharges*. Dry weather *discharges* encountered shall be addressed in accordance with the *illicit discharge* detection and elimination procedures *developed* in accordance with Part VII.C.

iii. Annual comprehensive inspections

Annual inspections shall be performed to assess compliance with the BMPs identified in the SWPPP using the Municipal Facility/Operation Assessment Form

f. Low Priority Facilities

- i. The following municipally owned facilities have been identified by the *Department* as low priority facilities based on the typical pollutant sources and activities present and their low risk for water quality impacts.
- Cemeteries
  - Vehicle and/or equipment storage facilities where no vehicle and/or equipment maintenance is performed
  - Incinerators
  - Materials storage yards
  - Pesticide storage facilities
  - Prisons or correctional facilities



- Public buildings, including libraries, police stations, fire stations, municipal buildings, and similar buildings
  - Parks
  - Parking lots
  - Golf courses
  - Swimming pools
- ii. The MS4 Operator must *develop* and implement written procedures outlining *BMPs* for the types of activities that occur at these low priority facilities as specified in Part VII.F.2. A facility-specific SWPPP is not required.
- g. **Municipal Facilities with Stormwater Discharges Associated with Industrial Activity**
- i. If an MS4 Operator owns or operates any *municipal facilities* with stormwater discharges associated with industrial activity (as defined by 40 CFR Part 122.26(b)(14)(i) through (ix) and (xi)) that does not currently have coverage under the SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP) and has not filed a Certificate of No Exposure for that facility, the MS4 Operator must *develop* a facility specific SWPPP as described in Part VII.F.4.c to cover those facilities under this Permit. MS4 Operators must identify on the NOI, the facilities that will be covered under this permit.
- ii. Table 8 lists the *municipal facilities* that require coverage under MSGP and the applicable Sector:

Facility	Sector
Airports	S
Asphalt or concrete batch plants	D
Composting facilities	C
Concrete Batch Plants	E
Hazardous Waste Disposal Facilities	K
Hazardous Waste Handling & Transfer Facilities	K
Landfills, operating or closed	L
Marinas	Q
Mines and gravel pits	J
Recycling facilities	N
Solid waste handling and transfer facilities	N
Vehicle fleet maintenance facilities	P
Treatment Works (WWTPs)	T

### **Table 8**

#### iii. Facility Specific SWPPP Requirements

The facility specific SWPPP *developed* for the facilities listed in this Part must comply with the SWPPP requirements contained in Parts III and VIII for the applicable Sector(s) of the *SPDES Multi Sector General Permit for Stormwater Associated with Industrial Activity, GP-0-12-001*(MSGP)

#### iv. Facility Specific Inspection/Assessment Requirements

The MS4 Operator must assess facility compliance as specified in Part IV of the MSGP. However, monitoring results shall be reported with the MS4 annual report on forms provided by the *Department*. Record retention shall comply with the requirements contained in Part V.B of this permit.

#### v. Corrective Actions

Corrective Actions must be completed as specified in Part IV of the MSGP. Documentation regarding corrective actions taken shall be submitted with the MS4 annual report and kept with the facility specific SWPPP.

### **4. Municipal Infrastructure Operations & Maintenance**

The MS4 Operator must ensure that MS4 infrastructure (i.e. storm sewer system components, roadways, bridges and associated right of way) is maintained in a timely manner to reduce the *discharge* of pollutants from the MS4.

#### **a. Municipal Storm Sewer System (MS4) Operations & Maintenance**

##### i. Catch Basin Inspection & Maintenance Program

- a) The MS4 Operator shall develop and implement a plan to optimize catch basin inspection and cleaning with the goal that catch basins are cleaned before exceeding 50% of *sump capacity*.
- b) The MS4 Operator shall *develop* a prioritized catch basin inventory based on the volume of trash/debris generated in the surrounding land use or captured in the catch basin.
  - o Catch basins serving areas with a high potential to generate trash/debris shall be considered high priority:
    - Commercial areas;
    - Industrial areas;
    - Areas with concentrated construction activities;
    - History of complaints or flooding;
    - Other areas known to generate significant amounts of trash/debris based on institutional knowledge of staff.

- As part of the *development* of a comprehensive map, catch basins shall be inspected to determine the level of trash debris captured:
  - Catch basins found to be >50% sump capacity shall be cleaned and assigned a high priority
  - Catch basins found to be <50% sump capacity shall be assigned a moderate priority;
  - Catch basins with no debris shall be assigned a low priority
- c) Inspect catch basins at the following frequency:
  - High priority catch basins – once (1) per year
  - Moderate priority catch basins – once every two (2) year
  - Low priority catch basins – once every five (5) years
- d) Catch basin inspections and cleaning must be documented in a log that records:
  - date of inspection
  - level of trash debris captured (no debris, <50% sump capacity, >50% sump capacity)
  - date of clean out
  - Log must be available for inspection by EPA or DEC.
- e) Annually report the number of catch basins inspected, number cleaned and total mass or volume of debris removed with the annual report.
- f) After 2 inspection/clean out cycles have been completed, evaluate inspection findings for trends or patterns to optimize the catch basin inspection and maintenance program and make adjustments to the overall stormwater program. For example:
  - Adjust inspection frequency
  - Adjust public education and outreach to target areas with high volumes of trash and debris to reduce the amount generated in those areas (reduce burden on municipality to inspect and clean out).
- g) Consider enhanced *BMPs* for trash and debris such as trash receptacles, adopt a trash can program, increased street sweeping, etc.
- h) Materials removed from catch basins must be properly managed so that:

- Water removed during the catch basin cleaning process and waste material will not reenter the MS4 or surface waters of the US.
  - Material removed from catch basins is screened for contamination and any debris containing trash or waste materials are managed as solid waste.
  - Screened/uncontaminated material is managed so that it will not reenter the MS4.
- i) Employees responsible for catch basin clean out must be trained on:
- Proper handling and disposal procedures for materials removed;
  - Signs/evidence of suspect or illicit *discharges* and procedures for referral/follow-up if illicit *discharges* are encountered.

ii. Stormwater Management Practice Maintenance

All municipally owned or operated stormwater treatment practices such as water quality swales, retention/detention basins, infiltration structures, proprietary treatment devices or other similar practices must be inspected and maintained per the requirements of Part VII.E.3.

b. Roads, Bridges & Right of Ways

i. Sweeping

The MS4 Operator must *develop* and implement procedures for sweeping and/or cleaning municipal streets, parking lots or other paved areas at municipal facilities:

- All streets and parking lots (except rural uncurbed roads with no catch basins or high speed limited access highways) shall be swept and/or cleaned a minimum of once per year in the spring (following winter activities such as sanding).
- Streets in business districts, commercially zoned areas and any other area where catch basin inspections identify high volumes of trash and debris shall be swept monthly.
- The MS4 Operator shall report in each annual report the number of lane miles cleaned or the volume or mass of material removed.

ii. Road and Right of Way Maintenance & Repairs

The MS4 Operator shall implement *BMPs* for road and parking lot maintenance, including pothole repair, pavement marking, sealing, and re-paving that include provisions to:

- Pave, mark and seal in dry weather;
- Manage materials (i.e. paints, sealants, lubricants, etc.) to minimize exposure;
- Select less toxic alternatives (i.e. paints, sealants, etc.) where available.
- Stage road operations and maintenance activity (patching, potholes) to reduce spillage. Cover catch basins and manholes during this activity;
- Clean up fluid leaks or spills from paving equipment/materials immediately;
- Restrict the use of herbicides/pesticide application to roadside vegetation;
- Maintain roadside vegetation; select vegetation with a high tolerance to road salt and drought resistant planting; minimize mowing frequencies; and, properly dispose of lawn clippings.
- Address erosion or poor vegetative cover in right-of-way areas especially if the erosion is within 50 feet of a surface water

### iii. Winter Road Maintenance

The MS4 Operator shall *develop* and implement the following *BMPs* for winter road maintenance, including the use and storage of salt and sand:

- Enclose or cover storage piles of salt, or piles containing salt, used for deicing or maintaining paved surfaces;
- Implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from storage piles;
- Routinely calibrate equipment to control salt/sand application rates.
- Minimize the use of sodium chloride and other salts, and evaluate opportunities for use of alternative materials; and
- Ensure that routine snow disposal activities do not result in disposal of snow into waters of the United States.

For purposes of this MS4 Permit, salt shall mean any chloride-containing material used to treat paved surfaces for deicing, including sodium chloride, calcium chloride, magnesium chloride, and brine solutions.

iv. Bridge Maintenance & Repairs

The MS4 Operator shall *develop* and implement procedures for bridge maintenance activities that includes provisions for:

- Control of paint chips and dust resulting from surface preparation, grinding, sanding or washing bridges;
- Use of tarps, booms and vacuums during painting and blasting activities;
- Good housekeeping methods for storage of paints, cleaners and other surface preparation materials;
- Proper disposal of debris and waste material;
- Regular clearing of debris from scupper drains;
- Considerations for use of calcium magnesium acetate for deicing around bridges to minimize corrosion;
- Sweeping debris from bridge deck and structure prior to washing

c. New Construction & Land Disturbances

The MS4 Operator must *develop* and implement procedures to ensure municipal projects comply with the SPDES General Permit for Stormwater associated with Construction Activity (GP-0-15-002) as specified in Part VII.D.

## Part VIII. Enhanced Requirements for Impaired Waters without an approved TMDL

### A. Pollutant Specific BMPs for Phosphorus

#### 1. *Public Education and Outreach on Sources of Phosphorus*

- a. The MS4 Operator shall supplement its public education and outreach program with information on the specific waters impaired for phosphorus and the MS4 programs they are implementing to address the issue.
- b. For each year of permit coverage, the MS4 Operator shall supplement its public education program with timely messages as follows:
  - o Spring (March/April) –
    - Educate residents and lawn care businesses on the yard waste collection schedule or proper disposal of grass clippings;
    - Encourage the use of mulching mowers; and
    - Reminders on the zero fertilizer law (distribute and post on website the “Look for the Zero” on phosphorus free fertilizer to residents in phosphorus impaired sewer sheds. Include information on the water to which they contribute and the impacts to that water.
  - o Summer (June/July) –
    - Encourage the proper management of pet waste, including information on local ordinances and enforcement provisions.
    - Educate on the proper disposal of car wash waters.
  - o Fall (August/September/October) –
    - Educate residents on the leaf litter collection schedule and encourage the proper disposal of leaf litter.
    - Provide information to owners of septic systems about proper septic system care and maintenance in sewersheds to phosphorus impaired waters listed in Appendix D
- c. Educate commercial users on the following topics: dumpster maintenance, grease storage at food service establishments and proper disposal practices for wash waters.

