TOWN OF MACEDON
Stormwater Management Program Plan (SWMPP)

SPDES General Permit ID# NYR20A391

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This document was initially prepared for the Town of Macedon by the Ontario-Wayne Stormwater Coalition and has been modified and updated by BME Associates on behalf of the Town of Macedon. It is intended to assist with compliance with Part IV of GP-0-15-003.

Last Revised May 2021

ACKNOWLEDGEMENTS

Sections of this document have been adapted from the document "Model Stormwater Management Plan," drafted for the Western New York Stormwater Coalition in October 2008 by Wendel Duchscherer, TVGA Consultants, and Bergmann Associates for the Western New York Stormwater Coalition.

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Introduction

The Town of Macedon Stormwater Management Program Plan (SWMPP) has been developed and revised to comply with Part IV.A. Of the New York State Department of Environmental Conservation General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (GP-0-15-003). The Stormwater Management Program Plan provides policy and management guidance for the Town of Macedon, which is a member of the Ontario-Wayne Stormwater Coalition (OWSC). The purpose of this plan is to maintain or improve water quality (see Appendix A for definition).

The OWSC exists by way of an inter-municipal agreement enacted through municipal resolution by each participating member, the term of which is from February 1, 2018 through January 31, 2023. The members include the Towns of Farmington, Macedon, Ontario, Victor and Walworth; the Village of Victor; and the Ontario County and Wayne County Highway Departments. Each of these entities is required to develop their own individual Stormwater Management Program Plan.

Part IV.A ("Stormwater Management Program (SWMPP) Requirements") of GP-0-15-003 states:

> "Covered entities must develop and enforce a SWMPP designed to reduce the discharge of pollutants from small MS4s to the maximum extent practicable ("MEP") in order to protect water quality and to satisfy the appropriate water quality requirements of the ECL [Environmental Conservation Law] and the CWA [Clean Water Act]. The objective of the permit is for MS4s to assume achievement of the applicable water quality standards." (page 15)

The SWMPP is based on the Federal Stormwater Phase II rule, issued in 1999, which requires municipal separate storm sewer system (MS4) owners and operators, in U.S. Census-defined urbanized areas as well as in additionally designated areas, to develop a Stormwater Management Program. There are six program elements designed to reduce the discharge of pollutants to the maximum extent practicable (MEP). The program elements, titled Minimum Control Measures (MCMs), include:

1. Public Education and Outreach
2. Public Involvement / Participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Runoff Control
5. Post-Construction Stormwater Management
6. Pollution Prevention / Good Housekeeping for Municipal Operations.

This document describes each MCM and the Best Management Practices (BMPs) that have been implemented to maintain compliance with the NYSDEC GP-0-15-003. Responsibilities to achieve and sustain compliance are clearly defined for each BMP. Portions of the work necessary are provided through the collective efforts of the Ontario-Wayne Stormwater Coalition members. The remaining work is the responsibility of the various departments within the Town of Macedon and are to be coordinated by the designated Stormwater Management Officer. To this end, assistance is readily available from OWSC staff upon request.

This SWMPP should be reviewed on an annual basis and updated as necessary in order to take into consideration the latest technologies and information to maintain compliance with the NYSDEC GP-0-15-003, as well as to account for progress made.

Minimum Measure 1: Public Education and Outreach

1.1 Description of Minimum Control Measure

The Public Education and Outreach MCM consists of BMPs that focus on the development of educational materials designed to inform the public about the impacts that stormwater discharges have on local water bodies. The educational materials contain specific actions as to how the public, as individuals or collectively as a group, can participate in reducing pollutants and their impact on the environment. The Public Education and Outreach program and BMPs, in combination, are expected to reach all of the constituents within the MS4's permitted boundary.

1.2 General Permit Requirements

An MS4 must, at a minimum:

a. Identify Pollutants of Concern (POCs), waterbodies of concern, geographic areas of concern, and target audiences;

i. Pollutants of Concern: The Town of Macedon's permitted area lies within the Oswego River/Finger Lakes Basin Watershed. According to the NYSDEC, "*water quality in the Oswego River/Finger Lakes Basin Watershed is generally satisfactory to good".* However, for the purposes of the Stormwater Management Program, pollutants of concern (POC) include: silt/sediment, pathogens, algal/weed growth, nutrients (phosphorus), dissolved oxygen/oxygen demand and ammonia. Known, suspected, and possible sources of these pollutants include: habitat modification, agriculture, construction (development), urban/stormwater runoff, and municipal runoff.

ii. Waterbodies of Concern: According to Appendix 2, page 108, of the GP-0-15-003, (Appendix N of the SWMPP), the Town of Macedon does not contain any impaired segments. Additionally, the Town does not contain any drinking water sources within its permitted boundaries.

Utilizing the NYSDEC Waterbody Inventory/Priority Waterbodies List, the waterbodies listed in the table on the next page, found within the Oswego River/Finger Lakes Basin (West) Watershed have been identified as flowing through the permitted area. Some waterbodies have been assessed to identify the known, suspected, and possible type of pollutants present and the known, suspected, or possible sources of pollutants. Below is a table which includes the name of the waterbody, assessment category, use impacted, severity of impact, known POC(s), known sources, suspected POC(s), and suspected sources. See Appendix D for the full Waterbody Inventory Priority Waterbodies List.

Although the NYS Barge Canal (portion 5) has been identified as an Impaired Segment within the Waterbody Inventory Priority Waterbodies List, the Canal is not listed in the General Permit as an impaired waterbody.

Waterbody	Assessment Category	Use Impacted	Severity	Known POC(s)	Known Sources	Suspected POC(s)	Suspected Sources
Red Creek and Tribs (07-04-0033) As of 08/09/2007	Minor Impacts	Aquatic Life, Recreation	Stressed	Algal/Weed Growth, Nutrients (Phosphorus), Silt/Sediment	Habitat Modification	Unknown	Agriculture
Ganargua Creek, Upper & Minor Tribs (0704-0013) As of 08/09/2007	Minor Impacts	Aquatic Life	Stressed	Nutrients (Phosphorus)	Construction (Development), Urban/Stormwater Runoff	Silt/Sediment	Agriculture
NYS Barge Canal (portion 5) (0704-0020) As of 08/13/2007	Impaired Segment	Aquatic Life	Impaired	Unknown	Unknown	D.O./Oxygen Demand, Water Level/Flow, Nutrients	Municipal, Agriculture, Hydro Modification, Urban/Stormwater Runoff
Minor Tribs to Barge Canal (0704-0019) As of 04/13/2020	UnAssessed	UnAssessed	UnAssessed	UnAssessed	UnAssessed	UnAssessed	UnAssessed

iii. Geographic Areas of Concern: Based upon the Sources of Pollutants identified by the NYSDEC and an assessment of land use, the following areas have been identified as geographic areas of concern:

- Municipal Facilities
- Canal Corridor Overlay District
- Areas under new construction/development
- Septic system areas
- Commercial parking lots
- Agriculture

iv. Targeted Audiences: Based upon the Sources of Pollutants identified by the NYSDEC and an assessment of land use, the following audiences have been targeted for public education and outreach:

- Residents
- Commercial Businesses including retail, restaurants, offices, dry cleaners, nail salons
- Automotive Business including gas stations, car washes, repair shops, etc.
- Institutions including medical centers, churches, and schools
- Developers and contractors
- Industrial facilities (factories, recyclers, auto salvage, mines)
- Agriculture

b. Develop and implement an ongoing public education and outreach program designed to describe to the general public and target audiences:

i. the impacts of stormwater discharges on waterbodies;
ii. POCs and their sources;
iii. steps contributors of these pollutants can take to reduce pollutants in stormwater runoff; and
iv. steps contributors of non-stormwater discharges can take to reduce pollutants (non-stormwater discharges are listed below);

See Section 1.4 Best Management Practices Implemented or Underway for details of the public education and outreach program.

c. Develop, record, periodically assess, and modify as needed, measurable goals; and

These elements are covered in the Town of Macedon's Individual MS4 Annual Report and the Ontario-Wayne Stormwater Coalition's combined Annual Report that is submitted to the DEC.

d. Select appropriate education and outreach activities and measurable goals to ensure the reduction of all POCs in stormwater discharges to the MEP.

These elements are covered in the Town of Macedon's Individual MS4 Annual Report and the Ontario-Wayne Stormwater Coalition's combined Annual Report that is submitted to the DEC. Also see Section 1.4 Best Management Practices Implemented or Underway for details of the public education and outreach program.

1.3 Methodology for Compliance with Permit Requirements

The OWSC has developed many of the BMPs necessary for this MCM. BMPs have included: brochures, a webpage, and a display for community events. In addition, the Town of Macedon has developed community specific BMPs to compliment the activities performed by the Coalition (see Section 1.4). BMPs will be evaluated by the Town of Macedon on an annual basis and updated or enhanced, as necessary.

1.4 Best Management Practices Implemented or Underway

Previous permit accomplishments include:

Description of Activity	Purpose	Responsibility	Targeted Audiences	Annual Compliance Requirements
Brochure Development and Distribution, See next page for list of existing brochures.	Raise awareness and change behavior	OWSC, Stormwater Management Coordinator (SMC)	Construction Operators, Residents, Homeowners, Restaurants, Automotive, Pet Owners	Display brochures at municipal facilities: Town Hall and Library. Track brochures distributed where possible (some brochures exist online for download). • 2020-2021 – Estimated 25 brochures • 2019-2020 – Estimated 25 brochures • 2018-2019 – Estimated 50 brochures • 2017-2018 – Estimated 45 brochures
Purchasing and distribution of coloring books	Raise awareness and change behavior	OWSC, SMC	Children and residents	Track number of coloring books distributed.
Creation of poster display for community events	Raise awareness	OWSC, SMC	General Public	Document number of times utilized. • Lumberjack Festival September 2019 • Lumberjack Festival September 2018
Development and installation of community signs in new developments	Raise awareness, promote OWSC website	OWSC, SMC	Homeowners, General Public	Document number of signs installed. • 2018-2021 – No new signs installed • 2017-2018 – 20 signs were installed
Development and distribution of automobile decals on municipal vehicles	Raise awareness and promote OWSC website	OWSC, SMC	General Public	Document number of decals distributed. • Removed from plan due to poor quality of decals. March 2019
Development of the OWSC webpage **http://owsc.org**	Raise awareness and educate	OWSC, SMC	General Public, Businesses, Schools	Update webpage annually with relevant information. Document number of visits, annually. • 2020-2021 – 78 Visitors, 127 Site Sessions. The OWSC changed Website Host Providers and the totals from the previous website are not accessible. • 2019-2020 – 1,522 Users (3,950 website page views) • 2018-2019 – 1,663 Users (4,162 website page views)

				• 2017-2018 – 4,453 website page views
Description of Activity	**Purpose**	**Responsibility**	**Targeted Audiences**	**Annual Compliance Requirements**
Development of the Town of Macedon webpage **http://www.macedontown.net/ms4/**	Raise awareness and educate	SMC, BME Associates	General Public, Businesses, Schools	Update website frequently with relevant information. Website does not have the capability to document the number of users or website views. • 2021-2022 Plan to add brochures to website
Distribution of Town wide mailer with stormwater information (Macedon Messenger)	Raise awareness and educate	SMC, BME Associates	General Public, Businesses	Document number of residences reached and how many times mailer was distributed (typically twice per year). • 2020-2021 – Zero due to COVID Restrictions • 2019-2020 – Approximately 6,400 • 2018-2019 – Approximately 4,000 • 2017-2018 – Approximately 4,000
Social media (Town of Macedon MS4 Facebook page) **https://www.facebook.com/MacedonMS4/**	Raise awareness and provide opportunity for public to participate	SMC, BME Associates	General Public	Update page frequently with relevant information. Document annually number of Likes and Followers. • 2020-2021 – 136 Followers, 131 Likes • 2019-2020 – 121 Followers, 116 Likes • 2018-2019 – 99 Followers, 97 Likes
The creation of Stormwater Door Hangers "Stormwater Pollution Found in Your Area"	Raise awareness and educate	Highway Superintendent	Homeowners and Residents	Document number of flyers distributed. • 2018-2021 – 0 Flyers were distributed
Coordinate with local businesses or entities to display stormwater brochures and educational material	Raise awareness and educate	SMC, BME Associates	General Public	Document number of brochures distributed. • 2017-2018 – 100 Brochures and letters
Septic System Brochure with Letter mailed to Residents who live along the Canal	Raise awareness and educate	SMC, BME Associates	Septic System Owners	Document number of brochures and letters mailed. • 2017-2018 – 65 Brochures and letters
Restaurant Brochure with Letter mailed to Restaurants in the Town of Macedon	Raise awareness and educate	SMC, BME Associates	Restaurant Owners and Employees	Document number of brochures and letters mailed. • 2017-2018 – 18 Brochures and letters
Created a flyer to be posted on the display boards at local Parks	Raise awareness and educate	SMC, BME Associates	General Public	• 2018-2019 – Posted at Bullis Park & Gravino Park

A Commercial Brochure was created to be mailed to commercial properties with parking lots	Raise awareness and educate	SMC, BME Associates	Business Owners	Document number of brochures and letters mailed. • To be mailed in 2021-2022
Description of Activity	**Purpose**	**Responsibility**	**Targeted Audiences**	**Annual Compliance Requirements**
Conducted an online Water Quality Survey to provide a baseline of community knowledge of stormwater efforts	Raise awareness and educate	OWSC, Causewave Community Partners, BME Associates	General Public	Survey Results can be found online at the OWSC Website. The survey provides a baseline of community knowledge and can be used to evaluate future stormwater educational efforts. • 2018-2019 – 538 Respondents participated
Chip clips were purchased for distribution at local events and with building permits	Promote the OWSC website and goals	OWSC	General Public	Document number of chip clips distributed. • 2020-2021 – 50 Chip Clips • 2019-2020 – 50 Chip Clips • 2018-2019 – 100 Chip Clips • 2017-2018 – 100 Chip Clips
Pet waste bag dispensers were purchased for distribution at local events and with pet licenses	Promote the OWSC website and goals and raise awareness regarding bacteria found in pet waste	OWSC	Pet Owners	Document number of pet waste bag dispensers distributed. • 2020-2021 – 60 Pet Waste Bag Dispensers • 2019-2020 – 40 Pet Waste Bag Dispensers • 2018-2019 – 100 Pet Waste Bag Dispensers
Reusable shopping bags were purchased through the OWSC.	Promote OWSC, recycling, and reducing plastic waste	OWSC	General public	Distributed in the 2020-2021 permit year to Long Acre Farms • 2020-2021 – 50 Reusable Bags

List of Brochures:

- Clean Car, Clean Water – 2017
- Composting Waste Becomes Wealth – 2017
- Food Service Establishments Keeping Stormwater Clean – Revised 2017
- Healthy Lawn, Healthy Water – Revised 2017
- How to Empty Your Pool or Spa Wisely – Revised 2107
- Illicit Discharge Detection and Elimination – 2017
- Lawn Fertilizer, Look for the Zero – 2017
- Living Near a Stormwater Pond – Revised 2017
- Managing and Minimizing Household Hazardous Waste – 2017
- Moving Dirt? Building Something? – 2008
- Our Home, Our Stormwater – 2017
- Pesticide Protection – 2017
- Plant a Rain Garden – 2017
- Septic Tips for Your Septic Tank – Revised 2017
- Stormwater Management Reducing Pollution – 2017
- The Scoop about Pet Poop - Revised 2020
- Reducing Stormwater Pollution at Your Business – 2019

1.5 Best Management Practices for Future Consideration

The Town of Macedon will continue implementing the Best Management Practices as outlined in Section 1.4. The following BMPs will be considered for future exploration and implementation:

- Pet Waste Brochures to be distributed at a local veterinarian office.
- The Restaurant poster to be given to the restaurants in Town.
- Reusable bags to be donated to the Fire Department for chicken dinners.
- The Commercial Brochure to be mailed to commercial properties with parking lots.

1.6 Minimum Reporting Requirements

At a minimum, the Town of Macedon shall report on the items below:

a. List education / outreach activities performed for the general public and target audiences and provide any results (for example, number of people attended, amount of materials distributed, etc.);

These items are listed in the Town of Macedon's Individual MS4 Annual Report Form and the Ontario-Wayne Stormwater Coalition's combined Annual Report Form that is submitted to the DEC.

b. Permittees performing the education and outreach activities required by other MCMs (listed below), may report on those activities in MCM 1 and provide the following information applicable to their program. This may include the following:

- IDDE education activities planned or completed for public employees, businesses, and the general public, as required by Part VIII.A.3 of GP-0-15-003;
- Construction site stormwater control training planned or completed, as required by Part VIII.A.4 of GP-0-15-003;
- Employee pollution prevention / good housekeeping training planned or completed, as required by Part VIII.A.6 of GP-0-15-003.

These items are covered in the Town of Macedon's Individual MS4 Annual Report and the Ontario-Wayne Stormwater Coalition's combined Annual Report that is submitted to the DEC.

c. Report on effectiveness of program, BMP and measurable goal assessment.

These items are covered in the Town of Macedon's Individual MS4 Annual Report and the Ontario-Wayne Stormwater Coalition's combined Annual Report that is submitted to the DEC.

Minimum Measure 2: Public Involvement and Participation

2.1 Description of Minimum Control Measure

The Public Involvement and Participation MCM consists of a set of BMPs that are focused on getting members of the local community involved in the MS4's municipal stormwater management program. Compliance with State and local public notice requirements will be maintained whenever public participation is sought or required. The BMPs include a number of practices designed to seek public input on the SWMPP and Annual Report accomplishments in addition to describing specific activities

that encourage public participation. The target audiences for the public involvement program are key individuals and groups that may have an interest in the particular BMPs as well as the general public located within the permitted boundary.

2.2 General Permit Requirements

An MS4 must, at a minimum:

a. Comply with the State Open Meetings Law and local public notice requirements, such as Open Meetings Law, when implementing a public involvement / participation program;

The Town of Macedon complies with the State Open Meetings Law and local public notice requirements. All public meetings are posted on their Home Webpage (http://www.macedontown.net/).

b. Provide the opportunity for the public to participate in the development, implementation review and revision of the SWMPP:

The 2021-2022 SWMPP revision will be posted on the Town of Macedon's MS4 Webpage and the public will have an opportunity to provide comments. The SWMPP was announced at the May 6th Town Board Meeting.

c. Identify a Local stormwater public contact. Identify a local point of contact for public concerns regarding stormwater management and compliance with this general SPDES permit. The name or title of this contact and the telephone number must be published in public outreach and public participation materials and kept updated with the Department on the MCC form;

The OWSC and Town of Macedon's websites have identified Scott Allen as the Stormwater Management Program Coordinator and lists his telephone number and email address.

d. Shared annual report presentation. Prior to submitting the final shared annual report to the Department, by June 1 of each reporting year (see Part V.C.2.b.), the report may be presented by each participating individual covered entity at an existing municipal meeting or may be made available for comments on the internet.

The Town of Macedon and the OWSC Coalition complies with the shared annual report presentation by posting the shared draft Annual Report on the Coalition's website (www.owsc.org). Public comments are directed to the OWSC Consultant who prepares the draft. A summary of the received comments and responses will be included in the final Shared Annual Report submitted to the DEC. As of this time, there have been no comments received. The final Shared Annual Reports are posted on the Coalition's website (www.owsc.org) and include permit years 2009-2010 to present day.

e. Develop, record, periodically assess and modify as needed measurable goals; and

These items are covered in the Town of Macedon's Individual MS4 Annual Report and the Ontario-Wayne Stormwater Coalition's combined Annual Report that is submitted to the DEC.

f. Select appropriate public involvement/participation activities and measurable goals to ensure the reduction of POCs in stormwater discharges to the MEP.

These items are covered in the Town of Macedon's Individual MS4 Annual Report and the Ontario-Wayne Stormwater Coalition's combined Annual Report that is submitted to the DEC. Also see Section 2.3.

2.3 Methodology for Compliance with Permit Requirements

In order to comply with this MCM, each MS4 must involve the local public in their SWMPP. By participating in the OWSC, each MS4 can comply with certain aspects of the SWMPP such as public participation at the OWSC meetings, incorporating a feedback mechanism into their local websites and accounting for stormwater business that is covered during public meetings that are held in targeted Ontario and Wayne County communities. Individual MS4s are responsible for allowing public review of their individual SWMPPs and the shared Annual Report for the OWSC, which are both posted on the Town of Macedon's website.

2.4 Best Management Practices Implemented or Underway

Previous permit accomplishments include:

Description of Activity	Purpose	Responsibility	Targeted Audiences	Annual Compliance Requirements
Public Review of Annual Report	To encourage public participation and to meet permit requirements	SMC, OWSC, BME Associates	Residents	The Town of Macedon prepares the individual MS4 Annual Report and submits the report to the OWSC Consultant who prepares the Coalition's shared report. The consultant also receives public comments (none at this time), and submits the Final Report to the DEC. The final report is also posted on the OWSC's website by OWSC staff.
Public Review of Stormwater Management Program Plan (SWMPP)	To encourage public participation in the planning phase of the SWMPP	SMC, BME Associates	Residents	Announce the SWMPP at a Town Board Meeting, post a draft on the Town of Macedon's website to solicit comments and advertise the plan on the Facebook page to receive additional comments. Post final copy at Library for review. • SWMPP to be announced at a Town Board Meeting on May 6th, 2021. and will be posted on the Town website and MS4 Facebook page. A hard copy will be posted at the Town Library. • SWMPP was announced at a Town Board Meeting on April 23rd, 2020. • SWMPP last reviewed at Town Planning Board Meeting May 9th, 2019
Support Canal Clean Sweep Events	To encourage public participation in stormwater pollution prevention activities	SMC, BME Associates	Residents, General Public	Facilitate event by availing public resources, such as gloves, trash bags, equipment, and dumpsters for waste hauling and disposal. Document activities to include number of participates and dates of activities. Advertise events on Facebook page. • 2018-2019 April 22, 2018 - 28 people collected 28 bags of trash along Route 31 and the Canal in Macedon
High Acres Waste Management Open House	To encourage public participation in	SMC, OWSC, BME	Residents, General Public	Provide Enviroscape Model display and hand out brochures about stormwater pollution. The High Acres

	stormwater pollution prevention activities	Associates		Waste Management Open House occurs every other year at the High Acres Facility in Fairport. • 2019-2020 – July 25th, 2019 Approximately 500 attendees • 2017-2018 – July 27th, 2017 Approximately 850 attendees
Description of Activity	**Purpose**	**Responsibility**	**Targeted Audiences**	**Annual Compliance Requirements**
Provide an annual E-Waste Collection event for residents to dispose of their electronic wastes	To encourage the public to dispose of their electronics properly to prevent electronics from being dumped illegally	SMC, Highway Superintendent	Residents	Document date of event, number of participants, and weight of electronics collected. • 2020-2021 – October 19th and 20th - 25 Pallets of electronics were collected • 2019-2020 – October 21st and 22nd - 8,994 pounds • 2018-2019 – No e-waste event • 2017-2018 – October 17, 2017
Provide an annual paper shredding event	To encourage the public to recycle paper to reduce the amount of wastes in our landfills	SMC, Highway Superintendent	Residents	Document date of event and number of participants. • 2020-2021 – 125 residents participated in the event • 2019-2020 – April 30th, 2019 – 75 residents participated in the event
Participate in an annual Pharmaceutical Collection event	To encourage the public to properly dispose of unused pharmaceuticals to reduce the amount of wastes in our landfills and pollutants in our sewer system	SMC, Highway Superintendent, Macedon PD	Residents	Document date of event and amount collected • 2020-2021 – Event cancelled due to COVID • 2019-2020 – April and October, - 100 pounds of material were collected • 2018-2019 – April 29th, 2018
Develop a storm drain marking program	To encourage to public to get involved and teach residents about stormwater versus the sanitary sewer system	SMC, OWSC, BME Associates	Residents, Students	The opportunity to volunteer to install storm drain makers has been posted on Macedon's MS4 Website with a link to the OWSC's website.
Lumberjack Festival	To encourage public participation in stormwater pollution prevention activities	SMC, OWSC, BME Associates	Residents, General Public	Provide Enviroscape Model display and hand out brochures about stormwater pollution. • 2019-2020 – September 7th, 2019 – ~3100 attendees

				• 2018-2019 – September 9, 2018 - ~3,100 attendees
Description of Activity	**Purpose**	**Responsibility**	**Targeted Audiences**	**Annual Compliance Requirements**
Conducted an online Water Quality Survey to provide direction for public participation outreach events.	Raise awareness, educate, and promote volunteering in the community	OWSC, Causewave Community Partners, BME Associates	General Public	Survey Results can be found online at the OWSC Website. The survey provides a baseline of community knowledge and is intended to be used to plan public outreach events. • 538 Respondents participated in survey
Conducted a Rain Garden Workshop	To promote green infrastructure	Caroline Kilmer-Myers	General Public	Document date of event and number of participants • 2019-2020 – May 21, 2019, 11 participants

2.5 Best Management Practices for Future Consideration

The Town of Macedon will continue implementing the Best Management Practices as outlined in Section 2.4. The following BMPs will be considered for future exploration and implementation:

- Coordinate an outdoor or virtual Rain Barrel Workshop with the OWSC.
- Continue researching an Adopt a Highway Program with the OWSC and Wayne County.

2.6 Minimum Reporting Requirements

At a minimum, the Town of Macedon shall report on the items below:

a. Annual Report presentation information (date, time, attendees) or information about how the annual report was made available for comment;

The Town of Macedon and the OWSC Coalition complies with the shared annual report presentation by posting the shared draft Annual Report on the Coalition's website (www.owsc.org). Public comments are directed to the OWSC Consultant who prepares the draft. The Town will also post a copy of the Town's Individual MS4 Annual Report on the Town's Facebook Page and MS4 Website notifying residents that they can view and comment on the Annual Report.

b. Comments received and intended responses (as an attachment);

As of the date of this SWMPP, there have been no comments received by the public.

c. Public involvement participation activities (for example stream cleanups including the number of people participating, the number of calls to a water quality hotline, the number and extent of storm drain stenciling); and

These items are covered in the Town of Macedon's Individual MS4 Annual Report and the Ontario-Wayne Stormwater Coalition's combined Annual Report that is submitted to the DEC.

d. Report on effectiveness of program, BMP and measurable goal assessment.

These items are covered in the Town of Macedon's Individual MS4 Annual Report and the Ontario-Wayne Stormwater Coalition's combined Annual Report that is submitted to the DEC.

Minimum Measure 3: Illicit Discharge Detection & Elimination

3.1 Description of Minimum Control Measure

The Illicit Discharge Detection and Elimination (IDDE) MCM consists of BMPs that focus on the detection and elimination of illicit discharges located within the MS4s. The BMPs describe outfall mapping and update procedures, the legal authority mechanism that will be used to effectively prohibit illicit discharges, enforcement procedures and actions to ensure that the regulatory mechanism is implemented, the dry weather screening program, procedures for tracking down and locating the source of

any illicit discharges, procedures for locating priority areas, and procedures for removing the sources of the illicit discharges.

3.2 General Permit Requirements

An MS4 must, at a minimum:

a. Develop, implement and enforce a program to detect and eliminate illicit discharges into the small MS4;

On September 13, 2007, the Town Board of Macedon adopted Town Code Chapter 112 Storm Sewers Article I Illicit Discharge Detection and Elimination to prohibit illicit discharges and implement enforcement procedures and actions as needed. See Town Code Chapter 112-14 for Enforcement: penalties for offenses and Standard Operating Procedure (SOP) #6 Locating Illicit Discharges.

b. Develop and maintain a map, at a minimum within the permittee's jurisdiction in the urbanized area and additionally designated area;

See Section 3.4 Best Management Practices Implemented or Underway for status of mapping.

c. Field verify outfall locations;

See Section 3.4 Best Management Practices Implemented or Underway for status of outfall locations.

d. Conduct an outfall reconnaissance inventory, addressing every outfall within the urbanized area and additionally designated area within the covered entity's jurisdiction at least once every five years, with reasonable progress each year;

See Section 3.4 Best Management Practices Implemented or Underway for status of outfall reconnaissance inventory. Also see SOP #1 for Dry & Wet Weather Outfall Inspections.

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

The Town of Macedon continuously maps new outfalls as they are constructed or newly discovered within the urbanized areas and additionally designated area. Over the course of the 2018-2019 permit year the Town began to locate and inspect the Village of Macedon's outfalls. The Town plans to begin surveying and mapping identified outfalls during the 2021-2022 permit year.

f. Prohibit, through a law, ordinance, or other regulatory mechanism, illicit discharges into the small MS4 and implement appropriate enforcement procedures and actions.

On September 13, 2007, the Town Board of Macedon adopted Town Code Chapter 112 Storm Sewers Article I Illicit Discharge Detection and Elimination to meet the requirements of the Minimum Control Measure 3 of the SPDES General Permit. See Town Code Chapter 112-14 for Enforcement: penalties for offenses.

g. Develop and implement a program to detect and address non-stormwater discharges, including illegal dumping, to the small MS4.

See SOP #1 Dry & Wet Weather Outfall Inspections and SOP #6 Locating Illicit Discharges.

h. Inform public employees, businesses, and the general public of the hazards associated with illegal discharges and improper disposal of waste;

See the Town of Macedon's website and the following brochures for information regarding hazards associated with illegal discharges and improper disposal of wastes:

- The Homeowner & MS4
- Food Service Establishments
- Clean Car, Clean Water
- Our Home, Our Stormwater
- Reducing Stormwater Pollution at Your Business
- The Scoop about Pet Poop
- Septic Tips for Your Septic Tank
- How to Empty Your Pool or Spa Wisely
- Illicit Discharges Detection & Elimination

i. Address the categories of non-stormwater discharges or flows as necessary;

The Town of Macedon's Stormwater Management Coordinator will annually update the non-stormwater discharge list as necessary such that no exempt stormwater discharge is a substantial contribution of pollutants. See Section 3.4 for list of exempt non-stormwater discharges.

j. Develop, record, periodically assess, and modify as needed, measurable goals; and

These elements are covered in the Town of Macedon's Individual MS4 Annual Report and the Ontario-Wayne Stormwater Coalition's combined Annual Report that is submitted to the DEC.

k. Select appropriate IDDE BMPs and measurable goals to ensure the reduction of all POCs in stormwater discharges to the MEP.

These elements are covered in the Town of Macedon's Individual MS4 Annual Report and the Ontario-Wayne Stormwater Coalition's combined Annual Report that is submitted to the DEC.

3.3 Methodology for Compliance with Permit Requirements

In the initial permit years, the OWSC secured the cooperation of the Monroe County Department of Environmental Services (MC DES) to provide IDDE training. Andy Sansone, an employee of the MC DES, presented information on IDDE methodologies including several field training opportunities which focused on inspection procedures, pollution prevention and good housekeeping practices. In the previous permit year, the OWSC reaffirmed its commitment to providing annual IDDE training to each MS4 community. The OWSC has and will continue to provide resources (GPS, camera, etc.) to assist field staff of individual MS4s with the outfall reconnaissance inventories, dry weather inspections, and outfall mapping. At this time, the Town of Macedon has assumed the responsibility of mapping their own outfalls.

3.4 Best Management Practices Implemented or Underway

Previous permit accomplishments include:

<table>
<tr><th>Description of Activity</th><th>Purpose</th><th>Responsibility</th><th>Targeted Audiences</th><th colspan="3">Annual Compliance Requirements</th></tr>
<tr><td>Outfall Mapping</td><td>To facilitate track down and prioritize outfalls based on proximity to waterbodies and community hotspots. See SOP #6 for Locating Illicit Discharges.</td><td>SMC, BME Associates, Novara GeoSolutions</td><td>General Public, Residents, Municipal Employees, Local Businesses, Construction Site Owners & Contractors</td><td colspan="3">The Town of Macedon has developed and maintained a Geographic Information Systems (GIS) map showing the urbanized area and additionally designated areas. The outfalls are currently mapped on paper maps. The outfalls have been inspected and latitude and longitude coordinates have been collected for future mapping purposes.</td></tr>
<tr><td rowspan="11">Status of Outfall Reconnaissance Inventory</td><td rowspan="11">The Town of Macedon has developed and implemented a plan to detect illicit discharges by conducting routine visual inspections of every mapped outfall. See SOP #1 for Dry & Wet Weather Outfall Inspections.</td><td rowspan="11">SMC, BME Associates, OWSC Intern</td><td rowspan="11">General Public, Residents, Municipal Employees, Local Businesses, Construction Site Owners & Contractors</td><td>Permit Year</td><td>Approx. # of Outfalls Mapped</td><td># of Outfalls Screened</td></tr>
<tr><td>2020-2021</td><td>122</td><td>17</td></tr>
<tr><td>2019-2020</td><td>122</td><td>9</td></tr>
<tr><td>2018-2019</td><td>122</td><td>122</td></tr>
<tr><td>2017-2018</td><td>78</td><td>78</td></tr>
<tr><td>2016-2017</td><td>78</td><td>35</td></tr>
<tr><td>2015-2016</td><td>78</td><td>70</td></tr>
<tr><td>2014-2015</td><td>62</td><td>44</td></tr>
<tr><td>2013-2014</td><td>52</td><td>26</td></tr>
<tr><td>2012-2013</td><td>52</td><td>52</td></tr>
<tr><td>Mechanism to prohibit and enforce against illicit discharges</td><td>To provide the Town with the legal authority to eliminate any discharges that are found.</td><td>SMC, Town Attorney, Town Board</td><td>General Public, Residents, Municipal Employees, Businesses, Construction Site Owners & Contractors</td><td colspan="3">On September 13, 2007, the Town Board adopted Town Code Chapter 112 Storm Sewers Article I Illicit Discharge Detection and Elimination to meet the requirements of MCM 3 of the SPDES General Permit. See Town Code Chapter 112-14 for Enforcement: penalties for offenses.</td></tr>
<tr><td>Brochure Development, Website and Facebook Postings</td><td>To inform the public about the hazards associated with illegal discharges and improper disposal</td><td>SMC, BME Associates</td><td>Businesses, General Public</td><td colspan="3">Continue to update brochures. Continue to post information on the Macedon MS4 page about illicit discharges.</td></tr>
</table>

	of wastes.			
Description of Activity	**Purpose**	**Responsibility**	**Targeted Audiences**	**Annual Compliance Requirements**
In-house training	To inform employees about the hazards associated with illegal discharges and improper disposal of wastes	SMC, OWSC, BME Associates	Municipal Employees	Continue to train employees on how to identify and detect illicit discharges. • 2020-2021 – March 5th, 2021 – 14 employees trained • 2019-2020 – March 3rd, 2020 – 14 employees trained • 2018-2019 – February 26th, 2019 – 15 employees trained • 2017-2018 - December 15th, 2017 – 13 employees trained
Inventory outfalls located in the former Village of Macedon Boundaries	To comply with GP-0-15-003 and to help the Town detect and eliminate illicit discharges	SMC, BME Associates, Caroline Myers Kilmer	Town of Macedon	The initial outfall inventory was completed in April of 2019. Outfalls have been added to overall inventory and are to be inspected at a rate of at least 20% each permit year or 100% within a 5-year period.
Obtain a WQIP Grant to map the Town's conveyance system: catch basins, inlets, manholes, closed pipe systems, open drainage systems, and culvert crossings to include the direction of flow	To comply with GP-0-15-003 and to help the Town detect and eliminate illicit discharges	SMC, Grants Are Us, BME Associates, Caroline Myers Kilmer, Novara GeoSolutions	Town of Macedon	The of Town of Macedon received the mapping grant in December of 2018. Surveying is tentatively scheduled to begin in the summer of 2021.
Update the MS4 Urbanized Area and Additionally Designated Area Boundaries on the online GIS system	To comply with GP-0-15-003 and to help the Town organize efforts for minimum control measures	SMC, BME Associates, Novara GeoSolutions	Town of Macedon	Monitor the DEC Website and update MS4 Boundaries as urbanized areas are updated.
Addressing Categories of Non-Stormwater Discharges	No person shall discharge or cause to be discharged into the MS4 any materials other than	SMC	General Public, Residents, Municipal Employees, Businesses,	The SMC will annually review and update the non-stormwater discharge list such that no exempt stormwater discharge is a substantial

	stormwater, except as noted in the list below		Construction Site Owners & Contractors	contribution of pollutants. • 2017-2021 – No changes implemented
Description of Activity	**Purpose**	**Responsibility**	**Targeted Audiences**	**Annual Compliance Requirements**
Inspect properties enrolled in the Agricultural & Farmland Protection Program	To comply with GP-0-15-003 and actively look for illicit discharges	SMC	Agriculture	Document number of properties inspected and illicit discharges discovered. • 2020-2021 – Easements were not inspected due to COVID • 2019-2020 – 8 Easements were inspected. No illicit discharges were reported
Inspect Commercial Car Washes and Gas Stations	To comply with GP-0-15-003 and actively look for illicit discharges	SMC, BME Associates	Businesses	Document number of businesses inspected and illicit discharges discovered. • 2019-2020 – 2 Commercial Car Washes and 2 Gas Stations, 0 Illicit Discharges Discovered

List of exempt Non-Stormwater Discharges as listed in Town Code 112-6:

- water line flushing or other potable water sources
- landscape irrigation or lawn watering
- existing diverted stream flows
- rising groundwater
- uncontaminated groundwater infiltration to storm drains
- uncontaminated pumped groundwater
- foundation or footing drains
- crawl space or basement sump pumps
- air-conditioning condensate
- irrigation water
- springs
- water from individual residential car washing
- natural riparian habitat or wetland flows
- dechlorinated swimming pool discharges,
- residential street wash water
- water from fire-fighting activities
- any other water source not containing pollutants

3.5 Best Management Practices for Future Consideration

The Town of Macedon will continue implementing the Best Management Practices as outlined in Section 3.4. The following BMPs will be considered for future exploration and implementation:

- Begin mapping the stormwater system to include catch basins, manholes, closed pipe systems, open drainage systems, and culvert crossings.

