



**Department of
Environmental
Conservation**

MS4 General Permit Renewal Update

October 17, 2018

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NYS DEC – Division of Water**

NYSDEC Draft MS4 Permit

- Current MS4 Permit Expired April 30, 2017
- Public Comment Began October 30, 2016
- Comment Period Ended on February 3, 2017
- Permit SAPA Extended
- What This Means:
 - Current Permit Requirements Remain in Effect
 - Current Permittees Covered
 - Cannot Cover New Permittees



MS4 Draft Permit Considerations

- EPA Proposed Remand Rule
- Recent EPA MS4 Permits
- EPA Guidance
- Program Experience
- Audit reports
- Stakeholder input
- Comments received
 - 2015 renewal, MS4 Implementation Plans for TMDL waters



EPA Remand Rule

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- Final Rule Effective January 9, 2017
- Permitting Authority Choice
 - Comprehensive General Permit
 - Two-Step General Permit
- NYSDEC
 - Comprehensive General Permit Approach

QUESTION 1:

- NYS as the permitting authority could choose the type of general permit it is using for any small MS4 general permit.
 - What permitting option did NYS choose?

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Comprehensive General Permit

EPA Remand Rule Requirements

➤ General Permit Requirements

- Reduce Discharge of Pollutants to Maximum Extent Practicable (MEP)
- Protect Water Quality
- Satisfy Water Quality Requirements of Clean Water Act (CWA)



QUESTION 2:

- The EPA Remand Rule had three over-arching requirements.
 - Name the THREE requirements of the EPA remand rule.



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- Name the THREE requirements of the EPA remand rule.

- 1. Reduce Discharge of Pollutants to MEP**
- 2. Protect Water Quality**
- 3. Satisfy Water Quality Requirements of CWA**



EPA Remand Rule Requirements -Permit Terms and Conditions-

➤ Clear, Specific, and Measurable

Narrative	Adaptive Management Requirements
Numeric	Schedules for Implementation and Maintenance
BMP Design Requirements	Frequency of Actions
Performance Requirements	Other (i.e. Implementation of Specific Tasks or BMPs)

EPA Remand Rule Requirements (MCM 1 and 2)

1. Public Education and Outreach
 - Identify Minimum Elements
 - Require Implementation of a Public Education Program
2. Public Involvement/Participation
 - Identify Minimum Elements
 - Involve public in Storm Water Management Program.



EPA Remand Rule Requirements (MCM 3)

3. Illicit Discharge Detection and Elimination

- Procedures for Location Priority Areas
- Procedures for Tracing the Source of an Illicit Discharge
- Procedures for Removing The Source
- Procedures for Program Evaluation and Assessment



EPA Remand Rule Requirements (MCM 3 cont.)

3. Illicit Discharge Detection and Elimination
 - Storm Sewer System Map
 - Prohibit non-storm water discharges
 - Plan to detect and address non-storm water discharges
 - Inform employees, businesses, and general public of hazards associated with illegal discharges

EPA Remand Rule Requirements (MCM 4)

4. Construction Site Storm Water Runoff Control
 - Ordinance to require erosion and sediment controls
 - Erosion and Sediment Control BMPs
 - Control Wastes
 - Site Plan Review Must Consider Water Quality Impacts
 - Receipt and Consideration of Information Submitted by the Public
 - Site Inspection and Enforcement of Control Measures



EPA Remand Rule Requirements (MCM 5)

5. Post-Construction Storm Water Management
 - Strategies for use of Structural and/or Nonstructural BMPs
 - Ordinance for Post-Construction Activities
 - Ensure Long Term O&M of BMPs



QUESTION 3:

- The EPA remand rule also included requirements for each minimum control measure in the MS4 permit.
 - What is a requirement for MCM 5 Post-Construction Storm Water Management?

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**Strategies for use of Structural and/or
Nonstructural BMPs, or**

Ordinance for Post-Construction Activities, or

Ensure Long Term O&M of BMPs



EPA Remand Rule Requirements (MCM 6)

6. Municipal Operations - Pollution Prevention/Good Housekeeping
 - Develop and Implement an Operation and Maintenance Program
 - Employee Training to Prevent and Reduce Storm Water Pollution
 - Long-Term Inspection Procedures to Reduce Floatables and Other Pollutants



Draft Permit Comments



Comments for MCM 1

Public Education and Outreach

➤ EPA

- Include section listing activities to increase knowledge, change pollutant generating behavior, and improve program effectiveness

➤ NRDC, CCE, Riverkeeper, SWIM

- Require outreach to all target audiences unless not present
- Not sufficiently clear and needs a measurable component



Comments for MCM 2

Public Involvement/Participation

➤ EPA

- Choose all elements for development of SWMP and opportunities for public involvement

➤ NRDC, CCE, Riverkeeper, SWIM

- At least one “meaningful” opportunity for public input
- Specify frequency for public input.



Comments for MCM 3

Illicit Discharge Detection and Elimination

➤ EPA

- Initial Sampling of all Outfalls
- No additional sampling if action levels not exceeded or physical indicator not present.

➤ NRDC, CCE, Riverkeeper, SWIM

- Specify minimum frequency or number of educational trainings



Comments for MCM 4

Construction Site Stormwater Control

➤ EPA

- MS4 meet with contractors and sub-contractors
- Document that MS4 inspectors receive required training.