#### 2. *Mapping*

Mapping completed in accordance with Part IV.C for MS4s discharging to phosphorus impaired waters listed in Appendix D shall be completed in Geographic Information Systems (GIS) format and include the following additional elements:

- o Areas with potential to contribute phosphorus to impaired segment:

- Poor soils (low infiltration rates/low permeability, high *groundwater*, seasonal high water table, etc.);
  - Highly erosive soils;
  - Areas with seasonal high water table impacting septic or sanitary alignments;
  - Retail and wholesale plant nurseries (including big box stores), commercial lawn care facilities, golf courses and other areas with concentrated fertilizer use and storage ;
  - Commercial areas (dumpsters, grease storage, wash waters, etc.);
  - Residential neighborhoods
  - Industrial areas.
- Post Construction Stormwater Management Practices (Part VI.E.3 and Part VII.E.3 )
    - SMP Type (Pond, Bioretention, Swale, Rain Garden, etc.);
    - Reason for SMP (Retrofit, New Development, Flood Control, etc.);
      - Ownership of SMP;
      - Location where SMP *discharges*; and,
      - Contributing drainage area to SMP.
  - Municipal facilities (Part VI.F.3 and Part VII.F.3)
    - Type (Municipal Building, DPW Garage, Vehicle and Fleet maintenance areas (fire station, police station, bus stations)
    - Priority (See Part VI.F.3 & Part VII.F.3)
    - Facility Contact
    - Last Assessment Date
  - Location and type of conveyance – closed pipe or open drainage
    - Pipe material, shape, size
    - Channel ditch lining material; shape; dimensions; locations and dimensions of culvert crossings

### **3. *Illicit Discharge, Detection & Elimination***

MS4 Operators must supplement their illicit *discharge* detection program in sewersheds to phosphorus impaired waters with the additional elements:

- a. Inspect the following commercial areas and businesses for illicit *discharges* and improper storage practices:
  - Commercial Areas (dumpsters, grease storage, washwaters, etc...);



- Retail and wholesale plant nurseries (including big box stores), commercial lawn care facilities, golf courses and other areas with concentrated fertilizer use and storage; and,
  - Industrial areas
- b. MS4 outfalls discharging to impaired waters shall be considered high priority outfalls (See Part VI.C and VII.C) and inspected annually.

**4. Construction Site Stormwater Runoff Control**

- a. *Construction activities* in sewersheds discharging to impaired waters shall be considered high priority construction sites that must be inspected at least once per month.

**5. Good Housekeeping/Pollution Prevention for Municipal Operations & Facilities**

- a. In addition to the requirements for catch basin inspection and clean out in Parts VI.4.a.i and VII.4.a.i, catch basins in MS4s discharging to Phosphorus impaired segments shall be inspected in the early spring and late fall for sediment and debris build-up.
- Catch basins exceeding 50% sump capacity must be cleaned within 30 days of inspection
  - Evaluate inspection findings for trends or patterns to optimize the catch basin inspection and maintenance program and make adjustments to the overall stormwater program. For example:
    - Adjust inspection frequency (increase inspection/clean out for catch basins exceeding 50% sump capacity);
    - Inspect areas to identify potential generating sites;
    - Implement corrective actions or additional BMPs to address generating sites (if identified)
      - Adjust public education and outreach to target areas with high volumes of sediment trash or debris to reduce the amount generated in those areas (reduce burden on municipality to inspect and clean out);
      - Consider enhanced *BMPs* for trash and debris such as trash receptacles, adopt a trash can program, increased street sweeping, etc.
- b. Sweep streets in sewersheds to impaired segment monthly.
- c. Repair all outfall protection and/or bank stability problems identified during inspection of outfalls within 30 days of inspection. Repairs shall be completed in accordance with the New York Standards and Specifications for Erosion and Sediment Control;

## **6. *Planned upgrades to municipal properties in sewersheds to impaired waters***

Incorporate, where feasible, cost-effective runoff reduction techniques and *green infrastructure* during planned municipal upgrades including municipal right of ways. Some examples include bioswales, green streets, porous pavement, replacement of closed drainage with grass swales, replacement of the existing islands in the parking lots with bioretention or curb cuts to route the flow through below-grade infiltration areas or other low cost improvements that provide runoff treatment or reduction. Consideration of feasibility should include type of land use or municipal operation, suitability of soils, presence of utilities, potential for exacerbating existing contamination problems, safety issues, maintenance requirements, and expected lifespans of available technologies.

## **B. Pollutant Specific BMPs for Pathogens**

### **1. *Public Education and Outreach on Sources of Pathogens***

- a. The MS4 Operator shall supplement its public education and outreach program with information on the specific waters impaired for pathogens as well as the MS4 programs, including any ordinances in place and the consequences for violations that they are implementing to address the issue.
- b. For each year of permit coverage, the MS4 Operator shall supplement its public education program with timely messages as follows:
  - i. **Residential users:**
    - a) Education materials shall describe the detrimental impacts of improper management of pet waste, requirements for proper residential waste collection and disposal, and penalties for non-compliance.
    - b) Provide information to owners of septic systems about septic system care and maintenance in sewersheds to pathogen impaired waters listed in Appendix D.
  - ii. **Commercial users:**
    - o Educate on reducing the food sources accessible to wildlife (e.g., manage restaurant dumpsters/grease traps).

### **2. *Mapping***

Mapping completed in accordance with Part IV.C for MS4s discharging to pathogen impaired waters listed in Appendix D shall be completed in Geographic Information Systems (GIS) format and include the following additional elements:

- o Areas with potential to contribute pathogens to impaired segment:
  - Poor soils (low infiltration rates/low permeability, high *groundwater*, seasonal high water table, etc.);

- Areas with seasonal high water table impacting septic or sanitary alignments;
- Area with history of sanitary sewer overflows or high number of illicit *discharges*.
- Commercial areas/food sources for wildlife (dumpsters, grease storage, washwaters, etc...);
- Waterfowl congregation areas on municipal property or right of way.
- Areas where pets/domestic animals may frequent (veterinary offices, pet supply stores, pet grooming, marinas, stables, public trails, etc...)
- Waste disposal areas (landfills, transfer stations)
- Post Construction Stormwater Management Practices (Part VI.E.3 and Part VII.E.3 )
  - SMP Type (Pond, Bioretention, Swale, Rain Garden, etc.);
  - Reason for SMP (Retrofit, New Development, Flood Control, etc.);
    - Ownership of SMP;
    - Location where SMP *discharges*; and,
    - Contributing drainage area to SMP.
- Municipal facilities (Part VI.F.3 and Part VII.F.3)
  - Type (Municipal Building, DPW Garage, Vehicle and Fleet maintenance areas (fire station, police station, bus stations)
  - Priority (See Part VI.F.3 & Part VII.F.3)
  - Facility Contact
  - Last Assessment Date
- Location and type of conveyance – closed pipe or open drainage
  - Pipe material, shape, size
  - Channel ditch lining material; shape; dimensions; locations and dimensions of culvert crossings

### **3. *Illicit Discharge, Detection & Elimination***

- a. MS4 outfalls discharging to pathogen impaired waters shall be considered high priority outfalls and inspected annually.
- b. Inspect the following areas for illicit *discharges* or evidence of animal waste:
  - Commercial areas/food sources for wildlife (dumpsters, grease storage, washwaters, etc...);
  - Waterfowl congregation areas on municipal property or right of way.

- Areas where pets/domestic animals may frequent:
- veterinary offices
- pet supply/pet grooming
- marina
- stables
- public trails
- Waste disposal areas (landfills, transfer stations)

#### **4. Good Housekeeping/Pollution Prevention for Municipal Operations & Facilities**

##### **a. Storm Sewer System Maintenance**

In addition to the requirements for catch basin inspection and clean out in Parts VI.4.a.i and VII.4.a.i, catch basins in MS4s discharging to pathogen impaired segments shall be inspected in the early spring and late fall for sediment and debris build-up.

- i. Catch basins exceeding 50% sump capacity must be cleaned within 30 days of inspection
- ii. Evaluate inspection findings for trends or patterns to optimize the catch basin inspection and maintenance program and make adjustments to the overall stormwater program. For example:
  - Adjust inspection frequency (increase inspection/clean out for catch basins exceeding 50% sump capacity);
  - Inspect areas to identify potential generating sites;
  - Implement corrective actions or additional BMPs to address generating sites (if identified)
    - Adjust public education and outreach to target areas with high volumes of sediment trash or debris to reduce the amount generated in those areas (reduce burden on municipality to inspect and clean out);
    - Consider enhanced *BMPs* for trash and debris such as trash receptacles, adopt a trash can program, increased street sweeping, etc.

b. *Wildlife Control*

- i. Identify municipally owned facilities with high bird populations and evaluate deterrents, population controls and other measures that may reduce bird related pathogen contributions.
- ii. Remove accumulated trash and debris from municipally owned facilities to eliminate potential food sources for wildlife

**5. *Planned upgrades to municipal properties in sewersheds to impaired waters***

Where feasible, incorporate cost-effective runoff reduction techniques and *green infrastructure* during planned municipal upgrades including municipal right of ways. Some examples include bioswales, green streets, replacement of closed drainage with grass swales, replacement of the existing islands in the parking lots with bioretention or curb cuts to route the flow through below-grade infiltration areas, disconnection of municipal buildings downspouts or other low cost improvements that provide runoff treatment or reduction.

Consideration of feasibility should include type of land use or municipal operation, suitability of soils, presence of utilities, potential for exacerbating existing contamination problems, safety issues, maintenance requirements, and expected lifespans of available technologies.

## C. Pollutant Specific BMPs for Nitrogen

### 1. *Public Education and Outreach on Sources of Nitrogen*

- a. The MS4 Operator shall supplement its public education and outreach program with information on the specific waters impaired for nitrogen and the MS4 programs they are implementing to address the issue.
- b. For each year of permit coverage, the MS4 Operator shall supplement its public education program with timely messages as follows:
  - o Spring (March/April) –
    - Educate residents and lawn care businesses on the yard waste collection schedule or proper disposal of grass clippings;
    - Encourage the use of mulching mowers; and
    - Educate the public on the fertilizer law.
  - o Summer (June/July) –
    - Encourage the proper management of pet waste, including information on local ordinances and enforcement provisions.
    - Educate on the proper disposal of car wash waters.
  - o Fall (August/September/October) –
    - Educate residents on the leaf litter collection schedule and encourage the proper disposal of leaf litter.
    - Provide information to owners of septic systems about proper maintenance in sewersheds nitrogen impaired waters listed in Appendix D
- c. Educate commercial users on the following topics: dumpster maintenance, grease storage at food service establishments and proper disposal practices for washwaters.

### 2. *Mapping*

Mapping of sewersheds discharging to impaired waters shall be completed in Geographic Information Systems (GIS) format include the following:

- o Areas with potential to contribute nitrogen to impaired segment:
  - Poor soils (low infiltration rates/low permeability, high *groundwater*, seasonal high water table, etc.)
  - Areas with seasonal high water table impacting septic or sanitary alignments (impaired water)
  - Retail and wholesale plant nurseries (including big box stores), commercial lawn care facilities, golf courses and other areas with concentrated fertilizer use and storage

- Commercial areas with (dumpsters, grease storage, washwaters, etc.)
  - Residential neighborhoods
  - Industrial areas.
- Post Construction Stormwater Management Practices (see Part VI.E.3)
    - SMP Type (Pond, Bioretention, Swale, Rain Garden, etc..)
    - Reason for SMP (Retrofit, New Development, Flood Control, etc..)
      - Ownership of SMP
      - Location where SMP *discharges*
      - Contributing drainage area to SMP
  - Municipal facilities
    - Type (Municipal Building, DPW Garage, Vehicle and Fleet maintenance areas (fire station, police station, bus stations)
    - Priority (See Part VI.F.4 and Part VII.F.4)
    - Facility Contact
    - Last Assessment Date
  - Location and type of conveyance – closed pipe or open drainage
    - Pipe material, shape, size
    - Channel ditch lining material; shape; dimensions; locations and dimensions of culvert crossings.