3.6 Minimum Required Reporting

At a minimum, the Town of Macedon shall report on the items below:

a. Number and percent of outfalls mapped;

b. Number of illicit discharges detected and eliminated;

c. Percent of outfalls for which an outfall reconnaissance inventory has been performed;

d. Status of system mapping;

e. Activities in and results from informing public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste;

f. Regulatory mechanism status - certification that the mechanism and directive are equivalent to the States model IDDE discharge local law (if not already completed and submitted with an earlier annual report); and

See Town Code Chapter 112 Storm Sewers Article I Illicit Discharge Detection and Elimination of the Town Codes.

g. Report on effectiveness of program, BMP and measurable goal assessment.

These items (a.-g.) are covered in the Town of Macedon's Individual MS4 Annual Report and the Ontario-Wayne Stormwater Coalition's combined Annual Report that is submitted to the DEC.

Minimum Measure 4: Construction Stormwater Management

Polluted stormwater runoff from construction sites often flows to MS4s and ultimately is discharged into local rivers and streams. Of the pollutants listed in the box to the right, sediment is usually the main pollutant of concern. According to the 2000 National Water Quality Inventory, States and Tribes report that sedimentation is one of the most widespread pollutants affecting assessed rivers and streams, second only to pathogens (bacteria). Sedimentation impairs 84,503 river and stream miles (12% of the assessed river and stream miles and 31% of the impaired river and stream miles). Sources of sedimentation include agriculture, urban runoff, construction, and forestry. Sediment runoff rates from construction sites, however, are typically 10 to 20 times greater than those of agricultural lands, and 1,000 to 2,000 times greater than those of forest lands. During a short period of time, construction sites can contribute more sediment to streams than can be deposited naturally during several decades. The resulting siltation, and the contribution of other pollutants from construction sites, can cause physical, chemical, and biological harm to our nation's waters. For example, excess sediment can quickly fill rivers and lakes, requiring dredging and destroying aquatic habitats.[1]

Pollutants Commonly Discharged From Construction Sites

- Sediment
- Solid and sanitary wastes
- Phosphorous (fertilizer)
- Nitrogen (fertilizer)
- Pesticides
- Oil and grease
- Concrete truck washout
- Construction chemicals
- Construction debris

4.1 Description of Minimum Control Measure

The Construction Site Runoff MCM consists of BMPs that focus on the reduction of pollutants to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of stormwater discharges from construction activities disturbing less than one acre will be considered if it is part of a larger common plan of development or sale that would disturb one acre or more. The BMPs describe the legal authority mechanism that will be used to require erosion and sediment controls, enforcement procedures and actions to ensure compliance, requirements for construction site operators to implement appropriate erosion and sediment control BMPs, requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter and sanitary waste at the construction site, procedures for site plan review which incorporate the consideration of potential water quality impacts, procedures for receipt and consideration of information submitted by the public, and procedures for site inspection and enforcement of control measures.

The stormwater regulations for Construction Site Runoff Control apply to both privately-owned and managed projects, and MS4-owned and managed projects. Therefore, the BMPs described in this section have application to both types of projects.

[1] Adapted from US EPA Fact Sheet 833-F-00-008, "Construction Site Runoff Control Minimum Control Measure." January 2000 (revised December 2005). See EPA's Publications search page online at http://cfpub.epa.gov/npdes/pubs.cfm?program_id=0

4.2 General Permit Requirements

An MS4 must, at a minimum:

a. Develop, implement, and enforce a program that:

i. Provides equivalent protection to the NYS SPDES General Permit for Stormwater Discharges from Construction Activities per the requirements of general SPDES permit (GP-0-20-001);

See Town Code Chapter 113: Stormwater Management and Erosion and Sediment Control and Chapter 135-43 Stormwater Control.

ii. Addresses stormwater runoff to the small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Control of stormwater discharges from construction activity disturbing less than one acre must be included in the program if:

- That construction activity is part of a larger common plan of development or sale that would disturb one acre or more

See Town Code Chapter 113: Stormwater Management and Erosion and Sediment Control and Chapter 135-43 Stormwater Control.

iii. Includes a law, ordinance or other regulatory mechanism to require a SWPPP for each applicable land disturbing activity that includes erosion and sediment controls that meet the State's most up-to-date technical standards:

See Town Code Chapter 113: Stormwater Management and Erosion and Sediment Control and Chapter 135-43 Stormwater Control. The ordinance addresses issues relating to the following:

- Erosion and Sediment Control
- Stormwater Management Design Requirements
- Construction Requirements
- Enforcement; penalties for offenses
- Fees for municipal services relating to SWPPP reviews, inspections, and maintenance.

iv. Contains requirements for construction site operators to implement erosion and sediment control management practices;

See Town Code Chapter 113: Stormwater Management and Erosion and Sediment Control and Chapter 135-43 Stormwater Control.

v. Allows for sanctions to ensure compliance to the extent allowable by State or local law;

See Town Code Chapter 113-8: Stormwater Management and Erosion and Sediment Control; Enforcement; penalties for offenses.

vi. Contains requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;

See Town Code Chapters 135-43. B.2. a.5. & 135-43. B.2.a 6. Stormwater Control.

vii. Describes procedures for SWPPP review that incorporate consideration of potential water quality impacts and review of individual pre-construction SWPPPs to ensure consistency with State and local sediment and erosion control requirements;

SWPPP Plan Review is currently outsourced to the qualified professionals at the Ontario County Soil & Water Conservation District or BME Associates.

viii. Describes procedures for receipt and follow up on complaints or other information submitted by the public regarding construction site stormwater runoff;

If a complaint is issued by the public regarding construction site stormwater runoff, the Town will document the complaint on the Construction Site Complaint Log, see Appendix I and the Stormwater Management Coordinator or designee will follow up with a site visit. For situations that pose a significant threat to human health or the environment, the SMC or designee will conduct a site visit immediately. If the complaint is found to be valid, the Stormwater Management Coordinator will request corrective action by the site's Project Manager. See SOP #10: SWPPP Review, Construction Site Inspection & Enforcement.

ix. Educates construction site operators, design engineers, municipal staff and other individuals to whom these regulations apply about the construction requirements in the covered entity's jurisdiction, including the procedures for submission of SWPPPs, construction site inspections, and other procedures associated with control of construction stormwater;

Audience	Type of Training	Frequency
Construction Site Operators	Pre-con checklist	One-time at pre-con
Design Engineers	MCSWD Workshop	Annual
Select Municipal Staff	NYSDEC Endorsed 4-Hour Erosion & Sediment Control Training Course	Every 3 years

x. Ensures that construction site contractors have received erosion and sediment control training, including the trained contractors as defined in the SPDES general permit for construction, before they do work within the covered entity's jurisdiction:

The Town of Macedon requires a copy of the NYSDEC Endorsed 4-Hour Erosion & Sediment Control Training Course Certificate from the Trained Contractor to be stored onsite in the Stormwater Pollution Prevention Plan (SWPPP).

xi. Establishes and maintains an inventory of active construction sites, including the location of the site, owner/operator contact information;

The Stormwater Management Program Coordinator maintains an excel inventory of active construction sites which includes the location of the site and the owner/operator contact information. Also see Appendix I, for an example of the Construction Site Inventory and Inspection Tracking spreadsheet.

xii. Develop (for newly authorized MS4), record, periodically assess and modify as needed measurable goals; and

These elements are covered in the Town of Macedon's Individual MS4 Annual Report and the Ontario-Wayne Stormwater Coalition's combined Annual Report that is submitted to the DEC.

xiii. Select appropriate construction stormwater BMPs and measurable goals to ensure the reduction of all POCs in stormwater discharges to the MEP.

These elements are covered in the Town of Macedon's Individual MS4 Annual Report and the Ontario-Wayne Stormwater Coalition's combined Annual Report that is submitted to the DEC.

4.3 Methodology for Compliance with Permit Requirements

The Town of Macedon has adopted the NYS Sample Local Law for Stormwater Management and Erosion & Sediment Control. This ordinance authorizes the MS4 to enforce a program that reduces pollutant runoff from construction sites. The Town of Macedon is responsible for reviewing SWPPPs, inspecting construction sites and enforcing the permit requirements on developers / owner / operators that do not comply with the regulations.

4.4 Best Management Practices Implemented or Underway

Previous permit accomplishments include:

Description of Activity	Purpose	Responsibility	Annual Compliance Requirements
Ordinance Adoption	These ordinances establish minimum stormwater management requirements and controls to protect the general health, safety, and welfare of the public.	SMC, Town Board, Town Attorney	Amend stormwater ordinance, as necessary, to maintain compliance with NYS stormwater standards and requirements as defined the current or any future permits pertaining to stormwater management activities. See Town Code Chapter 113: Stormwater Management and Erosion and Sediment Control and Chapter 135-43 Stormwater Control.
Design Requirements	Review construction project, planning, and design criteria to determine changes needed to comply with local, state and/or federal construction stormwater regulations.	SMC, Ontario Soil & Water Conservation District, BME Associates	Review construction project, planning, and design criteria to determine changes needed to comply with local, state and/or federal construction stormwater regulations. Remain current with the NYS Stormwater Management Design Manual updates.
Public Review	Provide the public with an opportunity to review and comment on proposed design plans and construction sites.	SMC, BME Associates	New developments are announced and reviewed at both the Planning Board (1st & 3rd Monday of each month) and Town Board meetings (2nd and 4th Thursdays of each month). The public has an opportunity to request information and relay concerns to at that time. The Town also posts signs on the proposed project's property for one week prior to the public meeting. The Town adds a notice on the MS4 Facebook Page notifying the public that construction plans and SWPPPs are available to review at the Town Hall and Library. A section has been created in the library dedicated to stormwater education which contains documents that are available for public review, including SWPPPs.
SWPPP Review & MS4 Acceptance	Review SWPPPs to verify construction plan compliance with local, state, and/or federal construction stormwater regulations. Sign SWPPP Acceptance Forms.	SMC, Ontario Soil & Water Conservation District, BME Associates	Continue SWPPP reviews by qualified professionals (consultants). Maintain checklists of SWPPPs reviewed and continue to sign MS4 Acceptance Forms. The SWPPP review checklist can be found on the Town's MS4 Webpage to allow developers and engineers to review the form prior to submitting a SWPPP.

Description of Activity	Purpose	Responsibility	Annual Compliance Requirements
Pre-Construction Meetings & Checklist	To educate Operators/Owners and Contractors about Erosion & Sediment Controls.	SMC, Ontario Soil & Water Conservation District, BME Associates	The Pre-Construction Checklist can be found on the Town's MS4 Website to allow developers, engineers and contractors to review the form prior to the pre-construction meeting.
SWPPP Inspections	Inspect construction sites to ensure compliance with the GP-0-20-001.	Ontario Soil & Water Conservation District, BME Associates	Construction Site Inspections are outsourced to qualified professionals. Third party contractors ensure inspections are compliant with the requirements listed in GP-0-20-001. The Town of Macedon receives and maintain records of construction site inspections and corrective actions performed.
SWPPP Enforcement	Take action against owners and / or operators of local construction sites that are in violation of local construction stormwater regulations	SMC, Ontario Soil & Water Conservation District, BME Associates	Notify owners/operators of local construction sites who are in violation of the standards defined in GP-0-20-001 using the enforcement procedures outlined in SOP #10, SWPPP Review, Construction Site Inspection & Enforcement.
SWPPP Review Training	Ensure that representatives completing the construction plan reviews are properly trained.	SMC, Ontario Soil & Water Conservation District, BME Associates	Verify with Consultants that SWPPP reviewers are qualified professionals (PE, CPESC).

4.5 Best Management Practices for Future Consideration

The Town of Macedon will continue implementing the Best Management Practices as outlined in Section 4.4. The following BMPs will be considered for future exploration and implementation:

- Continue implementing Best Management Practices noted in Section 4.4. Very little construction has occurred in the past annual reporting year in the Town of Macedon. The Town will continue to investigate additional Best Management Practices, as needed.

4.6 Minimum Required Reporting

At a minimum, the Town of Macedon shall report on the items below:

a. Number of SWPPPs reviewed;

b. Number and type of enforcement actions;

c. Percent of active construction sites inspected once;

d. Percent of active construction sites inspected more than once;

e. Number of construction sites authorized for disturbances of one acre or more; and

f. Report on effectiveness of program, BMP and measurable goal assessment.

The above elements (a.-f.) are covered in the Town of Macedon's Individual MS4 Annual Report and the Ontario-Wayne Stormwater Coalition's combined Annual Report that is submitted to the DEC.

Minimum Measure 5: Post-Construction Stormwater Management

5.1 Description of Minimum Control Measure

The Post-Construction Stormwater Management MCM consists of BMPs that focus on the prevention or minimization of water quality impacts from both new and re-development projects that disturb one acre or more. This includes projects less than one acre that are part of a larger common plan of development or sale that discharge into the MS4. The BMPs describe structural and/or non-structural practices, the legal authority mechanism that will be used to address post-construction runoff from new development and redevelopment projects, and procedures to ensure long term operation and maintenance of BMPs.

5.2 General Permit Requirements

An MS4 must, at a minimum:

a. Develop, implement, and enforce a program that:

i. Provides equivalent protection to the NYS SPDES General Permit for Stormwater Discharges from Construction Activities. (GP-0-20-001);

See Town Code Chapter 113: Stormwater Management and Erosion and Sediment Control and Chapter 135-43 Stormwater Control.

ii. Addresses stormwater runoff from new development and redevelopment projects to the small MS4 from projects that result in a land disturbance of greater than or equal to one acre. Control of stormwater discharges from projects of less than one acre must be included in the program if:

- That project is part of a larger common plan of development or sale

See Town Code Chapter 113: Stormwater Management and Erosion and Sediment Control and Chapter 135-43 Stormwater Control.

iii. Includes a law, ordinance or other regulatory mechanism to require post-construction runoff controls from new development and re-development projects to the extent allowable under State or Local law that meet the State's most up-to-date technical standards:

- The mechanism must be equivalent to one of the versions of the" NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control"; and
- Equivalence must be documented using the NYSDEC Gap Analysis Workbook or certified by the attorney representing the small MS4 as being equivalent to one of the sample laws if one of those sample laws is not adopted or if a modified version of one of the sample laws is adopted

After consultation with the Albany DEC office, the Town of Macedon decided to delay updating their local laws until the new MS4 Permit and its sample local laws were adopted. On June 15th, 2017, the Town of Macedon notified the DEC about this decision and as of the date of this publication, the Town has not received a response from the DEC, see Appendix E for a copy of the letter.

The Town of Macedon has adopted a post-construction stormwater management ordinance. This ordinance establishes minimum stormwater management requirements and controls to protect the general health, safety, and welfare of the public. The ordinance addresses issues relating to the following:

- Permanent Erosion and Sediment Controls;
- Stormwater Management Design Requirements; and
- Fee structure for municipal services relating to SWPPP reviews, inspections, and maintenance

See Town Code Chapter 113: Stormwater Management and Erosion and Sediment Control and Chapter 135-43 Stormwater Control, Appendix E.

iv. Includes a combination of structural or non-structural management practices (according to standards defined in the most current version of the NYS Stormwater Management Design Manual) that will reduce the discharge of pollutants to the MEP. In development of environmental plans such as watershed plans, opens space preservation programs, local laws, and

ordinances covered entities must incorporate principles of Low Impact Development (LID), Better Site Design (BSD) and other Green Infrastructure practices to the MEP. Covered entities must consider natural resource protection, impervious area reduction, maintaining natural hydrologic condition in developments, buffers or set back distances for protection of environmentally sensitive areas such as streams, wetlands, and erodible soils in the development of environmental plans.

- If a stormwater management practice is designed and installed in accordance with the New York State Stormwater Management Design Manual or has been demonstrated to be equivalent and is properly operated and maintained, then MEP will be assumed to be met for post-construction stormwater discharged by the practice.

See Town Code Chapter 113: Stormwater Management and Erosion and Sediment Control and Chapter 135-43 Stormwater Control.

v. Describes procedures for SWPPP review that incorporate consideration of potential water quality impacts and review of individual pre-construction SWPPPs to ensure consistency with local post-construction stormwater requirements;

- Ensure that the individuals performing SWPPP reviews are adequately trained, or under the supervision of a qualified professional who understand the State and Local post construction stormwater requirements;
- All SWPPPs must be reviewed for sites where the disturbance is one acre or greater; and
- After review of SWPPPs, the permittee must utilize the "SWPPP Acceptance Form" created by the Department and required by the SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001) when notifying construction site owner / operators that their plans have been accepted and approved by the permittee.

The SWPPP review is currently outsourced to the qualified professionals at the Ontario County Soil & Water Conservation District or BME Associates.

vi. Establish and maintain an inventory of post-construction stormwater management practices to include at a minimum, practices discharging to the small MS4 that have been installed since March 10, 2003, all practices owned by the small MS4, and those practices found to cause or contribute to water quality standard violations;

- The inventory shall include at a minimum: location of practice (street address or coordinates); type of practice; maintenance needed per the NYS Stormwater Management Design Manual, SWPPP, or other provided documentation; and dates and type of maintenance performed

See Appendix J for the Post-Construction Stormwater Management Practices Inventory.

i. Ensures adequate long-term operation and maintenance of management practices by trained staff, including assessment to ensure that the practices are performing properly.

- The assessment shall include inspection items identified in the maintenance requirements (NYS Stormwater Management Design Manual, SWPPP, or other maintenance information) for the practice. Covered entities are not required to collect stormwater samples and perform specific chemical analysis.

  See Appendix J for examples of the Post-Construction Inspection Forms. Reports to be filed in a separate binder.

ii. Covered entities may include in the SWMPP provisions for development of a banking and credit system. MS4s must have an existing watershed plan based on which offsite alternative stormwater management in lieu of or in addition to onsite stormwater management practices are evaluated. Redevelopment projects must be evaluated for pollutant reduction greater than required treatment by the state standards. The individual project must be reviewed and approved by the Department. Use of a banking and credit system for new development is only acceptable in the impaired watersheds to achieve the no net increase requirement and watershed improvement strategy areas to achieve pollutant reductions in accordance with watershed plan load reduction goals. A banking and credit system must at minimum include:

At this time, the Town of Macedon has not evaluated this option.

b. Develop (for newly authorized MS4s), implement, and provide adequate resources for a program to inspect development and re-development sites by trained staff and to enforce and penalize violators;

- Post-Construction Inspections are conducted by interns, BME Associates, or a trained employee from the Highway Department.
- The Town of Macedon has the ability to issue enforcement measures to owners and/or operators of local development projects that are in violation of local post-construction runoff regulations using enforcement procedures outlined in SOP #11 Inspecting Post Construction Controls & Enforcement.
- The Town of Macedon sends the Town Engineer to stormwater training courses offered by the Monroe County Stormwater Coalition.

g. Develop (for newly authorized MS4s), record, periodically assess and modify as needed measurable goals; and

These elements are covered in the Town of Macedon's Individual MS4 Annual Report and the Ontario-Wayne Stormwater Coalition's combined Annual Report that is submitted to the DEC.

h. Select appropriate post-construction stormwater BMPs and measurable goals to ensure the reduction of all POCs in stormwater discharges to the MEP.

These elements are covered in the Town of Macedon's Individual MS4 Annual Report and the Ontario-Wayne Stormwater Coalition's combined Annual Report that is submitted to the DEC.

5.3 Methodology for Compliance with Permit Requirements

The Town of Macedon has adopted the NYS Sample Local Law for Stormwater Management and Erosion & Sediment Control which includes provisions to enforce a program that reduces pollutant runoff from both newly and re-developed sites. The Town of Macedon is responsible for inspecting the sites for proper operation and maintenance and enforcing the permit requirements and for properties that are not in compliance. In this manner, Town of Macedon can ensure adequate long-term management practices for both public and private facilities.

5.4 Best Management Practices Implemented or Underway

Previous permit accomplishments include:

Description of Activity	Purpose	Responsibility	Annual Compliance Requirements
Post-Construction Stormwater Management Ordinance Adoption	These ordinances establish minimum stormwater management requirements and controls to protect the general health, safety, and welfare of the public.	SMC, Town Board, Town Attorney	Amend stormwater ordinance, as necessary, to maintain compliance with NYS stormwater standards and requirements as defined the current or any future permits pertaining to stormwater management activities. See Town Code Chapter 113: Stormwater Management and Erosion and Sediment Control and Chapter 135-43 Stormwater Control.
SWPPP Review of Post-Construction Controls & MS4 Acceptance	Review SWPPPs to incorporate consideration of potential water quality impacts and review of individual pre-construction SWPPPs to ensure consistency with local post-construction stormwater requirements. Sign SWPPP Acceptance Forms.	SMC, Ontario Soil & Water Conservation District, BME Associates	Continue SWPPP reviews by qualified professionals (consultants). Maintain records of plans reviewed and approved for construction under this program. Continue to sign MS4 Acceptance Forms after SWPPPs have been reviewed and found to be in compliance with current regulations.
Inventory of projects that qualify for inspection under local post-construction runoff regulations	To track and identify post-construction controls to benefit water quality.	SMC, BME Associates	The Post-Construction Inventory and Inspection Tracking spreadsheet has been updated. The inventory was last updated on April 10, 2021.
Inspect MS4 owned and operated post-construction facilities.	To ensure adequate long-term operation and maintenance of post-construction facilities.	SMC, BME Associates	Inspect and document maintenance as needed. See SOP #11 Inspecting Post-Construction Controls & Enforcement. Document follow up actions. Inspection reports are filed in a separate binder. See Appendix J for examples of the Post-Construction Inspection Forms. • 2020-2021 – Documented & Inspected 27 SWMFs • 2019-2020 – Documented & Inspected 26 SWMFs • 2018-2019 – Documented & Inspected 24 SWMFs
Obtain As-Builts for post-construction facilities.	To ensure that the SMPs have been constructed as per plan for effective long-term operation	SMC	Obtain As-Builts of newly constructed post-construction facilities and file plans with annual inspection documents. The requirement to submit As-Builts for post-construction facilities has been added to the Town's Conditions of Site Plan.

			Approval.
Description of Activity	**Purpose**	**Responsibility**	**Annual Compliance Requirements**
Offer Low Impact Development, Better Site Design, & GI training.	Offer training for Planning Board members to consider LID, BSD, and GI principles when conducting site plan reviews to reduce the discharge of pollutants to the maximum extent practicable.	SMC, Caroline Myers Kilmer	Document training date and number of members trained. • 2020-2021 March 5, 2021 – The Town Engineer and 6 Planning Board members received training. • 2019-2020 March 2, 2020 – The Town Engineer and 7 Planning Board Members received training. • 2018-2019 – March 4, 2019 – 7 Planning Board Members received training.
Map Post-Construction Facilities	To help identify post-construction facilities and facilitate inspections.	SMC, BME Associates, GeoSolutions	Continue to research post-construction facilities identified on the DEC Website and add facilities to the maps as they are constructed. • 2020-2021 – 1 facility was discovered and added to the post-construction inventory.

5.5 Best Management Practices for Future Consideration

The Town of Macedon will continue implementing the Best Management Practices as outlined in Section 5.4. The following BMPs will be considered for future exploration and implementation:

- Continue research on implementing a Stormwater Control Facility Maintenance Agreement for privately held post-construction facilities within the Town of Macedon.
- Establish a position to inspect and conduct minor maintenance of SMPs.
- Finalize work orders to verify maintenance actions are completed for post-construction facilities.

5.6 Minimum Required Reporting

At a minimum, the Town of Macedon shall report on the items below:

a. Number of SWPPPs reviewed;

b. Number and type of enforcement actions;

c. Number and type of post-construction stormwater management practices inventoried;

d. Number and type of post-construction stormwater management practices inspected;

e. Number and type of post-construction stormwater management practices maintained;

f. Regulatory mechanism status - certification that regulatory mechanism is equivalent to one of the "NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control"; and

See Town Code Chapter 113: Stormwater Management and Erosion and Sediment Control and Chapter 135-43 Stormwater Control.

g. Report on effectiveness of program, BMP and measurable goal assessment;

These elements (a.-g.) are covered in the Town of Macedon's Individual MS4 Annual Report and the Ontario-Wayne Stormwater Coalition's combined Annual Report that is submitted to the DEC

Minimum Measure 6: Pollution Prevention and Good Housekeeping for Municipal Operations

6.1 Description of Minimum Control Measure

The Pollution Prevention / Good Housekeeping minimum control measure consists of Best Management Practices (BMPs) that focus on training and the prevention or reduction of pollutant runoff from municipal operations. The BMPs describe the training program; specific municipal operations that are impacted by the proposed operation and maintenance programs (Standard Operating Procedures, or SOPs); maintenance, activities, schedules, and long term inspection procedures for controls to reduce floatables and other pollutants; controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas, and salt/sand storage locations; and procedures for the proper disposal of waste removed from the MS4 and municipal operations, including dredge spoil, accumulated sediments, floatables and other debris.

6.2 General Permit Requirements

An MS4 must, at a minimum:

a. Develop and implement a pollution prevention / good housekeeping program for municipal operations and facilities that:

i. Addresses municipal operations and facilities that contribute or potentially contribute POCs to the small MS4 system.

The operations and facilities include municipal building maintenance; park and open space maintenance; solid waste management; stormwater system maintenance; street maintenance; vehicle and fleet maintenance; and winter road maintenance (see BMP Summary Sheets in Appendix K). See Appendix L for a complete list of municipal facilities.

ii. At a minimum frequency of once every three years, perform a self-assessment of all municipal operations addressed by the SWMPP:

BMP Summary Sheets have been updated for the following municipal operations assessed in the 2020-2021 Permit Year:

Municipal Building Maintenance:
- Outdoor Container Storage
- Spill Prevention, Control, & Cleanup

Parks and Open Space Maintenance:
- Landscape Maintenance
- Outdoor Storage of Raw Materials
- Pet Waste Collection

Septic System Management:
- Septic System Management

Solid Waste Management:

- Chemical/Hazardous Waste
- Illegal Dumping and Litter Control
- Waste Collection
- Waste Reduction and Recycling

Stormwater System Maintenance:

- Catch Basin/Inlet Structures
- Open Channel, Ditch Maintenance
- Storm Sewer Conveyance System

Street Maintenance:

- Graffiti Removal
- Unpaved Roads and Trails
- Roadway Patching, Resurfacing and Surface Sealing
- Street Sweeping and Cleaning

Vehicle and Fleet Maintenance:

- Vehicle and Equipment Cleaning
- Vehicle and Equipment Fueling
- Vehicle and Equipment Repair

Winter Road Maintenance:

- Road Salt Application

iii. Determines management practices, policies, procedures, etc. that will be developed and implemented to reduce or prevent the discharge of (potential) pollutants. Refer to management practices identified in the "NYS Pollution Prevention and Good Housekeeping Assistance Document" and other guidance materials available from the EPA, State, or other organizations;

See Standard Operation Procedures (SOPs) in Appendix M and the BMPs listed above and in Appendix K.

iv. Prioritizes pollution prevention and good housekeeping efforts based on geographic area, potential to improve water quality, facilities or operations most in need of modification or improvement, and permittee's capabilities;

Pollution prevention and good housekeeping efforts will be prioritized based on geographic areas, potential to improve water quality, facilities or operations most in need of modification or improvement and capabilities.

v. Addresses pollution prevention and good housekeeping priorities;

See BMP Summary Sheets listed above and in Appendix K.

vi. Includes an employee pollution prevention and good housekeeping training program and ensures that staff receive and utilize training;

The Town of Macedon's Stormwater Management Program Coordinator and Highway Superintendent will coordinate annual training to the DPW municipal personnel. These personnel will be responsible for implementing the BMPs in their everyday activities.

vii. Requires third party entities performing contracted services, including but not limited to street sweeping, snow removal, lawn / grounds care, etc., to meet permit requirements as the requirements apply to the activity performed;

The Town of Macedon's Stormwater Management Program Coordinator will obtain third party certificates from contracted service companies and include them in Appendix F of this SWMPP.

As of the date of this publication third party certifications have been obtained from the following entities:

- BME Associates
- Caroline Myers Kilmer
- Ontario Soil & Water Conservation District
- EnviroTech Environmental Services
- Transitions Landscape and Design Inc.

viii. Requires municipal operations and facilities that would otherwise be subject to the NYS Multisector General Permit (MSGP, GP-0-06-002) for industrial stormwater discharges to prepare and implement provisions in the SWMPP that comply with Parts III. A, C, D, J, K and L of the MSGP. The permittee must also perform monitoring and record keeping in accordance with Part IV. Of the MSGP. Discharge monitoring reports must be attached to an MS4s annual report. For those operations or facilities that are not required to gain coverage under the MSGP, implementation of the above noted provisions of the SWMPP will ensure that MEP is met for discharges.

A SWPPP was developed for the Village DPW.

b. Develop, record, periodically assess and modify as needed any and all measurable goals; and

These elements are covered in the Town of Macedon's Individual MS4 Annual Report and the Ontario-Wayne Stormwater Coalition's combined Annual Report that is submitted to the DEC.

c. Select appropriate pollution prevention and good housekeeping BMPs and measurable goals to ensure the reduction of all POCs in stormwater discharges to the MEP.

These elements are covered in the Town of Macedon's Individual MS4 Annual Report and the Ontario-Wayne Stormwater Coalition's combined Annual Report that is submitted to the DEC.

6.3 Methodology for Compliance with Permit Requirements

The Town of Macedon will continue to assess the BMPs as listed above and further explained in detail in Appendix K. Training will be provided to the personnel who will be responsible for implementing the BMPs in their everyday activities. The Town will continue to review existing BMPs, Standard Operating Procedures (SOPs) and publicize the importance of reducing and preventing the discharge of pollutants to the maximum extent possible (MEP) from municipal activities.

6.4 Best Management Practices Implemented or Underway

Previous permit accomplishments include:

Description of Activity	Purpose	Responsibility	Annual Compliance Requirements
Municipal Training Program	Train MS4 personnel whose work may potentially impact stormwater and provide education on how to prevent water pollution	OWSC, SMC, Highway Superintendent	On an annual basis train municipal personnel on how to improve water quality by following pollution prevention measures: • 2020-2021 – 14 Municipal Employees were trained • 2019-2020 – 14 Municipal Employees were trained • 2018-2019 – 15 Municipal Employees were trained • 2017-2018 – 13 Municipal Employees were trained
Document Municipal Operations Good Housekeeping Programs	To annually measure the progress being made on the Annual Report for MCM 6.	SMC, Highway Superintendent, Transitions Landscape & Design, EnviroTech	Continue to document parking lots swept, street sweeping, phosphorus applied in chemical fertilizer, nitrogen applied in chemical fertilizer, and the amount of pesticide/herbicide applied. See annual reports for totals.
Municipal Building Maintenance	Conduct building maintenance activities such that they do not impact the stormwater systems and local water bodies whenever possible.	SMC, Highway Superintendent	Review the Best Management Practices at least once every three years to determine if any improvements are necessary. Develop mitigation measures for each activity that impacts stormwater. • 2020-2021 – BMPs Reassessed • 2019-2020 – BMPs Reassessed • 2018-2019 – BMPs Reassessed • 2016-2017 – BMPs Implemented
Parks & Open Space Maintenance	Reduce the discharge of landscaping and lawn care waste from MS4 owned facilities.	SMC, Highway Superintendent, Transitions Landscape & Design	Maintain and/or update as necessary an inventory of all municipally owned lands that are and/or will be subject to landscaping and lawn care activities. Review the Parks & Open Space Maintenance BMPs once every three years to determine of any improvements are necessary. Train municipal personnel accordingly. • 2020-2021 – BMPs Reassessed • 2019-2020 – BMPs Reassessed • 2018-2019 – BMPs Reassessed • 2016-2017 – BMPs Implemented
Septic System Management	To prevent improperly treated wastewaters from septic systems	SMC, Highway Superintendent	Continue to monitor and pump out facilities at the Bullis Park Concession (typically once every 3 to 4 years) and at the Highway

	from impacting municipal stormwater systems and local waterbodies.		Barn (typically once a year).
Description of Activity	**Purpose**	**Responsibility**	**Annual Compliance Requirements**
Solid Waste Management	Prevent the discharge of hazardous waste and materials from impacting municipal stormwater systems and local waterbodies	SMC, Highway Superintendent	Review the Solid Waste Management BMPs once every three years to determine if any improvements are necessary. Train municipal personnel accordingly. • 2020-2021 – BMPs Reassessed • 2019-2020 – BMPs Reassessed • 2018-2019 – BMPs Reassessed • 2016-2017 – BMPs Implemented
Stormwater System Maintenance	To reduce sediment and suspended solid discharges by routinely cleaning municipal catch basins and stormwater inlet structures.	Highway Superintendent	Review the Stormwater System Maintenance BMPs once every three years to determine if any improvements are necessary. Train municipal personnel accordingly. • 2020-2021 – BMPs Reassessed • 2019-2020 – BMPs Reassessed • 2018-2019 – BMPs Reassessed • 2016-2017 – BMPs Implemented
Street Maintenance	Utilize proper street maintenance activities to reduce stormwater quality impacts.	Highway Superintendent	Review Street Maintenance BMPs once every three years to determine if any improvements are necessary. Train municipal personnel accordingly. • 2020-2021 – BMPs Reassessed • 2019-2020 – BMPs Reassessed • 2018-2019 – BMPs Reassessed • 2016-2017 – BMPs Implemented
Vehicle, Equipment Maintenance and Maintenance Facilities Procedures	Maintain an inventory of municipal owned vehicles and maintenance records.	SMC, Highway Superintendent	Review vehicle inspection and maintenance records on an annual basis to evaluate conformance to vehicle manufacturer service specifications. Review Vehicle and Fleet Maintenance BMP once every three years to determine if any improvements are necessary. Train municipal personnel accordingly. Biodegradable soaps are being used to wash vehicles and equipment. Added in 2017. • 2020-2021 – BMPs Reassessed • 2019-2020 – BMPs Reassessed • 2018-2019 – BMPs Reassessed

			• 2016-2017 – BMPs Implemented
Description of Activity	**Purpose**	**Responsibility**	**Annual Compliance Requirements**
Winter Road Maintenance	Provide proper storage and application of road salt to reduce the impact of salt on plants, aquatic life, and the local waterbodies.	Highway Superintendent	Review Winter Road Maintenance BMP once every three years to determine if any improvements are necessary. Train municipal personnel accordingly. • 2020-2021 – BMPs Reassessed • 2019-2020 – BMPs Reassessed • 2018-2019 – BMPs Reassessed • 2016-2017 – BMPs Implemented
Install Pet Waste Stations	To improve water quality by reducing the amount of bacteria entering our waterways from pet waste.	Highway Superintendent	Document the number of pet waste stations installed and bags taken. • 2020-2021 – 2 New pet waste stations were installed and 6400 bags were ordered for the ten pet waste stations. • 2019-2020 – Approximately 2,400 bags have been ordered for the pet waste stations. • 2018-2019 – Eight pet waste stations were installed.
Install a Dry Well at the Highway Barn	To prevent outdoor wash waters from entering the storm drain system.	Highway Superintendent	A dry well was installed to prevent wash waters from leaving the site.
Use of Promelt Magic Salt	To reduce the amount of salt used on roadways.	Highway Superintendent	Document the amount of salt used per year.
Create a SWPPP for the Village DPW	To comply with Section Part VII.A.6.a of GP-0-15-003.	SMC, Highway Superintendent, BME Associates	A SWPPP has been created for the Village DPW.
Develop a SWPPP for the Waste Water Treatment Plant recently acquired with the dissolution of the Village of Macedon.	To comply with Section Part VII.A.6.a of GP-0-15-003.	SMC, Highway Superintendent, Caroline Myers Kilmer	Through communication with the DEC, Caroline M. Kilmer determined that a full SWPPP was not required for the Macedon Waste Water Treatment Plant. The WWTP is covered under an Individual SPDES Permit # NY-0023612. BMPs have been developed for the WWTP and a Facility Assessment was completed on 11/7/18. Facility to be assessed again in the 2020-2021 permit year.