➤ NRDC, CCE, Riverkeeper, SWIM

- Specify frequency, type, or minimum number of educational initiatives



Comments for MCM 5

Post Construction Stormwater Management

➤ EPA

- Inspect SMPs twice per year (spring and fall)
- Manufactures provide training of proprietary SMPs
- Document training

➤ NRDC, CCE, Riverkeeper, SWIM

- Measurable component for training Inspection and maintenance staff
- Specify minimum inspection frequency - annually



Comments for MCM 6

Pollution Prevention and Good Housekeeping

➤ EPA

- Likes catch basin prioritization, inspection and maintenance program; however, wants more to address floatable trash/debris

➤ NRDC, CCE, Riverkeeper, SWIM

- Measures are not sufficiently specific and need measurable components



Permittee Comments

➤ Mapping

- Amount of information to include on maps
 - Value of components
- Limited resources
- Time needed to complete

➤ IDDE (MCM 3)

- Mapping, sampling, and training costs will be high
- Successful program with inspecting 20 % of outfalls



Permittee Comments (cont.)

➤ Reporting

- Resources better directed to implementation vs reporting

➤ SWPPP Implementation for High Priority Facilities

- Use visual/map photographs to replace some monitoring requirements
- Extend deadline to 5 years – limited resources



Permittee Comments (cont.)

➤ Catch Basins (MCM 6)

- Staff limitations to meet requirements
- Quantifying mass or volume removed
- Current practices meet local conditions and resources

➤ Street Sweeping (MCM 6)

- Seasonal issues
- Cost of monthly sweeping versus benefits



QUESTION 4:

- The Permittees commented heavily throughout the permit, but the comments were relatively similar.
 - What is one theme represented in the comments that repeated itself throughout the draft permit?

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**Limitations on resources
(time and funding)**

Revising the Draft MS4

Stakeholder Workgroup Meetings

Things to Consider

- EPA Remand Rule
- Recent EPA MS4 Permits
- Comments on Draft Permit
 - Stakeholder Input
- 303(d)/TMDL
- Electronic Reporting



Mapping IV.C. – Draft Review

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*



Mapping IV.C. – Comments

➤ Pre-existing Information

- References information that New York State has to provide in a digital format the MS4 can use.

➤ Funding

- Cost \$27,000 to map a watershed area including 215 catch basins and other various structures
- This will cost \$4.9 million for complete mapping of the entire system in a GIS platform



Mapping IV.C. – Comments (cont.)

➤ GIS

- It states (on page 92) that mapping “shall be completed in Geographic Information Systems (GIS) format...”
- Many smaller villages do not have GIS capability

➤ Timeline

- Systems are very old and include thousands of
- Unachievable in a 5 year permit period

Mapping IV.C. – Comments (cont.)

➤ Asset Management

- Requires information from neighboring MS4s who may not be willing to provide it including the county, state DOT, NYS Thruway Authority and even other non-traditional MS4s that we have never received any information from in the past decade.

GP-0-15-003 – VII.A.3/VII.A.3.

b. *Develop (for newly authorized MS4s) and maintain a map, at a minimum within the covered entity's jurisdiction in the urbanized area and additionally designated area, showing:*

- i. *the location of all outfalls and the names and location of all surface waters of the State that receive discharges from those outfalls;*
- ii. *by March 9, 2010, the preliminary boundaries of the covered entity's storm sewersheds have been determined using GIS or other tools, even if they extend outside of the urbanized area (to facilitate track down), and additionally designated area within the covered entity's jurisdiction; and*
- iii. *when grant funds are made available or for sewer lines surveyed during an illicit discharge track down, the covered entity's storm sewer system in accordance with available State and EPA guidance;*

Completed by
2013

e. *Map new outfalls as they are constructed or newly discovered within the urbanized area and additionally designated area;*



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GP-0-15-003 – IX.A.3./IX.D.3.

3. Illicit Discharge Detection and Elimination

a. Mapping - applicable to *traditional land use control, traditional non-land use control and non-traditional MS4s.*

Develop and maintain a map showing the entire *small MS4* conveyance system. The *covered entity* shall complete the mapping of approximately 20% of the system every year, with the entire system being mapped by January 8, 2013.

Completed by
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At a minimum, the map and/or supportive documentation for the conveyance system should 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.

GIS for TMDL
Waters

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 1:24,000 or better.



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Mapping IV.C. – Comments Addressed

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Accessory Mapping: separate from mapping the MS4 Operator needs to complete

Remove: there are alternative ways to track



Mapping IV.C. – Workgroup #1 Comments Addressed

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Update: Better define and clarify

Will also include “land use” in accessory mapping



Mapping IV.C. – Workgroup #1 Comments Addressed (cont.)

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Match this to MCM 1
for consistency
throughout the permit

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*



QUESTION 5:

- The MS4 permit MCMs are not meant to be viewed as individual requirements, but rather parts that make up the whole.
 - Which MCMs do the mapping elements target?

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ALL MCMs

Next Steps

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- Continue Stakeholder Workgroup Meetings to Address Comments
- Update Draft Permit
 - Compliance Schedule
 - Additional Materials and Resources
- Incorporate Final EPA Remand Rule Requirements
- Continue Working with EPA to Develop Electronic Reporting Tool

Parts VIII and IX – 303(d) and TMDL Waters

- Part VII - Enhanced Requirements for Impaired Waters Without an Approved TMDL
 - 2018 – New 303 (d) list of Impaired Waters
 - Phosphorus, Pathogens, and Nitrogen
- Part IX - Watershed Improvement Strategy Requirements
 - Pathogen TMDL Withdrawal
 - Phosphorus and Nitrogen



Electronic Reporting

- December 2020
 - NOI and Annual Report submitted Electronically
- Data Elements
 - Define the Data Elements
 - Update to the Federal Database
- Develop the Reporting Tool
- Train Users



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