### **3. *Illicit Discharge, Detection & Elimination***

- a. Inspect commercial areas and businesses for illicit *discharges* and improper storage practices:
  - Commercial Areas (dumpsters, grease storage, washwaters, etc...)
  - Retail and wholesale plant nurseries (including big box stores), commercial lawn care facilities, golf courses and other areas with concentrated fertilizer use and storage
  - Industrial areas
- b. MS4 outfalls discharging to impaired waters shall be considered high priority outfalls (See Part VI.C.4) and inspected annually.

### **4. *Construction Site Stormwater Runoff Control***

*Construction activities* within sewersheds to impaired waters shall be considered high priority construction sites that must be inspected at least once per month. (See Part VI.D.6)

## **5. Good Housekeeping/Pollution Prevention for Municipal Operations & Facilities**

- a. In addition to the requirements for catch basin inspection and clean out in Parts VI.4.a.i and VII.4.a.i, catch basins in MS4s discharging to pathogen impaired segments shall be inspected in the early spring and late fall for sediment and debris build-up.
  - Catch basins exceeding 50% sump capacity must be cleaned within 30 days of inspection
  - Evaluate inspection findings for trends or patterns to optimize the catch basin inspection and maintenance program and make adjustments to the overall stormwater program. For example:
    - Adjust inspection frequency (increase inspection/clean out for catch basins exceeding 50% sump capacity);
    - Inspect areas to identify potential generating sites;
    - Implement corrective actions or additional BMPs to address generating sites (if identified)
      - Adjust public education and outreach to target areas with high volumes of sediment trash or debris to reduce the amount generated in those areas (reduce burden on municipality to inspect and clean out);
      - Consider enhanced *BMPs* for trash and debris such as trash receptacles, adopt a trash can program, increased street sweeping, etc.
- b. Sweep streets in sewersheds to impaired segment monthly.
- c. Repair all outfall protection and/or bank stability problems identified during inspection of outfalls within 30 of inspection. Repairs shall be completed in accordance with the New York Standards and Specifications for Erosion and Sediment Control;

## **6. Planned upgrades to municipal properties in sewersheds to impaired waters**

Incorporate, where feasible, cost-effective runoff reduction techniques and *green infrastructure* during planned municipal upgrades including municipal right of ways. Some examples include bioswales, green streets, porous pavement, replacement of closed drainage with grass swales, replacement of the existing islands in the parking lots with bioretention or curb cuts to route the flow through below-grade infiltration areas or other low cost improvements that provide runoff treatment or reduction. Consideration of feasibility should include type of land use or municipal operation, suitability of soils, presence of utilities, potential for exacerbating existing contamination problems, safety issues, maintenance requirements, and expected lifespans of available technologies.



**D. Pollutant Specific BMPs for Floatables**

To be added

**E. Pollutant Specific BMPs for Silt/Sediment**

To be added

## Part IX. Watershed Improvement Strategy Requirements

MS4 Operators discharging to waters where an approved TMDL requires reduction in MS4 pollutant loads must *develop* and implement additional watershed specific requirements to achieve the MS4 pollutant load reduction. The requirements contained in this Part are in addition to the applicable requirements in Part VI or VII, depending on the type of MS4. The MS4 Pollutant Load Reductions are the reductions necessary from the *discharge* loads associated with MS4s that, when combined with reductions in the *discharge* loads from other sources, will meet water quality standards.

The MS4 pollutant load reduction specified by the applicable TMDL shall be achieved by implementation of the 6 MCMs required of all MS4s and implementation of additional *BMPs* including any retrofits required by this Part. Implementation plans have been *developed* for watersheds where the *Department* has determined stormwater retrofits are needed to achieve the MS4 pollutant load reductions. These plans identify the timetable and pollutant load reduction requirements for each individual MS4 Operator and specify how retrofits will be credited. Finalized TMDL Implementation Plans referenced in this Part are enforceable under this permit. In accordance with NYCRR Part 750-1.14, all MS4 Operators in the watershed improvement strategy areas shall submit to the *Department* progress reports, described in Part V.C.3, identifying the activities that have been performed during the period of March 10 through September 9 of each year, and demonstrating that progress is being made towards completion of the reduction requirements, as required by this Part. Progress made during the period of September 10 through March 9 shall be reported with the annual report that is due no later than June 1 of each year.

Ultimately, progress in meeting water quality standards will be verified by the *Department's* ambient monitoring of the affected waterbody. Where ambient monitoring demonstrates consistent compliance with water quality standards, the MS4 Operator may submit a written request to the *Department* suspend the additional BMP requirements to install stormwater retrofits.

## A. NYC East of Hudson Phosphorus Impaired Watershed MS4s

New York City East of Hudson	
EPA Approved TMDL	Phase II Phosphorus TMDLs for Reservoirs in the NYC Watershed, June 2000
Implementation Plan	Croton Watershed Phase II TMDL Implementation Plan (January 2009)
Pollutant of Concern	Phosphorus
Area where requirements Apply	NYC EOH Watershed
Achievement of Pollutant Load Reduction	In accordance with the TMDL Implementation Plan

**Table 9**

MS4 Operators within the listed watershed shall *develop* and implement the following phosphorus-specific *BMPs*. MS4 Operators in these watersheds shall also submit to the *Department*, progress reports as specified in Part V.C.3.

### 1. Public Education and Outreach on Stormwater Impacts

All MS4 Operators shall supplement their public education and outreach program with information on the specific waters impaired for phosphorus as well as the MS4 programs they are implementing to address the phosphorus problem. For each year of permit coverage, the MS4 Operator shall supplement its public education program with timely messages as follows:

- Spring (March) –
  - Educate residents and lawn care businesses on the yard waste collection schedule or proper disposal of grass clippings;
  - Educate residents on the benefits of using mulching mowers; and
  - Distribute to residents and post on municipal website the DEC phosphorus free fertilizer brochure, “Look for the Zero”.
- Summer (June/July) –
  - Educate residents on the proper management of pet waste; provide information on local ordinances and enforcement provisions.
  - Educate residents on the proper disposal of car wash waters.

- Fall (August/September/October) –
  - Educate residents on the leaf litter collection schedule and the proper disposal of leaf litter.

Educate residential users on the on-site wastewater inspection program described in Part IX.A.3.d and proper maintenance of on-site wastewater inspection systems.

Educate commercial users on the following topics:

- dumpster maintenance
- grease storage at food service establishments
- proper disposal practices for washwaters
- proper management practices for landscape irrigation water at retail or wholesale plant nurseries and golf courses.

## **2. Public Involvement/ Participation**

No additional requirements proposed for this permit term.

## **3. Illicit Discharge Detection and Elimination**

### **a. Mapping**

All MS4 Operators must update the map completed in accordance with SPDES General Permit for Stormwater from Municipal Separate Storm Sewer System (GP-0-10-002) to include the required map elements in Part IV.C and the following additional elements:

- Areas with potential to contribute phosphorus to the impaired segment, including:
  - Poor soils (low infiltration rates/low permeability high *groundwater*, seasonal high water table, etc.)
  - Highly erosive soils;
  - Areas with seasonal high water table impacting septic or sanitary alignments;
  - Commercial areas with (dumpsters, grease storage, wash waters, etc.);
  - Retail and wholesale plant nurseries (including big box stores), commercial lawn care facilities and golf courses and other areas with concentrated fertilizer use and storage;
  - Residential neighborhoods; and,
  - Industrial areas.

- Post Construction Stormwater Management Practices (see Part VI.E.3 and Part VII.E.3 )
  - SMP Type (Pond, Bioretention, Swale, Rain Garden, etc.)
  - Reason for SMP (Retrofit, New *Development*, Flood Control, etc.)
  - Ownership of SMP
  - Location where SMP *discharges* into impaired water.
  - Contributing drainage area captured by SMP.
- Municipal facilities
  - Type (Municipal Building, DPW Garage, Vehicle and Fleet maintenance areas (fire station, police station, bus stations)
  - Priority (Part VI.F.4 and Part VII.F.4)
  - Facility Contact
  - Last Assessment Date
- In areas serviced by a sanitary sewer system, map the following MS4 vulnerabilities for sanitary cross connections or leakage into the MS4, where applicable:
  - Areas with a history of Sanitary Sewer Overflows, including, but not limited to, those resulting from wet weather, high water table, or fat/oil/grease blockages;
  - Common or twin-invert manholes serving storm and sanitary sewer alignments;
  - Common trench construction serving both storm and sanitary sewer alignments;
  - Crossings of storm and sanitary sewer alignments where the sanitary system is shallower than the storm drain system;
  - Inadequate sanitary sewer level of service (LOS) resulting in regular surcharging, customer back-ups, or frequent customer complaints;
  - Areas formerly served by combined sewer systems;
  - Sanitary sewer infrastructure defects such as leaking service laterals, cracked, broken, or offset sanitary infrastructure, directly piped connections between storm drain and sanitary sewer infrastructure, identified through infrastructure investigations.
  - Any sanitary sewer and storm drain infrastructure greater than 40 years old;
  - System upgrades identified as part of the on-site sanitary system inspection program conducted under the previous versions of the MS4 General Permit (2010 and 2015) (indicative of inadequate soils, water

table separation, or other physical constraints of the area rather than poor owner maintenance);

#### b. Inspection

Outfalls discharging directly to impaired segments as identified on DEC Impaired Waters for MS4 map shall be considered high priority outfalls for inspection as detailed in Part VI.C or VII.C, depending on the MS4 Operator type.

#### c. Hot spot inspections

MS4 Operators shall evaluate the following areas for illicit connections or exposure of materials to stormwater:

- Food waste storage areas, such as “dumpsters” serving restaurants and grocery;
- Yard waste storage areas, such as yard waste composting and disposal areas.
- Retail and wholesale garden supply/plant nurseries and golf course fertilizer storage areas.

Outfalls serving these hot spot areas are considered high priority outfalls for inspection as detailed in Part VI.C.4 and VII.C.4.