The following BMPs were considered for use in 2020-2021 but were rejected because they are not applicable to the facility or operations or these activities have been outsourced to other entities:

- Bridge Repair Work – not applicable
- Fountain & Pool Maintenance – not applicable
- Outdoor Loading and Unloading – not applicable
- Storage and Use of Pesticides – outsourced to EnviroTech or Transitions Landscape & Design
- Paint and Paint Removal – outsourced

6.5 Best Management Practices for Future Consideration

The Town of Macedon will continue implementing the Best Management Practices as outlined in Section 6.4. The following BMPs will be considered for future exploration and implementation:

- Conduct Municipal Facility Assessment for the Waste Water Treatment Plant. The Waste Water Treatment Plant is scheduled for decommissioning in September of 2023.

6.6 Minimum Reporting Requirements

At a minimum, the Town of Macedon shall report on the items below:

a. Indicate the municipal operations and facilities that the pollution prevention and good housekeeping program assessed;

The operations and facilities include: municipal building maintenance; park and open space maintenance; solid waste management; stormwater system maintenance; street maintenance; vehicle and fleet maintenance; and winter road maintenance (see BMP Summary Sheets in Appendix K). See Appendix L for a complete list of the municipal facilities.

b. Describe, if not done so already, the management practices, policies and procedures that have been developed, modified, and / or implemented and report, at a minimum, on the items below that the permittee's pollution prevention and good housekeeping program addressed during the reporting year:

- Acres of parking lot swept;
- Miles of street swept;
- Number of catch basins inspected and, where necessary, cleaned;
- Post-Construction control stormwater management practices inspected and, where necessary, cleaned (currently not applicable);
- Pounds of phosphorus applied in chemical fertilizer;
- Pounds of nitrogen applied in chemical fertilizer; and
- Pounds of pesticides / herbicides applied as pure product (currently not applicable).

These elements are covered in the Town of Macedon's Individual MS4 Annual Report and the Ontario-Wayne Stormwater Coalition's combined Annual Report that is submitted to the DEC

c. Staff training events and number of staff trained; and

These elements are covered in the Town of Macedon's Individual MS4 Annual Report and the Ontario-Wayne Stormwater Coalition's combined Annual Report that is submitted to the DEC.

d. Report on effectiveness of program, BMP and measurable goal assessment. If the pollution prevention and good housekeeping program addresses other operations than what is listed above in Part VIII.A.6.a. (ii.), the permittee shall report on items that will demonstrate program effectiveness.

These elements are covered in the Town of Macedon's Individual MS4 Annual Report and the Ontario-Wayne Stormwater Coalition's combined Annual Report that is submitted to the DEC.

Appendices

Appendix A: General Definitions

Appendix B: List of Commonly Used Abbreviations

Appendix C: Staffing Plan/Organizational Chart

Appendix D: Priority Waterbody Inventory Sheets

Appendix E:

- Attorney Certification of Local Laws,
- Local Law Filing of Laws #3 & #4,
- Letter to DEC Regarding Village of Macedon Dissolution & Local Laws – Illicit Discharge Detection & Elimination, Construction Site Stormwater Runoff Control and Post- Construction Stormwater Management (#NYR20A391),
- Town of Macedon Compliance with Local Law Requirement Evaluation by Caroline Myers Kilmer, November 30th, 2018

Appendix F:

- Third Party Certifications
- Inter-Municipal Agreement

Appendix G: Outfall Map (To Be Added At A Later Date)

Appendix H: Illicit Discharge Detection & Elimination Complaint Log

Appendix I: Construction Site Complaint Log & Construction Site Inventory & Inspection Tracking

Appendix J: Post-Construction Stormwater Management Practices Inventory & Inspection Forms

Appendix K: BMP Summary Sheets

Appendix L: Municipal Facilities Inventory & Inspection Form

Appendix M: Standard Operating Procedures (SOPS)

Appendix N: NYS DEC SPDES General Permit for Stormwater Discharges from Municipal Separate Strom Sewer Systems (MS4s) – GP-0-15-003

APPENDIX A

General Definitions

Appendix A: General Definitions

Best Management Practices (BMPs) – Activities or structural improvements that help reduce the quantity and improve the quality of stormwater runoff. BMPs include public education and outreach, treatment requirements, operating procedures, and practices to control runoff, spillage, leakage, sludge and waste disposal, and drainage from raw material storage.

Clean Water Act – Amendments made to the Federal Water Pollution Control Act in 1972 to establish water quality standards and to create the National Pollutant Discharge Elimination System to protect the waters and waterways of the U. S. by regulating the discharge of pollutants from point source discharges and municipal separate storm sewer systems.

Combined Sewer System – A sewer system designed to convey both sanitary wastewater and stormwater.

Detention Pond – Pond that stores a volume of water for a given period of time and then discharges the water downstream.

Discharge – An outflow of water from a stream, pipe, ground water system or watershed.

Ecosystem – All of the plants and animals in an area that interact to make up the local environment.

Erosion – The overall process of the transport of material on the earth's surface including the movement of soil and rock by agents such as water, wind, or gravity.

Groundwater –All of the water contained in void space beneath the earth's surface.

Heavy Metals – Metals such as zinc, copper, lead, mercury, chromium, cadmium, iron, manganese, nickel, molybdenum and silver that, even in low concentrations can be toxic or lethal to humans, animals and aquatic life.

Illicit Discharge – The term refers to any discharge to an MS4 that is not composed entirely of stormwater unless authorized via an NPDES permit or otherwise excluded from regulation. Thus, not all illicit discharges are illegal or prohibited.

Industrial Waste – Unwanted materials from an industrial operation, this may include liquids, sludge, solids, or hazardous waste.

Large Municipal Separate Storm Sewer System (Large MS4) – All municipal separate storm sewers that are located in an incorporated place with a population of 250,000 or more according to the latest Census.

Maintain or Improve Water Quality – This statement is to mean that no MS4 shall allow for an increase in turbidity to local waters that will cause a substantial visible contrast to natural conditions; the MS4s shall not allow suspended, colloidal and settleable solids from sewage, industrial wastes or other wastes that will cause deposition or impair local waters for their best usages; and no MS4 shall allow

residue from oil and floating substances attributable to sewage, industrial wastes or other wastes, nor visible oil film nor globules or grease.

Maximum Extent Practicable (MEP) – A water quality standard that applies to all MS4 operators under NPDES permits. The standard has no exact definition, as it was intended to be flexible to allow operators to tailor their stormwater programs to their particular site.

Medium Municipal Separate Storm Sewer System (Medium MS4) – This includes all municipal separate storm sewers that are located in an incorporated place with a population of more than 100,000 but less than 250,000.

Municipal Separate Storm Sewer Systems (MS4) – Areas with a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, and storm drains) that are not a combined sewer or part of a publicly owned treatment system and are owned or operated and regulated by a municipality or authorized agency. MS4s may be small, medium or large with the medium or large MS4s being principally determined by population size.

Non-Point Source Pollutants (NPS) – Pollution coming from many diffuse sources whose origin is often difficult to identify. This pollution occurs as rain or snowmelt travels over the land surface and picks up pollutants such as fertilizer, pesticides, and chemicals from cars. This pollution is difficult to regulate due to its origin from many different sources. These pollutants enter waterways untreated and are a major threat to aquatic organisms and people who fish, use waters and waterways for recreational purposes or as an untreated drinking water source.

National Pollutant Discharge Elimination System (NPDES) – This is the EPA's regulatory program to control the discharge of pollutants to waters and waterways of the United States.

Notice of Intent (NOI) – An application to notify the permitting authority of a facility's intention to be covered by a general permit. This exempts a facility from having to submit an individual or group application.

Nutrients – The term typically refers to nitrogen and phosphorus or compounds containing free amounts of the two elements. These elements are essential for the growth of plant life, but can create problems in the form of algal blooms, depletion of dissolved oxygen and pH changes in streams and other water bodies when higher concentrations are allowed to enter drainage systems and lakes.

Ordinance – A law based on state statutory authority developed and approved by a governmental agency to allow them to regulate the enforcement of criteria contained within the specific law and to invoke sanctions and other enforcement measures to ensure facilities comply with the criteria.

Outfall – the point where a sewer or drainage discharges into a receiving waterway.

Point Source Pollution – This is pollution coming from a single, definable source, such as a factory.

Retention Pond – Pond that stores a volume of water without allowing it to discharge downstream.

Runoff – Any drainage that leaves an area as surface flow.

Sanitary Sewer – Is an underground pipe system that carries sanitary waste and other wastewater to a treatment plant.

Sediment – Material derived from the weathering of rock such as sand and soil. This material can be detrimental to aquatic life and habitats if too much is allowed to wash into rivers and ponds.

Site Plan – Is a geographic representation of the layout of buildings and other important features on a tract of land.

Small Municipal Separate Storm Sewer Systems (SMS4s) – Are MS4s that are not merely determined by population, but are much broader in scope, they are land areas with conveyances that are designated because of one or more of the following criteria: 1) they discharge to sensitive waters; 2) they are experiencing high growth or have a high growth potential; 3) they are contiguous to urbanized areas and other MS4s; 4) they are a significant contributor of pollutants to the waters of the U. S.; or 5) they have ineffective protection of water quality through other programs.

State Pollutant Discharge Elimination System (SPDES) – The state's regulatory program to control the discharge of pollutants to waters of the Unites States.

Storm Drain – Any drain which drains directly into the storm sewer system, usually found along roadways or in parking lots.

Storm Sewer – Is an underground pipe system that carries runoff from streets and other surfaces.

Stormwater – Stormwater or snow melt runoff, and surface runoff and drainage.

Stormwater Management – Any measure associated with the planning, maintenance, and regulation of facilities which collect, store, or convey stormwater.

Stormwater Pollution Prevention Plan (SWPPP) – A plan developed by a facility or entity that thoroughly evaluates potential pollutant sources at a site and selects and implements appropriate best management practice measures designed to prevent or control the discharge of pollutants in stormwater runoff.

Surface Runoff – Is the flow of water across the land surface that occurs when the rainfall rate exceeds the ability of the soil to absorb the water. This is of primary concern when dealing with impervious surfaces, such as parking lots, roofs, roads, or driveways where water cannot infiltrate at all.

Surface Water – Is any water that remains on the earth's surface, such as ponds, rivers, streams, impoundments, wetlands, oceans, etc.

Total Maximum Daily Load (TMDL) – Is a regulatory limit of the maximum amount of a pollutant type that can be released into a body of water in a twenty-four hour period without adversely affecting water quality.

Tributary – A stream which drains into another larger stream or body of water.

Urbanized Area (UA) – Is a land area consisting of one or more central places and the adjacent densely settled surrounding area (urban fringe) that together have a residential population of at least 50,000 and a minimum average population density of at least 1,000 people per square mile.

Watershed – A geographic area in which water flowing across the surface will drain into a certain stream or river and flow out of the area via that stream or river, or all of the land that drains to a particular body of water, also known as a catchment or drainage basin.

Waters of the US – These are surface waters defined as wetlands, lakes (including dry lakes), rivers, streams (including intermittent streams, ephemeral washes and arroyos), mudflats, sandflats, sloughs, wet meadows, playa lakes, natural ponds, and man-made impoundments.

Wetlands – Is an area of land where part of the surface is covered with water or the soil is completely saturated with water for a large majority of the year. Wetlands provide an important habitat for many different types of plant and animal species. Wetlands are also natural stormwater control areas, since they filter out pollutants and are able to retain large amounts of water during storm events.

APPENDIX B

List of Commonly Used Abbreviations

Appendix B: List of Commonly Used Abbreviations

BMPs – Best Management Practices

CWA – Clean Water Act

EPA – U.S. Environmental Protection Agency

MCC – Municipal Compliance Certification form

MCM – Minimum Control Measure

MEP – Maximum Extent Practicable

MS4 - Municipal Separate Storm Sewer System

NOI – Notice of Intent

NPS – Non-Point Source Pollutants

NPDES – National Pollution Discharge Elimination System

NYSDEC – New York State Department of Environmental Conservation

POC – Pollutants of Concern

SMO – Stormwater Management Officer

SOP – Standard Operating Procedures

SPCC – Spill Prevention and Control Countermeasures

SPDES – State Pollution Discharge Elimination System

SWMP – Stormwater Management Program

SWPP – Stormwater Pollution Prevention

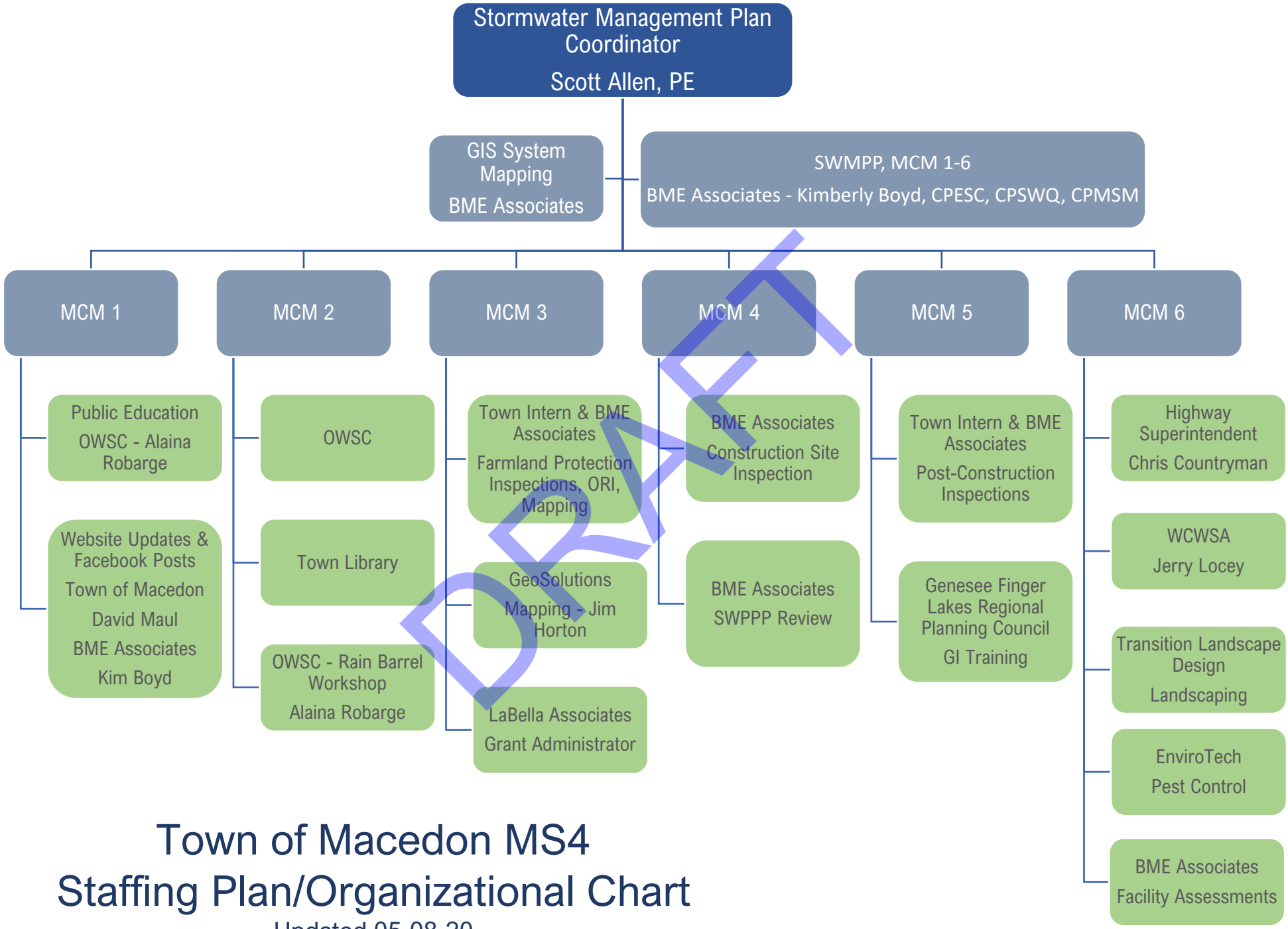
SWPPP – Stormwater Pollution Prevention Plan

TMDL – Total Maximum Daily Load

USEPA – United States Environmental Protection Agency

APPENDIX C

Staffing Plan/Organizational Chart

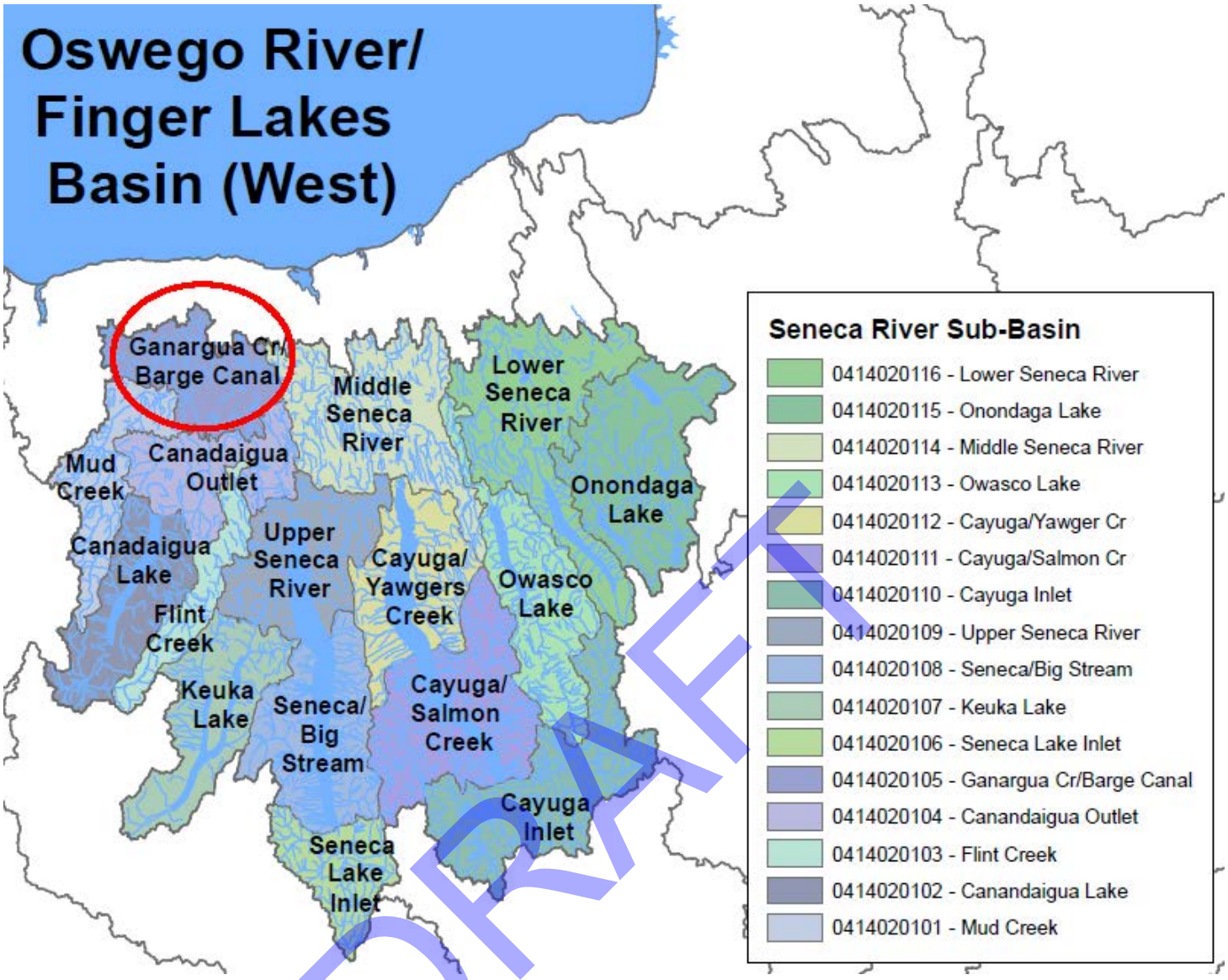


Town of Macedon MS4
Staffing Plan/Organizational Chart

Updated 05-08-20

APPENDIX D

Priority Waterbody Inventory Sheets



Ganargua Creek-Erie Canal
(0414020105)

Water Index Number	Waterbody Segment	Category
Ont 66-12-52-23	Ganargua Creek, Lower, and minor tribs(0704-0026)	MinorImpacts
Ont 66-12-52-23- 1	Marbletown Creek and tribs (0704-0003)	UnAssessed
Ont 66-12-52-23- 8	Fairville Creek and tribs (0704-0032)	UnAssessed
Ont 66-12-52-23-17	Red Creek and tribs (0704-0015)	Need Verific
Ont 66-12-52-23-24	Red Creek and tribs (0704-0033)	MinorImpacts

Red Creek and tribs (0704-0033) MinorImpacts

Waterbody Location Information

Revised: 08/09/2007

Water Index No: Ont 66-12-52-23-24
Hydro Unit Code: 04140201/230 **Str Class:** C
Waterbody Type: River
Waterbody Size: 78.3 Miles
Seg Description: entire stream and tribs

Drain Basin: Oswego-Seneca-Oneida
Seneca/Clyde Rivers
Reg/County: 8/Wayne Co. (59)
Quad Map: PALMYRA (I-12-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Aquatic Life	Stressed	Known
Recreation	Stressed	Known

Type of Pollutant(s)

Known: ALGAL/WEED GROWTH, NUTRIENTS (phosphorus), Silt/Sediment
Suspected: - - -
Possible: - - -

Source(s) of Pollutant(s)

Known: HABITAT MODIFICATION
Suspected: AGRICULTURE
Possible: - - -

Resolution/Management Information

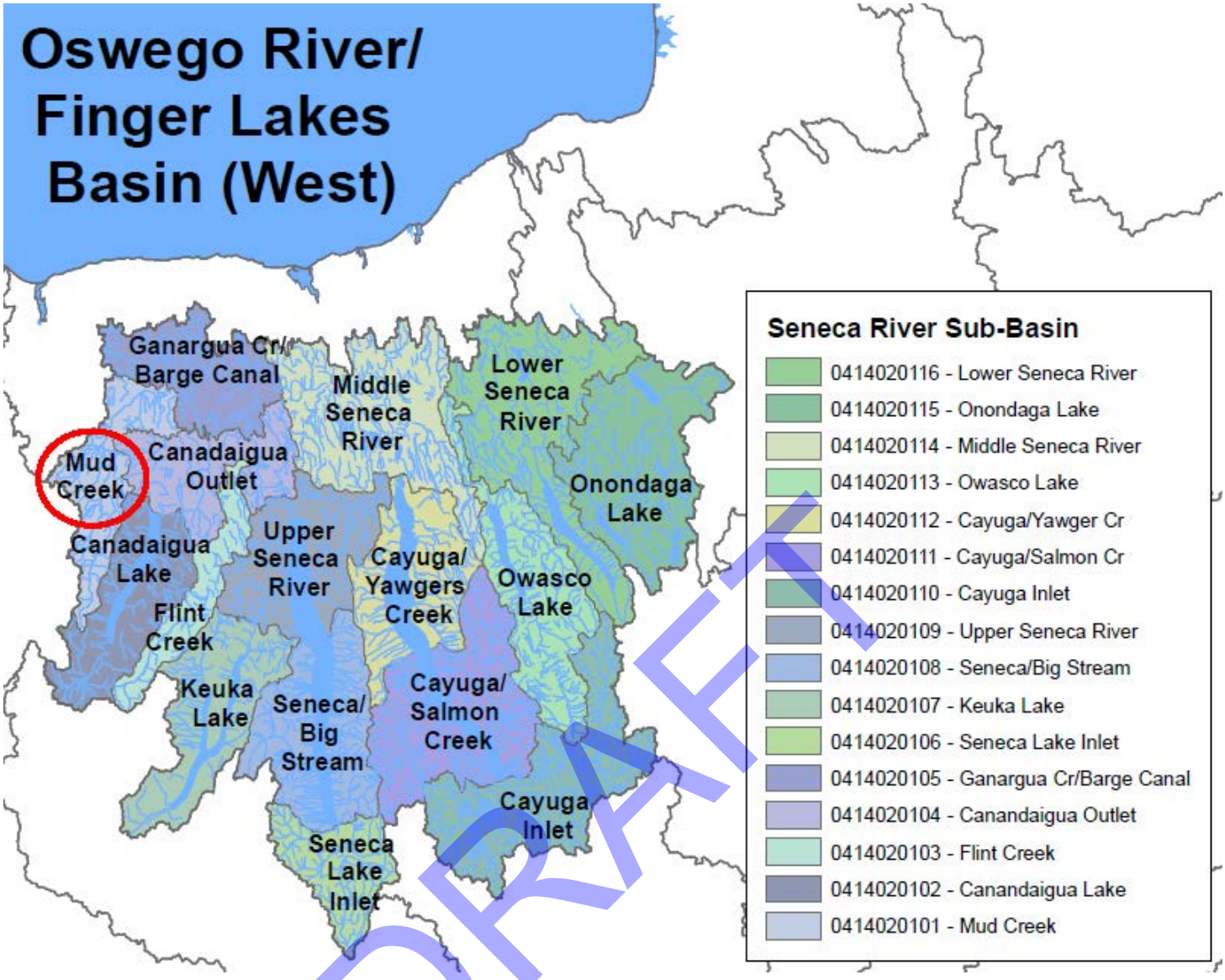
Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 4 (Source Identified, Strategy Needed)
Lead Agency/Office: ext/WQCC **Resolution Potential:** Medium
TMDL/303d Status: n/a

Further Details

Aquatic life support and recreational uses in Red Creek are known to experience minor impacts due to nonpoint nutrients and silt/sediment. Aquatic weed growth also contributes to the impacts.

A biological (macroinvertebrate) assessment of Red Creek in Palmyra (at Maple Avenue) was conducted in 2001. Sampling results indicated slightly impacted water quality conditions. The stream carried an abundance of aquatic weeds (duckweed) indicating ponded waters upstream. The ponded water likely influenced the sample. Specific conductance at the site was quite high also. Although aquatic life is supported in the stream, nutrient biotic evaluation indicates/suggests the level of eutrophication is sufficient to stress/threaten aquatic life support. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the entire stream and all tribs. The waters of the stream are Class C. Tribs to this reach/segment, including Black Creek (-9) are Class C,C(T).



Mud Creek
(0414020101)

Water Index Number	Waterbody Segment	Category
Ont 66-12-52-23	Ganargua Creek, Upper, and minor tribs(0704-0013)	MinorImpacts
Ont 66-12-52-23 (Mud Creek)	Mud Creek, Lower, and minor tribs (0704-0030)	MinorImpacts
Ont 66-12-52-23 (Mud Creek)	Mud Creek, Upper, and tribs (0704-0031)	UnAssessed
Ont 66-12-52-23-43	Great Brook and minor tribs (0704-0034)	Impaired Seg
Ont 66-12-52-23-43..P263a,P263b	Fairport Reservoirs (0704-0035)	UnAssessed
Ont 66-12-52-23-43..P263a/b-	Tribs to Fairport Reservoirs (0704-0036)	UnAssessed
Ont 66-12-52-23-45	Fish Creek and tribs (0704-0037)	UnAssessed
Ont 66-12-52-23-46	Beards/Beaver Creek and tribs (0704-0038)	UnAssessed
Ont 66-12-52-23-51	Schaffer Creek and tribs (0704-0039)	UnAssessed
Ont 66-12-52-23-52-P267	Sterling Pond (0704-0040)	UnAssessed
Ont 66-12-52-23..(Barge Canal)	NYS Barge Canal (portion 5) (0704-0020)	Impaired Seg
Ont 66-12-52-23..(Barge Canal)-	Minor Tribs to Barge Canal (0704-0019)	UnAssessed

Ganargua Creek, Upper, and minor tribs (0704-0013) MinorImpacts

Waterbody Location Information

Revised: 08/09/2007

Water Index No: Ont 66-12-52-23
Hydro Unit Code: 04140201/160 **Str Class:** C
Waterbody Type: River
Waterbody Size: 67.1 Miles
Seg Description: stream and selected tribs, from Palmyra to Victor

Drain Basin: Oswego-Seneca-Oneida
Seneca/Clyde Rivers
Reg/County: 8/Wayne Co. (59)
Quad Map: MACEDON (I-11-3)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Aquatic Life	Stressed	Known

Type of Pollutant(s)

Known: NUTRIENTS (phosphorus)
Suspected: Silt/Sediment
Possible: D.O./Oxygen Demand, Ammonia

Source(s) of Pollutant(s)

Known: CONSTRUCTION (development), URBAN/STORM RUNOFF
Suspected: Agriculture, Municipal
Possible: - - -

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 4 (Source Identified, Strategy Needed)
Lead Agency/Office: ext/WQCC **Resolution Potential:** Medium
TMDL/303d Status: n/a

Further Details

Aquatic life support in this portion of Ganargua Creek is known to experience minor impacts due to nutrients from primarily nonpoint sources. Impacts from municipal discharges had been identified in the past, but additional sampling is recommended to determine the whether these impacts continue.

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Ganargua Creek in Macedon, Wayne County, (at Erie Road) was conducted in 2002. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, sediment and invertebrate tissues analysis and toxicity evaluation. During this sampling the biological (macroinvertebrate) sampling results indicated slightly impacted water quality conditions. The impacts are attributed to nonpoint source nutrient enrichment. Water column sampling revealed dissolved solids and iron to be parameters of concern, however these finding are thought to be more reflective of natural conditions in the basin than a source of water quality impacts. Toxicity testing of the water column showed significant mortality and reproductive impacts in one of the three tests conducted. (DEC/DOW, BWAM/RIBS, January 2005)

A biological (macroinvertebrate) assessment of Ganargua Creek in Macedon was also conducted in 2001. Sampling results at that time also indicated slightly impacted water quality. Previous sampling in 1980 and prior reflected non-impacted conditions. The headwaters of the creek are in the Town of Victor, a rapidly growing suburb of Rochester. Recent development in the watershed and along the stream (including a golf course) increases the nutrient and other loadings to the stream. This stream is typical of many waters in the state that are slipping from non-impacted to slightly impacted due to nonpoint source nutrient enrichment attributed to development pressures. A survey of the entire Ganargua Creek at multiple sites between East Victor and Lyons was conducted in 1996. Sampling results at that time also indicated primarily slightly impacted water quality conditions. However moderate impact was noted along one short reach below Victor and Farmington related to municipal discharges. Another short reach outside this portion of the creek was similarly impacted. Since this sampling, the Village of Victor WWTP has been updated and is meeting permit discharge limits and the Farmington WWTP is about to complete and upgrade as well. Due to the length of time since it was last sampled, conditions regarding this impact should be verified. (DEC/DOW, BWAM/SBU, August 2007)

This segment includes the portion of the stream and selected/smaller tribs from the confluence with the Barge Canal in Palmyra to Mud Creek in Victor. The waters of this portion of the stream are Class C. Tribs to this reach/segment, including Trapp Brook (-33), are also Class C. Great Brook (-43) and Mud Creek are listed separately.

NYS Barge Canal (portion 5) (0704-0020) Impaired Seg

Waterbody Location Information

Revised: 08/13/2007

Water Index No: Ont 66-12-52-23..(Barge Canal)
Hydro Unit Code: 04140201/230 **Str Class:** C
Waterbody Type: River
Waterbody Size: 23.5 Miles
Seg Description: portion from Lyons to Wayneport

Drain Basin: Oswego-Seneca-Oneida
Seneca/Clyde Rivers
Reg/County: 8/Wayne Co. (59)
Quad Map: NEWARK (I-12-3)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
AQUATIC LIFE	Impaired	Suspected

Type of Pollutant(s)

Known: - - -
Suspected: D.O./OXYGEN DEMAND, Water Level/Flow, Nutrients
Possible: Pathogens

Source(s) of Pollutant(s)

Known: - - -
Suspected: MUNICIPAL, Agriculture, Hydro Modification, Urban/Storm Runoff
Possible: On-Site/Septic Syst, Other Sanitary Disch

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 3 (Cause Identified, Source Unknown)
Lead Agency/Office: DOW/Reg8 **Resolution Potential:** Medium
TMDL/303d Status: 3a*

Further Details

Aquatic life support and recreational uses in this portion of the NYS Barge Canal are impaired due to oxygen-demanding substances that cause low dissolved oxygen. Municipal discharges are the likely source of the pollutants. Zebra mussel infestation of the canal may also be contributing to the impacts.

A biological (macroinvertebrate) assessment of the Barge Canal in Newark (at canal light 719) was conducted in 2006. Multiple sampling results indicated moderately impacted water quality conditions. The fauna was dominated by sewage-tolerant midges. Zebra mussels were numerous on the plates, but not so numerous that they invalidated the samples. Habitat factors (slow current) may have some effect on the results, but the samples showed greater impacts than previous sampling results. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the portion of the canal from Canadaigua Outlet in Lyons to the western edge of the drainage basin in Wayneport. The waters of this portion of the canal are Class C.

APPENDIX E

- **Attorney Certification of Local Laws**
- **Local Law Filing of Laws #3 & #4**
- **Letter To DEC Regarding Village of Macedon's Dissolution & Local Laws**
- **Town of Macedon's Compliance with Local Law Requirement Evaluation by Caroline Myers Kilmer, November 30th, 2018**

ANTHONY J. VILLANI, P.C.
ATTORNEYS AT LAW

66 WILLIAM STREET ▪ LYONS, NEW YORK 14489 ▪ 315-946-9707 ▪ FAX 315-946-0373 ▪ E-mail: ajvillani@villaniandgrow.com

September 20, 2019

Mr. Scott Allen
Macedon Town Engineer
32 West Main Street
Macedon, New York 14502

Re: Town of Macedon, New York
Stormwater Management

Dear Scott:

We are and were the attorneys for the Town of Macedon, Wayne County, New York at the times relevant herein. As such, we prepared and processed the adoption of local laws numbers 3 and 4 of the year 2007 which have been adopted and filed with the secretary of state. These local laws, copies attached, dealt with Storm Water Management relative to the New York State MS4 program.

Local Law 3 established guidelines and enforcement mechanisms for detecting and eliminating illegal connections to storm water drainage systems. Local Law 4 established guidelines and enforcement mechanisms for erosion and sediment control by amending Chapter 75 Land Use, and Chapter 135 Zoning of the Town of Macedon. Drafting of these local laws was based on the model ordinance for stormwater management and erosion control revised March, 2006. I attach a copy of the local laws and template for the model ordinance.

Based in the information in our file as to the resources used in drafting these local laws, we were of the opinion at the time and continue that opinion that these local laws are functionally equivalent to the Model Local Law and implement the substantive requirements of the Model Laws. While I believe an A:B comparison of the local laws passed with the Model Law will show the Model Law as the foundation thereof, should you have any questions, please let me know and I will be happy to discuss the minor variations therefrom.

Very truly yours,

Anthony J. Villani

cc: Sandy Pagano, Supervisor
Luke Scannell, DEC Region 8

STATE OF NEW YORK
DEPARTMENT OF STATE
41 STATE STREET
ALBANY, NY 12231-0001

ELIOT SPITZER
GOVERNOR

LORRAINE A. CORTÉS-VÁZQUEZ
SECRETARY OF STATE

September 26, 2007

Judy W Gravino, RMC
Town Clerk
32 Main Street
Macedon NY 14502

RE: Town of Macedon, Local Law No. 3 & 4, 2007, filed on September 19, 2007

Dear Sir/Madam:

The above referenced material was received and filed by this office as indicated. Additional local law filing forms can be obtained from our website, www.dos.state.ny.us/corp/misc.html.

Sincerely,
Linda Lasch
Principal Clerk
State Records and Law Bureau
(518) 474-2755

Local Law Filing

NEW YORK STATE DEPARTMENT OF STATE
41 STATE STREET
ALBANY, NY 12231

(Use this form to file a local law with the Secretary of State.)

Text of law should be given as amended. Do not include matter being eliminated and do not use italics or underlining to indicate new matter.

- ☐ **County**
- ☐ **City** **of** Macedon
- ☒ **Town**
- ☐ **Village**

Local Law No. 3 **of the year 20** 07

A local law Stormwater - IDDE Illicit Discharge Detection and Elimination
(Insert Title)

Be it enacted by the Town Board
(Name of Legislative Body) **of the**

- ☐ **County**
- ☐ **City** **of** Macedon
- ☒ **Town**
- ☐ **Village**

as follows:

text as attached

(If additional space is needed, attach pages the same size as this sheet, and number each.)

Town of Macedon
Local Law #3 of 2007

General Purpose: Adoption of NYS Model Code relative to MS4 program. This law establishes guidelines and enforcement mechanisms for detecting and eliminating illegal connections to storm drainage systems.

Town Board Public Hearing date: August 23, 2007

Be it resolved and enacted that the following law be added to the Macedon Town Code as follows:

Chapter 116

STORMWATER – IDDE
ILLICIT DISCHARGE DETECTION AND ELIMINATION

SECTION 1. PURPOSE/INTENT.

The purpose of this law is to provide for the health, safety, and general welfare of the citizens of the Town of Macedon through the regulation of non-stormwater discharges to the municipal separate storm sewer system (MS4) to the maximum extent practicable as required by federal and state law. This law establishes methods for controlling the introduction of pollutants into the MS4 in order to comply with requirements of the SPDES General Permit for Municipal Separate Storm Sewer Systems. The objectives of this law are:

1.1 To meet the requirements of the SPDES General Permit for Stormwater Discharges from MS4s, Permit no. GP-02-02 or as amended or revised;

1.2 To regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process or discharge non-stormwater wastes;

1.3 To prohibit Illicit Connections, Activities and Discharges to the MS4;

1.4 To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this law; and

1.5 To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the MS4.

SECTION 2. DEFINITIONS.

Whenever used in this law, unless a different meaning is stated in a definition applicable to only a portion of this law, the following terms will have meanings set forth below:

2.1 Best Management Practices (BMPs). Schedules of activities, prohibitions of practices, general good house keeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or stormwater conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

2.2 Clean Water Act. The Federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.), and any subsequent amendments thereto.

2.3 Construction Activity. Activities requiring authorization under the SPDES permit for stormwater discharges from construction activity, GP-02-01, as amended or revised. These activities include construction projects resulting in land disturbance of one or more acres. Such activities include but are not limited to clearing and grubbing, grading, excavating, and demolition.

2.4 Department. The New York State Department of Environmental Conservation.

2.5 Design professional. New York State licensed professional engineer or licensed architect.

2.6 Hazardous Materials. Any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

2.7 Illicit Connections. Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the MS4, including but not limited to:
1. Any conveyances which allow any non-stormwater discharge including treated or untreated sewage, process wastewater, and wash water to enter the MS4 and any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by an authorized enforcement agency; or
2. Any drain or conveyance connected from a commercial or industrial land use to the MS4 which has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.

2.8 Illicit Discharge. Any direct or indirect non-stormwater discharge to the MS4, except as exempted in Section 6 of this law.

5. (City local law concerning Charter revision proposed by petition.)
I hereby certify that the local law annexed hereto, designated as local law No. _____ of 20 _____ of the City of _____ having been submitted to referendum pursuant to the provisions of section (36)(37) of the Municipal Home Rule Law, and having received the affirmative vote of a majority of the qualified electors of such city voting thereon at the (special)(general) election held on _____ 20_____, became operative.

6. (County local law concerning adoption of Charter.)
I hereby certify that the local law annexed hereto, designated as local law No. _____ of 20 _____ of the County of _____ State of New York, having been submitted to the electors at the General Election of November _____ 20 _____, pursuant to subdivisions 5 and 7 of section 33 of the Municipal Home Rule Law, and having received the affirmative vote of a majority of the qualified electors of the cities of said county as a unit and a majority of the qualified electors of the towns of said county considered as a unit voting at said general election, became operative.

(If any other authorized form of final adoption has been followed, please provide an appropriate certification.)
I further certify that I have compared the preceding local law with the original on file in this office and that the same is a correct transcript therefrom and of the whole of such original local law, and was finally adopted in the manner indicated in paragraph 1_____, above.

_____
Clerk of the county legislative body, City, Town or Village Clerk or officer designated by local legislative body

(Seal)

Date: _____

(Certification to be executed by County Attorney, Corporation Counsel, Town Attorney, Village Attorney or other authorized attorney of locality.)

STATE OF NEW YORK
COUNTY OF Wayne

I, the undersigned, hereby certify that the foregoing local law contains the correct text and that all proper proceedings have been had or taken for the enactment of the local law annexed hereto.

_____
Signature
Town Attorney
Title

~~County~~
~~City~~ of
Town
~~Village~~

Date: September 13, 2007

2.9 Individual Sewage Treatment System. A facility serving one or more parcels of land or residential households, or a private, commercial or institutional facility, that treats sewage or other liquid wastes for discharge into the groundwaters of New York State, except where a permit for such a facility is required under the applicable provisions of Article 17 of the Environmental Conservation Law.

2.10 Industrial Activity. Activities requiring the SPDES permit for discharges from industrial activities except construction, GP-98-03, as amended or revised.

2.11 MS4. Municipal Separate Storm Sewer System.

2.12 Municipal Separate Storm Sewer System. 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 the Town of Macedon;
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 40CFR 122.2

2.13 Municipality. The Town of Macedon

2.14 Non-Stormwater Discharge. Any discharge to the MS4 that is not composed entirely of stormwater.

2.15 Person. Any individual, association, organization, partnership, firm, corporation or other entity recognized by law and acting as either the owner or as the owner's agent.

2.16 Pollutant. Dredged spoil, filter backwash, solid waste, incinerator residue, treated or untreated sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand and industrial, municipal, agricultural waste and ballast discharged into water; which may cause or might reasonably be expected to cause pollution of the waters of the state in contravention of the standards.

2.17 Premises. Any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.

2.18 Special Conditions.
1. Discharge Compliance with Water Quality Standards. The condition that applies where a municipality has been notified that the discharge of stormwater authorized under their MS4 permit may have caused or has the reasonable potential to cause or contribute to the violation of an applicable water quality standard. Under this condition the municipality must take all necessary actions to ensure future discharges do not cause or contribute to a violation of water quality standards.

2. 303(d) Listed Waters. The condition in the municipality's MS4 permit that applies where the MS4 discharges to a 303(d) listed water. Under this condition the stormwater management program must ensure no increase of the listed pollutant of concern to the 303(d) listed water.

3. Total Maximum Daily Load (TMDL) Strategy. The condition in the municipality's MS4 permit where a TMDL including requirements for control of stormwater discharges has been approved by EPA for a waterbody or watershed into which the MS4 discharges. If the discharge from the MS4 did not meet the TMDL stormwater allocations prior to September 10, 2003, the municipality was required to modify its stormwater management program to ensure that reduction of the pollutant of concern specified in the TMDL is achieved.

4. The condition in the municipality's MS4 permit that applies if a TMDL is approved in the future by EPA for any waterbody or watershed into which an MS4 discharges. Under this condition the municipality must review the applicable TMDL to see if it includes requirements for control of stormwater discharges. If an MS4 is not meeting the TMDL stormwater allocations, the municipality must, within six (6) months of the TMDL's approval, modify its stormwater management program to ensure that reduction of the pollutant of concern specified in the TMDL is achieved.

2.19 State Pollutant Discharge Elimination System (SPDES) Stormwater Discharge Permit. A permit issued by the Department that authorizes the discharge of pollutants to waters of the state.

2.20 Stormwater. Rainwater, surface runoff, snowmelt and drainage.

2.21 Stormwater Management Officer (SMO). An employee, the municipal engineer or other public official(s) designated by the Town of Macedon to enforce this local law. The SMO may also be designated by the municipality to accept and review stormwater pollution prevention plans, forward the plans to the applicable municipal board and inspect stormwater management practices.

2.22 303(d) List. A list of all surface waters in the state for which beneficial uses of the water (drinking, recreation, aquatic habitat, and industrial use) are impaired by pollutants, prepared periodically by the Department as required by Section 303(d) of the Clean Water Act. 303(d) listed waters are estuaries, lakes and streams that fall short of state surface water quality standards and are not expected to improve within the next two years.

2.23 TMDL. Total Maximum Daily Load.

2.24 Total Maximum Daily Load. The maximum amount of a pollutant to be allowed to be released into a waterbody so as not to impair uses of the water, allocated among the sources of that pollutant.

2.25 Wastewater. Water that is not stormwater, is contaminated with pollutants and is or will be discarded.

(Complete the certification in the paragraph that applies to the filing of this local law and strike out that which is not applicable.)

1. (Final adoption by local legislative body only.)
I hereby certify that the local law annexed hereto, designated as local law No. 3 of 20 07 of the ~~(County)(City)~~(Town)~~(Village)~~ of Macedon was duly passed by the Town Board on September 13, 20 07 in accordance with the applicable provisions of law.
(Name of Legislative Body)

2. (Passage by local legislative body with approval, no disapproval or repassage after disapproval by the Elective Chief Executive Officer*.)
I hereby certify that the local law annexed hereto, designated as local law No. _____ of 20 _____ of the (County)(City)(Town)(Village) of _____ was duly passed by the _____ on _____ 20 _____, and was (approved)(not approved) (repassed after disapproval) by the _____ and was deemed duly adopted
(Name of Legislative Body)
(Elective Chief Executive Officer)*
on _____ 20 _____, in accordance w ith the applicable provisions of law.

3. (Final adoption by referendum.)
I hereby certify that the local law annexed hereto, designated as local law No. _____ of 20 _____ of the (County)(City)(Town)(Village) of _____ was duly passed by the _____ on _____ 20 _____, and was (approved)(not approved) (repassed after disapproval) by the _____ on _____ 20 _____.
(Name of Legislative Body)
(Elective Chief Executive Officer)*
Such local law was submitted to the people by reason of a (mandatory)(permissive) referendum, and received the affirmative vote of a majority of the qualified electors voting thereon at the (general) (special)(annual) election held on _____ 20 _____, in accordance with the applicable provisions of law.

4. (Subject to permissive referendum and final adoption because no valid petition was filed requesting referendum.)
I hereby certify that the local law annexed hereto, designated as local law No. _____ of 20 _____ of the (County)(City)(Town)(Village) of _____ was duly passed by the _____ on _____ 20 _____, and was (approved)(not approved) (repassed after disapproval) by the _____ on _____ 20 _____. Such local law was subject to permissive referendum and no valid petition requesting such referendum was filed as of _____ 20 _____, in accordance with the applicable provisions of law.
(Name of Legislative Body)
(Elective Chief Executive Officer)*

* Elective Chief Executive Officer means or includes the chief executive officer of a county elected on a county-wide basis or, if there be none, the chairperson of the county legislative body, the mayor of a city or village, or the supervisor of a town where such officer is vested with the power to approve or veto local laws or ordinances.

exist in violation of any of the provisions of this law is a threat to public health, safety, and welfare, and is declared and deemed a nuisance, and may be summarily abated or restored at the violator's expense, and/or a civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken.

SECTION 20. REMEDIES NOT EXCLUSIVE.

The remedies listed in this law are not exclusive of any other remedies available under any applicable federal, state or local law and it is within the discretion of the authorized enforcement agency to seek cumulative remedies.

SECTION 21. ADOPTION OF LAW.

This law shall be in full force and effect 30 days after its final passage and adoption. All prior laws and parts of law in conflict with this law are hereby repealed.

PASSED AND ADOPTED this 23rd day of August, 2007, by the following vote:

SECTION 3. APPLICABILITY.

This law shall apply to all water entering the MS4 generated on any developed and undeveloped lands unless explicitly exempted by an authorized enforcement agency.

SECTION 4. RESPONSIBILITY FOR ADMINISTRATION.

The Stormwater Management Officer(s) (SMO(s)) shall administer, implement, and enforce the provisions of this law. Such powers granted or duties imposed upon the authorized enforcement official may be delegated in writing by the SMO as may be authorized by the municipality.

SECTION 5. SEVERABILITY.

The provisions of this law are hereby declared to be severable. If any provision, clause, sentence, or paragraph of this law or the application thereof to any person, establishment, or circumstances shall be held invalid, such invalidity shall not affect the other provisions or application of this law.

SECTION 6. DISCHARGE PROHIBITIONS.

6.1 Prohibition of Illegal Discharges.
No person shall discharge or cause to be discharged into the MS4 any materials other than stormwater except as provided in Section 6.1.1. The commencement, conduct or continuance of any illegal discharge to the MS4 is prohibited except as described as follows:

6.1.1 The following discharges are exempt from discharge prohibitions established by this local law, unless the Department or the municipality has determined them to be substantial contributors of pollutants: water line flushing or other potable water sources, landscape irrigation or lawn watering, existing diverted stream flows, rising ground water, uncontaminated ground water infiltration to storm drains, uncontaminated pumped ground water, foundation or footing drains, crawl space or basement sump pumps, air conditioning condensate, irrigation water, springs, water from individual residential car washing, natural riparian habitat or wetland flows, dechlorinated swimming pool discharges, residential street wash water, water from fire fighting activities, and any other water source not containing pollutants. Such exempt discharges shall be made in accordance with an appropriate plan for reducing pollutants.

6.1.2 Discharges approved in writing by the SMO to protect life or property from imminent harm or damage, provided that, such approval shall not be construed to constitute compliance with other applicable laws and requirements, and further provided that such discharges may be permitted for a specified time period and under such conditions as the SMO may deem appropriate to protect such life and property while reasonably maintaining the purpose and intent of this local law.

6.1.3 Dye testing in compliance with applicable state and local laws is an allowable discharge, but requires a verbal notification to the SMO prior to the time of the test.
6.1.4 The prohibition shall not apply to any discharge permitted under an SPDES

permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the Department, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the MS4.

6.2 Prohibition of Illicit Connections.

6.2.1 The construction, use, maintenance or continued existence of illicit connections to the MS4 is prohibited.

6.2.2 This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

6.2.3 A person is considered to be in violation of this local law if the person connects a line conveying sewage to the municipality's MS4, or allows such a connection to continue.

SECTION 7. PROHIBITION AGAINST FAILING INDIVIDUAL SEWAGE TREATMENT SYSTEMS

No persons shall operate a failing individual sewage treatment system in areas tributary to the municipality's MS4. A failing individual sewage treatment system is one which has one or more of the following conditions:

7.1 The backup of sewage into a structure.
7.2 Discharges of treated or untreated sewage onto the ground surface.
7.3 A connection or connections to a separate stormwater sewer system.
7.4 Liquid level in the septic tank above the outlet invert.
7.5 Structural failure of any component of the individual sewage treatment system that could lead to any of the other failure conditions as noted in this section.
7.6 Contamination of off-site groundwater.

SECTION 8. PROHIBITION AGAINST ACTIVITIES CONTAMINATING STORMWATER

8.1 Activities that are subject to the requirements of this section are those types of activities that:

8.1.1 Cause or contribute to a violation of the municipality's MS4 SPDES permit.
8.1.2 Cause or contribute to the municipality being subject to the Special Conditions as defined in Section 2 (Definitions) of this local law.

8.2 Such activities include failing individual sewage treatment systems as defined in Section 7, improper management of pet waste or any other activity that causes or contributes to violations of the municipality's MS4 SPDES permit authorization.

8.3 Upon notification to a person that he or she is engaged in activities that cause or contribute to violations of the municipality's MS4 SPDES permit authorization, that person shall take all

the filing of the appeal, and within five days of making its decision, file its decision in the office of the municipal clerk and mail a copy of its decision by certified mail to the discharger.

SECTION 16. CORRECTIVE MEASURES AFTER APPEAL.

16.1 If the violation has not been corrected pursuant to the requirements set forth in the Notice of Violation, or, in the event of an appeal, within 5 business days of the decision of the municipal authority upholding the decision of the SMO, then the SMO shall request the owner's permission for access to the subject private property to take any and all measures reasonably necessary to abate the violation and/or restore the property.

16.2 If refused access to the subject private property, the SMO may seek a warrant in a court of competent jurisdiction to be authorized to enter upon the property to determine whether a violation has occurred. Upon determination that a violation has occurred, the SMO may seek a court order to take any and all measures reasonably necessary to abate the violation and/or restore the property. The cost of implementing and maintaining such measures shall be the sole responsibility of the discharger.

SECTION 17. INJUNCTIVE RELIEF.

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this law. If a person has violated or continues to violate the provisions of this law, the SMO may petition for a preliminary or permanent injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation.

SECTION 18. ALTERNATIVE REMEDIES.

18.1 Where a person has violated a provision of this Law, he/she may be eligible for alternative remedies in lieu of a civil penalty, upon recommendation of the Municipal Attorney and concurrence of the Municipal Code Enforcement Officer, where:

18.1.1 The violation was unintentional
18.1.2 The violator has no history of pervious violations of this Law.
18.1.3 Environmental damage was minimal.
18.1.4 Violator acted quickly to remedy violation.
18.1.5 Violator cooperated in investigation and resolution.

18.2 Alternative remedies may consist of one or more of the following:

18.2.1 Attendance at compliance workshops
18.2.2 Storm drain stenciling or storm drain marking
18.2.3 River, stream or creek cleanup activities

SECTION 19. VIOLATIONS DEEMED A PUBLIC NUISANCE.

In addition to the enforcement processes and penalties provided, any condition caused or permitted to

SECTION 14. ENFORCEMENT.

14.1 Notice of Violation.

When the municipality's SMO finds that a person has violated a prohibition or failed to meet a requirement of this law, he/she may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:

14.1.1 The elimination of illicit connections or discharges;

14.1.2 That violating discharges, practices, or operations shall cease and desist;

14.1.3 The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property;

14.1.4 The performance of monitoring, analyses, and reporting;

14.1.5 Payment of a fine; and

14.1.6 The implementation of source control or treatment BMPs. If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work will be done by a designated governmental agency or a contractor and the expense thereof shall be charged to the violator.

14.2 Penalties
In addition to or as an alternative to any penalty provided herein or by law, any person who violates the provisions of this local law shall be guilty of a violation punishable by a fine not exceeding three hundred fifty dollars ($350) or imprisonment for a period not to exceed six months, or both for conviction of a first offense; for conviction of a second offense both of which were committed within a period of five years, punishable by a fine not less than three hundred fifty dollars nor more than seven hundred dollars ($700) or imprisonment for a period not to exceed six months, or both; and upon conviction for a third or subsequent offense all of which were committed within a period of five years, punishable by a fine not less than seven hundred dollars nor more than one thousand dollars ($1000) or imprisonment for a period not to exceed six months, or both. However, for the purposes of conferring jurisdiction upon courts and judicial officers generally, violations of this local law shall be deemed misdemeanors and for such purpose only all provisions of law relating to misdemeanors shall apply to such violations. Each week's continued violation shall constitute a separate additional violation.

SECTION 15. APPEAL OF NOTICE OF VIOLATION.

Any person receiving a Notice of Violation may appeal the determination of the SMO to the Macedon Town Board within 15 days of its issuance, which shall hear the appeal within 30 days after

reasonable actions to correct such activities such that he or she no longer causes or contributes to violations of the municipality's MS4 SPDES permit authorization.

SECTION 9. REQUIREMENT TO PREVENT, CONTROL, AND REDUCE STORMWATER POLLUTANTS BY THE USE OF BEST MANAGEMENT PRACTICES.

9.1 Best Management Practices
Where the SMO has identified illicit discharges as defined in Section 2 or activities contaminating stormwater as defined in Section 8 the municipality may require implementation of Best Management Practices (BMPs) to control those illicit discharges and activities.

9.1.1 The owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the MS4 through the use of structural and non-structural BMPs.

9.1.2 Any person responsible for a property or premise, which is, or may be, the source of an illicit discharge as defined in Section 2 or an activity contaminating stormwater as defined in Section 8, may be required to implement, at said person's expense, additional structural and non-structural BMPs to reduce or eliminate the source of pollutant(s) to the MS4.

9.1.3 Compliance with all terms and conditions of a valid SPDES permit authorizing the discharge of stormwater associated with industrial activity, to the extent practicable, shall be deemed compliance with the provisions of this section.

9.2 Individual Sewage Treatment Systems - Response to Special Conditions Requiring No Increase of Pollutants or Requiring a Reduction of Pollutants

Where individual sewage treatment systems are contributing to the municipality's being subject to the Special Conditions as defined in Section 2 of this local law, the owner or operator of such individual sewage treatment systems shall be required to:

9.2.1 Maintain and operate individual sewage treatment systems as follows:
1. Inspect the septic tank annually to determine scum and sludge accumulation. Septic tanks must be pumped out whenever the bottom of the scum layer is within three inches of the bottom of the outlet baffle or sanitary tee or the top of the sludge is within ten inches of the bottom of the outlet baffle or sanitary tee.
2. Avoid the use of septic tank additives.
3. Avoid the disposal of excessive quantities of detergents, kitchen wastes, laundry wastes. and household chemicals; and
4. Avoid the disposal of cigarette butts, disposable diapers, sanitary napkins, trash and other such items

9.2.2 Repair or replace individual sewage treatment systems as follows:
1. In accordance with 10NYCRR Appendix 75A to the maximum extent practicable.

2. A design professional licensed to practice in New York State shall prepare design plans for any type of absorption field that involves:
   1. Relocating or extending an absorption area to a location not previously approved for such.
   2. Installation of a new subsurface treatment system at the same location.
   3. Use of alternate system or innovative system design or technology.
3. A written certificate of compliance shall be submitted by the design professional to the municipality at the completion of construction of the repair or replacement system.

SECTION 10. SUSPENSION OF ACCESS TO MS4. Illicit Discharges in Emergency Situations.

10.1 The SMO may, without prior notice, suspend MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment, to the health or welfare of persons, or to the MS4. The SMO shall notify the person of such suspension within a reasonable time thereafter in writing of the reasons for the suspension. If the violator fails to comply with a suspension order issued in an emergency, the SMO may take such steps as deemed necessary to prevent or minimize damage to the MS4 or to minimize danger to persons.

10.2 Suspension due to the detection of illicit discharge. Any person discharging to the municipality's MS4 in violation of this law may have their MS4 access terminated if such termination would abate or reduce an illicit discharge. The SMO will notify a violator in writing of the proposed termination of its MS4 access and the reasons therefor. The violator may petition the SMO for a reconsideration and hearing. Access may be granted by the SMO if he/she finds that the illicit discharge has ceased and the discharger has taken steps to prevent its recurrence. Access may be denied if the SMO determines in writing that the illicit discharge has not ceased or is likely to recur. A person commits an offense if the person reinstates MS4 access to premises terminated pursuant to this Section, without the prior approval of the SMO.

SECTION 11. INDUSTRIAL OR CONSTRUCTION ACTIVITY DISCHARGES.

Any person subject to an industrial or construction activity SPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the municipality prior to the allowing of discharges to the MS4.

SECTION 12. ACCESS AND MONITORING OF DISCHARGES.

12.1 Applicability. This section applies to all facilities that the SMO must inspect to enforce any provision of this Law, or whenever the authorized enforcement agency has cause to believe that there exists, or potentially exists, in or upon any premises any condition which constitutes a violation of this Law.

12.2 Access to Facilities.

12.2.1 The SMO shall be permitted to enter and inspect facilities subject to regulation under this law as often as may be necessary to determine compliance with this Law. If a discharger has security measures in force which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to the SMO.

12.2.2 Facility operators shall allow the SMO ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records as may be required to implement this law.

12.2.3 The municipality shall have the right to set up on any facility subject to this law such devices as are necessary in the opinion of the SMO to conduct monitoring and/or sampling of the facility's stormwater discharge.

12.2.4 The municipality has the right to require the facilities subject to this law to install monitoring equipment as is reasonably necessary to determine compliance with this law. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure stormwater flow and quality shall be calibrated to ensure their accuracy.

12.2.5 Unreasonable delays in allowing the municipality access to a facility subject to this law is a violation of this law. A person who is the operator of a facility subject to this law commits an offense if the person denies the municipality reasonable access to the facility for the purpose of conducting any activity authorized or required by this law.

12.2.6 If the SMO has been refused access to any part of the premises from which stormwater is discharged, and he/she is able to demonstrate probable cause to believe that there may be a violation of this law, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this law or any order issued hereunder, then the SMO may seek issuance of a search warrant from any court of competent jurisdiction.

SECTION 13. NOTIFICATION OF SPILLS.

Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into the MS4, said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous materials said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non-hazardous materials, said person shall notify the municipality in person or by telephone or facsimile no later than the next business day. Notifications in person or by telephone shall be confirmed by written notice addressed and mailed to the municipality within three business days of the telephone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years.

Local Law Filing

NEW YORK STATE DEPARTMENT OF STATE
41 STATE STREET
ALBANY, NY 12231

(Use this form to file a local law with the Secretary of State.)

Text of law should be given as amended. Do not include matter being eliminated and do not use italics or underlining to indicate new matter.

- ☐ **County**
- ☐ **City** **of** Macedon
- ☒ **Town**
- ☐ **Village**

Local Law No. 4 **of the year 20** 07

A local law Stormwater Management and Erosion & Sediment Control
(Insert Title)

Be it enacted by the Town Board **of the**
(Name of Legislative Body)

- ☐ **County**
- ☐ **City** **of** Macedon
- ☒ **Town**
- ☐ **Village**

as follows:

text as attached

(If additional space is needed, attach pages the same size as this sheet, and number each.)

Town of Macedon
Local Law for Stormwater Management and Erosion & Sediment Control
Local Law #4 of 2007

General Purpose: Adoption of NYS Model Code relative to MS4 program. This law establishes guidelines and enforcement mechanisms for erosion and sediment control by amending Chapter 75 Land Use, and Chapter 135 Zoning of the Town of Macedon.

Town Board Public Hearing date: August 23, 2007

Be it enacted by the Town Board of the Town of Macedon as follows:

Article 1. General Provisions

Section 1. Findings of Fact

It is hereby determined that:

1.1 Land development activities and associated increases in site impervious cover often alter the hydrologic response of local watersheds and increase stormwater runoff rates and volumes, flooding, stream channel erosion, or sediment transport and deposition;

1.2 This stormwater runoff contributes to increased quantities of water-borne pollutants, including siltation of aquatic habitat for fish and other desirable species;

1.3 Clearing and grading during construction tends to increase soil erosion and add to the loss of native vegetation necessary for terrestrial and aquatic habitat;

1.4 Improper design and construction of stormwater management practices can increase the velocity of stormwater runoff thereby increasing stream bank erosion and sedimentation;

1.5 Impervious surfaces allow less water to percolate into the soil, thereby decreasing groundwater recharge and stream baseflow;

1.6 Substantial economic losses can result from these adverse impacts on the waters of the municipality;

1.7 Stormwater runoff, soil erosion and nonpoint source pollution can be controlled and minimized through the regulation of stormwater runoff from land development activities;

1.8 The regulation of stormwater runoff discharges from land development activities in order to control and minimize increases in stormwater runoff rates and volumes, soil erosion, stream channel erosion, and nonpoint source pollution associated with stormwater runoff is in the public interest and will minimize threats to public health and safety.

1.9 Regulation of land development activities by means of performance standards governing stormwater management and site design will produce development compatible with the natural functions of a particular site or an entire watershed and thereby mitigate the adverse effects of erosion and sedimentation from development.

Section 2. Purpose

The purpose of this local law is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of fact in Section 1 hereof. This local law seeks to meet those purposes by achieving the following objectives:

2.1 Meet the requirements of minimum measures 4 and 5 of the SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit no. GP-02-02 or as amended or revised;

2.2 Require land development activities to conform to the substantive requirements of the NYS Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities GP-02-01 or as amended or revised;

2.3 Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels;

2.4 Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality;

2.5 Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and

2.6 Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety.

Section 3. Statutory Authority

In accordance with Article 10 of the Municipal Home Rule Law of the State of New York, the Town Board of Macedon has the authority to enact local laws and amend local laws and for the purpose of promoting the health, safety or general welfare of the Town of Macedon and for the protection and enhancement of its physical environment. The Town Board of Macedon may

include in any such local law provisions for the appointment of any municipal officer, employees, or independent contractor to effectuate, administer and enforce such local law.

Section 4. Applicability

4.1 This local law shall be applicable to all land development activities as defined in this local law, Article 2, Section 1.

4.2 The municipality shall designate a Stormwater Management Officer who shall accept and review all stormwater pollution prevention plans and forward such plans to the applicable municipal board. The Stormwater Management Officer may (1) review the plans, (2) upon approval by the Town Board of the Town of Macedon, engage the services of a registered professional engineer to review the plans, specifications and related documents at a cost not to exceed a fee schedule established by said governing board, or (3) accept the certification of a licensed professional that the plans conform to the requirements of this law.

4.3 All land development activities subject to review and approval by the Planning Board of the Town of Macedon under subdivision, site plan, and/or special use permit regulations shall be reviewed subject to the standards contained in this local law.

4.4 All land development activities not subject to review as stated in section 4.3 shall be required to submit a Stormwater Pollution Prevention Plan (SWPPP) to the Stormwater Management Officer who shall approve the SWPPP if it complies with the requirements of this law.

Section 5. Exemptions

The following activities may be exempt from review under this law.

5.1 Agricultural activity as defined in this local law.

5.2 Silviculturalactivity except that landing areas and log haul roads are subject to this law.

5.3 Routine maintenance activities that disturb less than five acres and are performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility.

5.4 Repairs to any stormwater management practice or facility deemed necessary by the Stormwater Management Officer.

5.5 Any part of a subdivision if a plat for the subdivision has been approved by the Town of Macedon on or before the effective date of this law.

5.6 Land development activities for which a building permit has been approved on or before the effective date of this law.

5.7 Cemetery graves.

5.8 Installation of fence, sign, telephone, and electric poles and other kinds of posts or poles.

5.9 Emergency activity immediately necessary to protect life, property or natural resources.

5.10 Activities of an individual engaging in home gardening by growing flowers, vegetable and other plants primarily for use by that person and his or her family.

5.11 Landscaping and horticultural activities in connection with an existing structure.

Article 2. Zoning Law Amendment: Stormwater Control

The Town of Macedon Zoning Law Article VI §135-43 is hereby renamed from "Storm drainage considerations" to "Stormwater Control", and the text of this section is hereby amended to read as follows:

Section 1. Definitions

The terms used in this local law or in documents prepared or reviewed under this local law shall have the meaning as set forth in this section.

The following listed definitions shall be integrated into Zoning Code §135-7 Definitions:

Applicant - A property owner or agent of a property owner who has filed an application for a land development activity.

Channel - A natural or artificial watercourse with a definite bed and banks that conducts continuously or periodically flowing water.

Clearing - Any activity that removes the vegetative surface cover.

Dedication - The deliberate appropriation of property by its owner for general public use.

Department - The New York State Department of Environmental Conservation

Design Manual - The New York State Stormwater Management Design Manual, most recent version including applicable updates, that serves as the official guide for stormwater management principles, methods and practices.

Developer - A person who undertakes land development activities.

Erosion Control Manual - The most recent version of the "New York Standards and Specifications for Erosion and Sediment Control" manual, commonly known as the "Blue Book".

18.2 Alternative remedies may consist of one or more of the following:

18.2.1 Attendance at compliance workshops
18.2.2 Storm drain stenciling or storm drain marking
18.2.3 River, stream or creek cleanup activities

SECTION 19. VIOLATIONS DEEMED A PUBLIC NUISANCE.

In addition to the enforcement processes and penalties provided, any condition caused or permitted to exist in violation of any of the provisions of this law is a threat to public health, safety, and welfare, and is declared and deemed a nuisance, and may be summarily abated or restored at the violator's expense, and/or a civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken.

SECTION 20. REMEDIES NOT EXCLUSIVE.

The remedies listed in this law are not exclusive of any other remedies available under any applicable federal, state or local law and it is within the discretion of the authorized enforcement agency to seek cumulative remedies.

SECTION 21. ADOPTION OF LAW.

This law shall be in full force and effect __ days after its final passage and adoption. All prior laws and parts of law in conflict with this law are hereby repealed.

PASSED AND ADOPTED this ____day of _____, 20__, by the following vote:

courts and judicial officers generally, violations of this local law shall be deemed misdemeanors and for such purpose only all provisions of law relating to misdemeanors shall apply to such violations. Each week's continued violation shall constitute a separate additional violation.

SECTION 15. APPEAL OF NOTICE OF VIOLATION.

Any person receiving a Notice of Violation may appeal the determination of the SMO to the **(City Council/Town Board/Village Board of Trustees)** within 15 days of its issuance, which shall hear the appeal within 30 days after the filing of the appeal, and within five days of making its decision, file its decision in the office of the municipal clerk and mail a copy of its decision by certified mail to the discharger.

SECTION 16. CORRECTIVE MEASURES AFTER APPEAL.

16.1 If the violation has not been corrected pursuant to the requirements set forth in the Notice of Violation, or, in the event of an appeal, within 5 business days of the decision of the municipal authority upholding the decision of the SMO, then the SMO shall request the owner's permission for access to the subject private property to take any and all measures reasonably necessary to abate the violation and/or restore the property.

16.2 If refused access to the subject private property, the SMO may seek a warrant in a court of competent jurisdiction to be authorized to enter upon the property to determine whether a violation has occurred. Upon determination that a violation has occurred, the SMO may seek a court order to take any and all measures reasonably necessary to abate the violation and/or restore the property. The cost of implementing and maintaining such measures shall be the sole responsibility of the discharger.

SECTION 17. INJUNCTIVE RELIEF.

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this law. If a person has violated or continues to violate the provisions of this law, the SMO may petition for a preliminary or permanent injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation.

SECTION 18. ALTERNATIVE REMEDIES.

18.1 Where a person has violated a provision of this Law, he/she may be eligible for alternative remedies in lieu of a civil penalty, upon recommendation of the Municipal Attorney and concurrence of the Municipal Code Enforcement Officer, where:

18.1.1 The violation was unintentional
18.1.2 The violator has no history of pervious violations of this Law.
18.1.3 Environmental damage was minimal.
18.1.4 Violator acted quickly to remedy violation.
18.1.5 Violator cooperated in investigation and resolution.

Grading - Excavation or fill of material, including the resulting conditions thereof.

Impervious Cover- Those surfaces, improvements and structures that cannot effectively infiltrate rainfall, snow melt and water (e.g., building rooftops, pavement, sidewalks, driveways, etc).

Industrial Stormwater Permit - A State Pollutant Discharge Elimination System permit issued to a commercial industry or group of industries which regulates the pollutant levels associated with industrial stormwater discharges or specifies on-site pollution control strategies.