#### d. On-site wastewater systems

*Traditional land use control and traditional non-land use control MS4s* must update, implement and enforce a program that ensures residential on-site waste water systems (septic tanks, cesspools, absorption fields or distribution systems) are properly operated and do not contribute pollutants to the MS4:

- Pump out residential septic tanks/cesspools and inspect system components (septic tanks, cesspools and installed absorption field) at least once every 5 years.
- Document the following information for each inspection:
  - Individual performing inspection;
  - Inspection date;
  - Address;
  - Location of system on property;
  - Inspection rating (pass/fail);
  - Evidence of failed systems:
    - Cracked or damaged septic tank walls;
    - Missing septic tank components (i.e. sanitary tees, baffles);
    - Foul odors in the yard;

- Wet, spongy ground; lush plant growth; or burnt grass near the drain field;
- Algal blooms or excessive weed growth in adjacent ditches, ponds and streams;
- Cars, boats and other heavy objects located over the field that could crush lateral pipes;
- Stormwater flowing over the drain field;
- Cave-ins or exposed system components;
- Visible liquid on the surface of the drain field (e.g. surface breakouts);
- Obvious system bypasses (i.e. straight pipe *discharges*); and,
- Corrective actions and timeframes for completion.
- Refer failures to appropriate agency to ensure corrective actions taken.
- *Discharges* from on-site wastewater systems to MS4 shall be eliminated in accordance with the time frames specified in Parts VI.C.5.d or VII.C.5.d, depending on the MS4 Operator type.

#### 4. **Construction Site Stormwater Runoff Control**

- a. All MS4 Operators must include projects that disturb between 5000 sf and 1 acre in the construction site runoff control program as described in Part VI.D or VII.D, depending on the MS4 Operator type. The legal authority required by Part VI.D or VII.D must include the following “plug in” language:

“Land activity is defined as *construction activity* including clearing, grading, excavating, soil disturbance or placement of fill that results in land disturbance of equal to or greater than 5000 sf and activities disturbing less than 5000 sf of total land area that are part of a larger common plan of *development* or sale and will occur under one plan.”

- b. Construction sites discharging to impaired segment shall be inspected as a high priority construction project as described in Part VI.D.9 or VII.D.9, depending on the MS4 Operator type.

#### 5. **Post-Construction Stormwater Management**

- a. All MS4 Operators must require the use of the Enhanced Phosphorus Removal design standards contained in Chapter 10 of the NYS Stormwater Management Design Manual (January 2015) for all new *development* and *redevelopment* projects that disturb greater than or equal to one (1) acre and projects less than one acre that are part of a larger common plan of *development* or sale. In addition, the legal

authority required by Part VI.D.3 and Part VII.D.3, depending on the MS4 Operator type, must include the following “plug in” language:

- i. Land *development* activities requiring water quantity and quality controls (post construction stormwater runoff controls) must include: “Single-family home construction located in the NYC East of Hudson watershed” and “Single-family residential subdivisions located in the NYC East of Hudson watershed.”
- ii. Requirements for SWPPPs that include post-construction stormwater controls must include: “Post-construction stormwater management practices in the SWPPP must be designed in conformance with the Enhanced Phosphorus Removal Design Standards in the Design Manual.”
- b. Performance Standards must include the following enhanced stabilization requirements: “Where soil disturbance activity has temporarily or permanently ceased, the construction site is located in the NYC East of Hudson watershed, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. The soil stabilization measures selected shall be in conformance with the Erosion Control Manual.”
- c. Inspections of land *development* activities during construction must include, requirements for a qualified inspector to conduct at least two (2) site inspections every seven (7) calendar days for single-family homes and subdivisions within the NYC East of Hudson watersheds.
- d. Retrofit program

All MS4 Operators within the Croton Watershed as described in the TMDL Implementation Plan shall continue to implement the Retrofit Program according to the following schedule:

- o Within 1 year of the effective date of permit, submit an inventory of proposed retrofit projects for the permit term and implementation schedule that identifies:
  - Project name;
  - Location;
  - Proposed retrofit type;
  - Estimated phosphorus reduction (using the criteria in the Implementation plan); and,
  - Estimated total phosphorus reduction for all projects demonstrating they will meet the reduction specified in the implementation plan for the permit term.



- By December 31<sup>st</sup> of each year following DEC acceptance of the retrofit project list, MS4 Operators (or Single Entities representing MS4 Operators as described in Part III.B.2.b) shall submit approvable bid-ready plans and associated phosphorus reduction calculations for projects to be constructed in the next construction season.
- Approved projects must be completed within the next construction season or by the deadline specified in the DEC approval of the bid-ready plans.
- Submit with the annual reports due June 1<sup>st</sup> of each year, progress with commencement of retrofit projects for the construction season.
- Submit with the interim progress report due December 1<sup>st</sup> of each year, a certification of compliance for each approved retrofit project that certifies the project(s) constructed in the previous construction season were completed in accordance with the approved plans.

#### **6. *Pollution Prevention/Good Housekeeping For Municipal Operations***

All MS4 Operators must:

- a. Continue to implement a storm sewer system inspection and maintenance program. At a minimum, the program shall include the following:
  - i. Inspect catch basin and manhole sumps in the early spring and late fall for sediment and debris build-up.
    - a) Catch basins found to be >50% full shall be cleaned and re-inspected within 3 months.
    - b) Catch basin inspections and cleaning must be documented in a log that records:
      - i) Date of inspection;
      - ii) Level of debris captured;
      - iii) Date of clean out; and,
      - iv) Revised frequency based on findings.
    - c) All sediment and debris removed from the catch basins and manholes must be properly managed so that:
      - i) Material removed from catch basins or manholes is screened for contamination and any debris containing trash or waste materials are managed as solid waste.
      - ii) Water removed during the catch basin cleaning process as well as screened and waste material will not reenter the MS4 or surface waters of the US.
    - d) Inspection findings must be evaluated for trends or patterns to optimize the catch basin inspection and maintenance program and

make adjustments to the overall stormwater program. For example:

- i) Adjust public education and outreach to target areas with high volumes of trash and debris to reduce the amount generated in those areas (reduce burden on municipality to inspect and clean out).
  - ii) Consider enhanced *BMPs* for trash and debris such as trash receptacles, adopt a trash can program, increased street sweeping, etc.
- ii. Inspect outfalls as required by Parts VI.C.4.b or VII.C.4.b, depending on MS4 Operator type. All outfall protection and/or bank stability problems identified during the inspection shall be corrected in accordance with the New York Standards and Specifications for Erosion and Sediment Control within 30 days of inspection;
  - iii. Inspect stormwater management practices owned or operated by the MS4 Operator at least twice per year. Maintain and repair SMPs within 30 days of inspection, when needed.
- b. **Planned upgrades to municipal properties**  
Where feasible, incorporate cost-effective runoff reduction techniques and *green infrastructure* during planned municipal upgrades including municipal right of ways. Some examples include bioswales, green streets, replacement of closed drainage with grass swales, replacement of the existing islands in the parking lots with bioretention or curb cuts to route the flow through below-grade infiltration areas, disconnection of municipal buildings downspouts or other low cost improvements that provide runoff treatment or reduction. Consideration of feasibility should include type of land use or municipal operation, suitability of soils, presence of utilities, potential for exacerbating existing contamination problems, safety issues, maintenance requirements, and expected lifespans of available technologies

## B. Other Phosphorus Watershed MS4s

Area where Requirements Apply <sup>20</sup>	Greenwood Lake	Onondaga Lake	Oscawana Lake
EPA Approved TMDL	<i>Impaired Waters Restoration Plan for Greenwood Lake – Total Maximum Daily Load for Total Phosphorus, Sept 2005</i>	<i>Updated Phosphorus Total Maximum Daily Load for Onondaga Lake, June 2012</i>	<i>Total Maximum Daily Load (TMDL) for Phosphorus in Lake Oscawana, September 2008</i>
Implementation Plan	Greenwood Lake Watershed Phosphorus TMDL Implementation Plan, draft October 2016		
Pollutant of Concern	Phosphorus		
Achievement of Pollutant Load Reduction	In accordance with Implementation Plan	In accordance with approved TMDL	In accordance with approved TMDL

**Table 10**

MS4 Operators shall *develop* and implement the following phosphorus-specific *BMPs*. MS4 Operators that own or operate MS4s in these watersheds shall also submit to the *Department*, progress reports as specified in Part V.C.3.

### 1. *Public Education and Outreach on Stormwater Impacts*

All MS4 Operators shall supplement their public education and outreach program with information on the specific waters impaired for phosphorus as well as the MS4 programs they are implementing to address the phosphorus problem.

- a. For each year of permit coverage, the MS4 Operator shall supplement its public education program with timely messages as follows:
  - o Spring (March/April) –
    - Educate residents and lawn care businesses on the yard waste collection schedule or proper disposal of grass clippings;
    - Encourage the use of mulching mowers; and
    - Distribute to residents and post on municipal website the DEC phosphorus free fertilizer brochure, “Look for the Zero”.

<sup>20</sup> Stormwater Interactive Mapper – see referenced Watershed Improvement Strategy Area Layer

- Summer (June/July) –
  - Educate residents on the proper management of pet waste; provide information on local ordinances and enforcement provisions.
  - Educate residents on the proper disposal of car wash waters.
- Fall (August/September/October) –
  - Educate residents on the leaf litter collection schedule and the proper disposal of leaf litter.
- b. Educate on-site wastewater system users on the on-site wastewater inspection program described in Part IX.B.3.c and proper maintenance practices.
- c. Educate commercial users on the following topics:
  - dumpster maintenance
  - grease storage at food service establishments
  - proper disposal practices for washwaters
  - proper management practices for landscape irrigation water at retail or wholesale plant nurseries and golf courses.

## **2. Public Involvement/ Participation**

No additional requirements proposed for at this time.

## **3. Illicit Discharge Detection and Elimination**

### **a. Mapping**

In addition to the mapping requirements specified in Part IV.C, all MS4 Operators discharging to the listed watersheds shall include the following elements:

- Location and type of conveyance – closed pipe or open drainage
  - Pipe material, shape, size
  - Channel ditch lining material; shape; dimensions; locations and dimensions of culvert crossings
- Areas of Concern, including:
  - Poor soils (low infiltration rates/low permeability high *groundwater*, seasonal high water table, etc.)
  - Areas with potential to contribute phosphorus, including:
    - Areas with seasonal high water table impacting septic or sanitary alignments
    - Commercial areas with (dumpsters, grease storage, washwaters, etc.)

- Retail and wholesale plant nurseries (including big box stores), commercial lawn care facilities and golf courses
  - Residential neighborhoods
  - Industrial areas
- Post Construction Stormwater Management Practices (see Part VI.E.3.and VII.E.3 ):
  - SMP Type (Pond, Bioretention, Swale, Rain Garden, etc.)
  - Reason for SMP (Retrofit, New Development, Flood Control, etc.)
  - Ownership of SMP
  - Location where SMP *discharges* into impaired water.
  - Contributing drainage area captured by SMP.
- Municipal facilities
  - Type (Municipal Building, DPW Garage, Vehicle and Fleet maintenance areas (fire station, police station, bus stations)
  - Priority (Part VI.F.4 and Part VII.F.4)
  - Contact
  - Last Assessment Date
- In areas serviced by a sanitary sewer system, map the following MS4 vulnerabilities for sanitary cross connections or leakage into the MS4, where applicable:
  - Areas with a history of Sanitary Sewer Overflows, including, but not limited to, those resulting from wet weather, high water table, or fat/oil/grease blockages;
  - Common or twin-invert manholes serving storm and sanitary sewer alignments;
  - Common trench construction serving both storm and sanitary sewer alignments;
  - Crossings of storm and sanitary sewer alignments where the sanitary system is shallower than the storm drain system;
  - Inadequate sanitary sewer level of service (LOS) resulting in regular surcharging, customer back-ups, or frequent customer complaints;
  - Areas formerly served by combined sewer systems;
  - Sanitary sewer infrastructure defects such as leaking service laterals, cracked, broken, or offset sanitary infrastructure, directly

piped connections between storm drain and sanitary sewer infrastructure, identified through infrastructure investigations.