Infiltration - The process of percolating stormwater into the subsoil.

Jurisdictional Wetland - An area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

Land Development Activity - Construction activity including clearing, grading, excavating, soil disturbance or placement of fill that results in land disturbance of equal to or greater than one acre, or activities disturbing less than one acre of total land area that is part of a larger common plan of development or sale, even though multiple separate and distinct land development activities may take place at different times on different schedules.

Landowner - The legal or beneficial owner of land, including those holding the right to purchase or lease the land, or any other person holding proprietary rights in the land.

Maintenance Agreement - A legally recorded document that acts as a property deed restriction, and which provides for long-term maintenance of stormwater management practices.

Nonpoint Source Pollution - Pollution from any source other than from any discernible, confined, and discrete conveyances, and shall include, but not be limited to, pollutants from agricultural, silvicultural, mining, construction, subsurface disposal and urban runoff sources.

Phasing - Clearing a parcel of land in distinct pieces or parts, with the stabilization of each piece completed before the clearing of the next.

Pollutant of Concern - Sediment or a water quality measurement that addresses sediment (such as total suspended solids, turbidity or siltation) and any other pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the land development activity.

Project - Land development activity

Recharge - The replenishment of underground water reserves.

Sediment Control - Measures that prevent eroded sediment from leaving the site.

Sensitive Areas - Cold water fisheries, shellfish beds, swimming beaches, groundwater recharge areas, water supply reservoirs, habitats for threatened, endangered or special concern species.

SPDES General Permit for Construction Activities GP-02-01 - A permit under the New York State Pollutant Discharge Elimination System (SPDES) issued to developers of construction activities to regulate disturbance of one or more acres of land.

SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems GP-02-02 - A permit under the New York State Pollutant Discharge Elimination System (SPDES) issued to municipalities to regulate discharges from municipal separate storm sewers for compliance with EPA established water quality standards and/or to specify stormwater control standards

Stabilization - The use of practices that prevent exposed soil from eroding.

Stop Work Order - An order issued which requires that all construction activity on a site be stopped.

Stormwater - Rainwater, surface runoff, snowmelt and drainage

Stormwater Hotspot - A land use or activity that generates higher concentrations of hydrocarbons, trace metals or toxicants than are found in typical stormwater runoff, based on monitoring studies.

Stormwater Management - The use of structural or non-structural practices that are designed to reduce stormwater runoff and mitigate its adverse impacts on property, natural resources and the environment.

Stormwater Management Facility - One or a series of stormwater management practices installed, stabilized and operating for the purpose of controlling stormwater runoff.

Stormwater Management Officer - An employee or officer designated by the municipality to accept and review stormwater pollution prevention plans, forward the plans to the applicable municipal board and inspect stormwater management practices

Stormwater Management Practices (SMPs) - Measures, either structural or nonstructural, that are determined to be the most effective, practical means of preventing flood damage and preventing or reducing point source or nonpoint source pollution inputs to stormwater runoff and water bodies.

Stormwater Pollution Prevention Plan (SWPPP) - A plan for controlling stormwater runoff and pollutants from a site during and after construction activities.

containment, and cleanup of such release. In the event of such a release of hazardous materials said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non-hazardous materials, said person shall notify the municipality in person or by telephone or facsimile no later than the next business day. Notifications in person or by telephone shall be confirmed by written notice addressed and mailed to the municipality within three business days of the telephone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years.

SECTION 14. ENFORCEMENT.

14.1 Notice of Violation.

When the municipality's SMO finds that a person has violated a prohibition or failed to meet a requirement of this law, he/she may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:

14.1.1 The elimination of illicit connections or discharges;

14.1.2 That violating discharges, practices, or operations shall cease and desist;

14.1.3 The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property;

14.1.4 The performance of monitoring, analyses, and reporting;

14.1.5 Payment of a fine; and

14.1.6 The implementation of source control or treatment BMPs. If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work will be done by a designated governmental agency or a contractor and the expense thereof shall be charged to the violator.

14.2 Penalties

In addition to or as an alternative to any penalty provided herein or by law, any person who violates the provisions of this local law shall be guilty of a violation punishable by a fine not exceeding three hundred fifty dollars ($350) or imprisonment for a period not to exceed six months, or both for conviction of a first offense; for conviction of a second offense both of which were committed within a period of five years, punishable by a fine not less than three hundred fifty dollars nor more than seven hundred dollars ($700) or imprisonment for a period not to exceed six months, or both; and upon conviction for a third or subsequent offense all of which were committed within a period of five years, punishable by a fine not less than seven hundred dollars nor more than one thousand dollars ($1000) or imprisonment for a period not to exceed six months, or both. However, for the purposes of conferring jurisdiction upon

SECTION 12. ACCESS AND MONITORING OF DISCHARGES.

12.1 Applicability. This section applies to all facilities that the SMO must inspect to enforce any provision of this Law, or whenever the authorized enforcement agency has cause to believe that there exists, or potentially exists, in or upon any premises any condition which constitutes a violation of this Law.

12.2 Access to Facilities.

12.2.1 The SMO shall be permitted to enter and inspect facilities subject to regulation under this law as often as may be necessary to determine compliance with this Law. If a discharger has security measures in force which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to the SMO.

12.2.2 Facility operators shall allow the SMO ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records as may be required to implement this law.

12.2.3 The municipality shall have the right to set up on any facility subject to this law such devices as are necessary in the opinion of the SMO to conduct monitoring and/or sampling of the facility's stormwater discharge.

12.2.4 The municipality has the right to require the facilities subject to this law to install monitoring equipment as is reasonably necessary to determine compliance with this law. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure stormwater flow and quality shall be calibrated to ensure their accuracy.

12.2.5 Unreasonable delays in allowing the municipality access to a facility subject to this law is a violation of this law. A person who is the operator of a facility subject to this law commits an offense if the person denies the municipality reasonable access to the facility for the purpose of conducting any activity authorized or required by this law.

12.2.6 If the SMO has been refused access to any part of the premises from which stormwater is discharged, and he/she is able to demonstrate probable cause to believe that there may be a violation of this law, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this law or any order issued hereunder, then the SMO may seek issuance of a search warrant from any court of competent jurisdiction.

SECTION 13. NOTIFICATION OF SPILLS.

Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into the MS4, said person shall take all necessary steps to ensure the discovery,

Stormwater Runoff - Flow on the surface of the ground, resulting from precipitation

Surface Waters of the State of New York - Lakes, bays, sounds, ponds, impounding reservoirs, springs, wells, 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. Storm sewers and waste treatment systems, including treatment ponds or lagoons 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.

Watercourse - A permanent or intermittent stream or other body of water, either natural or man-made, which gathers or carries surface water.

Waterway - A channel that directs surface runoff to a watercourse or to the public storm drain.

Section 2. Stormwater Pollution Prevention Plans

2.1. Stormwater Pollution Prevention Plan Requirement

No application for approval of a land development activity shall be reviewed until the appropriate board has received a Stormwater Pollution Prevention Plan (SWPPP) prepared in accordance with the specifications in this local law.

2.2 Contents of Stormwater Pollution Prevention Plans

2.2.1 All SWPPPs shall provide the following background information and erosion and sediment controls:

1. Background information about the scope of the project, including location, type and size of project.

2. Site map/construction drawing(s) for the project, including a general location map. At a minimum, the site map should show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); wetlands and drainage patterns that could be affected by the construction activity; existing and final slopes; locations of off-site material, waste, borrow or equipment storage areas; and location(s) of the stormwater discharges(s);

3. Description of the soil(s) present at the site;

4. Construction phasing plan describing the intended sequence of construction activities, including clearing and grubbing, excavation and grading, utility and infrastructure installation and any other activity at the site that results in soil disturbance. Consistent

with the New York Standards and Specifications for Erosion and Sediment Control (Erosion Control Manual), not more than five (5) acres shall be disturbed at any one time unless pursuant to an approved SWPPP.

5. Description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a pollutant source in stormwater runoff;

6. Description of construction and waste materials expected to be stored on-site with updates as appropriate, and a description of controls to reduce pollutants from these materials including storage practices to minimize exposure of the materials to stormwater, and spill-prevention and response;

7. Temporary and permanent structural and vegetative measures to be used for soil stabilization, runoff control and sediment control for each stage of the project from initial land clearing and grubbing to project close-out;

8. A site map/construction drawing(s) specifying the location(s), size(s) and length(s) of each erosion and sediment control practice;

9. Dimensions, material specifications and installation details for all erosion and sediment control practices, including the siting and sizing of any temporary sediment basins;

10. Temporary practices that will be converted to permanent control measures;

11. Implementation schedule for staging temporary erosion and sediment control practices, including the timing of initial placement and duration that each practice should remain in place;

12. Maintenance schedule to ensure continuous and effective operation of the erosion and sediment control practice;

13. Name(s) of the receiving water(s);

14. Delineation of SWPPP implementation responsibilities for each part of the site;

15. Description of structural practices designed to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable; and

16. Any existing data that describes the stormwater runoff at the site.

2.2.2 Land development activities as defined in Section 1 of this Article and meeting Condition "A", "B" or "C" below shall also include water quantity and water quality controls (post-construction stormwater runoff controls) as set forth in Section 2.2.3 below as applicable:

4. *Avoid the disposal of cigarette butts, disposable diapers, sanitary napkins, trash and other such items*

➲Most tanks should be pumped out every two to three years. However, pumping may be more or less frequent depending on use. Inspection of the tank for cracks, leaks and blockages should be done by the septage hauler at the time of pumping of the tank contents.

9.2.2 Repair or replace individual sewage treatment systems as follows:

1. *In accordance with 10NYCRR Appendix 75A to the maximum extent practicable.*
2. *A design professional licensed to practice in New York State shall prepare design plans for any type of absorption field that involves:*
   1. *Relocating or extending an absorption area to a location not previously approved for such.*
   2. *Installation of a new subsurface treatment system at the same location.*
   3. *Use of alternate system or innovative system design or technology.*
3. *A written certificate of compliance shall be submitted by the design professional to the municipality at the completion of construction of the repair or replacement system.*

SECTION 10. SUSPENSION OF ACCESS TO MS4. Illicit Discharges in Emergency Situations.

10.1 The SMO may, without prior notice, suspend MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment, to the health or welfare of persons, or to the MS4. The SMO shall notify the person of such suspension within a reasonable time thereafter in writing of the reasons for the suspension. If the violator fails to comply with a suspension order issued in an emergency, the SMO may take such steps as deemed necessary to prevent or minimize damage to the MS4 or to minimize danger to persons.

10.2 Suspension due to the detection of illicit discharge. Any person discharging to the municipality's MS4 in violation of this law may have their MS4 access terminated if such termination would abate or reduce an illicit discharge. The SMO will notify a violator in writing of the proposed termination of its MS4 access and the reasons therefor. The violator may petition the SMO for a reconsideration and hearing. Access may be granted by the SMO if he/she finds that the illicit discharge has ceased and the discharger has taken steps to prevent its recurrence. Access may be denied if the SMO determines in writing that the illicit discharge has not ceased or is likely to recur. A person commits an offense if the person reinstates MS4 access to premises terminated pursuant to this Section, without the prior approval of the SMO.

SECTION 11. INDUSTRIAL OR CONSTRUCTION ACTIVITY DISCHARGES.

Any person subject to an industrial or construction activity SPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the municipality prior to the allowing of discharges to the MS4.

8.3 Upon notification to a person that he or she is engaged in activities that cause or contribute to violations of the municipality's MS4 SPDES permit authorization, that person shall take all reasonable actions to correct such activities such that he or she no longer causes or contributes to violations of the municipality's MS4 SPDES permit authorization.

SECTION 9. REQUIREMENT TO PREVENT, CONTROL, AND REDUCE STORMWATER POLLUTANTS BY THE USE OF BEST MANAGEMENT PRACTICES.

9.1 Best Management Practices
Where the SMO has identified illicit discharges as defined in Section 2 or activities contaminating stormwater as defined in Section 8 the municipality may require implementation of Best Management Practices (BMPs) to control those illicit discharges and activities.

9.1.1 The owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the MS4 through the use of structural and non-structural BMPs.

9.1.2 Any person responsible for a property or premise, which is, or may be, the source of an illicit discharge as defined in Section 2 or an activity contaminating stormwater as defined in Section 8, may be required to implement, at said person's expense, additional structural and non-structural BMPs to reduce or eliminate the source of pollutant(s) to the MS4.

9.1.3 Compliance with all terms and conditions of a valid SPDES permit authorizing the discharge of stormwater associated with industrial activity, to the extent practicable, shall be deemed compliance with the provisions of this section.

➲ *The following section in italics is optional for those municipalities that are regulating failing individual sewage treatment systems to address Special Conditions or water resource objectives:*

9.2 Individual Sewage Treatment Systems - Response to Special Conditions Requiring No Increase of Pollutants or Requiring a Reduction of Pollutants

Where individual sewage treatment systems are contributing to the municipality's being subject to the Special Conditions as defined in Section 2 of this local law, the owner or operator of such individual sewage treatment systems shall be required to:

9.2.1 Maintain and operate individual sewage treatment systems as follows:

1. *Inspect the septic tank annually to determine scum and sludge accumulation. Septic tanks must be pumped out whenever the bottom of the scum layer is within three inches of the bottom of the outlet baffle or sanitary tee or the top of the sludge is within ten inches of the bottom of the outlet baffle or sanitary tee.*
2. *Avoid the use of septic tank additives.*
3. *Avoid the disposal of excessive quantities of detergents, kitchen wastes, laundry wastes, and household chemicals; and*

Condition A - Stormwater runoff from land development activities discharging a pollutant of concern to either an impaired water identified on the Department's 303(d) list of impaired waters or a Total Maximum Daily Load (TMDL) designated watershed for which pollutants in stormwater have been identified as a source of the impairment.

Condition B - Stormwater runoff from land development activities disturbing five (5) or more acres.

Condition C - Stormwater runoff from land development activity disturbing between one (1) and five (5) acres of land during the course of the project, exclusive of the construction of single family residences and construction activities at agricultural properties.

2.2.3 SWPPP Requirements for Condition A, B and C:

1. All information in Section 2.2 .1 of this local law
2. Description of each post-construction stormwater management practice;
3. Site map/construction drawing(s) showing the specific location(s) and size(s) of each post-construction stormwater management practice;
4. Hydrologic and hydraulic analysis for all structural components of the stormwater management system for the applicable design storms
5. Comparison of post-development stormwater runoff conditions with pre-development conditions
6. Dimensions, material specifications and installation details for each post-construction stormwater management practice;
7. Maintenance schedule to ensure continuous and effective operation of each post-construction stormwater management practice.
8. Maintenance easements to ensure access to all stormwater management practices at the site for the purpose of inspection and repair. Easements shall be recorded on the plan and shall remain in effect with transfer of title to the property.
9. Inspection and maintenance agreement binding on all subsequent landowners served by the on-site stormwater management measures in accordance with Article 2, Section 4 of this local law.
10. For Condition A, the SWPPP shall be prepared by a landscape architect, certified professional or professional engineer and must be signed by the professional preparing the plan, who shall certify that the design of all stormwater management practices meet the requirements in this local law.

2.3 Other Environmental Permits

The applicant shall assure that all other applicable environmental permits have been or will be acquired for the land development activity prior to approval of the final stormwater design plan.

2.4 Contractor Certification

2.4.1 Each contractor and subcontractor identified in the SWPPP who will be involved in soil disturbance and/or stormwater management practice installation shall sign and date a copy of the following certification statement before undertaking any land development activity : "I certify under penalty of law that I understand and agree to comply with the terms and conditions of the Stormwater Pollution Prevention Plan. I also understand that it is unlawful for any person to cause or contribute to a violation of water quality standards."

2.4.2 The certification must include the name and title of the person providing the signature, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.

2.4.3 The certification statement(s) shall become part of the SWPPP for the land development activity.

2.5 A copy of the SWPPP shall be retained at the site of the land development activity during construction from the date of initiation of construction activities to the date of final stabilization.

Section 3. Performance and Design Criteria for Stormwater Management and Erosion and Sediment Control

All land development activities shall be subject to the following performance and design criteria:

3.1 Technical Standards

For the purpose of this local law, the following documents shall serve as the official guides and specifications for stormwater management. Stormwater management practices that are designed and constructed in accordance with these technical documents shall be presumed to meet the standards imposed by this law:

3.1.1 The New York State Stormwater Management Design Manual (New York State Department of Environmental Conservation, most current version or its successor, hereafter referred to as the Design Manual)

3.1.2 New York Standards and Specifications for Erosion and Sediment Control, (Empire State Chapter of the Soil and Water Conservation Society, 2004, most

6.2 Prohibition of Illicit Connections.

6.2.1 The construction, use, maintenance or continued existence of illicit connections to the MS4 is prohibited.

6.2.2 This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

6.2.3 A person is considered to be in violation of this local law if the person connects a line conveying sewage to the municipality's MS4, or allows such a connection to continue.

➲ *The following section in italics is optional for those municipalities that are regulating failing individual sewage treatment systems to address Special Conditions or water resource objectives:*

SECTION 7. PROHIBITION AGAINST FAILING INDIVIDUAL SEWAGE TREATMENT SYSTEMS

No persons shall operate a failing individual sewage treatment system in areas tributary to the municipality's MS4. A failing individual sewage treatment system is one which has one or more of the following conditions:

7.1 The backup of sewage into a structure.
7.2 Discharges of treated or untreated sewage onto the ground surface.
7.3 A connection or connections to a separate stormwater sewer system.
7.4 Liquid level in the septic tank above the outlet invert.
7.5 Structural failure of any component of the individual sewage treatment system that could lead to any of the other failure conditions as noted in this section.
7.6 Contamination of off-site groundwater.

SECTION 8. PROHIBITION AGAINST ACTIVITIES CONTAMINATING STORMWATER

8.1 Activities that are subject to the requirements of this section are those types of activities that:

8.1.1 Cause or contribute to a violation of the municipality's MS4 SPDES permit.
8.1.2 Cause or contribute to the municipality being subject to the Special Conditions as defined in Section 2 (Definitions) of this local law.

➲ *The following section in italics is optional for those municipalities that are regulating failing individual sewage treatment systems to address Special Conditions or water resource objectives:*

8.2 Such activities include failing individual sewage treatment systems as defined in Section 7, improper management of pet waste or any other activity that causes or contributes to violations of the municipality's MS4 SPDES permit authorization.

official may be delegated in writing by the SMO as may be authorized by the municipality.

SECTION 5. SEVERABILITY.

The provisions of this law are hereby declared to be severable. If any provision, clause, sentence, or paragraph of this law or the application thereof to any person, establishment, or circumstances shall be held invalid, such invalidity shall not affect the other provisions or application of this law.

SECTION 6. DISCHARGE PROHIBITIONS.

6.1 Prohibition of Illegal Discharges.
No person shall discharge or cause to be discharged into the MS4 any materials other than stormwater except as provided in Section 6.1.1. The commencement, conduct or continuance of any illegal discharge to the MS4 is prohibited except as described as follows:

6.1.1 The following discharges are exempt from discharge prohibitions established by this local law, unless the Department or the municipality has determined them to be substantial contributors of pollutants: water line flushing or other potable water sources, landscape irrigation or lawn watering, existing diverted stream flows, rising ground water, uncontaminated ground water infiltration to storm drains, uncontaminated pumped ground water, foundation or footing drains, crawl space or basement sump pumps, air conditioning condensate, irrigation water, springs, water from individual residential car washing, natural riparian habitat or wetland flows, dechlorinated swimming pool discharges, residential street wash water, water from fire fighting activities, and any other water source not containing pollutants. Such exempt discharges shall be made in accordance with an appropriate plan for reducing pollutants.

➲ *These discharge exemptions are allowed by the Federal regulations and the Department; however, municipalities may choose to delete certain exemptions if it is important to control that discharge to protect local water resources.*

6.1.2 Discharges approved in writing by the SMO to protect life or property from imminent harm or damage, provided that, such approval shall not be construed to constitute compliance with other applicable laws and requirements, and further provided that such discharges may be permitted for a specified time period and under such conditions as the SMO may deem appropriate to protect such life and property while reasonably maintaining the purpose and intent of this local law.

6.1.3 Dye testing in compliance with applicable state and local laws is an allowable discharge, but requires a verbal notification to the SMO prior to the time of the test.
6.1.4 The prohibition shall not apply to any discharge permitted under an SPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the Department, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the MS4.

current version or its successor, hereafter referred to as the Erosion Control Manual).

3.2 Equivalence to Technical Standards

Where stormwater management practices are not in accordance with technical standards, the applicant or developer must demonstrate equivalence to the technical standards set forth in Article 2, Section 3.1 and the SWPPP shall be prepared by a licensed professional.

3.3 Water Quality Standards

Any land development activity shall not cause an increase in turbidity that will result in substantial visible contrast to natural conditions in surface waters of the state of New York.

Section 4. Maintenance, Inspection and Repair of Stormwater Facilities

4.1 Maintenance and Inspection During Construction

4.1.1 The applicant or developer of the land development activity or their representative shall 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 applicant or developer to achieve compliance with the conditions of this local law. Sediment shall be removed from sediment traps or sediment ponds whenever their design capacity has been reduced by fifty (50) percent.

4.1.2 For land development activities as defined in Section 1 of this Article and meeting Condition A, B or C in Section 2.2.2, the applicant shall have a qualified professional conduct site inspections and document the effectiveness of all erosion and sediment control practices every 7 days and within 24 hours of any storm event producing 0.5 inches of precipitation or more. Inspection reports shall be maintained in a site log book.

4.1.3 The applicant or developer or their representative shall be on site at all times when construction or grading activity takes place and shall inspect and document the effectiveness of all erosion and sediment control practices.

4.2 Maintenance Easement(s)

Prior to the issuance of any approval that has a stormwater management facility as one of the requirements, the applicant or developer must execute a maintenance easement agreement that shall be binding on all subsequent landowners served by the stormwater management facility. The easement shall provide for access to the facility at reasonable times for periodic inspection by the Town of Macedon to ensure that the facility is maintained in proper working condition to meet design standards and any other provisions established by this local law. The easement shall be recorded by the grantor in the office of the County Clerk after approval by the counsel for the Town of Macedon.

4.3 Maintenance after Construction

The owner or operator of permanent stormwater management practices installed in accordance with this law shall ensure they are operated and maintained to achieve the goals of this law. Proper operation and maintenance also includes as a minimum, the following:

4.3.1 A preventive/corrective maintenance program for all critical facilities and systems of treatment and control (or related appurtenances) which are installed or used by the owner or operator to achieve the goals of this law.

4.3.2 Written procedures for operation and maintenance and training new maintenance personnel.

4.3.3 Discharges from the SMPs shall not exceed design criteria or cause or contribute to water quality standard violations in accordance with Article 2, section 3.3.

4.4 Maintenance Agreements

The Town of Macedon shall approve a formal maintenance agreement for stormwater management facilities binding on all subsequent landowners and recorded in the office of the County Clerk as a deed restriction on the property prior to final plan approval. The maintenance agreement shall be consistent with the terms and conditions of Schedule B of this local law entitled Sample Stormwater Control Facility Maintenance Agreement. The Town of Macedon, in lieu of a maintenance agreement, at its sole discretion may accept dedication of any existing or future stormwater management facility, provided such facility meets all the requirements of this local law and includes adequate and perpetual access and sufficient area, by easement or otherwise, for inspection and regular maintenance.

Section 5. Severability and Effective Date

5.1 Severability

If the provisions of any article, section, subsection, paragraph, subdivision or clause of this local law shall be judged invalid by a court of competent jurisdiction, such order of judgment shall not affect or invalidate the remainder of any article, section, subsection, paragraph, subdivision or clause of this local law.

5.2 Effective Date

This Local Law shall be effective upon filing with the office of the Secretary of State.

10, 2003, the municipality was required to modify its stormwater management program to ensure that reduction of the pollutant of concern specified in the TMDL is achieved.

4. The condition in the municipality's MS4 permit that applies if a TMDL is approved in the future by EPA for any waterbody or watershed into which an MS4 discharges. Under this condition the municipality must review the applicable TMDL to see if it includes requirements for control of stormwater discharges. If an MS4 is not meeting the TMDL stormwater allocations, the municipality must, within six (6) months of the TMDL's approval, modify its stormwater management program to ensure that reduction of the pollutant of concern specified in the TMDL is achieved.

2.19 State Pollutant Discharge Elimination System (SPDES) Stormwater Discharge Permit. A permit issued by the Department that authorizes the discharge of pollutants to waters of the state.

2.20 Stormwater. Rainwater, surface runoff, snowmelt and drainage.

2.21 Stormwater Management Officer (SMO). An employee, the municipal engineer or other public official(s) designated by the **((City/Town/Village) of _____)** to enforce this local law. The SMO may also be designated by the municipality to accept and review stormwater pollution prevention plans, forward the plans to the applicable municipal board and inspect stormwater management practices.

2.22 303(d) List. A list of all surface waters in the state for which beneficial uses of the water (drinking, recreation, aquatic habitat, and industrial use) are impaired by pollutants, prepared periodically by the Department as required by Section 303(d) of the Clean Water Act. 303(d) listed waters are estuaries, lakes and streams that fall short of state surface water quality standards and are not expected to improve within the next two years.

2.23 TMDL. Total Maximum Daily Load.

2.24 Total Maximum Daily Load. The maximum amount of a pollutant to be allowed to be released into a waterbody so as not to impair uses of the water, allocated among the sources of that pollutant.

2.25 Wastewater. Water that is not stormwater, is contaminated with pollutants and is or will be discarded.

SECTION 3. APPLICABILITY.

This law shall apply to all water entering the MS4 generated on any developed and undeveloped lands unless explicitly exempted by an authorized enforcement agency.

SECTION 4. RESPONSIBILITY FOR ADMINISTRATION.

The Stormwater Management Officer(s) (SMO(s)) shall administer, implement, and enforce the provisions of this law. Such powers granted or duties imposed upon the authorized enforcement

2.11 MS4. Municipal Separate Storm Sewer System.

2.12 Municipal Separate Storm Sewer System. 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 the **((City/Town/Village) of _____)**;
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 40CFR 122.2

2.13 Municipality. The **((City/Town/Village) of _____)**

2.14 Non-Stormwater Discharge. Any discharge to the MS4 that is not composed entirely of stormwater.

2.15 Person. Any individual, association, organization, partnership, firm, corporation or other entity recognized by law and acting as either the owner or as the owner's agent.

2.16 Pollutant. Dredged spoil, filter backwash, solid waste, incinerator residue, treated or untreated sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand and industrial, municipal, agricultural waste and ballast discharged into water; which may cause or might reasonably be expected to cause pollution of the waters of the state in contravention of the standards.

2.17 Premises. Any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.

2.18 Special Conditions.
1. Discharge Compliance with Water Quality Standards. The condition that applies where a municipality has been notified that the discharge of stormwater authorized under their MS4 permit may have caused or has the reasonable potential to cause or contribute to the violation of an applicable water quality standard. Under this condition the municipality must take all necessary actions to ensure future discharges do not cause or contribute to a violation of water quality standards.

2. 303(d) Listed Waters. The condition in the municipality's MS4 permit that applies where the MS4 discharges to a 303(d) listed water. Under this condition the stormwater management program must ensure no increase of the listed pollutant of concern to the 303(d) listed water.

3. Total Maximum Daily Load (TMDL) Strategy. The condition in the municipality's MS4 permit where a TMDL including requirements for control of stormwater discharges has been approved by EPA for a waterbody or watershed into which the MS4 discharges. If the discharge from the MS4 did not meet the TMDL stormwater allocations prior to September

Article 3. Land Use (Site Plan and Subdivision) Regulation Amendment

Sections 75-48 and 75-49 of the Land Use and Public Works Regulations of the Town of Macedon are hereby amended by adding the following to the information requirements:

A. Under §75-48 Preliminary plan, add the following under a new subsection "S.":

Stormwater Pollution Prevention Plan: A Stormwater Pollution Prevention Plan (SWPPP) consistent with the requirements of Article 1 and 2 of this local law shall be required for Preliminary Site Plan/Subdivision submittal. The SWPPP shall meet the performance and design criteria and standards in Article 2 of this local law. The approved Preliminary Site Plan/Subdivision Plat shall be consistent with the provisions of this local law.

B. Under §75-49 Final plan, add the following under a new subsection "A. (14)":

Stormwater Pollution Prevention Plan: A Stormwater Pollution Prevention Plan consistent with the requirements of Article 1 and 2 of this local law and with the terms of preliminary plan approval shall be required for Final Subdivision Plat approval. The SWPPP shall meet the performance and design criteria and standards in Article 2 of this local law. The approved Final Site Plan/Subdivision Plat shall be consistent with the provisions of this local law.

Article 4. Erosion & Sediment Control Law Repeal

The existing Erosion & Sediment Control requirements of the Town of Macedon, as delineated in the Land Use and Public Works, §75-34 is hereby repealed in its entirety.

Article 5. Administration and Enforcement

Section 1. Construction Inspection

1.1 Erosion and Sediment Control Inspection

The Town of Macedon Stormwater Management Officer may require such inspections as necessary to determine compliance with this law and may either approve that portion of the work completed or notify the applicant wherein the work fails to comply with the requirements of this law and the stormwater pollution prevention plan (SWPPP) as approved. To obtain inspections, the applicant shall notify the Town of Macedon enforcement official at least 48 hours before any of the following as required by the Stormwater Management Officer:

1.1.1 Start of construction
1.1.2 Installation of sediment and erosion control measures
1.1.3 Completion of site clearing
1.1.4 Completion of rough grading

1.1.5 Completion of final grading
1.1.6 Close of the construction season
1.1.7 Completion of final landscaping
1.1.8 Successful establishment of landscaping in public areas.

If any violations are found, the applicant and developer shall be notified in writing of the nature of the violation and the required corrective actions. No further work shall be conducted except for site stabilization until any violations are corrected and all work previously completed has received approval by the Stormwater Management Officer.

1.2 Stormwater Management Practice Inspections

The Town of Macedon Stormwater Management Officer, is responsible for conducting inspections of stormwater management practices (SMPs). All applicants are required to submit "as built" plans for any stormwater management practices located on-site after final construction is completed. The plan must show the final design specifications for all stormwater management facilities and must be certified by a professional engineer.

1.3 Inspection of Stormwater Facilities After Project Completion

Inspection programs shall be established on any reasonable basis, including but not limited to: routine inspections; random inspections; inspections based upon complaints or other notice of possible violations; inspection of drainage basins or areas identified as higher than typical sources of sediment or other contaminants or pollutants; inspections of businesses or industries of a type associated with higher than usual discharges of contaminants or pollutants or with discharges of a type which are more likely than the typical discharge to cause violations of state or federal water or sediment quality standards or the SPDES stormwater permit; and joint inspections with other agencies inspecting under environmental or safety laws. Inspections may include, but are not limited to: reviewing maintenance and repair records; sampling discharges, surface water, groundwater, and material or water in drainage control facilities; and evaluating the condition of drainage control facilities and other stormwater management practices.

1.4 Submission of Reports

The Town of Macedon Stormwater Management Officer may require monitoring and reporting from entities subject to this law as are necessary to determine compliance with this law.

1.5 Right-of-Entry for Inspection

When any new stormwater management facility is installed on private property or when any new connection is made between private property and the public storm water system, the landowner shall grant to the Town of Macedon the right to enter the property at reasonable times and in a reasonable manner for the purpose of inspection as specified in paragraph 1.3.

any subsequent amendments thereto.

2.3 Construction Activity. Activities requiring authorization under the SPDES permit for stormwater discharges from construction activity, GP-02-01, as amended or revised. These activities include construction projects resulting in land disturbance of one or more acres. Such activities include but are not limited to clearing and grubbing, grading, excavating, and demolition.

2.4 Department. The New York State Department of Environmental Conservation.

➲ *The following section in italics is optional for those municipalities that are regulating failing individual sewage treatment systems to address Special Conditions or water resource objectives:*

2.5 Design professional. New York State licensed professional engineer or licensed architect.

2.6 Hazardous Materials. Any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

2.7 Illicit Connections. Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the MS4, including but not limited to:
1. Any conveyances which allow any non-stormwater discharge including treated or untreated sewage, process wastewater, and wash water to enter the MS4 and any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by an authorized enforcement agency; or
2. Any drain or conveyance connected from a commercial or industrial land use to the MS4 which has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.

2.8 Illicit Discharge. Any direct or indirect non-stormwater discharge to the MS4, except as exempted in Section 6 of this law.

➲ *The following section in italics is optional for those municipalities that are regulating failing individual sewage treatment systems to address Special Conditions or water resource objectives:*

2.9 Individual Sewage Treatment System. A facility serving one or more parcels of land or residential households, or a private, commercial or institutional facility, that treats sewage or other liquid wastes for discharge into the groundwaters of New York State, except where a permit for such a facility is required under the applicable provisions of Article 17 of the Environmental Conservation Law.

2.10 Industrial Activity. Activities requiring the SPDES permit for discharges from industrial activities except construction, GP-98-03, as amended or revised.

Model Local Law
to
Prohibit Illicit Discharges, Activities
and Connections to
Separate Storm Sewer System

SECTION 1. PURPOSE/INTENT.

The purpose of this law is to provide for the health, safety, and general welfare of the citizens of the **((City/Town/Village) of _____)** through the regulation of non-stormwater discharges to the municipal separate storm sewer system (MS4) to the maximum extent practicable as required by federal and state law. This law establishes methods for controlling the introduction of pollutants into the MS4 in order to comply with requirements of the SPDES General Permit for Municipal Separate Storm Sewer Systems. The objectives of this law are:

1.1 To meet the requirements of the SPDES General Permit for Stormwater Discharges from MS4s, Permit no. GP-02-02 or as amended or revised;

1.2 To regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process or discharge non-stormwater wastes;

1.3 To prohibit Illicit Connections, Activities and Discharges to the MS4;

1.4 To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this law; and

1.5 To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the MS4.

SECTION 2. DEFINITIONS.

Whenever used in this law, unless a different meaning is stated in a definition applicable to only a portion of this law, the following terms will have meanings set forth below:

2.1 Best Management Practices (BMPs). Schedules of activities, prohibitions of practices, general good house keeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or stormwater conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

2.2 Clean Water Act. The Federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.), and

Section 2. Performance Guarantee

2.1 Construction Completion Guarantee

In order to ensure the full and faithful completion of all land development activities related to compliance with all conditions set forth by the Town of Macedon in its approval of the Stormwater Pollution Prevention Plan, the Town of Macedon may require the applicant or developer to provide, prior to construction, a performance bond, cash escrow, or irrevocable letter of credit from an appropriate financial or surety institution which guarantees satisfactory completion of the project and names the Town of Macedon as the beneficiary. The security shall be in an amount to be determined by the Town of Macedon based on submission of final design plans, with reference to actual construction and landscaping costs. The performance guarantee shall remain in force until the surety is released from liability by the Town of Macedon, provided that such period shall not be less than one year from the date of final acceptance or such other certification that the facility(ies) have been constructed in accordance with the approved plans and specifications and that a one year inspection has been conducted and the facilities have been found to be acceptable to the Town of Macedon. Per annum interest on cash escrow deposits shall be reinvested in the account until the surety is released from liability.

2.2 Maintenance Guarantee

Where stormwater management and erosion and sediment control facilities are to be operated and maintained by the developer or by a corporation that owns or manages a commercial or industrial facility, the developer, prior to construction, may be required to provide the Town of Macedon with an irrevocable letter of credit from an approved financial institution or surety to ensure proper operation and maintenance of all stormwater management and erosion control facilities both during and after construction, and until the facilities are removed from operation. If the developer or landowner fails to properly operate and maintain stormwater management and erosion and sediment control facilities, the Town of Macedon may draw upon the account to cover the costs of proper operation and maintenance, including engineering and inspection costs.

2.3 Recordkeeping

The Town of Macedon may require entities subject to this law to maintain records demonstrating compliance with this law.