- Any sanitary sewer and storm drain infrastructure greater than 40 years old;
- System upgrades identified as part of the on-site sanitary system inspection program conducted under the previous versions of the MS4 General Permit (2010 and 2015) (indicative of inadequate soils, water table separation, or other physical constraints of the area rather than poor owner maintenance);

**b. Enhanced Inspection Requirements**

- i. Outfalls discharging directly to impaired segments as identified on DEC Impaired Waters for MS4 map shall be considered high priority outfalls for inspection as detailed in Part VI.C.4 or VII.C.4, depending on the MS4 Operator type.
- ii. Phosphorus Hot Spot Inspections: MS4 Operators shall evaluate the following areas for illicit connections or exposure of materials to stormwater:
  - Food wastes storage areas, such as dumpsters serving restaurants and grocery stores;
  - Yard waste storage areas, such as yard waste composting and disposal areas
  - Retail and wholesale garden supply/plant nurseries and golf course fertilizer storage areas.
- iii. Outfalls serving these hot spot areas are considered high priority outfalls for inspection as detailed in Part VI.C.4 or VII.C.4, depending on the MS4 Operator type.

**c. On-site wastewater systems**

*Traditional land use control and traditional non-land use control MS4s* (except in the Onondaga Lake watershed) must continue to implement and enforce a program that ensures residential on-site wastewater systems (septic tanks, cesspools, absorption fields or distribution systems) are properly operated and do not contribute pollutants to the MS4:

- Pump out residential septic tanks/cesspools and inspect system components (septic tanks, cesspools and installed absorption field) at least once every 5 years.
- Document the following information for each inspection:
  - Individual performing inspection;

- Inspection date;
- Address;
- Location of system on property;
- Inspection rating (pass/fail);
- Evidence of failed systems:
  - Cracked or damaged septic tank walls;
  - Missing septic tank components (i.e. sanitary tees, baffles);
  - Foul odors in the yard;
  - Wet, spongy ground; lush plant growth; or burnt grass near the drain field;
  - Algal blooms or excessive weed growth in adjacent ditches, ponds and streams;
  - Cars, boats and other heavy objects located over the field that could crush lateral pipes;
  - Stormwater flowing over the drain field;
  - Cave-ins or exposed system components;
  - Visible liquid on the surface of the drain field (e.g. surface breakouts); and,
  - Obvious system bypasses (i.e. straight pipe *discharges*).
- Corrective actions and timeframes for completion.
- Refer failures to the appropriate agency to ensure corrective actions are taken.
- *Discharges* from on-site wastewater systems to the MS4 shall be eliminated in accordance with the time frames specified in VI.C.5.d or VII.C.5.d, depending on the MS4 Operator type.

#### **4. Construction Site Stormwater Runoff Control**

Construction sites discharging to impaired segment shall be inspected as a high priority construction project as described in Part VI.D.9 or VII.D.9, depending on the MS4 Operator type.

#### **5. Post Construction Stormwater- Management**

- a. All MS4 Operators must require the use of the Enhanced Phosphorus Removal design standards contained in Chapter 10 of the NYS Stormwater Management Design Manual (January 2015) for all new development and redevelopment projects within the listed watersheds.
- b. In addition to the requirements of Parts VI or VII, depending on the type of MS4 Operator, the legal authority required by Part VI.D.3 and VII.D.3 must include the following “plug in” language requiring the use of the Enhanced

Phosphorus Removal Design Standards in accordance with the NYS Stormwater Management Design Manual for the applicable watershed:

- i. Land development activities requiring water quantity and quality controls (post construction stormwater runoff controls) must include: “Single-family home construction located in the *<insert watershed name>* watershed” and “Single-family residential subdivisions located in the *<insert watershed name>* watershed.”
- ii. Requirements for SWPPPs that include post-construction stormwater controls must include: “Post-construction stormwater management practices in the SWPPP must be designed in conformance with the Enhanced Phosphorus Removal Design Standards in the Design Manual.”
- c. Performance Standards must include the following enhanced stabilization requirements: “Where soil disturbance activity has temporarily or permanently ceased, the construction site is located in the *<insert watershed name>* watershed, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. The soil stabilization measures selected shall be in conformance with the Erosion Control Manual.”
- d. Inspections of land development activities during construction must include, requirements for a qualified inspector to conduct at least two (2) site inspections every seven (7) calendar days for single-family homes and subdivisions within the *<insert watershed name>* watersheds.
- e. Retrofit program  
All MS4 Operators within the Greenwood Lake Watershed shall implement a Retrofit Program as described in the TMDL Implementation Plan according to the following schedule:
  - o Within 1 year of completion of the MS4 Map required in Part IX.B.3.a, submit an inventory of proposed retrofit projects for the permit term and implementation schedule that identifies:
    - project name
    - location
    - proposed retrofit type
    - estimated phosphorus reduction (using the criteria in the Implementation plan); and,
    - Estimated total phosphorus reduction for all projects demonstrating they will meet the reduction specified in the implementation plan for the permit term.



- By December 31<sup>st</sup> of each year following DEC acceptance of the retrofit project list, MS4 Operators (or Single Entities representing MS4 Operators as described in Part III.B.2) shall submit approvable bid-ready plans and associated phosphorus reduction calculations for projects to be constructed in the next construction season.
- Approved projects must be completed within the next construction season or by the deadline specified in the DEC approval of the bid-ready plans.
- Submit with the annual reports (Part V.C.2) due June 1<sup>st</sup> of each year, progress with commencement of retrofit projects for the construction season.
- Submit with the interim progress report (Part V.C.3) due December 1<sup>st</sup> of each year, a certification of compliance for each approved retrofit project that certifies the project(s) constructed in the previous construction season were completed in accordance with the approved plans.

## **6. *Pollution Prevention/Good Housekeeping For Municipal Operations***

### **a. *MS4 Maintenance***

In addition to the requirements for catch basin inspection and clean out in Parts VI.4.a.i and VII.4.a.i, catch basins in MS4s discharging to pathogen impaired segments shall be inspected in the early spring and late fall for sediment and debris build-up.

- Catch basins exceeding 50% sump capacity must be cleaned within 30 days of inspection
- Evaluate inspection findings for trends or patterns to optimize the catch basin inspection and maintenance program and make adjustments to the overall stormwater program. For example:
  - Adjust inspection frequency (increase inspection/clean out for catch basins exceeding 50% sump capacity);
  - Inspect areas to identify potential generating sites;
  - Implement corrective actions or additional BMPs to address generating sites (if identified)
    - Adjust public education and outreach to target areas with high volumes of sediment trash or debris to reduce the amount generated in those areas (reduce burden on municipality to inspect and clean out);

- Consider enhanced *BMPs* for trash and debris such as trash receptacles, adopt a trash can program, increased street sweeping, etc.

b. **Planned upgrades to municipal properties**

Where feasible, incorporate cost-effective runoff reduction techniques and *green infrastructure* during planned municipal upgrades including municipal right of ways. Some examples include bioswales, green streets, replacement of closed drainage with grass swales, replacement of the existing islands in the parking lots with bioretention or curb cuts to route the flow through below-grade infiltration areas, disconnection of municipal buildings downspouts or other low cost improvements that provide runoff treatment or reduction. Consideration of feasibility should include type of land use or municipal operation, suitability of soils, presence of utilities, potential for exacerbating existing contamination problems, safety issues, maintenance requirements, and expected lifespans of available technologies

### C. Pathogen Impaired Watershed MS4s

Table IX.C - Pollutant Load Reduction and Timetable for Pathogen Impaired Watershed Improvement Strategy Areas.

Watershed	Watershed Improvement Strategy Deadline	Retrofit Plan Submission Deadline	Pollutant Load Reduction (Waste Load Allocation %)	Pollutant Load Reduction Deadline
Budds Pond*	To Be determined Pending TMDL Revision	To Be determined Pending TMDL Revision	61	To Be determined Pending TMDL Revision
Stirling Creek*			28	
Town & Jockey Creeks*			76	
Goose Creek*			70	
Hashamomuck Pond, Zone HP-1*			77	
Hashamomuck Pond, Zone HP-2*			43	
Richmond Creek*			71	
Deep Hole Creek*			29	
James Creek*			51	
Flanders Bay			98	
Reeves Bay			97	
Sebonac Creek			58	
North Sea Harbor, Zone NSH-1			97	
North Sea Harbor, Zone NSH-2			62	
North Sea Harbor, Zone NSH-3			99	
North Sea Harbor, Zone NSH-5			74	
Wooley Pond			97	
Noyac Creek, Zone NC-1			64	
Sag Harbor, Zone SH-2*			50	
Northwest Creek*			76	
Acabonac Harbor, Zone AH-2*			42	
Acabonac Harbor, Zone AH-3*			85	
Acabonac Harbor, Zone AH-4*			81	
Acabonac Harbor, Zone AH-5*			87	
Montauk Lake, Zone LM-1*			52	
Montauk Lake, Zone LM-2*			52	
Montauk Lake, Zone LM-3*			48	
Little Sebonac Creek			70	
Oyster Bay (Harbor 2)			20	
Oyster Bay (Harbor 3)			90	
Hempstead Harbor, north, and tidal tributaries			95	
Cold Spring Harbor, and tidal tributaries, Inner			95	
Cold Spring Harbor, Eel Creek			90	
Huntington Harbor			89	
Centerport Harbor	91			
Northport Harbor	92			

Watershed	Watershed Improvement Strategy Deadline	Retrofit Plan Submission Deadline	Pollutant Load Reduction (Waste Load Allocation %)	Pollutant Load Reduction Deadline
Stony Brook Harbor and West Meadow Creek	To Be determined Pending TMDL Revision	To Be determined Pending TMDL Revision	99	To Be determined Pending TMDL Revision
Stony Brook Creek			99	
Stony Brook Yacht Club			48	
Port Jefferson Harbor, North and tribs			94	
Conscience Bay and tidal tribs			99	
Setaukut Harbor, Little Bay			84	
Setauket Harbor, East Setauket			79	
Setauket Harbor, Poquot			100	
Mt. Sinai Harbor, Crystal Brook			88	
Mt. Sinai Harbor, Inner Harbor			96	
Mt. Sinai Harbor, Pipe Stave Hollow			93	
Mattituck Inlet/Creek, Low, and tidal tributaries			64	
Goldsmith Inlet			91	
West Harbor - Darby Cove			41	
Georgica Pond, Upper			93	
Georgica Pond, Lower			93	
Georgica Pond Cove			92	
Sagaponack Pond			88	
Mecox Bay and tributaries			89	
Heady Creek and tributaries			88	
Taylor Creek and tributaries			52	
Penny Pond			31	
Weesuck Creek and tidal tributaries			37	
Penniman Creek and tidal tributaries			32	
Ogden Pond			28	
Quantuck Bay-Quantuck Creek			91	
Quantuck Canal/Moneybogue Bay			62	
Seatuck Cove			94	
Harts Cove			12	
Narrow Bay			16	
Bellport Bay, Beaver Dam Creek	94			
Bellport Bay, West Cove	94			
Patchogue Bay, Swan River	90			
Patchogue Bay, Mud Creek	71			

*\*Additionally Designated Area*

MS4 Operator's that own or operate MS4s within the listed watersheds shall *develop* and implement the following pollutant specific *BMPs* in MS4 sewersheds discharging to the listed waters. MS4 Operators who own or operate MS4s within these watersheds shall also submit to the *Department*, progress reports as specified in Part V.C.3.