Section 3. Enforcement and Penalties

3.1 Notice of Violation.

When the Town of Macedon determines that a land development activity is not being carried out in accordance with the requirements of this local law, it may issue a written notice of violation to the landowner. The notice of violation shall contain :

3.1.1 The name and address of the landowner, developer or applicant;

3.1.2 The address when available or a description of the building, structure or land upon which the violation is occurring;

3.1.3 A statement specifying the nature of the violation;

3.1.4 A description of the remedial measures necessary to bring the land development activity into compliance with this local law and a time schedule for the completion of such remedial action;

3.1.5 A statement of the penalty or penalties that shall or may be assessed against the person to whom the notice of violation is directed;

3.1.6 A statement that the determination of violation may be appealed to the municipality by filing a written notice of appeal within fifteen (15) days of service of notice of violation.

3.2 Stop Work Orders

The Town of Macedon may issue a stop work order for violations of this law. Persons receiving a stop work order shall be required to halt all land development activities, except those activities that address the violations leading to the stop work order. The stop work order shall be in effect until the Town of Macedon confirms that the land development activity is in compliance and the violation has been satisfactorily addressed. Failure to address a stop work order in a timely manner may result in civil, criminal, or monetary penalties in accordance with the enforcement measures authorized in this local law.

3.3 Violations

Any land development activity that is commenced or is conducted contrary to this local law, may be restrained by injunction or otherwise abated in a manner provided by law.

3.4 Penalties

In addition to or as an alternative to any penalty provided herein or by law, any person who violates the provisions of this local law shall be guilty of a violation punishable by a fine not exceeding three hundred fifty dollars ($350) or imprisonment for a period not to exceed six months, or both for conviction of a first offense; for conviction of a second offense both of which were committed within a period of five years, punishable by a fine not less than three hundred fifty dollars nor more than seven hundred dollars ($700) or imprisonment for a period not to exceed six months, or both; and upon conviction for a third or subsequent offense all of which were committed within a period of five years, punishable by a fine not less than seven

Model Local Law to Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer System

Introduction

This model local law is intended to be a tool for communities that are currently or may soon be responsible for meeting the Phase II stormwater management requirements of the National Pollutant Discharge Elimination System (NPDES) regulations, administered by New York State through the State Pollutant Discharge Elimination System (SPDES) regulations. The goal of providing this model law is to assist communities in adopting provisions of local law to meet the new federal and state guidelines for prohibiting illicit discharges to municipal separate storm sewer systems. In designing a model illicit discharge law for a New York State audience, we include suggestions for standard language and concepts that we believe a good illicit discharge law should contain. This local law should not be construed as an exhaustive listing of all the language needed for a local law, but represents a good base that communities can build upon and customize to be consistent with the local conditions and staff resources available in their municipality.

Throughout the local law, there are sections in which you must insert the name of your municipality and the agency that you have given regulatory power over stormwater management issues. These sections are denoted by **bold text** placed in brackets. By using this document and customizing these sections, you can create a viable local law with minimal editing.

Italicized text with this symbol ➲ should be interpreted as comments, instructions, information or optional language to assist the local law writer. The text next to the arrow should be deleted and the optional sections converted to non-italicized text or deleted as appropriate in your final local law. Sections 2.5, 2.9, 7, 8.2, and 9.2 are optional for municipalities that are regulating failing individual sewage treatment systems because stormwater discharge from the MS4 meets one of the Special Conditions in Section 2.18 or for municipalities that choose to include these standards for certain water resource protection objectives.

If any building or land development activity is installed or conducted in violation of this local law the Stormwater Management Officer may prevent the occupancy of said building or land.

3.6 Restoration of lands

Any violator may be required to restore land to its undisturbed condition. In the event that restoration is not undertaken within a reasonable time after notice, the **((City/Town/Village) of _____)** may take necessary corrective action, the cost of which shall become a lien upon the property until paid.

Section 4. Fees for Services

The **((City/Town/Village) of _____)** may require any person undertaking land development activities regulated by this law to pay reasonable costs at prevailing rates for review of SWPPPs, inspections, or SMP maintenance performed by the **((City/Town/Village) of _____)** or performed by a third party for the **((City/Town/Village) of _____)**.

hundred dollars nor more than one thousand dollars ($1000) or imprisonment for a period not to exceed six months, or both. However, for the purposes of conferring jurisdiction upon courts and judicial officers generally, violations of this local law shall be deemed misdemeanors and for such purpose only all provisions of law relating to misdemeanors shall apply to such violations. Each week's continued violation shall constitute a separate additional violation.

3.5 Withholding of Certificate of Occupancy

If any building or land development activity is installed or conducted in violation of this local law the Stormwater Management Officer may prevent the occupancy of said building or land.

3.6 Restoration of lands

Any violator may be required to restore land to its undisturbed condition. In the event that restoration is not undertaken within a reasonable time after notice, the Town of Macedon may take necessary corrective action, the cost of which shall become a lien upon the property until paid.

Section 4. Fees for Services

The Town of Macedon may require any person undertaking land development activities regulated by this law to pay reasonable costs at prevailing rates for review of SWPPPs, inspections, or SMP maintenance performed by the Town of Macedon or performed by a third party for the Town of Macedon.

(Complete the certification in the paragraph that applies to the filing of this local law and strike out that which is not applicable.)

1. (Final adoption by local legislative body only.)
I hereby certify that the local law annexed hereto, designated as local law No. 4 of 20 07 of the ~~(County)(City)~~(Town)(~~Village~~) of Macedon was duly passed by the Town Board on September 13, 20 07, in accordance with the applicable
(Name of Legislative Body)
provisions of law.

2. (Passage by local legislative body with approval, no disapproval or repassage after disapproval by the Elective Chief Executive Officer*.)
I hereby certify that the local law annexed hereto, designated as local law No. _____ of 20 _____ of the (County)(City)(Town)(Village) of _____ was duly passed by the _____ on _____ 20 _____, and was (approved)(not approved)
(Name of Legislative Body)
(repassed after disapproval) by the _____ and was deemed duly adopted
(Elective Chief Executive Officer)*
on _____ 20 _____, in accordance w ith the applicable provisions of law.

3. (Final adoption by referendum.)
I hereby certify that the local law annexed hereto, designated as local law No. _____ of 20 _____ of the (County)(City)(Town)(Village) of _____ was duly passed by the _____ on _____ 20 _____, and was (approved)(not approved)
(Name of Legislative Body)
(repassed after disapproval) by the _____ on _____ 20 _____.
(Elective Chief Executive Officer)*
Such local law was submitted to the people by reason of a (mandatory)(permissive) referendum, and received the affirmative vote of a majority of the qualified electors voting thereon at the (general) (special)(annual) election held on _____ 20 _____, in accordance with the applicable provisions of law.

4. (Subject to permissive referendum and final adoption because no valid petition was filed requesting referendum.)
I hereby certify that the local law annexed hereto, designated as local law No. _____ of 20 _____ of the (County)(City)(Town)(Village) of _____ was duly passed by the _____ on _____ 20 _____, and was (approved)(not approved)
(Name of Legislative Body)
(repassed after disapproval) by the _____ on _____ 20 _____. Such local
(Elective Chief Executive Officer)*
law was subject to permissive referendum and no valid petition requesting such referendum was filed as of _____ 20 _____, in accordance with the applicable provisions of law.

* Elective Chief Executive Officer means or includes the chief executive officer of a county elected on a county-wide basis or, if there be none, the chairperson of the county legislative body, the mayor of a city or village, or the supervisor of a town where such officer is vested with the power to approve or veto local laws or ordinances.

3.1 Notice of Violation.
When the **((City/Town/Village) of _____)** determines that a land development activity is not being carried out in accordance with the requirements of this local law, it may issue a written notice of violation to the landowner. The notice of violation shall contain :

3.1.1 the name and address of the landowner, developer or applicant;
3.1.2 the address when available or a description of the building, structure or land upon which the violation is occurring;
3.1.3 a statement specifying the nature of the violation;
3.1.4 a description of the remedial measures necessary to bring the land development activity into compliance with this local law and a time schedule for the completion of such remedial action;
3.1.5 a statement of the penalty or penalties that shall or may be assessed against the person to whom the notice of violation is directed;
3.1.6 a statement that the determination of violation may be appealed to the municipality by filing a written notice of appeal within fifteen (15) days of service of notice of violation.

3.2 Stop Work Orders
The **((City/Town/Village) of _____)** may issue a stop work order for violations of this law. Persons receiving a stop work order shall be required to halt all land development activities, except those activities that address the violations leading to the stop work order. The stop work order shall be in effect until the **((City/Town/Village) of _____)** confirms that the land development activity is in compliance and the violation has been satisfactorily addressed. Failure to address a stop work order in a timely manner may result in civil, criminal, or monetary penalties in accordance with the enforcement measures authorized in this local law.

3.3 Violations
Any land development activity that is commenced or is conducted contrary to this local law, may be restrained by injunction or otherwise abated in a manner provided by law.

3.4 Penalties
In addition to or as an alternative to any penalty provided herein or by law, any person who violates the provisions of this local law shall be guilty of a violation punishable by a fine not exceeding three hundred fifty dollars ($350) or imprisonment for a period not to exceed six months, or both for conviction of a first offense; for conviction of a second offense both of which were committed within a period of five years, punishable by a fine not less than three hundred fifty dollars nor more than seven hundred dollars ($700) or imprisonment for a period not to exceed six months, or both; and upon conviction for a third or subsequent offense all of which were committed within a period of five years, punishable by a fine not less than seven hundred dollars nor more than one thousand dollars ($1000) or imprisonment for a period not to exceed six months, or both. However, for the purposes of conferring jurisdiction upon courts and judicial officers generally, violations of this local law shall be deemed misdemeanors and for such purpose only all provisions of law relating to misdemeanors shall apply to such violations. Each week's continued violation shall constitute a separate additional violation.

3.5 Withholding of Certificate of Occupancy

1.4 Submission of Reports

The ((City/Town/Village) of _____) Stormwater Management Officer may require monitoring and reporting from entities subject to this law as are necessary to determine compliance with this law.

1.5 Right-of-Entry for Inspection

When any new stormwater management facility is installed on private property or when any new connection is made between private property and the public storm water system, the landowner shall grant to the **((City/Town/Village) of _____)** the right to enter the property at reasonable times and in a reasonable manner for the purpose of inspection as specified in paragraph 1.3.

Section 2. Performance Guarantee

2.1 Construction Completion Guarantee

In order to ensure the full and faithful completion of all land development activities related to compliance with all conditions set forth by the **((City/Town/Village) of _____)** in its approval of the Stormwater Pollution Prevention Plan, the **((City/Town/Village) of _____)** may require the applicant or developer to provide, prior to construction, a performance bond, cash escrow, or irrevocable letter of credit from an appropriate financial or surety institution which guarantees satisfactory completion of the project and names the **((City/Town/Village) of _____)** as the beneficiary. The security shall be in an amount to be determined by the **((City/Town/Village) of _____)** based on submission of final design plans, with reference to actual construction and landscaping costs. The performance guarantee shall remain in force until the surety is released from liability by the **((City/Town/Village) of _____)**, provided that such period shall not be less than one year from the date of final acceptance or such other certification that the facility(ies) have been constructed in accordance with the approved plans and specifications and that a one year inspection has been conducted and the facilities have been found to be acceptable to the **((City/Town/Village) of _____)**. Per annum interest on cash escrow deposits shall be reinvested in the account until the surety is released from liability.

2.2 Maintenance Guarantee

Where stormwater management and erosion and sediment control facilities are to be operated and maintained by the developer or by a corporation that owns or manages a commercial or industrial facility, the developer, prior to construction, may be required to provide the **((City/Town/Village) of _____)** with an irrevocable letter of credit from an approved financial institution or surety to ensure proper operation and maintenance of all stormwater management and erosion control facilities both during and after construction, and until the facilities are removed from operation. If the developer or landowner fails to properly operate and maintain stormwater management and erosion and sediment control facilities, the **((City/Town/Village) of _____)** may draw upon the account to cover the costs of proper operation and maintenance, including engineering and inspection costs.

2.3 Recordkeeping

The ((City/Town/Village) of _____) may require entities subject to this law to maintain records demonstrating compliance with this law.

Section 3. Enforcement and Penalties

5. (City local law concerning Charter revision proposed by petition.)

I hereby certify that the local law annexed hereto, designated as local law No. _____ of 20 _____ of the City of _____ having been submitted to referendum pursuant to the provisions of section (36)(37) of the Municipal Home Rule Law, and having received the affirmative vote of a majority of the qualified electors of such city voting thereon at the (special)(general) election held on _____ 20 _____, became operative.

6. (County local law concerning adoption of Charter.)

I hereby certify that the local law annexed hereto, designated as local law No. _____ of 20 _____ of the County of _____ State of New York, having been submitted to the electors at the General Election of November _____ 20 _____, pursuant to subdivisions 5 and 7 of section 33 of the Municipal Home Rule Law, and having received the affirmative vote of a majority of the qualified electors of the cities of said county as a unit and a majority of the qualified electors of the towns of said county considered as a unit voting at said general election, became operative.

(If any other authorized form of final adoption has been followed, please provide an appropriate certification.)

I further certify that I have compared the preceding local law with the original on file in this office and that the same is a correct transcript therefrom and of the whole of such original local law, and was finally adopted in the manner indicated in paragraph 1 , above.

_____

Clerk of the county legislative body, City, Town or Village Clerk or officer designated by local legislative body

(Seal)

Date: _____

(Certification to be executed by County Attorney, Corporation Counsel, Town Attorney, Village Attorney or other authorized attorney of locality.)

STATE OF NEW YORK
COUNTY OF Wayne

I, the undersigned, hereby certify that the foregoing local law contains the correct text and that all proper proceedings have been had or taken for the enactment of the local law annexed hereto.

_____

Signature
Town Attorney
Title

~~County~~
~~City~~ of
Town
~~Village~~

Date: September 13, 2007

Sample Local Law for Stormwater Management and Erosion & Sediment Control *(Revised 3/06)*

This model local law is intended to be a guidance tool for communities that are subject to the Municipal Separate Storm Sewer System (MS4) Phase II stormwater management requirements of the National Pollutant Discharge Elimination System (NPDES) regulations, administered by New York State through the State Pollutant Discharge Elimination System (SPDES) regulations. The goal of providing this model law is to assist communities in amending existing laws and ordinances and/or adopting new provisions of local law to meet the new federal and state guidelines for stormwater control. In designing a model stormwater law for a New York State audience, we include suggestions for standard language and concepts that we believe a good stormwater management program should contain. This local law should not be construed as an exhaustive listing of all the language needed for a local law, but represents a good base that communities can build upon and customize to be consistent with the local conditions and staff resources available in their municipality.

Throughout the local law, there are sections in which you must insert the name of your municipality and the agency that you have given regulatory power over stormwater management issues. These sections are denoted by **bold** text placed in brackets. By using this document and customizing these sections, you can create a viable local law with minimal editing. Municipalities should work with their municipal attorney throughout the process.

Italicized text with this symbol ↄ should be interpreted as comments, instructions, or information to assist the local law writer. This text *should not appear* in your final local law.

The contents of this local law are as follows:

1.1 Erosion and Sediment Control Inspection

The **((City/Town/Village) of _____)** Stormwater Management Officer may require such inspections as necessary to determine compliance with this law and may either approve that portion of the work completed or notify the applicant wherein the work fails to comply with the requirements of this law and the stormwater pollution prevention plan (SWPPP) as approved. To obtain inspections, the applicant shall notify the **((City/Town/Village) of _____)** enforcement official at least 48 hours before any of the following as required by the Stormwater Management Officer:

1.1.1 Start of construction
1.1.2 Installation of sediment and erosion control measures
1.1.3 Completion of site clearing
1.1.4 Completion of rough grading
1.1.5 Completion of final grading
1.1.6 Close of the construction season
1.1.7 Completion of final landscaping
1.1.8 Successful establishment of landscaping in public areas.

If any violations are found, the applicant and developer shall be notified in writing of the nature of the violation and the required corrective actions. No further work shall be conducted except for site stabilization until any violations are corrected and all work previously completed has received approval by the Stormwater Management Officer.

1.2 Stormwater Management Practice Inspections

The **((City/Town/Village) of _____)** Stormwater Management Officer, is responsible for conducting inspections of stormwater management practices (SMPs). All applicants are required to submit "as built" plans for any stormwater management practices located on-site after final construction is completed. The plan must show the final design specifications for all stormwater management facilities and must be certified by a professional engineer.

1.3 Inspection of Stormwater Facilities After Project Completion

Inspection programs shall be established on any reasonable basis, including but not limited to: routine inspections; random inspections; inspections based upon complaints or other notice of possible violations; inspection of drainage basins or areas identified as higher than typical sources of sediment or other contaminants or pollutants; inspections of businesses or industries of a type associated with higher than usual discharges of contaminants or pollutants or with discharges of a type which are more likely than the typical discharge to cause violations of state or federal water or sediment quality standards or the SPDES stormwater permit; and joint inspections with other agencies inspecting under environmental or safety laws. Inspections may include, but are not limited to: reviewing maintenance and repair records; sampling discharges, surface water, groundwater, and material or water in drainage control facilities; and evaluating the condition of drainage control facilities and other stormwater management practices.

ↄ*Inspections may be performed by local government staff or the local government may designate an inspector required to have a Professional Engineer's (PE) license or Certified Professional in Erosion and Sediment Control (CPESC) certificate, as long as the designated inspector is required to submit a report.*

Article 4. Site Plan Review Regulation Amendment

Sections ___ and ___ of the Site Plan Review regulations of the **((City/Town/Village) of** _____**)** are hereby amended by adding the following to the information requirements:

For Site Plan Approval add: Stormwater Pollution Prevention Plan: A Stormwater Pollution Prevention Plan consistent with the requirements of Article 1 and 2 of this local law shall be required for Site Plan Approval. The SWPPP shall meet the performance and design criteria and standards in Article 2 of this local law. The approved Site Plan shall be consistent with the provisions of this local law.

Article 5. Erosion & Sediment Control Law Repeal or Amendment[8]

Repeal:

The Erosion & Sediment Control Law of the **((City/Town/Village) of** _____**)** is hereby repealed.

⊃ *By adopting Articles 1 and 2 (and 3, 4 and 6 where necessary) of the Model Local Law for Stormwater Management and Erosion & Sediment Control, the municipality will have regulatory authority for both erosion & sediment control and post-construction stormwater management so a separate erosion & sediment control law is not needed.*

OR

Amendment:

Section _____of the Erosion & Sediment Control Law of the **((City/Town/Village) of** _____**)** is hereby amended by adding the following clause: Stormwater Pollution Prevention Plan: A Stormwater Pollution Prevention Plan consistent with the requirements of Article 1 and 2 of this local law shall be required. The SWPPP shall meet the performance and design criteria and standards in Article 2 of this local law. The approved erosion control permit shall be consistent with the provisions of this local law.

⊃ *The municipality must also adopt Articles 1, 2, 3 and 4 (as applicable for their municipality) in order to address post-construction stormwater runoff control in stormwater pollution prevention plans.*

Article 6. Administration and Enforcement

⊃***The following provisions for construction inspection, performance guarantees and bonds, and enforcement are important to include in a stormwater control program, but may already exist in local law. Therefore the municipality and its counsel should review their existing provisions for these activities, compare them with the following provisions, and consider whether revisions or amendments are necessary to achieve the purposes of this local law.***

Section 1. Construction Inspection

[8] Revised 3/06 to clarify that adoption of this Sample Local Law provides all the required language for local regulation of erosion & sediment control, therefore repeal of an existing erosion & sediment control law and replacement with the Sample Local Law may be the best option for many municipalities.

Sample Local Law for Stormwater Management and Erosion & Sediment Control

A local law to amend the **(Zoning Law/Subdivision Law/Site Plan Review Law/Erosion and Sediment Control Law)** of the **((City/Town/Village) of** _____**),** Local law Number _____ of the Year _____.

⊃*Article 1 and Article 2 must be adopted for proper implementation. The municipality and its legal counsel, after reviewing their local codes and this model language, should pick additional provisions from Articles 3, 4, 5 and 6 to ensure review and enforcement of stormwater pollution prevention plans at the local level.*

Be it enacted by the **(City Council/Town Board/Village Board of Trustees)** of the **((City/Town/Village) of** _____**)** as follows:

Article 1. General Provisions

Section 1. Findings of Fact

It is hereby determined that:

1.1 Land development activities and associated increases in site impervious cover often alter the hydrologic response of local watersheds and increase stormwater runoff rates and volumes, flooding, stream channel erosion, or sediment transport and deposition;

1.2 This stormwater runoff contributes to increased quantities of water-borne pollutants, including siltation of aquatic habitat for fish and other desirable species;

1.3 Clearing and grading during construction tends to increase soil erosion and add to the loss of native vegetation necessary for terrestrial and aquatic habitat;

1.4 Improper design and construction of stormwater management practices can increase the velocity of stormwater runoff thereby increasing stream bank erosion and sedimentation;

1.5 Impervious surfaces allow less water to percolate into the soil, thereby decreasing groundwater recharge and stream baseflow;

1.6 Substantial economic losses can result from these adverse impacts on the waters of the municipality;

1.7 Stormwater runoff, soil erosion and nonpoint source pollution can be controlled and minimized through the regulation of stormwater runoff from land development activities;

1.8 The regulation of stormwater runoff discharges from land development activities in order to control and minimize increases in stormwater runoff rates and volumes, soil erosion, stream channel erosion, and nonpoint source pollution associated with stormwater runoff is in the public interest and will minimize threats to public health and safety.

1.9 Regulation of land development activities by means of performance standards governing stormwater management and site design will produce development compatible with the natural functions of a particular site or an entire watershed and thereby mitigate the adverse effects of erosion and sedimentation from development.

Section 2. Purpose

The purpose of this local law is to establish minimum stormwater management requirements and controls to

protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of fact in Section 1 hereof. This local law seeks to meet those purposes by achieving the following objectives:

2.1 Meet the requirements of minimum measures 4 and 5 of the SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit no. GP-02-02 or as amended or revised;

2.2 Require land development activities to conform to the substantive requirements of the NYS Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities GP-02-01 or as amended or revised;

2.3 Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels;

2.4 Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality;

2.5 Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and

2.6 Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety.

➲ *The above list is a general set of objectives to reduce the impact of stormwater on receiving waters. Section 2.1 applies to regulated MS4s; a municipality not currently under this program may wish to leave this objective out, although the community may become regulated in the future. The advantage to adopting a local law for all municipalities is that the local government then has control over review and approval of Stormwater Pollution Prevention Plans (SWPPPs) during subdivision and site plan review. The local government may also wish to set some more specific objectives, based on priority water quality (refer to New York State 303 (d) list of priority waters at* www.dec.state.ny.us/website/dow/303dcalm.html*) and habitat problems (e.g., to reduce phosphorus loads being delivered to recreational lakes, to sustain a Class TS trout fishery).*

Section 3. Statutory Authority

In accordance with Article 10 of the Municipal Home Rule Law of the State of New York, the **(City Council/Town Board/Village Board of Trustees of _____)** has the authority to enact local laws and amend local laws and for the purpose of promoting the health, safety or general welfare of the **((City/Town/Village) of _____)** and for the protection and enhancement of its physical environment. The **(City Council/Town Board/Village Board of Trustees of _____)** may include in any such local law provisions for the appointment of any municipal officer, employees, or independent contractor to effectuate, administer and enforce such local law.

Section 4. Applicability

4.1 This local law shall be applicable to all land development activities as defined in this local law, Article 2, Section 1.

4.2 The municipality shall designate a Stormwater Management Officer who shall accept and review all stormwater pollution prevention plans and forward such plans to the applicable municipal board. The

4.3.3 Discharges from the SMPs shall not exceed design criteria or cause or contribute to water quality standard violations in accordance with Article 2, section 3.3.

4.4 Maintenance Agreements

The **((City/Town/Village) of _____)** shall approve a formal maintenance agreement for stormwater management facilities binding on all subsequent landowners and recorded in the office of the County Clerk as a deed restriction on the property prior to final plan approval. The maintenance agreement shall be consistent with the terms and conditions of Schedule B of this local law entitled Sample Stormwater Control Facility Maintenance Agreement. The **((City/Town/Village) of _____)**, in lieu of a maintenance agreement, at its sole discretion may accept dedication of any existing or future stormwater management facility, provided such facility meets all the requirements of this local law and includes adequate and perpetual access and sufficient area, by easement or otherwise, for inspection and regular maintenance.

Section 5. Severability and Effective Date

5.1 Severability

If the provisions of any article, section, subsection, paragraph, subdivision or clause of this local law shall be judged invalid by a court of competent jurisdiction, such order of judgment shall not affect or invalidate the remainder of any article, section, subsection, paragraph, subdivision or clause of this local law.

5.2 Effective Date

This Local Law shall be effective upon filing with the office of the Secretary of State.

Approved by: _____ Date _____

Article 3. Subdivision Regulation Amendment

Sections ___ and ___ of the Subdivision Regulations of the **((City/Town/Village) of _____)** are hereby amended by adding the following to the information requirements:

A. *For Preliminary Subdivision Plat add:* Stormwater Pollution Prevention Plan: A Stormwater Pollution Prevention Plan (SWPPP) consistent with the requirements of Article 1 and 2 of this local law shall be required for Preliminary Subdivision Plat approval. The SWPPP shall meet the performance and design criteria and standards in Article 2 of this local law. The approved Preliminary Subdivision Plat shall be consistent with the provisions of this local law.

B. *For Final Subdivision Plat approval add:* Stormwater Pollution Prevention Plan: A Stormwater Pollution Prevention Plan consistent with the requirements of Article 1 and 2 of this local law and with the terms of preliminary plan approval shall be required for Final Subdivision Plat approval. The SWPPP shall meet the performance and design criteria and standards in Article 2 of this local law. The approved Final Subdivision Plat shall be consistent with the provisions of this local law.

➲ *If the municipality has only one requirement for a final plan (no preliminary) then use Paragraph A language only.*

traps or sediment ponds whenever their design capacity has been reduced by fifty (50) percent.

4.1.2 For land development activities as defined in Section 1 of this Article and meeting Condition A, B or C in Section 2.2.2, the applicant shall have a qualified professional conduct site inspections and document the effectiveness of all erosion and sediment control practices every 7 days and within 24 hours of any storm event producing 0.5 inches of precipitation or more. Inspection reports shall be maintained in a site log book.[5]

4.1.3 The applicant or developer or their representative shall be on site at all times when construction or grading activity takes place and shall inspect and document the effectiveness of all erosion and sediment control practices.[6]

➲ *4.1.3 is an optional clause for municipalities that are interested in requiring more oversight by the developer during construction activities.*

4.2 Maintenance Easement(s)

Prior to the issuance of any approval that has a stormwater management facility as one of the requirements, the applicant or developer must execute a maintenance easement agreement that shall be binding on all subsequent landowners served by the stormwater management facility. The easement shall provide for access to the facility at reasonable times for periodic inspection by the **((City/Town/Village) of _____)** to ensure that the facility is maintained in proper working condition to meet design standards and any other provisions established by this local law. The easement shall be recorded by the grantor in the office of the County Clerk after approval by the counsel for the **((City/Town/Village) of _____)**.

4.3 Maintenance after Construction

The owner or operator of permanent stormwater management practices installed in accordance with this law shall ensure they are operated and maintained[7] to achieve the goals of this law. Proper operation and maintenance also includes as a minimum, the following:

4.3.1 A preventive/corrective maintenance program for all critical facilities and systems of treatment and control (or related appurtenances) which are installed or used by the owner or operator to achieve the goals of this law.

4.3.2 Written procedures for operation and maintenance and training new maintenance personnel.

[5] Revised 3/06. This clause was rewritten to more closely meet the New York State requirements for Conditions A, B and C in Section 2.2.2. The NY SPDES General Permit for Stormwater Runoff fromConstruction Activities (GP-02-01) requires that inspections be conducted every 7 days and within 24 hours of any storm event producing 0.5 inches of precipitation or more for all projects that are required to prepare full SWPPPs as stated in Conditions A, B and C, and to copy such reports to a site log book.

[6] Revised 3/06. Originally part of 4.1.2, this clause was relocated as a separate section to show that it is optional.

[7] Revised 3/06 to correct a grammatical error.

Stormwater Management Officer may (1) review the plans, (2) upon approval by the ((City Council/Town Board/Village Board of Trustees) of the (Town/Village/City) of _____), engage the services of a registered professional engineer to review the plans, specifications and related documents at a cost not to exceed a fee schedule established by said governing board, or (3) accept the certification of a licensed professional that the plans conform to the requirements of this law.

4.3 All land development activities subject to review and approval by the **(applicable board of the (City/Town Village) of _____)** under **(subdivision, site plan, and/or special permit)** regulations shall be reviewed subject to the standards contained in this local law

4.4 All land development activities not subject to review as stated in section 4.3 shall be required to submit a Stormwater Pollution Prevention Plan (SWPPP) to the Stormwater Management Officer who shall approve the SWPPP if it complies with the requirements of this law.

Section 5. Exemptions

The following activities may be exempt from review under this law.

➲ *The municipality may elect to include some or all of the exemptions in Section 5.*

5.1 Agricultural activity as defined in this local law.

5.2 Silvicultural activity except that landing areas and log haul roads are subject to this law.

5.3 Routine maintenance activities that disturb less than five acres and are performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility.

5.4 Repairs to any stormwater management practice or facility deemed necessary by the Stormwater Management Officer.

5.5 Any part of a subdivision if a plat for the subdivision has been approved by the **((City/Town/Village) of _____)** on or before the effective date of this law.

5.6 Land development activities for which a building permit has been approved on or before the effective date of this law.

5.7 Cemetery graves.

5.8 Installation of fence, sign, telephone, and electric poles and other kinds of posts or poles.

5.9 Emergency activity immediately necessary to protect life, property or natural resources.

5.10 Activities of an individual engaging in home gardening by growing flowers, vegetable and other plants primarily for use by that person and his or her family.

5.11 Landscaping and horticultural activities in connection with an existing structure.

Article 2. Zoning Law Amendment: Stormwater Control

➲*Municipalities that do not have zoning should add the language in Article 2 to Article 3 (Subdivision Regulation Amendment) or Article 4 (Site Plan Review Law Amendment) as applicable for their municipality.*

The Zoning Law is hereby amended to include Article ___, a new supplemental regulation titled Stormwater Control.

Section 1. Definitions

The terms used in this local law or in documents prepared or reviewed under this local law shall have the meaning as set forth in this section.

➲Definitions should be incorporated into the appropriate section of the municipality's zoning law which contains definitions.

Agricultural Activity - the activity of an active farm including grazing and watering livestock, irrigating crops, harvesting crops, using land for growing agricultural products, and cutting timber for sale, but shall not include the operation of a dude ranch or similar operation, or the construction of new structures associated with agricultural activities.

Applicant - a property owner or agent of a property owner who has filed an application for a land development activity.

Building - any structure, either temporary or permanent, having walls and a roof, designed for the shelter of any person, animal, or property, and occupying more than 100 square feet of area.

Channel - a natural or artificial watercourse with a definite bed and banks that conducts continuously or periodically flowing water.

Clearing - any activity that removes the vegetative surface cover.

Dedication - the deliberate appropriation of property by its owner for general public use.

Department - the New York State Department of Environmental Conservation

Design Manual - the *New York State Stormwater Management Design Manual*, most recent version including applicable updates, that serves as the official guide for stormwater management principles, methods and practices.

Developer - a person who undertakes land development activities.

Erosion Control Manual - the most recent version of the "New York Standards and Specifications for Erosion and Sediment Control" manual, commonly known as the "Blue Book".

Grading - excavation or fill of material, including the resulting conditions thereof.

Impervious Cover- those surfaces, improvements and structures that cannot effectively infiltrate rainfall, snow melt and water (e.g., building rooftops, pavement, sidewalks, driveways, etc).

Industrial Stormwater Permit - a State Pollutant Discharge Elimination System permit issued to a commercial industry or group of industries which regulates the pollutant levels associated with industrial stormwater discharges or specifies on-site pollution control strategies.

Infiltration - the process of percolating stormwater into the subsoil.

Jurisdictional Wetland - an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

Land Development Activity - construction activity including clearing, grading, excavating, soil disturbance or placement of fill that results in land disturbance of equal to or greater than one acre (*see ➲Note)*, or activities disturbing less than one acre of total land area that is part of a larger common plan of development or sale, even though multiple separate and distinct land development activities may take place at different times on different schedules.

➲ A community should review the local site plan, subdivision, zoning and erosion & sediment control laws and ordinances to see if there are minimum land disturbance requirements already specified in those laws. To meet the SPDES guidelines under GP-02-02, the municipality must require SWPPPs for construction activities that result in land disturbance equal to or greater than one acre, or activities disturbing less than one acre if they are part of a larger common plan of development or sale or in a specified watershed. The municipality may wish to reduce this threshold to a lesser amount of disturbance to conform to local standards which may be stricter than the standards set forth in the state regulations. Many communities regulate land disturbance activities of more than 5000 square feet (1/8 acre), with an exemption if the amount of impervious cover created does not exceed 1000 square feet.

Landowner - the legal or beneficial owner of land, including those holding the right to purchase or lease the

Section 3. Performance and Design Criteria for Stormwater Management and Erosion and Sediment Control

All land development activities shall be subject to the following performance and design criteria:

3.1 Technical Standards

For the purpose of this local law, the following documents shall serve as the official guides and specifications for stormwater management. Stormwater management practices that are designed and constructed in accordance with these technical documents shall be presumed to meet the standards imposed by this law:

3.1.1 The New York State Stormwater Management Design Manual (New York State Department of Environmental Conservation, most current version or its successor, hereafter referred to as the Design Manual)

3.1.2 New York Standards and Specifications for Erosion and Sediment Control, (Empire State Chapter of the Soil and Water Conservation Society, 2004, most current version or its successor, hereafter referred to as the Erosion Control Manual).

➲ The New York State technical guidance documents may be ordered from The Department. An order form as well as downloadable versions of the Manuals are available on the Internet at;

http://www.dec.state.ny.us/website/dow/toolbox/escstandards/index.html

http://www.dec.state.ny.us/website/dow/toolbox/swmanual/

3.2 Equivalence to Technical Standards[2]

Where stormwater management practices are not in accordance with technical standards, the applicant or developer must demonstrate equivalence to the technical standards set forth in Article 2, Section 3.1 and the SWPPP shall be prepared by a licensed professional.

3.3 Water Quality Standards

Any land development activity shall not cause an increase in turbidity that will result in substantial visible contrast to natural conditions in surface waters of the state of New York.

Section 4. Maintenance, Inspection and Repair of Stormwater Facilities[3]

4.1 Maintenance and Inspection During Construction[4]

4.1.1 The applicant or developer of the land development activity or their representative shall 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 applicant or developer to achieve compliance with the conditions of this local law. Sediment shall be removed from sediment

[2] Added 3/06 to ensure that the local law addresses the New York State requirement for applicants to demonstrate through preparation by a licensed professional that stormwater management practices that are not prepared in accordance with NYSDEC technical standards will work in the field to prevent soil erosion and maintain water quality.
[3] Revised 3/06 to add the word "Inspection" to the title to more closely reflect the content of the section.
[4] Revised 3/06 to add the word "Inspection" to the title to more closely reflect the content of the section.

6. Dimensions, material specifications and installation details for each post-construction stormwater management practice;
7. Maintenance schedule to ensure continuous and effective operation of each post-construction stormwater management practice.
8. Maintenance easements to ensure access to all stormwater management practices at the site for the purpose of inspection and repair. Easements shall be recorded on the plan and shall remain in effect with transfer of title to the property.
9. Inspection and maintenance agreement binding on all subsequent landowners served by the on-site stormwater management measures in accordance with Article 2, Section 4 of this local law.
10. For Condition A, the SWPPP shall be prepared by a landscape architect, certified professional or professional engineer and must be signed by the professional preparing the plan, who shall certify that the design of all stormwater management practices meet the requirements in this local law.[1]

2.3 Other Environmental Permits

The applicant shall assure that all other applicable environmental permits have been or will be acquired for the land development activity prior to approval of the final stormwater design plan.

2.4 Contractor Certification

2.4.1 Each contractor and subcontractor identified in the SWPPP who will be involved in soil disturbance and/or stormwater management practice installation shall sign and date a copy of the following certification statement before undertaking any land development activity : "I certify under penalty of law that I understand and agree to comply with the terms and conditions of the Stormwater Pollution Prevention Plan. I also understand that it is unlawful for any person to cause or contribute to a violation of water quality standards."

2.4.2 The certification must include the name and title of the person providing the signature, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.

2.4.3 The certification statement(s) shall become part of the SWPPP for the land development activity.

2.5 A copy of the SWPPP shall be retained at the site of the land development activity during construction from the date of initiation of construction activities to the date of final stabilization.

[1] Revised 3/06 - formerly Section 2.3. This section was moved under Section 2.2.3 to more closely meet the New York State requirements for Condition A in Section 2.2.2. The NY SPDES General Permit for Stormwater Runoff from Construction Activities (GP-02-01) requires that SWPPPs be prepared by a licensed professional for land development activities discharging a pollutant of concern to an impaired water identified on the Department's 303(d) list of impaired waters or to a Total Maximum Daily Load (TMDL) designated watershed for which pollutants in stormwater have been identified as a source of the impairment.

land, or any other person holding proprietary rights in the land.

Maintenance Agreement - a legally recorded document that acts as a property deed restriction, and which provides for long-term maintenance of stormwater management practices.

Nonpoint Source Pollution - pollution from any source other than from any discernible, confined, and discrete conveyances, and shall include, but not be limited to, pollutants from agricultural, silvicultural, mining, construction, subsurface disposal and urban runoff sources.

Phasing - clearing a parcel of land in distinct pieces or parts, with the stabilization of each piece completed before the clearing of the next.

Pollutant of Concern - sediment or a water quality measurement that addresses sediment (such as total suspended solids, turbidity or siltation) and any other pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the land development activity.

Project - land development activity

Recharge - the replenishment of underground water reserves.

Sediment Control - measures that prevent eroded sediment from leaving the site.

Sensitive Areas - cold water fisheries, shellfish beds, swimming beaches, groundwater recharge areas, water supply reservoirs, habitats for threatened, endangered or special concern species.

SPDES General Permit for Construction Activities GP-02-01 - A permit under the New York State Pollutant Discharge Elimination System (SPDES) issued to developers of construction activities to regulate disturbance of one or more acres of land.

SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems GP-02-02 - A permit under the New York State Pollutant Discharge Elimination System (SPDES) issued to municipalities to regulate discharges from municipal separate storm sewers for compliance with EPA established water quality standards and/or to specify stormwater control standards

Stabilization - the use of practices that prevent exposed soil from eroding.

Stop Work Order - an order issued which requires that all construction activity on a site be stopped.

Stormwater - rainwater, surface runoff, snowmelt and drainage

Stormwater Hotspot - a land use or activity that generates higher concentrations of hydrocarbons, trace metals or toxicants than are found in typical stormwater runoff, based on monitoring studies.

Stormwater Management - the use of structural or non-structural practices that are designed to reduce stormwater runoff and mitigate its adverse impacts on property, natural resources and the environment.

Stormwater Management Facility - one or a series of stormwater management practices installed, stabilized and operating for the purpose of controlling stormwater runoff.

Stormwater Management Officer - an employee or officer designated by the municipality to accept and review stormwater pollution prevention plans, forward the plans to the applicable municipal board and inspect stormwater management practices

> ↄ *The Stormwater Management Officer would likely be the Code Enforcement Officer or his/her staff. A consultant cannot be appointed as Stormwater Management Officer. Plan reviews and site inspections may be delegated to a consultant paid for through the applicant's escrow account, however the final approval must be made by a municipal employee or board member.*

Stormwater Management Practices (SMPs) - measures, either structural or nonstructural, that are determined to be the most effective, practical means of preventing flood damage and preventing or reducing point source or nonpoint source pollution inputs to stormwater runoff and water bodies.

Stormwater Pollution Prevention Plan (SWPPP) - a plan for controlling stormwater runoff and pollutants from a site during and after construction activities.

Stormwater Runoff - flow on the surface of the ground, resulting from precipitation

Surface Waters of the State of New York - lakes, bays, sounds, ponds, impounding reservoirs, springs, wells, 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.

Storm sewers and waste treatment systems, including treatment ponds or lagoons 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.

Watercourse - a permanent or intermittent stream or other body of water, either natural or man-made, which gathers or carries surface water.

Waterway - a channel that directs surface runoff to a watercourse or to the public storm drain.

Section 2. Stormwater Pollution Prevention Plans

2.1. Stormwater Pollution Prevention Plan Requirement

No application for approval of a land development activity shall be reviewed until the appropriate board has received a Stormwater Pollution Prevention Plan (SWPPP) prepared in accordance with the specifications in this local law.

2.2 Contents of Stormwater Pollution Prevention Plans

2.2.1 All SWPPPs shall provide the following background information and erosion and sediment controls:

1. Background information about the scope of the project, including location, type and size of project.
2. Site map/construction drawing(s) for the project, including a general location map. At a minimum, the site map should show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); wetlands and drainage patterns that could be affected by the construction activity; existing and final slopes; locations of off-site material, waste, borrow or equipment storage areas; and location(s) of the stormwater discharges(s);

⊃*Site map should be at a scale no smaller than 1"=100' (e.g. 1"=500" is smaller than 1"=100")*

3. Description of the soil(s) present at the site;
4. Construction phasing plan describing the intended sequence of construction activities, including clearing and grubbing, excavation and grading, utility and infrastructure installation and any other activity at the site that results in soil disturbance. Consistent with the New York Standards and Specifications for Erosion and Sediment Control (Erosion Control Manual), not more than five (5) acres shall be disturbed at any one time unless pursuant to an approved SWPPP.

⊃ *A municipality may choose to reduce the amount of land that may be exposed at any one time.*

5. Description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a pollutant source in

stormwater runoff;

6. Description of construction and waste materials expected to be stored on-site with updates as appropriate, and a description of controls to reduce pollutants from these materials including storage practices to minimize exposure of the materials to stormwater, and spill -prevention and response;
7. Temporary and permanent structural and vegetative measures to be used for soil stabilization, runoff control and sediment control for each stage of the project from initial land clearing and grubbing to project close-out;
8. A site map/construction drawing(s) specifying the location(s), size(s) and length(s) of each erosion and sediment control practice;
9. Dimensions, material specifications and installation details for all erosion and sediment control practices, including the siting and sizing of any temporary sediment basins;
10. Temporary practices that will be converted to permanent control measures;
11. Implementation schedule for staging temporary erosion and sediment control practices, including the timing of initial placement and duration that each practice should remain in place;
12. Maintenance schedule to ensure continuous and effective operation of the erosion and sediment control practice;
13. Name(s) of the receiving water(s);
14. Delineation of SWPPP implementation responsibilities for each part of the site;
15. Description of structural practices designed to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable; and
16. Any existing data that describes the stormwater runoff at the site.

2.2.2 Land development activities as defined in Section 1 of this Article and meeting Condition "A", "B" or "C" below shall also include water quantity and water quality controls (post-construction stormwater runoff controls) as set forth in Section 2.2.3 below as applicable:

Condition A - Stormwater runoff from land development activities discharging a pollutant of concern to either an impaired water identified on the Department's 303(d) list of impaired waters or a Total Maximum Daily Load (TMDL) designated watershed for which pollutants in stormwater have been identified as a source of the impairment.

Condition B - Stormwater runoff from land development activities disturbing five (5) or more acres.

Condition C - Stormwater runoff from land development activity disturbing between one (1) and five (5) acres of land during the course of the project, exclusive of the construction of single family residences and construction activities at agricultural properties.

2.2.3 SWPPP Requirements for Condition A, B and C:

1. All information in Section 2.2 .1 of this local law
2. Description of each post-construction stormwater management practice;
3. Site map/construction drawing(s) showing the specific location(s) and size(s) of each post-construction stormwater management practice;
4. Hydrologic and hydraulic analysis for all structural components of the stormwater management system for the applicable design storms
5. Comparison of post-development stormwater runoff conditions with pre-development conditions

BME ASSOCIATES

ENGINEERS • SURVEYORS • LANDSCAPE ARCHITECTS

June 15, 2016

MS4 Permit Coordinator
NYSDEC, Bureau of Water Permits
625 Broadway, 4th Floor
Albany, NY 12233-3505

Re: Local Laws - Illicit Discharge Detection & Elimination, Construction Site Stormwater Runoff Control and Post-Construction Stormwater Management (#NYR20A391) **2530**

Dear Permit Coordinator:

We are writing to you on behalf of the Town of Macedon in regards to updating their local laws pertaining to Illicit Discharge Detection & Elimination, Construction Site Stormwater Runoff Control, and Post-Construction Stormwater Management.

The Village of Macedon dissolved on March 31, 2017, and at that time, the Town of Macedon incorporated the Village's geographical boundaries into the Town's geographical boundaries, and began incorporating the Village's MS4 responsibilities into the Town's SWMP and MS4 Program.

The Town has considered updating their existing stormwater local laws to encompass the Village's urbanized areas. However, the Draft SPDES General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (GP-0-17-002), and the Sample Local Law for Stormwater Management and Erosion & Sediment Control have not been finalized. Therefore, after consultation with the Albany DEC Office, the Town has decided it would be prudent to delay updating their local laws until the new permit and sample laws are adopted. This decision will save the Town's taxpayers from passing laws now, and then repeating that lengthy process again in another six months to a year when the Draft MS4 Permit and Sample Local Laws are finalized. The Village's local laws will remain in effect until March 31, 2019.

Please contact our office if you disagree with the Town's course of action. You may reach our office at (585) 377-7360, ext. 133.

Thank you for your attention to this matter.

Sincerely,
BME ASSOCIATES

Kimberly Boyd

Kimberly Boyd, CPESC, CPMSM
Stormwater Specialist

KB

c: Cassandra Pagano; Town of Macedon Supervisor (by Email)
Scott Allen; Town of Macedon (by Email)
Ben Groth; NYSDEC, Region 8 (by Email)
Peter Vars; BME Associates (by Email)
Tom Danks; BME Associates (by Email)

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Town of Macedon Compliance with Permit GP-0-15-003 Local Laws Requirement for MCM #3 Illicit Discharge Detection & Elimination, MCM #4 Construction Stormwater Management, & MCM #5 Post-Construction Stormwater Management

Date 11/30/18

MS4 Permit GP-0-15-003 MS4 requirement	Town of Macedon Code Equivalent
NYS DEC's model local law to prohibit Illicit discharges, activities, and connections to the separate storm sewer system.	Part 2, General Legislation Chapter 112: Storm Sewers Article I: Illicit Discharge Detection and Elimination §112; Sections 1-20. Date Adopted: 9/13/2007
NYS DEC's Sample Local Law for Stormwater Management and Erosion and Sediment Control- Article 1 General Provisions; Sections 1-5.	Part 2, General Legislation Chapter 113: Stormwater Management and Erosion and Sediment Control Article I: General Provisions §113; Sections 1-5.
NYS DEC's Sample Local Law for Stormwater Management and Erosion and Sediment Control- Article 2. Zoning Law Amendment: Stormwater Control; Section 1. Definitions.	Part 2, General Legislation Chapter 135: Zoning Article II, Definitions and Word Usage §135-7 Definitions. Date Adopted: 9/13/2007
NYS DEC's Sample L Local law for Stormwater Management and Erosion and Sediment Control- Article 2. Zoning Law Amendment: Stormwater Control; Sections 2-5.	Part 2, General Legislation Chapter 135: Zoning Article VI: Regulations Applicable to all Districts §135-43 Stormwater Control. Date Adopted: 9/13/2007

NYS DEC's Sample Local Law for Stormwater Management and Erosion and Sediment Control- Article 3. Subdivision Regulation Amendment, and Article 4. Site plan Review Regulation Amendment.	Not necessary to adopt this language because of: Part 2, General Legislation Chapter 135: Zoning Article VI: Regulations Applicable to all Districts §135-43 Stormwater Control. Date Adopted: 9/13/2007
NYS DEC's Sample Local Law for Stormwater Management and Erosion and Sediment Control- Article 5. Erosion and Sediment Control Law repeal or Amendment.	Not applicable. There is no separate erosion and sediment control law that exists at the time the Town adopted its stormwater laws.
NYS DEC's Sample Local Law for Stormwater Management and Erosion and Sediment Control- Article 6. Administration and Enforcement, Section 1. Construction Inspection.	Part 2, General Legislation Chapter 135: Zoning Article II, Administration and Enforcement Chapter 113: Stormwater Management and Erosion and Sediment Control §113-6 Construction Inspection.
NYS DEC's Sample Local Law for Stormwater Management and Erosion and Sediment Control- Article 6. Administration and Enforcement, Section 2-4 Performance guarantee, enforcement and penalties, fees for service	Part 2, General Legislation Chapter 135: Zoning Article II, Administration and Enforcement §113-7 Performance guarantee; maintenance guarantee; recordkeeping. §113-8 Enforcement: penalties for offenses. §113-9 Fees for Service.

APPENDIX F

Third Party Certifications

&

Inter-Municipal Agreement

Third Party Contractor Agreement

Regarding Cooperation to Comply with the New York State Department of Environmental Conservation SPDES General Permit For Stormwater Discharges From Municipal Separate Storm Sewer Systems (MS4s)
GP-0-15-003

Third Party Contractor Information:

Company Name: BME Associates

Company Representative: Kimberly Boyd

Address: 10 Lift Bridge Lane East, Fairport, NY 14450

Phone Number: 585-377-7360 (ext. 133)

Email: kboyd@bmepc.com

Identify the activities that the entity will be responsible for including the particular Minimum Control Measure (MCM), the location and type of work:

MCM 1: SWMP Updates, FB Posts, Website Updates, Town Wide Mailer - Urbanized Area

MCM 2: Annual Report Preparation, SWMP Updates, Open House - Urbanized Area

MCM 3: Outfall Mapping, ORI, Dry Weather Inspections - Urbanized Area

MCM 4: SWPPP Review, Stormwater Inspections, SWPPP Enforcement -Town Wide

MCM 5: SWPPP Review, Inventory & Inspect Post-Construction Controls - Town Wide

MCM 6: SOP & BMP Development, Low Priority Facility Assessments - Urbanized Area

Certification Statement:

"I certify under penalty of law that I understand and agree to comply with the terms and conditions of the Town of Macedon's stormwater management program and agree to implement any corrective actions identified by the Town of Macedon or a representative. I also understand that the Town of Macedon 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 the Town of Macedon will not diminish, eliminate, or lessen my own liability."

Your signature below will constitute acknowledgement and acceptance of this agreement.

Scott Allen
Town of Macedon Representative

6-13-17
Date

Kimberly Boyd
Third Party Contractor Representative

6-13-17
Date

Third Party Contractor Agreement

Regarding Cooperation to Comply with the New York State Department of Environmental Conservation SPDES General Permit For Stormwater Discharges From Municipal Separate Storm Sewer Systems (MS4s)
GP-0-15-003

Third Party Contractor Information:

Company Name: EnviroTech Environmental Services

Company Representative: Robert Allen

Address: PO Box 29, Victor NY 14564

Phone Number: 8007242102

Email: info@naturallythebest.com

Identify the activities that the entity will be responsible for including the particular Minimum Control Measure (MCM), the location and type of work:

Minimum Control Measure 6: Pollution Prevention/Good Housekeeping For Municipal Operations

Envirotech applies pest control at municipal facilities - Town Wide

Utilize a management system that incoporates integrated pest management techniques.

Use pesticides only if there is an actual problem.

Do not use pesticides if rain is expected, and do not prepare pesticides near a storm drain.

Calibrate application equipment to avoid excessive application.

Certification Statement:

"I certify under penalty of law that I understand and agree to comply with the terms and conditions of the Town of Macedon's stormwater management program and agree to implement any corrective actions identified by the Town of Macedon or a representative. I also understand that the Town of Macedon 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 the Town of Macedon will not diminish, eliminate, or lessen my own liability."

Your signature below will constitute acknowledgement and acceptance of this agreement.

Town of Macedon Representative

9/13/17
Date

Robert Allen Robert Allen
Third Party Contractor Representative

09/13/2017
Date

Third Party Contractor Agreement

Regarding Cooperation to Comply with the New York State Department of Environmental Conservation SPDES General Permit For Stormwater Discharges From Municipal Separate Storm Sewer Systems (MS4s)
GP-0-15-003

Third Party Contractor Information:

Company Name: Caroline Myers Kilmer, WBE Certified Stormwater Consultant

Company Representative: Caroline Kilmer, MS, CPESC, CPSWQ, SPMSM

Address: 90 Caversham Woods, Pittsford, NY 14534

Phone Number: 585-746-5276

Email: caroline.myers.kilmer@gmail.com

Identify the activities that the entity will be responsible for including the particular Minimum Control Measure (MCM), the location and type of work:

MCM 2 - Provide a rain garden class at the Town Library. Work with the Town Library, Macedon Garden Club and others to create and/or attend existing events to provide public education.

MCM 3 - Identify and inventory outfalls located in the Village of Macedon using GPS - Urbanized Area Conduct Outfall Reconnaissance Inventory and categorize outfalls as low or high priority.

MCM 4-6 Research requirements for local laws and existing laws to determine compliance.

MCM 6 - Assist with researching regulatory compliance for the Sewer Plant. Provide one work-shop on green infrastructure for the Macedon Planning Board and Zoning Board of Appeals.

Certification Statement:

"I certify under penalty of law that I understand and agree to comply with the terms and conditions of the Town of Macedon's stormwater management program and agree to implement any corrective actions identified by the Town of Macedon or a representative. I also understand that the Town of Macedon 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 the Town of Macedon will not diminish, eliminate, or lessen my own liability."

Your signature below will constitute acknowledgement and acceptance of this agreement.

Town of Macedon Representative

12/13/18
Date

Third Party Contractor Representative

12/13/18
Date

Third Party Contractor Agreement

Regarding Cooperation to Comply with the New York State Department of Environmental Conservation SPDES General Permit For Stormwater Discharges From Municipal Separate Storm Sewer Systems (MS4s)
GP-0-15-003

Third Party Contractor Information:

Company Name: Transitions Landscape & Design Inc.

Company Representative: Charlie Holvey

Address: 1095 Quaker Road, Macedon, NY 14502

Phone Number: 315-986-1595

Email: transitions@verizon.net

Identify the activities that the entity will be responsible for including the particular Minimum Control Measure (MCM), the location and type of work:

MCM 6: Parks & Open Space Maintenance, Pesticide & Fertilizer Application, Hydroseeding at Municipal facilities, parks, or right-of-ways - Urbanized Areas

Certification Statement:

"I certify under penalty of law that I understand and agree to comply with the terms and conditions of the Town of Macedon's stormwater management program and agree to implement any corrective actions identified by the Town of Macedon or a representative. I also understand that the Town of Macedon 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 the Town of Macedon will not diminish, eliminate, or lessen my own liability."

Your signature below will constitute acknowledgement and acceptance of this agreement.

Town of Macedon Representative

9/11/17
Date

Third Party Contractor Representative

9/11/17
Date

Third Party Contractor Agreement

Regarding Cooperation to Comply with the New York State Department of Environmental Conservation SPDES General Permit For Stormwater Discharges From Municipal Separate Storm Sewer Systems (MS4s)
GP-0-15-003

Third Party Contractor Information:

Company Name: Ontario County Soil & Water Conservation District

Company Representative: Thomas Derue

Address: 480 North Main Street, Canandaigua, NY 14424

Phone Number: 585-396-1450

Email: _____

Identify the activities that the entity will be responsible for including the particular Minimum Control Measure (MCM), the location and type of work:

MCM 4: SWPPP Plan Review, SWPPP Inspections, & SWPPP Enforcement - Town Wide

Certification Statement:

"I certify under penalty of law that I understand and agree to comply with the terms and conditions of the Town of Macedon's stormwater management program and agree to implement any corrective actions identified by the Town of Macedon or a representative. I also understand that the Town of Macedon 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 the Town of Macedon will not diminish, eliminate, or lessen my own liability."

Your signature below will constitute acknowledgement and acceptance of this agreement.

Town of Macedon Representative

6-13-17
Date

Third Party Contractor Representative
THOMAS L DERUE, INTERIM MANAGER

6/9/17
Date

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INTERMUNICIPAL AGREEMENT

REGARDING COOPERATION TO COMPLY WITH THE FEDERAL PHASE II STORMWATER REGULATION IN ONTARIO AND WAYNE COUNTIES

An INTERMUNICIPAL AGREEMENT among the Ontario-Wayne Counties Stormwater Coalition members of the Towns of FARMINGTON, 1000 County Road 8, Farmington, New York 14425, MACEDON, 32 Main Street, Macedon, New York 14502, ONTARIO, 1850 Ridge Road, Ontario, New York 14519, VICTOR, 85 East Main Street, Victor, New York 14564, WALWORTH, 3600 Lorraine Drive, Walworth, New York 14568, hereinafter referred to as "Towns", the Coalition members of the Village of VICTOR, 60 East Main Street, Victor, New York 14564, hereinafter referred to as "Village"; ONTARIO COUNTY on behalf on its Department of Public Works with offices at 2962 County Road 48, Canandaigua, New York 14424; and WAYNE COUNTY on behalf of its Highway Department with offices at 7227 Route 31, Lyons, New York 14489, as authorized by Article 5-G of the General Municipal Law.

WHEREAS, the Phase II federal stormwater regulations require that regulated municipal separate storm sewer system operators comply with the SPDES General Permit for Stormwater Discharges (latest version) issued by the New York State Department of Environmental Conservation; and

WHEREAS, the Phase II federal stormwater regulations require that for each regulated municipal separate storm sewer system the municipality must prepare and implement a stormwater management program that includes six minimum control measures; and

WHEREAS, the municipalities recognize that, because watersheds and separate storm sewer systems cross municipal and county boundaries and because there are opportunities to save money and resources by working collaboratively, the municipalities should work cooperatively to comply with the requirements of the Phase II federal stormwater regulations; and

WHEREAS, the Ontario-Wayne Stormwater Coalition started holding meetings beginning in 2004 to identify and analyze options for pooling resources to meet the requirements of the Phase II Federal Stormwater Regulations, and;

WHEREAS, the funding for the Ontario-Wayne Stormwater Coalition is a combination of municipal cash and in-kind funding and New York State Environmental Protection Fund grant(s) and other available grant sources, which shall be managed by the Ontario County Soil and Water Conservation District and/or an appointed representative from the Ontario-Wayne MS4 Coalition.

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter set forth, the parties hereto mutually agree as follows:

1. The term of this agreement shall be from February 1, 2018 through January 31, 2023. At such time, this agreement may be renewed, amended, or terminated. Any party may withdraw from this agreement upon 60 days written notice to the other parties with or without cause.

2. The work of the Ontario-Wayne Stormwater Coalition shall be to work collaboratively to:
a. Comply with the Phase II Federal Stormwater Regulations and permit conditions placed on municipal separate storm sewer system operators in 2003 and future permit guidelines; comply with latest
b. Protect and/or improve the water quality of local water ways in accordance with State, County, and local water quality planning documents and policies
c. Facilitate the use of existing or future resources, organizations, and programs for the provision of the services necessary to comply with the Phase II regulations
d. Research and implement an appropriate funding mechanism to meet the financial needs resulting from compliance with the Phase II Federal Stormwater Regulations
e. Report annually to the Ontario County Board of Supervisors, Ontario County Water Resources Council, Wayne County Board of Supervisors, and Wayne County Water Quality Coordinating Committee on the Coalition's progress with compliance and funding issues.

3. Each Coalition member (Municipality or Agency) will pay an annual membership fee to the Coalition to fund the implementation of compliance activities, which are part of each Coalition member's stormwater management plan. This fee will be determined annually by the Stormwater Coalition and approved by the full membership of the Stormwater Coalition. The fee schedule is included in Appendix 'A'.

4. Each Coalition member will designate an official representative to serve on the Stormwater Coalition. The designee shall be responsible to attend and participate in monthly meetings of the Coalition and the task groups created to facilitate compliance with different aspects of the regulations, and to transmit stormwater policy issues to his or her Coalition member. The designee shall also be responsible to obtain opinions on stormwater policy issues from the Coalition member and to share such opinions with the Stormwater Coalition membership. Every Coalition member entitled to vote or attend a meeting of the Stormwater Coalition may authorize another person to act by signed proxy.

5. The officers of the Stormwater Coalition shall be the Chair and Vice-Chair. The officers shall be elected to two-year terms by a majority of the members present at a regularly scheduled meeting. The duties and responsibilities of the Chair shall be to preside at meetings of the Coalition, and function as the official spokesperson for the Coalition. The Vice-Chair shall assist the Chair and subsequently assume the Chair position for a two-year term.

6. Membership fees, which are outlined in Appendix A, should be paid to the Ontario County Soil and Water Conservation District by the date established by the Coalition. If payment is not received within 30 days of this date (Feb 1, 2018), then membership will be revoked unless the Coalition has agreed to other payment arrangements.

7. Stormwater Coalition decisions and recommendations are generally made by consensus. Consensus is defined as all members of the Coalition being able to support the decision or recommendation.

When the Coalition cannot reach consensus, voting will be used for decision-making. Each Coalition member (municipality or agency), that has paid its Coalition membership fee in-full, shall have one vote. All decisions requiring voting shall be made by the majority of the members (or their officially designated alternates) present at a regularly scheduled meeting. In the case of a tie vote, the Chair shall cast the tie-breaking vote.

8. Staff from the local, regional, and state agencies may provide staffing services to the Ontario-Wayne Stormwater Coalition. This will include coordination of the Coalition, the task groups, management of Coalition projects, applying for grant funding, and coordination of awarded grants. The Coalition or its designated service provider may, with the approval of the Coalition, also manage the implementation of the membership fee and develop a template for the annual reports that must be submitted by each regulated Coalition member. The Ontario- Wayne Stormwater Coalition shall not be the employer of such staff.

9. This Agreement may be modified or amended only in writing duly executed by all parties, which shall be attached to and become a part of this Agreement.

10. Each party shall defend, indemnify and hold harmless the other, its officers, agents and assigns for all liability arising out of its activities under this Agreement. The obligations of this paragraph shall survive the expiration or termination of this Intermunicipal Agreement, whether occasioned by this Intermunicipal Agreement's expiration or earlier termination.

11. This Agreement constitutes the entire Agreement between the parties and supersedes any and all prior Agreements between the parties hereto for the services herein to be provided. The Agreement shall be governed by and construed in accordance with the laws of New York State without regard or reference to its conflict of laws and principles.

12. Each Coalition Member shall be solely responsible and liable for its own activities under this Agreement, for obtaining its permit coverage under the SPDES General Permit for Stormwater Discharges from MS4s (current permit) and for the preparation, implementation, operation and maintenance of its own stormwater management program including, but not limited to, the required minimum control measures.

APPENDIX A

Ontario-Wayne Stormwater Coalition

2018-2023 Membership Fee
Schedule:

Type of Coalition Member	Membership Fee	Membership In-Kind Match
• MS4 Towns • Ontario County Highway Department • Wayne County Highway Department	$5,000.00	$9,000.00
MS4 Villages and Non Traditional MS4's to include School Districts	$2,500.00	$4,500.00

Signatories

Town of FARMINGTON Supervisor:
Date:

Town of MACEDON Supervisor:
Date:

Town of ONTARIO Supervisor:
Date:

Town of VICTOR Supervisor:
Date:

Town of WALWORTH Supervisor:
Date:

Village of VICTOR Mayor:
Date:

WAYNE
~~ONTARIO~~ COUNTY, on behalf on its Department of Public Works
Title: Chairman

Signature:

Date: 12/19/17

WAYNE COUNTY, on behalf of its Highway Department
Title: Chairman

Signature:

Date:

Signatories

Town of FARMINGTON Supervisor:
Date:

Town of MACEDON Supervisor:
Date:

Town of ONTARIO Supervisor:
Date:

Town of VICTOR Supervisor:
Date:

Patricia Marini
Town of WALWORTH Supervisor:
Date: 11/28/2017

Village of VICTOR Mayor:
Date:

ONTARIO COUNTY, on behalf on its Department of Public Works
Title:

Signature:

Date:

WAYNE COUNTY, on behalf of its Highway Department
Title:

Signature:

Date:

Signatories

Town of FARMINGTON Supervisor:
Date: 11/29/2017

Town of MACEDON Supervisor:
Date:

Town of ONTARIO Supervisor:
Date:

Town of VICTOR Supervisor:
Date:

Town of WALWORTH Supervisor:
Date:

Village of VICTOR Mayor:
Date:

ONTARIO COUNTY, on behalf on its Department of Public Works
Title:

Signature:

Date:

WAYNE COUNTY, on behalf of its Highway Department
Title:

Signature:

Date:

Signatories

Town of FARMINGTON Supervisor:
Date:

Town of MACEDON Supervisor:
Date:

Town of ONTARIO Supervisor:
Date:

Town of VICTOR Supervisor:
Date:

Town of WALWORTH Supervisor:
Date:

Village of VICTOR Mayor: Gary A. Hadden
Date: 11/7/2017

ONTARIO COUNTY, on behalf on its Department of Public Works
Title:

Signature:

Date:

WAYNE COUNTY, on behalf of its Highway Department
Title:

Signature:

Date:

Signatories

Town of FARMINGTON Supervisor:
Date:

Town of MACEDON Supervisor: Cassandra M Pagan
Date: 12/14/2017

Town of ONTARIO Supervisor:
Date:

Town of VICTOR Supervisor:
Date:

Town of WALWORTH Supervisor:
Date:

Village of VICTOR Mayor:
Date:

ONTARIO COUNTY, on behalf on its Department of Public Works
Title:

Signature:

Date:

WAYNE COUNTY, on behalf of its Highway Department
Title:

Signature:

Date:

Signatories

Town of FARMINGTON Supervisor:
Date:

Town of MACEDON Supervisor:
Date:

Town of ONTARIO Supervisor:
Date:

Town of VICTOR Supervisor: John Mann
Date: 1-2-18

Town of WALWORTH Supervisor:
Date:

Village of VICTOR Mayor:
Date:

ONTARIO COUNTY, on behalf on its Department of Public Works
Title:

Signature:

Date:

WAYNE COUNTY, on behalf of its Highway Department
Title:

Signature:

Date:

Signatories

Town of FARMINGTON Supervisor:
Date:

Town of MACEDON Supervisor:
Date:

Town of ONTARIO Supervisor:
Date:

Town of VICTOR Supervisor:
Date:

Town of WALWORTH Supervisor:
Date:

Village of VICTOR Mayor:
Date:

ONTARIO COUNTY, on behalf on its Department of Public Works
Title: Ontario County Administrator

Signature:

Date: 1/5/18

WAYNE COUNTY, on behalf of its Highway Department
Title:

Signature:

Date:

Signatories

Town of FARMINGTON Supervisor:
Date:

Town of MACEDON Supervisor:
Date:

Town of ONTARIO Supervisor:
Date: 3/27/19

Town of VICTOR Supervisor:
Date:

Town of WALWORTH Supervisor:
Date:

Village of VICTOR Mayor:
Date:

ONTARIO COUNTY, on behalf on its Department of Public Works
Title:

Signature:

Date:

WAYNE COUNTY, on behalf of its Highway Department
Title:

Signature:

Date:

APPENDIX G

Outfall Map

TO BE ADDED AT A LATER DATE

APPENDIX H

Illicit Discharge Detection & Elimination Complaint Log

Illicit Discharge Complaint Log

Contact: Scott Allen for Illicit Discharge Complaints

See reverse side for examples of illicit discharges

DATE	TYPE OF DISCHARGE	ADDRESS	CONTACT INFORMATION FOR FOLLOW UP	INPECTION DATE	FOLLOW UP ACTIONS	COMPLETION DATE OF FOLLOW UP ACTIONS

Examples of Illicit Discharges includes dumping materials into streets, ditches, catch basins, waterbodies, etc.:

- Lawn clippings
- Trash, litter and debris
- Pet waste
- Soil and sediment
- *Chlorinated* pool discharges
- Motor vehicle oils
- Antifreeze
- Soapy wash waters (excludes individual residential car washes, see below)
- Paint
- Failed septic systems
- Cooking grease or oil

Examples of Exempt Discharges Include:

- Water line flushing or other potable water sources
- Landscape irrigation or lawn watering
- Existing diverted stream flows
- Rising groundwater
- Uncontaminated groundwater infiltration to storm drains
- Uncontaminated pumped groundwater
- Foundation or footing drains
- Crawl space or basement sump pumps
- Air-conditioning condensate
- Irrigation water
- Springs
- Water from individual residential car washing
- Natural riparian habitat or wetland flows
- Dechlorinated swimming pool discharges,
- Residential street wash water
- Water from fire-fighting activities
- Any other water source not containing pollutants

APPENDIX I

Construction Site Complaint Log

&

Construction Site Inventory

and Inspection Tracking

Town of Macedon's Construction Site Complaint Log

Contact: Scott Allen for Construction Site Complaints

Common Complaints include but are not limited to:

- Sediment laden runoff from site flowing into street, private property or waterbody
-Mud in the street
-Trash or debris on adjacent property (including straw)
-Fuel or concrete wastes

DATE	NATURE OF COMPLAINT	SITE LOCATION	CONTACT INFORMATION FOR FOLLOW UP	INPECTION DATE	FOLLOW UP ACTIONS	COMPLETION DATE OF FOLLOW UP ACTIONS

Construction Site Inventory and Inspection Tracking

Updated 05/05/21

Number	Status/Action	Priority Rating	SWPPP Approval Date	Inspection Date	Inspection Rating	Current Status: Active, Temporarily Shut Down, Completed	SPDES NUMBER	CONT_LAST	CONT FIRST	CONT_PHONE	CONT_EMAIL	FAC_NAME	FAC_STREET	WATERBODY_1	SWPPP_PREPARER
1	Active	High	7/3/2018	8/17/18, 8/22/18. 8/30/18, 9/6/18, 9/12/18, 9/21/18, 9/28/18, 9/28/18,	Satisfactory	Active	NYR11D908	Welker	Mark	585-223-1500	craigwelker@welkerproperty.com	Parkwood Heights	Parkwood Dr	Ganaruga Creek	Marathon/Bob Brinkley 458-7770
35	Inactive	Low	9/30/2020	n/a	n/a	Inactive	NYR11H290	Chaimanis	John	617-374-3707	jchaimanis@kendallinvestments.com	Frey Solar Project	2 Frey Road	Red Creek	Rosemary Wightman
34	Winter Shutdown	High	5/10/2017	12/29/2017	Satisfactory	Winter Shutdown (All work completed in Macedon)	NYR11C280	Bitka	Mary	716-831-7206	mary.bitka@nationalgrid.com	Quaker Road to Sleight Road #13	991 Quaker Road	Erie Canal	John Morgan
2	2/15/18 - Site Re-Approval in Progress		n/a	n/a	n/a	Never Started/On hold	NYR10A293	Morrison	Thomas	315-986-8300	morrisonexc1@aol.com	Quaker Rd Industrial Park	Quaker Rd	Barge Canal	
4	No action needed, Temporarily Shutdown	Low	n/a	n/a	n/a	Temporarily Shutdown	NYR11A356	Geoca	Eric	585-733-7303	EGEOCA@AOL.COM	PHEASANT RUN SUBDIVISION	TANABERRY CIRCLE AND SPRAGBROOK CIRCLE	SWMF FOR PHEASANT RUN SUBDIVISION	PARRONE ENGINEERING
	No Action needed, per Engineer, does not want to close out		n/a	n/a	n/a	Never Started/On hold	NYR10P139	Fabbio	Peter	585-742-2283	pfabbiol@rochester.rr.com	Hidden Woods Section 1	Wayneport Road	Tributary to the Erie Canal	BME ASSOCIATES
	No Action needed, per Engineer, does not want to close out		n/a	n/a	n/a	Never Started/On hold	NYR10Y337	Stark	Nancy	585-739-9342		CAPITAL HILL SECTION 1	WAYNEPORT ROAD	Tributary to the Erie Canal	BME ASSOCIATES
18	Winter Shutdown	Low	n/a	n/a	n/a	Almost Complete	NYR10P016	CEDRULY	RON	585-359-9903		FAIRPORT - MACEDON MINI STORAGE	NEW YORK STATE 31F	UNNAMED TRIBUTARIES TO WETLANDS TO THE	MRB GROUP
33	NOT has been filed and accepted 9/1/18	Low	n/a	n/a	n/a	Completed	NYR11B659	MARTIN	KEVIN	315-986-0000	kevinmartin@izzo.com	PREMIER PACKAGING	1635 COMMONS PARKWAY	LOCAL DRAINAGE CREEK/SWALE WHICH DRAINS	AEY ENGINEERING DPC
1	NOT has been filed and accepted. 11/15/18	High	n/a	n/a	n/a	Completed	NYR10D103	Welker	Mark	585-223-1500	craigwelker@welkerproperty.com	Parkwood Heights Section 3	Woodsview Lane/Parkwood Dr	Ganaruga Creek	Marathon/Bob Brnkley 458-7770
8	NOT has been filed and accepted 9/13/17	Low	n/a	n/a	n/a	Completed	NYR10K642	DEHOLLANDER	SCOTT	585-259-9609	DEHOLLANDER-DESIGN@ROCHESTER.RR.COM	CHESTERWOOD SUBDIVISION	PANNEL ROAD	GANARGUA CREEK	DEHOLLANDER DESIGN INC.
32	NOT has been filed and accepted 08/01/18	High	8/28/2017	n/a	n/a	Completed	NYR10Z941	MERRYMAN	HARRY	315-789-5501	hmerryman@lakeviewhs.org	LAKEVIEW HEALTH SERVICES MACEDON	NYS ROUTE 31	GANARGUA CREEK	BME ASSOCIATES
6	NOT has been filed and accepted 06/26/18	Low	n/a	n/a	n/a	Completed	NYR10V221	HYDE	PATRICK	315-446-0125	pat@expressmart.com	PROPOSED EXPRESS MART #363	123 MAIN STREET	GANARGUA CREEK VIA FEDERAL WETLANDS	CARMINA WOOD MORRIS, PC
30	NOT has been filed and accepted 4/18/18	Low	n/a	n/a	n/a	Completed	NYR10V957	HEALD	BARB	315-986-1499	REDSLANDSCAPING@VERIZON.NET	TWILIGHT ON THE ERIE RV RESORT	997 NYS RTE 31	NYS BARGE CANAL VIA EXISTING DRAINAGE	T.Y. Lin Engineering - Bob Keefer