**1. Public Education and Outreach on Stormwater Impacts-** applicable to *traditional land use control, traditional non-land use control* and *non-traditional MS4s*

a. Plan and conduct an ongoing public education and outreach program designed to describe the impacts of Pathogens (the *POC*) on waterbodies. The program must identify potential sources of Pathogens in *stormwater* runoff and describe steps that contributors can take to reduce the Pathogens in *stormwater* runoff. The program must also describe steps that contributors of non-*stormwater discharges* can take to reduce Pathogens.

b. *Develop*, or acquire if currently available, specific educational material dealing with sources of Pathogens in *stormwater* and pollutant reduction practices. At a minimum, the educational material should address the following topics:

i. where, why, and how Pathogens pose threats to the environment and to the community;

ii. septic systems, geese and pets as a source of pathogens;

iii. dissemination of educational materials / surveys to households/businesses in proximity to Pathogen *TMDL* waterbodies; and

iv. education for livestock / horse boarders regarding manure *BMPs*.

**2. Public Involvement / Participation**

No additional requirements proposed at this time.

**3. Illicit Discharge Detection and Elimination, SWMP Development / Implementation-** Mapping applicable to *traditional land use control* and *traditional non-land use control MS4s*.

a. *Develop*, implement, and enforce a program to detect and eliminate *discharges* to the municipal separate storm sewer system from on-site sanitary systems in areas where factors such as shallow *groundwater*, low infiltrative soils, historical on-site sanitary system failures, or proximity to pathogen-impaired waterbodies, indicate a reasonable likelihood of system *discharge*.

In such areas, ensure that on-site sanitary systems designed for less than 1000 gallons per day (septic systems, cesspools, including any installed absorption fields) are inspected at a minimum frequency of once every five years and, where necessary, maintained or rehabilitated. Conduct regular field investigations/inspections in accordance with the most current version of the EPA publication entitled Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessment, to detect the presence of ongoing and/or intermittent on-site sanitary

*discharges* to the storm sewer system. An advanced system inspection requiring completion by a certified professional is not required by this permit, but may be used where site specific conditions warrant.

On-site sanitary system IDDE program development shall include the establishment of the necessary legal authority (such as new or revised local laws) for implementation and enforcement.

b. *Develop* and maintain a map showing the entire *small MS4* conveyance system. The *MS4 Operator* shall complete the mapping of approximately 20% of the system every year, with the entire system being mapped by May 1, 2015. At a minimum, the map and/or supportive documentation for the conveyance system shall include the following information:

- i. type of conveyance system - closed pipe or open drainage;
- ii. for closed pipe systems - pipe material, shape, and size;
- iii. for open drainage systems - channel/ditch lining material, shape, and dimensions; location and dimensions of any culvert crossings;
- iv. drop inlet, catch basin, and manhole locations; and
- v. number and size of connections (inlets/outlets) to catch basins and manholes, direction of flow.

All information shall be prepared in digital format suitable for use in GIS software and in accordance with the *Department's* guidance on Illicit Discharge Detection and Elimination. The scale shall be 1:24000 or better.

#### **4. Construction Site Stormwater Runoff Control**

No additional requirements at this time.

**5. Post-Construction Stormwater Management-** applicable to *traditional land use control*, *traditional non-land use control* and *non-traditional MS4s*.

*Develop* and commence implementation of a Retrofit Program that addresses runoff from sites to correct or reduce pollutant loading problems, with a particular emphasis placed on the pollutant Pathogens. At a minimum, the MS4 shall:

- a. establish procedures to identify sites with erosion and/or pollutant loading problems;
- b. establish policy and procedures for project selection. Project selection should be based on the Pathogen reduction potential of the specific retrofit being constructed/installed; the ability to use standard, proven technologies; and the economic feasibility of constructing/installing the retrofit. As part of the project selection process, the *MS4 Operator* should participate in locally based watershed planning efforts which involve the *Department*, other *MS4 Operator's*, stakeholders and other interested parties;

c. establish policy and procedures for project permitting, design, funding, construction and maintenance

d. By the deadlines in Table IX.C, *develop* and submit approvable plans and schedules for completing retrofit projects. Upon DEC approval of those plans and schedules and identification of funding sources, the plans and schedules shall become enforceable requirements of this permit.

**6. Pollution Prevention/Good Housekeeping For Municipal Operations**, - applicable to *traditional land use control* and traditional non-land use control MS4s.

a. *Develop*, enact and enforce a local law prohibiting pet waste on municipal properties and prohibiting goose feeding.

b. *Develop* and *implement* a pet waste bag program for collection and proper disposal of pet waste.

c. *Develop* a program to manage goose populations.

## D. Nitrogen Watershed MS4s

Area where Requirements Apply	Peconic Nitrogen
EPA Approved TMDL	<i>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)</i>
Implementation Plan	None
Pollutant of Concern	Nitrogen
Pollutant Load Reduction	In accordance with approved TMDL
Waterbodies	Terrys Creek & Tributaries
	Meetinghouse Creek
	Western Flanders Bay & Lower Sawmill Creek
	Lower Peconic River and tidal tributaries

**Table 11**

MS4 Operators shall *develop* and implement the following nitrogen specific *BMPs* for MS4 sewersheds discharging to the listed waterbodies and submit to the *Department*, progress reports as specified in Part V.C.3.

### 1. **Public Education and Outreach on Stormwater Impacts**

All MS4s must:

- a. Supplement their public education and outreach program with information on the specific waters impaired for nitrogen and the MS4 programs they are implementing to address the issue.
- b. For each year of permit coverage, the MS4 Operator shall supplement its public education program with timely messages as follows:
  - o Spring (March/April) –
    - Educate residents and lawn care businesses on the yard waste collection schedule or proper disposal of grass clippings;
    - Encourage the use of mulching mowers; and



- Educate the public on the fertilizer law.
- Summer (June/July) –
  - Encourage the proper management of pet waste, including information on local ordinances and enforcement provisions.
  - Educate on the proper disposal of car wash waters.
- Fall (August/September/October) –
  - Educate residents on the leaf litter collection schedule and encourage the proper disposal of leaf litter.
- c. Educate commercial users on the following topics: dumpster maintenance, grease storage at food service establishments and proper disposal practices for washwaters.

## **2. *Public Involvement/ Participation***

No additional requirements proposed for at this time.

## **3. *Illicit Discharge Detection and Elimination***

MS4 outfalls discharging to the listed impaired waters shall be considered high priority outfalls (See Part VI.C.4) and inspected annually.

## **4. *Construction Site Stormwater Runoff Control***

No additional requirements at this time.

## **5. *Post Construction Stormwater- Management***

All MS4 Operators must ensure new *development* or *redevelopment* does not expand the MS4 or increase MS4 nitrogen load to the listed impaired waters. Compliance with this requirement shall be met by on-site retention of the 1 year storm or greater using *green infrastructure* practices selected from the New York State Stormwater Management Design Manual (January 2015).

## **6. *Good Housekeeping/Pollution Prevention for Municipal Operations & Facilities***

Inspect catch basin and manhole sumps in the early spring and late fall for sediment and debris build-up.

- a. Catch basins found to be >50% full shall be cleaned and re-inspected within 3 months.
- b. Catch basin inspections and cleaning must be documented in a log that records:

- i. Date of inspection;
  - ii. Level of debris captured;
  - iii. Date of clean out; and,
  - iv. Revised frequency based on findings.
- c. All sediment and debris removed from the catch basins and manholes must be properly managed so that:
- i. Material removed from catch basins or manholes is screened for contamination and any debris containing trash or waste materials are managed as solid waste.
  - ii. Water removed during the catch basin cleaning process as well as screened and waste material will not reenter the MS4 or surface waters of the US.
    - o Inspection findings must be evaluated for trends or patterns to optimize the catch basin inspection and maintenance program and make adjustments to the overall stormwater program. For example:
      - Adjust public education and outreach to target areas with high volumes of trash and debris to reduce the amount generated in those areas (reduce burden on municipality to inspect and clean out).
      - Consider enhanced *BMPs* for trash and debris such as trash receptacles, adopt a trash can program, increased street sweeping, etc.
- d. Sweep streets in sewersheds to impaired segment monthly.
- e. Repair all outfall protection and/or bank stability problems identified during inspection of outfalls within 30 days of inspection. Repairs shall be completed in accordance with the New York Standards and Specifications for Erosion and Sediment Control;
- f. Planned upgrades to municipal properties  
 Incorporate, where feasible, cost-effective runoff reduction techniques and *green infrastructure* during planned municipal upgrades including municipal right of ways. Examples of cost-effective runoff reduction techniques include bioswales, green streets, porous pavement, replacement of closed drainage with grass swales, replacement of the existing islands in the parking lots with bioretention or curb cuts to route the flow through below-grade infiltration areas or other low cost improvements that provide runoff treatment or reduction. Consideration of feasibility should include type of land use or municipal operation, suitability of soils, presence of utilities, potential for exacerbating existing contamination problems, safety issues, maintenance requirements, and expected lifespans of available technologies.

## Part X. Standard Permit Conditions

### A. Duty to Comply

1. An *MS4 Operator* must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the CWA and the *ECL* and is grounds for enforcement action.
2. All entities with whom the *MS4 Operator* has a relationship with, as specified in Part IV.B.2, must comply with the terms of this permit, and specifically the *SWMP*. Any non-compliance with this permit and/or the *SWMP* constitutes a violation of the CWA and/or the *ECL* and is grounds for an enforcement action against the *MS4 Operator* and/or the Shared Resources entity; revocation or suspension of coverage; modification of the *MS4 general permit*; or denial of a Notice of Intent to Continue Coverage.

### B. Enforcement

Failure of the *MS4 Operator* or the entity with whom the *MS4 Operator* relies upon to *develop*, implement or enforce the conditions of this general permit to strictly adhere to any of the *SPDES general permit* requirements contained herein shall constitute a permit violation. There are substantial criminal, civil, and administrative penalties associated with violating the provisions of this permit. Fines of up to \$37,500 per day for each violation and imprisonment for up to fifteen (15) years may be assessed depending upon the nature and degree of the offense.

### C. Continuation of the Expired *SPDES General Permit*

This *SPDES general permit* expires five years from the effective date of this permit. If a new general permit is not issued prior to the expiration of this general permit, an *MS4 Operator* is still covered under this permit and is authorized to *discharge* in accordance with the terms and conditions of this general permit, if it is extended pursuant to the State Administrative Procedure Act and 6 NYCRR Part 621, until a new general permit is issued.

### D. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for an *MS4 Operator* in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this *SPDES general permit*.

### E. Duty to Mitigate

The *MS4 Operator* and entities with whom the *MS4 Operator* relies upon to *develop*, implement or enforce the conditions of this general permit shall take all reasonable steps to minimize or prevent any *discharge* in violation of this *SPDES general permit* which has a reasonable likelihood of adversely affecting human health or the environment.

## **F. Duty to Provide Information**

The *MS4 Operator* shall, within a reasonable time as set forth in a *Department* request, furnish to the *Department* or an authorized representative of the *Department* all documentation necessary to demonstrate eligibility and any information to determine compliance with this permit or to determine whether cause exists for modifying or revoking this permit, or suspending or denying coverage under this permit, in accordance with the terms and conditions of this permit. Failure to provide information requested shall be a violation of the terms of this *SPDES general permit* and applicable regulation.

## **G. Other Information**

An *MS4 Operator* who becomes aware of a failure to submit any relevant facts or has submitted incorrect information in the NOI or in any other documentation required by this permit to the *Department*, must promptly submit such facts or information using the contact information in Part II.B.2 of this permit. Failure of the *MS4 Operator* to correct or supplement any relevant facts within five (5) business days of becoming aware of the deficiency shall constitute a violation of this permit.

## **H. Property Rights**

The issuance of this *SPDES general permit* does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations, nor does it limit, diminish and / or stay compliance with any terms of this permit.

## **I. Severability**

The provisions of this *SPDES general permit* are severable, and if any provision of this *SPDES general permit*, or the application of any provision of this *SPDES general permit* to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

## **J. Signatory Requirements**

All NOIs, reports, certifications or information submitted to the *Department*, or that this *SPDES general permit* requires, must be maintained by the *MS4 Operator*, and shall be signed by the responsible person as indicated in this section. It shall constitute a permit violation if an incorrect and/or improper signatory authorizes any required forms, and/or reports.

### **1. Notices of Intent**

All NOIs shall be signed by either a principal executive officer or ranking elected official. Principal executive officer includes (1) the chief executive officer of the municipal agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

## **2. Reports Required and Other Information Requested**

All reports required by this *SPDES general permit* and other information requested by the *Department* shall be signed by a person described in X.J.1 or by a duly authorized representative of that person. All other positions within the MS4 Operators organization must be a duly authorized representative and may obtain this designation by satisfying the following:

- a. The authorization is made in writing by a person described in X.J.1 and submitted to the *Department*; and
- b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated MS4, or an individual or position having overall responsibility for environmental matters for the *MS4 Operator* (a duly authorized representative may thus be either a named individual or any individual occupying a named position); and
- c. The written authorization shall include the name, title and signature of the authorized representative.

## **3. Changes to authorization**

If an authorization to *discharge* is no longer accurate because a different *MS4 Operator* has responsibility for the overall operation of another *MS4 Operator's* program, these changes must be indicated on the Annual Report submitted to the *Department* per Part V.C.2.

## **4. Initial signatory authorization or changes to signatory authorization**

The initial signatory authorization must be submitted to the *Department* with any reports to be signed by a signatory representative. If a signatory authorization under X.J.2 is no longer accurate because a different individual, or position, has responsibility for the overall operation of the facility, a new signatory authorization satisfying the requirements of X.J.2 must be submitted to the *Department* with any reports to be signed by an authorized representative.

## **5. Certification**

Any person signing documents under paragraph VI.H shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

### **K. Penalties for Falsification of Reports**

In accordance with 6NYCRR Part 750-2.4 and 750-2.5, any person who knowingly makes any false material statement, representation, or certification in any application, record, report or other document filed or required to be maintained under this permit, including reports of compliance or noncompliance shall, upon conviction, be punished in accordance with ECL §71-1933 and or Articles 175 and 210 of the New York State Penal Law.

### **L. Oil and Hazardous Substance Liability**

Nothing in this *SPDES general permit* shall be construed to preclude the institution of any legal action or relieve the *MS4 Operator* from any responsibilities, liabilities, or penalties to which it is or may be subject under section 311 of the CWA or section 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

### **M. Requiring an Individual Permit or an Alternative General Permit**

1. The *Department* may require any person authorized by this *SPDES general permit* to apply for and/or obtain either an *individual SPDES permit* or an alternative *SPDES general permit*. Where the *Department* requires a *MS4 Operator* to apply for an *individual SPDES permit*, the *Department* will notify such person in writing that a permit application is required. This notification shall include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for filing the application, and a deadline not sooner than 180 days from *MS4 Operator's* receipt of the notification letter, whereby the authorization to *discharge* under this general permit shall be terminated. Applications must be submitted to the appropriate Regional Office. The *Department* may grant additional time to submit the application upon request of the applicant.
2. Any *MS4 Operator* authorized by this *SPDES general permit* may request to be excluded from the coverage of this *SPDES general permit* by applying for an *individual SPDES permit* or an alternative *SPDES general permit*. In such cases, a *MS4 Operator* must submit an individual application or an application for an alternative *SPDES general permit* in accordance with the requirements of 40 CFR 122.26(c)(1)(ii), with reasons supporting the request, to the *Department* at the address for the appropriate Regional Office. The request may be granted by issuance of any *individual SPDES permit* or an alternative *SPDES general permit* if the reasons cited by the *MS4 Operator* are adequate to support the request.
3. When an individual *SPDES permit* is issued to a discharger authorized to *discharge* under a *SPDES general permit* for the same *discharge(s)*, the general permit authorization for outfalls authorized under the individual permit is automatically terminated on the effective date of the individual permit unless termination is earlier in accordance with 6 NYCRR Part 750.

## **N. Other State Environmental Laws**

1. Nothing in this *SPDES general permit* shall be construed to preclude the institution of any legal action or relieve a *MS4 Operator* from any responsibilities, liabilities, or penalties established pursuant to any applicable *State* law or regulation under authority preserved by section 510 of the CWA.
2. No condition of this *SPDES general permit* releases the *MS4 Operator* from any responsibility or requirements under other environmental statutes or regulations.

## **O. Proper Operation and Maintenance**

A *MS4 Operator* must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the *MS4 Operator* to achieve compliance with the conditions of this *SPDES general permit*. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a *MS4 Operator* only when necessary to achieve compliance with the conditions of the *SPDES general permit*.

## **P. Inspection and Entry**

1. The *MS4 Operator* shall allow the Commissioner of NYSDEC, the Regional Administrator of the USEPA, the applicable county health department, or their authorized representatives, upon the presentation of credentials and other documents as may be required by law, to:
2. Enter upon the *MS4 Operator's* premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this *SPDES general permit*;
3. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, including records required to be maintained for purposes of operation and maintenance; and
4. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment), practices, or operations regulated or required under the permit.

## **Q. Permit Actions**

This permit may, at any time, be modified, suspended, revoked, or renewed by the *Department* in accordance with 6 NYCRR Part 621.

## **R. Anticipated noncompliance**

The *MS4 Operator* shall give advance notice to the *Department* of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. Notification of planned changes or anticipated noncompliance does not limit, diminish and / or stay compliance with any terms of this permit.

**S. Permit Transfers.**

Coverage under this *SPDES general permit* is not transferable to any person except after notice to the *Department*.



## Part XI. Acronyms and Definitions

### A. Acronym List

BMP - Best Management Practice  
CFR - Code of Federal Regulations  
CSO – Combined Sewer Overflows  
CWA - Clean Water Act  
ECL - *Environmental Conservation Law*  
EDP – Effective Date of the Permit  
ERP – Enforcement Response Plan  
IDDE – Illicit *Discharge* Detection and Elimination  
LID – Low Impact *Development*  
MCC - Municipal Compliance Certification  
MCM - Minimum Control Measure  
MEP - Maximum Extent Practicable  
MS4 - Municipal Separate Storm Sewer System  
MSGP – Multi-Sector General Permit  
NOV – Notice of Violation  
NPDES - National Pollutant *Discharge* Elimination System  
NYSDEC – New York State *Department* of Environmental Conservation  
O&M – Operations and Maintenance  
ORI – Outfall Reconnaissance Inventory  
POC - Pollutant of Concern  
SPDES - State Pollutant *Discharge* Elimination System  
SWMP - Stormwater Management Program  
SWMP Plan - Stormwater Management Program Plan  
SWPPP - Stormwater Pollution Prevention Plan  
TMDL - Total Maximum Daily Load  
UA - Urbanized Area  
USEPA – United States Environmental Protection Agency

## B. Definitions

**Activities** - See Best Management Practice

**Additionally Designated Areas** – Areas designated by New York State as regulated small MS4s to be covered under the SPDES stormwater *discharge* control program. As required by 40 CFR 123.35, New York State has *developed* a process, as well as criteria to designate small MS4s other than those described in 40 CFR 122.32(a)(1) as regulated small MS4s. This criteria can be found in the document, Designation Criteria for Identifying Regulated Municipal Separate Storm Sewer Systems (MS4s), January 2010.

**Automatically Designated Areas** - means those areas served by MS4s that are located within the boundaries of a Bureau of the Census defined urbanized area based on the latest decennial Census.

**Best Management Practice (BMP)** - means schedules of activities, practices (and prohibitions of practices), maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the state. *BMPs* also include treatment requirements, operating procedures, and practices to control runoff, spillage and leaks, sludge or waste disposal, or drainage from areas that could contribute pollutants to stormwater *discharges*. BMP is referred to in EPA's fact sheets and other materials. *BMPs* are also referred to as "activities" or "management practices" throughout the MS4 requirements under this *SPDES general permit*.

**Construction Activity**- as defined by the SPDES General Permit for Stormwater *Discharges* from Construction Activity (GP-0-15-002). Any clearing, grading, excavation, demolition or stockpiling activity that results in soil disturbance. Clearing activities can include but are not limited to logging equipment operation, the cutting and skidding of trees, stump removal and/or brush root removal. Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

**Department** - means the New York State Department of Environmental Conservation as well as meaning the Department's designated agent.

**Development (Develop)** - period after initial authorization under this *SPDES general permit* when the MS4 Operator creates, designs or *updates* activities, *BMPs*, tasks or other measures to include in their SWMP.

**Discharge(s)** - any addition of any pollutant to waters of the State through an outlet or point source.

**Environmental Conservation Law (ECL)** - means chapter 43-B of the Consolidated Laws of the State of New York, entitled the *Environmental Conservation Law*.

**Equivalent (Equivalence)** – the practice or measure meets all the performance, longevity, maintenance, and safety objectives of the technical standard and will provide an equal or greater degree of water quality protection.

**Green Infrastructure** - Green infrastructure are stormwater management and treatment practices that essentially infiltrate, evapotranspire or reuse stormwater, with significant utilization of soils and vegetation rather than traditional hardscape collection, conveyance and storage structures. Common green infrastructure approaches include green roofs, trees and tree boxes, rain gardens, vegetated swales, pocket wetlands, infiltration planters, vegetated median strips, reforestation, and protection and enhancement of riparian buffers and floodplains.

**Groundwater** - Are waters in the saturated zone. The saturated zone is a subsurface zone in which all the interstices are filled with water under pressure greater than that of the atmosphere. Although the zone may contain gas-filled interstices or interstices filled with fluids other than water, it is still considered saturated.

**Illicit Discharge** – Any *discharge* into an MS4 that is not entirely composed of stormwater, except those identified in Part I.A.3. Examples of illicit *discharges* are non-permitted sanitary sewage, garage drain effluent, and waste motor oil. However, an illicit *discharge* could be any other non-permitted *discharge* which the MS4 Operator or *Department* has determined to be a substantial contributor of pollutants to the small MS4.

**Impaired Water** - a water is impaired if it does not fully support its designated use(s) and/or meet applicable water quality standards. The State Section 303(d) List of Impaired/TMDL Waters identifies the impaired waterbodies and pollutants for which the development of a TMDL is still needed. States will generally have associated, but separate lists of impaired waters for which TMDLs have already been established, or for which other existing controls to resolve the impairment are in place. For the purposes of this permit “impaired” refers to impaired waters for which TMDLs have been established, those on the 303(d) list and those for which existing controls such as permits are expected to resolve the impairment.

**Implementation** - period after *development* of SWMP, where the MS4 Operator puts into effect the practices, tasks and other activities in their SWMP.

**Individual SPDES Permit** - A SPDES permit issued to a single facility in one location that is unique with respect to *discharge* characteristics and other factors. (as distinguished from a *SPDES general permit*).

**Industrial Activity** - the ten categories of industrial activities included in the definition of “stormwater *discharges* associated with industrial activity,” as defined in 40 CFR 122.26(b)(14)(i)-(ix) and (xi).

**Larger Common Plan of Development or Sale** - means a contiguous area where multiple separate and distinct *construction activities* are occurring, or will occur, under one plan. The term “plan” in “larger common plan of development or sale” is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, State Environmental Quality Review Act Application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating that *construction activities* may occur on a specific plot.

For discrete construction projects that are located within a larger common plan of development or sale that are at least 1/4 mile apart, each project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same “common plan” is not concurrently being disturbed.

**Major Outfall** - a municipal separate storm sewer outfall that *discharges* from a single pipe with an inside diameter of 36 inches or more or its equivalent *discharge* from a single conveyance other than circular pipe which is associated with a drainage area of more than 50 acres); or for municipal separate storm sewers that receive storm water from lands zoned for industrial activity (based on comprehensive zoning plans or the equivalent, an outfall that *discharges* from a single pipe with an inside diameter of 12 inches or more or from its equivalent (*discharge* from other than a circular pipe associated with a drainage area of 2 acres or more)

**Management Practices** - See *Best Management Practices*

**Maximum Extent Practicable (MEP)** - is a technology-based standard established by Congress in the Clean Water Act '402(p)(3)(B)(iii) where the cost is wholly disproportionate to the benefit.

**Measurable Goals** - are the goals set forth by this permit so that each MS4 Operator's SWMP will be instrumental in protecting water quality.

**MS4 Operator** - The person, persons or legal entity that is responsible for the small MS4, as indicated by signing the NOI to gain coverage for the MS4 under this *SPDES general permit*

**Municipal/Municipalities** - A city, town, borough, county, parish, district, association or other public body created by or under state law and having

jurisdiction over a separate storm sewer system. Examples of other public entities that are included in this program include the State *Department of Transportation*, State University Campuses, federal and State prisons, State and federal hospitals, Thruway and Dormitory Authorities, public housing authorities, school and other special districts.

**Municipal operations** - activities performed at various locations within the regulated areas (i.e. street and bridge maintenance; municipal building maintenance; park and open space maintenance, etc.) that have the potential to contribute a pollutant of concern to the MS4 or surface water of the State. Municipal operations are typically transient and may or not be performed at a fixed location.

**Municipal Separate Storm Sewer System (MS4)** - a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

1. owned or operated by a State, city, town, village, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA, that *discharges* to surface waters of the State;
2. designed or used for collecting or conveying stormwater;
3. which is not a combined sewer; and
4. which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

**National Pollutant *Discharge* Elimination System** - means the national system for the issuance of wastewater and stormwater permits under the Federal Water Pollution Control Act (Clean Water Act).

**Non-traditional MS4s** - state and federal prisons, office complexes, hospitals; state: transportation agencies; university campuses, public housing authorities, schools, other special districts.

**Operator** –.see MS4 Operator

**Outfall** - any point where an MS4 *discharges* to either surface waters of the State or to another MS4. Outfalls include *discharges* from pipes, ditches, swales, and other points of concentrated flow. Areas of non-concentrated (sheet) flow which drain to surface waters of the State or to another MS4's system are not considered outfalls and should not be identified as such on the system map. (Also see Major Outfall)

**Pollutant of Concern (POC)** – a pollutant that might reasonably be expected to be present in stormwater in quantities that may cause or contribute to a water quality violation in waters of the State. These pollutants include but are not limited to nitrogen, phosphorus, silt and sediment, pathogens, floatables, petroleum hydrocarbons, heavy metals, and polycyclic aromatic hydrocarbons (PAHs).

**Qualified Professional** - a person that is knowledgeable in the principles and practices of stormwater management and treatment, such as a licensed Professional Engineer, Registered Landscape Architect or other *Department* endorsed individual(s). Individuals preparing SWPPPs that require the post-construction stormwater management practice component must have an understanding of the principles of hydrology, water quality management practice design, water quantity control design, and, in many cases, the principles of hydraulics in order to prepare a SWPPP that conforms to the *Department's* technical standard. All components of the SWPPP that involve the practice of engineering, as defined by the NYS Education Law (see Article 145), shall be prepared by, or under the direct supervision of, a professional engineer licensed to practice in the State of New York.

**Qualifying Storm Event** - a storm event of at least 0.1 inch precipitation providing the interval from the preceding measurable storm is at least 72 hours.

**Regulated Area** – The area served by MS4s that discharge to outfalls within *automatically designated areas* and *additionally designated areas*.

**Retrofit** – to modify or add to existing stormwater infrastructure for the purpose of reducing pollutant loadings. Examples, some of which may not be effective for all pollutants, include:

**Section 303(d) Listed Waters** - Section 303(d) is part of the federal CWA that requires the *Department* to prepare a list every two years of all surface waters in the State for which beneficial uses of the water are impaired by pollutants. Beneficial uses include water for drinking, recreation, aquatic habitat, and industrial use. These impaired waters are water quality-limited estuaries, lakes, and streams that fall short of state surface water quality standards, and are not expected to improve within the next two years. See also: Impaired Water.

**Sizing Criteria** –the criteria included in Part I.C.2 of the SPDES General Permit for Stormwater *Discharges* from Construction Activity (GP-0-15-002) that are used to size post-construction stormwater management control practices. The criteria include; Water Quality Volume (WQv), Runoff Reduction Volume (RRv), Channel Protection Volume (Cpv), Overbank Flood (Qp), and Extreme Flood (Qf).

**Small MS4** – A small MS4 is an MS4 within an urbanized area or other areas *additionally designated* by the *Department*.

**SPDES general permit** - means a SPDES permit issued pursuant to 6 NYCRR Part 750-1.21 authorizing a category of *discharges*.

**Staff** - actual employees of the MS4 Operator.

**State** - means the State of New York.

**State Pollutant *Discharge* Elimination System (SPDES)** - means the system established pursuant to Article 17 of the ECL and 6 NYCRR Part 750 for issuance of permits authorizing *discharges* to the waters of the state.

**Stormwater** - the portion of precipitation and snow melt that flows off the land surface to waters of the state.

**Stormwater Management Program (SWMP)** - means the program *developed* and implemented by the MS4 Operator which provides a comprehensive integrated planning approach involving public participation and, where necessary, intergovernmental coordination, to reduce the *discharge* of POCs and specified pollutants to the MEP, using management practices, control techniques and systems, design and engineering methods, and other appropriate provisions. MS4 Operators are required at a minimum to *develop*, implement and enforce a SWMP designed to address POCs and reduce the *discharge* of pollutants from the MS4 to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of the ECL and the Clean Water Act. The SWMP must address all MS4 requirements in this SPDES Permit.

**Stormwater Management Program Plan** - used by the MS4 Operator to document *developed*, planned and implemented SWMP elements. The *SWMP plan* must describe how pollutants in stormwater runoff will be controlled.

**Storm sewershed (sewershed)** - the land area that drains into the storm sewer system based on the surface topography in the area served by the stormsewer. Adjacent catchment areas that drain to adjacent outfalls are not separate storm sewersheds.

**Sump Capacity** - the distance between the bottom interior of the catch basin to the invert of the deepest outlet of the catch basin.

**Surface Waters of the State** - shall be construed to include lakes, bays, sounds, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic ocean within the territorial seas of the state of New York and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not

combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the state or within its jurisdiction. Waters of the state are further defined in 6 NYCRR Parts 800 to 941.

Storm sewers are not waters of the state unless they are classified in 6 NYCRR Parts 800 to 941. Nonetheless, a *discharge* to a storm sewer shall be regulated as a *discharge* at the point where the storm sewer *discharges* to waters of the state. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Act and *Environmental Conservation Law* (other than cooling ponds as defined in 40 CFR 423.11(m)(see section 750 - 1.24) which also meet the criteria of this definition are not waters of the state. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the State (such as a disposal area in wetlands) nor resulted from impoundment of waters of the state.

**Stormwater Pollution Prevention Plan (SWPPP)** - as defined per the NYSDEC SPDES General Permit for Stormwater *Discharges* from Construction Activity or NYSDEC SPDES Multi-Sector General Permit for Stormwater Associated with Industrial Activity .

**Total Maximum Daily Load (TMDL)** - A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. It is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL stipulates Waste Load Allocations (WLA) for point source *discharges*, Load Allocations (LA) for nonpoint sources, and a margin of safety (MOS).

**Traditional Land Use Control MS4s** - means a city, town or village with land use control authority.

**Traditional Non-land Use Control MS4s** - means any county agency without land use control.

**Urbanized Area (UA)** - is a land area comprising one or more places (central place(s)) and the adjacent densely settled surrounding area (urban fringe) that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile, as defined by the US Bureau of Census. It is a calculation used by the Bureau of the Census to determine the geographic boundaries of the most heavily *developed* and dense urban areas. It outlines the extent of automatically regulated areas, which do not necessarily extend to the political boundaries of a city, town, or village. SWMPs are only required within the UA.



**Water Quality Standard** - means such measures of purity or quality for any waters in relation to their reasonable and necessary use as promulgated in 6 NYCRR Part 700 et seq.