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APPENDIX J

Post-Construction Stormwater Management Practice Inventory & Inspection Forms

(Inspection Reports Located in Separate Binder)

Post-Construction Inventory and Inspection Tracking

Updated By Kim Boyd: 04/10/21

GIS Control ID	FAC_NAME	Location	Type of Practice	Inspection 2018-2019	Inspection 2019-2020	Inspection 2020-2021	Inspection Results	Actions	Dates of Corrective Actions to be Completed	Status of Corrective Action	Projected Date of Next Inspection
1	Lakeview Health Services Macedon	1950 NYS Route 31	Pond: Stormwater Pond	7/31/2018	5/20/2019	3/8/2021	Satisfactory	None	n/a	n/a	Fall 2021
2	Lakeview Health Services Macedon	1950 NYS Route 31	Other: Bioretention	7/31/2018	5/20/2019	3/8/2021	Satisfactory	None	n/a	n/a	Fall 2021
3	Parkwood Heights Section 3, The Cottages at Parkwood	Woodsview Lane/Parkwood Dr	Pond: Stormwater Pond	7/30/2018	5/20/2019	3/5/2021	Satisfactory	None	n/a	n/a	Fall 2021
4	Cedar Creek (Post Office)	1475 Canandaigua Road	Pond: Detention Pond	7/31/2018	5/20/2019	3/5/2021	Unsatisfactory	Remove debris (tires), unbury inlet pipe and establish rip rap below pipe	TBD	Follow up	Fall 2021
5	CVS/Dunkin Donuts	1215/1231 NYS Route 31	Pond: Stormwater Pond	7/30/2018	5/20/2019	3/5/2021	Unsatisfactory	Add stone riprap below inlet structure, remove trash, tires and add trash rack to top of outlet structure.	TBD	Follow up	Fall 2021
6	Prime Convenience	1241 NYS Route 31	Infiltration Basin	7/30/2018	5/20/2019	3/5/2021	Unsatisfactory	Add stone riprap below inlet structure and into the swale leading to the infiltration basin.	TBD	Follow up	Fall 2021
7	AEY Office and Maintenance Shop	1607 Commons Parkway	Pond: Wet Pond Extended Detention	7/30/2018	5/20/2019	3/9/2021	Satisfactory	Recommend reinspecting in late Spring due to snow cover.	TBD	Follow up	Spring 2021
8	Izzo Golf	1635 Commons Parkway	Pond: Stormwater Pond	7/30/2018	5/20/2019	3/5/2021	Unsatisfactory	Recommend adding topsoil and seed in drainage swale leading to the pond.	TBD	Follow up	Fall 2021
9	Premier Packaging aka Commons Mini Storage Units	1635 Commons Parkway	Other: Bioretention	7/31/2018	5/20/2019	3/5/2021	Unsatisfactory	Install silt fence adjacent to bioretention area. Remove inlet protection and add temporary stabilization to exposed adjacent soils.	TBD	Follow up	Fall 2021
10	Premier Packaging aka Commons Mini Storage Units	1635 Commons Parkway	Pond: Stormwater Pond	7/31/2018	5/20/2019	3/5/2021	Satisfactory	None	n/a	n/a	Fall 2021
11	Twilight on the Erie RV Resort	997 NYS Route 31	Pond: Stormwater Pond #2	7/31/2018	5/20/2019	3/8/2021	Unsatisfactory	Add stone riprap to eroded swales, unbury pipe and add riprap below.	TBD	Follow up	Fall 2021
12	Twilight on the Erie RV Resort	997 NYS Route 31	Pond: Stormwater Pond #1	7/31/2018	5/20/2019	3/8/2021	Satisfactory	None	n/a	n/a	Fall 2021
13	ABVI-Goodwill	1635 North Wilson Road	Pond: Wet Extended Detention, **Dry Swale, Stormwater Pond**	7/30/2018	5/20/2019	3/4/2021	Unsatisfactory	Remove cart and trash from facility	TBD	Follow up	Fall 2021
14	Wal-Mart Macedon #3842.00	425 NYS Route 31	Pond: Stormwater Pond	7/30/2018	5/20/2019	3/4/2021	Satisfactory	None	n/a	n/a	Fall 2021
14a	Wal-Mart Macedon #3842.00	425 NYS Route 31	Pond: Stormwater Pond		n/a	3/4/2021	Satisfactory	None	n/a	n/a	Fall 2021
15	Autozone	344 NYS Route 31	Other: Bioretention	7/30/2018	5/21/2019	3/9/2021	Satisfactory	None	n/a	n/a	Fall 2021

Post-Construction Inventory and Inspection Tracking

Updated By Kim Boyd: 04/10/21

16	Autozone	344 NYS Route 31	Other: Bioretention	7/30/2018	5/21/2019	3/9/2021	Satisfactory	None	n/a	n/a	Fall 2021
17	Autozone	344 NYS Route 31	Infiltration Basin	7/30/2018	5/21/2019	3/9/2021	Satisfactory	None	n/a	n/a	Spring 2022
18	Lyons National Branch - Macedon Branch	359 NYS Route 31	Pond: Wet Pond	7/30/2018	5/21/2019	3/4/2021	Unsatisfactory	Remove trash and clean out two end sections.			Fall 2021
19	Shoppes at Macedon, NY (Lowes Building)	NW Quadrant of SR 31 and Macedon Pkwy.	Pond: Wet Pond, Multiple systems	7/30/2018	5/21/2019	3/4/2021	Satisfactory	None	n/a	n/a	Spring 2022
20	Fairport- Macedon Mini Storage	155 Macedon Center Road	Pond: Stormwater Pond	7/31/2018	5/21/2019	3/5/2021	Satisfactory	None	n/a	n/a	Spring 2022
21	Pheasant Run Subdivision South - Sect. 1	Peacock Circle Pheasant Run Subdivision	Pond: Stormwater Pond	7/30/2018	11/25/2019	3/8/2021	Satisfactory	Some minor trash.			Spring 2022
22	Pheasant Run Subdivision North	3282 Spragbrook Circle, Pheasant Run Subdivision	Other: Bioretention	7/30/2018	11/25/2019	3/8/2021	Unsatisfactory	Remove silt fence, remove trees adjacent to cleanout pipe.			Fall 2021
23	Evergreen Hills	Gananda Parkway	Other: Dissipation Device (3)	7/31/2019	11/25/2019	3/5/2021	Satisfactory	Remove trash. Monitor tree growth. Trees may need to be removed.			Spring 2022
24	Constellation Energy	1255 Reserarch Forest (Lot R1B)	Pond: Stormwater Pond	7/31/2018	5/21/2019	3/8/2021	Unsatisfactory	Erosion and Tree removal	TBD	Follow up	Fall 2021

Disconnection & Sheetflow Stormwater Management Practices Level 2 Inspection Checklist

SMP ID #		**SMP Owner**		☐ Private ☐ Public
SMP Location (Address; Latitude & Longitude)				
	Latitude		**Longitude**	

Party Responsible for Maintenance	**System Type**		**Type of Site**
☐ Same as SMP Owner ☐ Other _____	☐ Seasonal ☐ Continuous Use ☐ Other	☐ Above Ground ☐ Below Ground	☐ Commercial ☐ Industrial ☐ Residential ☐ State

Inspection Date		**Inspection Time**	
Inspector			
Date of Last Inspection			

Level 2 Inspection – DISCONNECTION AND SHEETFLOW	
Recommended Repairs	**Triggers for Level 3 Inspection**
Observed Condition: Significant sediment on pavement that drains to disconnection area (e.g., grass strip)	
☐ Condition 1: Sediment on parking lot is widespread Enlist a mechanical sweeper or vacuum sweeper to remove sediment across entire pavement surface. Pay special attention to downhill edges of pavement where more sediment may have accumulated.	• Sediment accumulation is so serious that it cannot be sufficiently removed with mechanical sweeper. May indicate a high sediment load from uphill in the drainage area that needs to be mitigated. ☐ Level 3 inspection necessary
Observed Condition: Pavement edge deteriorating	
☐ Condition 1: Dips or damage at pavement edge causing runoff to concentrate Determine whether the damaged edge is causing significant enough concentration of runoff to warrant repair or regrading of the pavement.	• Edge must be patched or re-paved to make secure and level. • Parking lot not draining properly to the energy dissipator and treatment area. ☐ Level 3 inspection necessary
Observed Condition: Level spreader/energy dissipator	
☐ Condition 1: Level spreader sinking or uneven If basic equipment can be used, prop up and secure any section of level spreader that is sinking. Regrade soil all around level spreader and add stone as necessary to prevent erosion and bypassing. ☐ Condition 2: Level spreader is broken These repairs can be simple for small, residential-scale practices, such as at a downspout. Ensure the level spreader is level across, keyed in to soil at the edges, and made of durable material that can withstand the flow of water running across it. Larger or more complicated level spreaders (e.g., concrete) will likely require specialized skill and equipment.	• Level spreader requires specialized equipment, regrading, or large amount of material to make level again. • Level spreader needs to be re-designed and replaced. ☐ Level 3 inspection necessary

Level 2 Inspection – DISCONNECTION AND SHEETFLOW	
Recommended Repairs	**Triggers for Level 3 Inspection**
Observed Condition: Erosion in treatment area	
☐ Condition 1: Rills from concentrated flow Inspect energy dissipator to see whether it needs to be improved to better spread out incoming flow. Regrade flow path to ensure that it is relatively flat (if minor). If major re-grading is needed, the treatment area may need to be redesigned and fixed with specialized equipment.	• Major rills and gullies • Treatment area needs to be re-designed and major grading needed. ☐ Level 3 inspection necessary

Notes:

Inspector:_____ Date: _____

Swale Stormwater Management Practices
Level 2 Inspection Checklist

SMP ID #		**SMP Owner**		☐ Private ☐ Public
SMP Location (Address; Latitude & Longitude)				
	Latitude		**Longitude**	

Party Responsible for Maintenance	**System Type**		**Type of Site**
☐ Same as SMP Owner ☐ Other _____	☐ Seasonal ☐ Continuous Use ☐ Other	☐ Above Ground ☐ Below Ground	☐ Commercial ☐ Industrial ☐ Residential ☐ State

Inspection Date		**Inspection Time**	
Inspector			
Date of Last Inspection			

Level 2 Inspection: SWALE	
Recommended Repairs	**Triggers for Level 3 Inspection**
Observed Condition: Water Stands on Surface for More than 72 Hours after Storm	
☐ Condition 1: Small pockets of standing water Use a soil probe or auger to examine the soil profile. If isolated areas have accumulated grit, fines, or vegetative debris or have compacted soil, try scraping off top 3 to 6 inches of soil and replacing with clean material. Also check to see that surface is level and water is not ponding selectively in certain areas. ☐ Condition 2: Standing water is widespread or covers entire surface Requires diagnosis and resolution of problem: • Bad or compacted soil • Filter fabric on the swale bottom • Too much sediment/grit washing in from drainage area? • Too much ponding depth? • Longitudinal slope is too flat?	• Soil is overly compacted or clogged and problem is not evident from Level 2 inspection. • Level 2 inspection identifies problem, but it cannot be resolved easily or is associated with the original design of the practice (e.g., not enough slope down through the swale). ☐ Level 3 inspection necessary
Observed Condition: Vegetation is predominantly weeds and invasive species	
For a small area, weed and dig up invasive plants. Replant with natives or plants from original planting plan. If longer than 100 feet, develop a new planting plan and have it professionally reviewed.	• Vegetation deviates significantly from original planting plan; swale has been neglected and suffered from deferred maintenance. • Owner/responsible party does not know how to maintain the practice. • For large area, hire a professional to develop a grading plan and develop a planting plan. ☐ Level 3 inspection necessary

Notes:

Inspector:_____ Date: _____

Complete the following if follow-up/corrective actions were identified during this inspection:

Certified Completion of Follow-Up Actions:

"I hereby certify that the follow-up/corrective actions identified in the inspection performed on _____ (DATE) have been completed and any required maintenance deficiencies have been adequately corrected."

Inspector/Operator: _____ Date: _____

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Bioretention Stormwater Management Practices Level 2 Inspection Checklist

SMP ID #		**SMP Owner**		☐ Private ☐ Public
SMP Location (Address; Latitude & Longitude)				
	Latitude		**Longitude**	

Party Responsible for Maintenance	**System Type**		**Type of Site**
☐ Same as SMP Owner ☐ Other _____	☐ Seasonal ☐ Continuous Use ☐ Other	☐ Above Ground ☐ Below Ground	☐ Commercial ☐ Industrial ☐ Residential ☐ State

Inspection Date		**Inspection Time**	
Inspector			
Date of Last Inspection			

Level 2 Inspection: BIORETENTION
NOTE: Key Source for this Information *(CSN, 2013)*

Recommended Repairs	Triggers for Level 3 Inspection
Observed Condition: Water Stands on Surface for More than 72 Hours after Storm	
☐ Condition 1: Small pockets of standing water Use a soil probe or auger to examine the soil profile. If isolated areas have accumulated grit, fines, or vegetative debris or have bad soil media, try scraping off top 3 inches of media and replacing with clean material. Also check to see that surface is level and water is not ponding selectively in certain areas. ☐ Condition 2: Standing water is widespread or covers entire surface Requires diagnosis and resolution of problem: • Clogged underdrain? • Filter fabric between soil media and underdrain stone? • Need to install underdrain if not present? • Too much sediment/grit washing in from drainage area? • Too much ponding depth? • Improper soil media?	• Soil media is clogged and problem is not evident from Level 2 inspection. • Level 2 inspection identifies problem, but it cannot be resolved easily or is associated with the original design of the practice. ☐ Level 3 inspection necessary
Observed Condition: Vegetation is sparse or out of control	
☐ Condition 1: Original design planting plan seems good but has not been maintained, so there are many invasives and/or dead plants Will require some horticultural experience to restore vegetation to intended condition by weeding, pruning, removing plants, and adding new plants. ☐ Condition 2: Original design planting plan is unknown or cannot be actualized A landscape architect or horticulturalist will be needed to redo the planting plan. Will likely require analysis of soil pH, moisture, organic content, sun/shade, and other conditions to make sure plants match conditions. Plan should include invasive plant management and maintenance plan to include mulching, watering, disease intervention, periodic thinning/pruning, etc.	• Vegetation deviates significantly from original planting plan; Bioretention has been neglected and suffered from deferred maintenance. • Owner/responsible party does not know how to maintain the practice. ☐ Level 3 inspection necessary
Observed Condition: Bioretention does not conform to original design plan in surface area or storage	
☐ Condition 1: Level 2 Inspection reveals that practice is too small based on design dimension, does not have adequate storage (e.g., ponding depth) based on the plan, and/or does not treat the drainage area runoff as indicated on the plan Small areas of deviation can be corrected by the property owner or responsible party, but it is likely that a Qualified Professional will have to revisit the design and attempt a redesign that meets original objectives or that can be resubmitted to the municipality for approval.	• More than a 25% departure from the approved plan in surface area, storage, or drainage area; sometimes less than this threshold at the discretion of the Level 2 inspector. ☐ Level 3 inspection necessary

Level 2 Inspection: BIORETENTION NOTE: Key Source for this Information *(CSN, 2013)*	
Recommended Repairs	**Triggers for Level 3 Inspection**
Observed Condition: Severe erosion of filter bed, inlets, or around outlets	
☐ Condition 1: Erosion at inlets The lining (e.g., grass, matting, stone, rock) may not be adequate for the actual flow velocities coming through the inlets. First line of defense is to try a more non-erosive lining and/or to extend the lining further down to where inlet slopes meet the Bioretention surface. If problem persists, analysis by a Qualified Professional is warranted. ☐ Condition 2: Erosion of Bioretention filter bed This is often caused by "preferential flow paths" through and along the Bioretention surface. The source of flow should be analyzed and methods employed to dissipate energy and disperse the flow (e.g., check dams, rock splash pads). ☐ Condition 3: Erosion on side slopes Again, the issue is likely linked with unanticipated flow paths down the side slopes (probably overland flow that concentrates as it hits the edge of the slope). For small or isolated areas, try filling, compacting, and re-establishing healthy ground cover vegetation. If the problem is more widespread, further analysis is required to determine how to redirect the flow.	• Erosion (rills, gullies) is more than 12 inches deep at inlets or the filter bed or more than 3 inches deep on side slopes. • If the issue is not caused by moving water but some sort of subsurface defect. This may manifest as a sinkhole or linear depression and be associated with problems with the underdrain stone or pipe or underlying soil. ☐ Level 3 inspection necessary
Observed Condition: Significant sediment accumulation, indicating an uncontrolled source of sediment	
☐ Condition 1: Isolated areas of sediment accumulation, generally less than 3-inches deep Sediment source may be from a one-time or isolated event. Remove accumulated sediment and top 2 to 3 inches of Bioretention soil media; replace with clean material. Check drainage area for any ongoing sources of sediment. ☐ Condition 2: Majority of the surface is caked with "hard pan" (thin layer of clogging material) or accumulated sediment that is 3-inches deep or more This can be caused by an improper construction sequence (drainage area not fully stabilized prior to installation of Bioretention soil media) or another chronic source of sediment in the drainage area. Augering several holes down through the media can indicate how severe the problem is; often the damage is confined to the first several inches of soil media. Removing and replacing this top layer (or to the depth where sediment incursion is seen in auger holes) can be adequate, as long as the problem does not recur.	• More than 2 inches of accumulated sediment cover 25% or more of the Bioretention surface area. • "Hard pan" of thin, crusty layer covers majority of Bioretention surface area and seems to be impeding flow of water down through the soil media. • New sources of sediment seem to be accumulating with each significant rainfall event. ☐ Level 3 inspection necessary

Notes:

Inspector:_____ Date: _____

Complete the following if follow-up/corrective actions were identified during this inspection:

Certified Completion of Follow-Up Actions:

"I hereby certify that the follow-up/corrective actions identified in the inspection performed on _____ (DATE) have been completed and any required maintenance deficiencies have been adequately corrected."

Inspector/Operator: _____ Date: _____

Pond and Wetland Stormwater Management Practices Level 2 Inspection Checklist

SMP ID #		**SMP Owner**		☐ Private ☐ Public
SMP Location (Address; Latitude & Longitude)				
	Latitude		**Longitude**	

Party Responsible for Maintenance	**System Type**		**Type of Site**
☐ Same as SMP Owner ☐ Other _____	☐ Seasonal ☐ Continuous Use ☐ Other	☐ Above Ground ☐ Below Ground	☐ Commercial ☐ Industrial ☐ Residential ☐ State

Inspection Date		**Inspection Time**	
Inspector			
Date of Last Inspection			

Level 2 Inspection: PONDS and WETLANDS

Recommended Repairs and Required Skills	Triggers for Level 3 Inspection
Observed Condition: Bare Soil or Erosion in the Drainage Area	
☐ Condition 1: Extensive problem spots, but no channels or rills forming Reseed problem areas. If problem persists or grass does not take, consider hiring a landscape contractor. ☐ Condition 2: Problem is extensive, and rills/channels are beginning to form May be necessary to divert or redirect water that is causing the erosion problem. If it appears that simple regrading—such as installing a berm or leveling a low spot–will fix the problem, make repairs and ensure that the problem is repaired after the next storm.	• Large rills or gullies are forming in the drainage area. • An attempt to regrade the drainage area has been unsuccessful. • Fixing the problem would require major regrading (i.e., redirecting more than a 100-square-foot area. • It is not clear why the problem is occurring. ☐ Level 3 inspection necessary
Observed Condition: Manholes or Inlet Pipe Buried or Covered with Vegetation	
☐ Condition 1: Nearest manhole and inlet pipe not found Consult as-built drawings to get to closest suspected location and use metal detector to search for metal manhole cover. If unsuccessful, identify nearest drain inlets and approximate pipe direction to locate next manhole. ☐ Condition 2: Manhole located and inspected Never enter a manhole, except by following confined-space entry protocols. If outlet pipe is not visible or greater than 25% full of sediment/debris or trash, it will typically require a qualified contractor to flush, clean and clear blockages. ☐ Condition 3: Inlet pipe not found at pond Clear vegetation and brush that may be covering the inlet pipe. Buried inlet pipes may be found through use of a metal probe. ☐ Condition 4: Inlet pipe buried in sediment or blocked by vegetation Once located, the pipe path can be cleared of vegetation with brush hook or other brush tools. Light digging may clear sediment from the end of the pipe.	• To locate buried manholes and lost storm lines, it is sometimes necessary to hire a pipeline inspection contractor with televising equipment or ground-penetrating radar and enter at the closest upstream access point. • Locating a buried inlet pipe may require wading in the edge of the pond and using a metal probe and brush axe to find and expose the pipe. • If other than light digging is necessary to remove accumulated sediment, a contractor with heavy equipment may be required. ☐ Level 3 inspection necessary

Level 2 Inspection: PONDS and WETLANDS	
Recommended Repairs and Required Skills	**Triggers for Level 3 Inspection**
Observed Condition: Pipe or Headwall Settlement, Erosion, Corrosion or Failure	
☐ Condition 1: Pipe or headwall settlement or failure Severe sinkholes, settlement or corrosion should be kicked out to Level 3 Inspection. ☐ Condition 2: Flow not confined to pipe and visible outside pipe wall With flashlight, observe the inside of the pipe and note its condition. Take photographs. Look for sinkholes developing that indicate pipe failure beneath the surface. Kick out to Level 3 inspection.	• Where blockages are visible, a decision is needed on whether to clear them or leave in place. If a third of the pipe is full of sediment, it should be removed by a contractor with pipe-cleaning equipment. • Corrosion of inlet pipes that allows flow around the pipe exterior is a structural concern because it can lead to settlement, sinkholes and undermining pond embankment. Evidence of this type of failure may require specialized pipe-inspection equipment and investigation by an engineer. ☐ Level 3 inspection necessary
Observed Condition: Pond Conditions	
☐ Condition 1: Pond pre-treatment zone is full of sediment or not constructed as shown on as-built drawings. ☐ Condition 2: Excessive buildup of sediment or overgrowth If the pre-treatment area or pond pool is overgrown or filled with sediment so that the original design is compromised, corrective measures are required. If plants have died, then replanting is necessary. If none of the original design exists due to alteration or sediment, kick out to Level 3 inspection.	• It may require inspection by an engineer to determine next steps for clearing, replanting or reconstruction. • Erosion or settlement such that design has been compromised should be reviewed by an engineer. Recurring erosion may require redesign and/or regrading to direct flow away from eroding area. • If sediment has filled more than 50% of the pond's capacity, dredging is likely needed and should be evaluated by a qualified contractor. • Removal or control of excessive algae or aquatic plants can be assessed by a qualified pond maintenance company. ☐ Level 3 inspection necessary

Notes:

Inspector:_____ Date: _____

Complete the following if follow-up/corrective actions were identified during this inspection:

Certified Completion of Follow-Up Actions:

"I hereby certify that the follow-up/corrective actions identified in the inspection performed on _____ (DATE) have been completed and any required maintenance deficiencies have been adequately corrected."

Inspector/Operator: _____ Date: _____

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Infiltration Stormwater Management Practices Level 2 Inspection Checklist

SMP ID #		**SMP Owner**		☐ Private ☐ Public
SMP Location (Address; Latitude & Longitude)				
	Latitude		**Longitude**	

Party Responsible for Maintenance	**System Type**		**Type of Site**
☐ Same as SMP Owner ☐ Other _____	☐ Seasonal ☐ Continuous Use ☐ Other	☐ Above Ground ☐ Below Ground	☐ Commercial ☐ Industrial ☐ Residential ☐ State

Inspection Date		**Inspection Time**	
Inspector			
Date of Last Inspection			

Level 2 Inspection: INFILTRATION

Recommended Repairs	Triggers for Level 3 Inspection
Observed Condition: Water Stands on Surface for More than 72 Hours after Storm	
☐ Condition 1: Small pockets of standing water For infiltration basins with soil, use a soil probe or auger to examine the soil profile. For gravel infiltration trenches or basins, use a shovel to dig into the gravel layer where the problem is occurring. If isolated areas have accumulated grit, fine silt, or vegetative debris or have bad soil or clogged gravel, try removing and replacing with clean material. If the practice is supposed to have grass cover, it will likely be necessary to replant once the problem is resolved. ☐ Condition 2: Standing water is widespread or covers entire surface Look in the observation well (if it exists) and use a tape measure to estimate the depth of water standing in the soil or gravel. Requires diagnosis and resolution of problem: • Too much sediment/grit washing in from drainage area? • Too much ponding depth? • Improper infiltration media? • Underlying soil not suitable for infiltration? As above, the resolution will likely require replanting and re-establishment of good grass cover if this is part of the design.	• Infiltration media is clogged and problem cannot be diagnosed from Level 2 inspection. • Level 2 inspection identifies problem, but it cannot be resolved easily or it is associated with the original design of the practice. ☐ Level 3 Inspection necessary
Observed Condition: Severe erosion of infiltration bed, inlets, or around outlets	
☐ Condition 1: Erosion at inlets The lining (e.g., grass, matting, stone, rock) may not be adequate for the actual flow velocities coming through the inlets. First line of defense is to try a less erosive lining and/or extending the lining further down to where inlet slopes meet the infiltration surface. If problem persists, analysis by a Qualified Professional is warranted. ☐ Condition 2: Erosion of infiltration bed This is often caused by “preferential flow paths” along the surface. The source of flow should be analyzed and methods employed to dissipate energy and disperse the flow (e.g., check dams, rock splash pads).	• Erosion (rills, gullies) is more than 12 inches deep • The issue is not caused by moving water but some sort of subsurface defect, which may manifest as a sinkhole or linear depression and be associated with problems with the underlying stone or soil. ☐ Level 3 Inspection necessary

Notes:

Inspector:_____ Date: _____

Complete the following if follow-up/corrective actions were identified during this inspection:

Certified Completion of Follow-Up Actions:

"I hereby certify that the follow-up/corrective actions identified in the inspection performed on _____ (DATE) have been completed and any required maintenance deficiencies have been adequately corrected."

Inspector/Operator: _____ Date: _____

APPENDIX K

BMP Summary Sheets

BMP Summary Sheet

Department Name: Highway Department
Category of Municipal Operations: Municipal Building Maintenance

BMP Title: **Outdoor Container Storage**

BMP Description:

- Minimize outdoor container storage.
- Use covered dumpsters for waste containers.
- Place tight fitting lids on all containers.
- Raise containers off the ground with provisions for spill control and secondary containment.
- Contain the material in such a way that if a leak or spill occurs, the contents will not drain to the storm drain or other waters.
- Current outdoor container storage is limited to metals. Metals are covered.

Measurable Goals:

- Inspect outdoor containers for leaks.
- Metal storage container was covered.

Timeline/Implementation Schedule:

- 2016-2017 Implemented
- 2017-2022 Permit Years - Continue Implementation

Specific Components and Notes:

- Employee Training completed: 12/05/17, 02/26/19, 03/03/20, 03/05/21

Responsible Party for this BMP
Indicate who specifically is responsible for the implementation and monitoring of this BMP. This should be the individual who is actively involved with the BMP.

Name: Chris Countryman - Superintendent of Highways
Department: Highway Department
Phone: 315-986-7852 Ext. 102
E-mail: townofmacedon@yahoo.com

BMP Summary Sheet

Department Name: Highway Department
Minimum Control Measure: Municipal Building Maintenance (Also applicable to most operations and facilities)

BMP Title: **Spill Prevention, Control, & Cleanup**

BMP Description:

- Move material handling indoors, under cover, or away from storm drains or sensitive water bodies, if possible.
- Properly label all containers so contents are easily identifiable.
- Berm storage areas so that if a spill of leak occurs, the material is contained.
- Cover outside storage areas either with a permanent structure or a seasonal one so that rain cannot contact materials.
- Check containers often for leaks or spills, and replace deteriorating containers with ones in good condition.
- Store, contain, and transfer liquid materials in such a manner that if the contents spilled, they would not discharge or be washed into the storm drain, surface waters, or groundwater.
- Place drip pans or absorbent materials beneath all mounted taps and all potential drip and spill locations during the filling and unloading of containers.
- For field programs, only transport the minimum amount of material needed for the daily activities and transfer materials between containers at a municipal yard where leaks and spills are easier to control.
- If paved, sweep and clean storage areas monthly. Do not hose down area unless water is being collected and disposed properly.
- Install a spill control device in any catch basins that collect runoff from areas storing materials that separate and float on water.
- Protect catch basins while a conducting field activity so if a spill does occur, the material is contained.
- Utilize Emergency Spill Kit located on the upper level of the Highway Barn

Measurable Goals:

- Annually train municipal employees on Spill Prevention, Control, & Cleanup
- Document and report spills as required per the SOP #3

Timeline/Implementation Schedule:

- 2016-2017 Implemented
- 2017-2022 Permit Years - Continue Implementation

Specific Components and Notes:

- Employee Training completed: 12/05/17, 02/26/19, 03/03/20, 03/05/21

Responsible Party for this BMP

Indicate who specifically is responsible for the implementation and monitoring of this BMP. This should be the individual who is actively involved with the BMP.

Name: Chris Countryman - Superintendent of Highways
Department: Highway Department
Phone: 315-986-7852 Ext. 102
E-mail: townofmacedon@yahoo.com

BMP Summary Sheet

Department Name: Highway Department
Category of Municipal Operations: Parks and Open Space Maintenance

BMP Title: Landscape Maintenance

BMP Description:

- Use mechanical methods of vegetation removal whenever possible.
- Avoid loosening the soil when removing weeds, and use mulch when soils are exposed.
- Collect lawn and grass clippings, pruning waste, tree trimmings and weeds, and compost or dispose of at the facility across from the Highway Barn.
- Consider planting native vegetation where feasible.
- The Town does not use fertilizers or pesticides. Transitions Landscaping may fertilize some areas. If a pesticide is needed, then a third party contractor is utilized (Envirotech).
- Utilize a management system that incoporates integrated pest management techniques (Envirotech).
- Use pesticides only if there is an actual problem (Envirotech).
- Do not use pesticides if rain is expected, and do not prepare pesticides near a storm drain. (Envirotech).
- Calibrate application equipment to avoid excessive application (Envirotech).
- Avoid placing landscape waste around storm drain inlets.
- The Town does not irrigate any areas which reduces runoff.

Measurable Goals:

- Document fertililers or pesticides utilized by third party contractors.

Timeline/Implementation Schedule:

- 2016-2017 Implemented
- 2017-2022 Permit Years - Continue Implementation

Specific Components and Notes:

- Employee Training Completed 12/05/17, 02/26/19/ 03/03/20, 03/05/21

Responsible Party for this BMP

Indicate who specifically is responsible for the implementation and monitoring of this BMP. This should be the individual who is actively involved with the BMP.

Name: Chris Countryman - Superintendent of Highways
Department: Highway Department
Phone: 315-986-7852 Ext. 102
E-mail: townofmacedon@yahoo.com

BMP Summary Sheet

Department Name: NA

Category of Municipal Operations: Parks and Open Space Maintenance

BMP Title: **Outdoor Storage of Raw Materials**

BMP Description:

- Store all materials inside. If this is not feasible, then all outside storage areas should be covered with a roof and enclosed to prevent storm water contact.
- Cover and contain stockpiles of raw materials while not in use to prevent storm water from running into the covered piles.
- If stockpiles are too large to be covered and contained, implement erosion control practices at the perimeter of the site.
- Keep liquids in a designated area on a paved impervious surface with secondary containment.
- Keep outdoor storage containers in good condition, and in a clean and dry area.
- Secure drums stored in an area to prevent accidental spillage or stealing.
- Store chemicals, drums, or bagged materials in secondary containers if applicable.
- Release accumulated stormwater in petroleum storage areas prior to the next storm. Water should at least pass through an oil/water separator and, if allowed, discharged to a sanitary sewer.

Measurable Goals:

- Monitor outdoor storage area for runoff.

Timeline/Implementation Schedule:

- 2016-2017 Implemented
- 2017-2022 Permit Years - Continue Implementation

Specific Components and Notes:

- Employee Training Completed 12/05/17, 02/26/19, 03/03/20, 03/05/21

Responsible Party for this BMP

Indicate who specifically is responsible for the implementation and monitoring of this BMP. This should be the individual who is actively involved with the BMP.

Name: Chris Countryman - Superintendent of Highways
Department: Highway Department
Phone: 315-986-7852 Ext. 102
E-mail: townofmacedon@yahoo.com

BMP Summary Sheet

Department Name: Highway Department
Category of Municipal Operations: Parks and Open Space Maintenance

BMP Title: Pet Waste Collection

BMP Description:

- Assess municipal parks and open space areas to determine locations with excessive amounts of pet waste.
- Prioritize problem areas based upon quantity of pet waste and proximity to waterbodies.
- Maintain pet waste signs or bag stations as necessary.

Measurable Goals:

- Continue to replenish pet waste bag stations on an as needed basis
- 8 Pet Waste Stations have been installed as of 04/27/20
- 2 additional Pet Waste Stations installed as of 04/22/21

Timeline/Implementation Schedule:

- 2016-2017 Implemented
- 2017-2022 Permit Years - Continue Implementation

Specific Components and Notes:

- Employee Training Completed 12/05/17, 02/26/19, 03/03/20, 03/05/21

Responsible Party for this BMP

Indicate who specifically is responsible for the implementation and monitoring of this BMP. This should be the individual who is actively involved with the BMP.

Name: Chris Countryman - Superintendent of Highways
Department: Highway Department
Phone: 315-986-7852 Ext. 102
E-mail: townofmacedon@yahoo.com

BMP Summary Sheet

Department Name: Highway Department
Category of Municipal Operations: Septic System Management

BMP Title: **Septic System Management**

BMP Description:

- Divert stormwater runoff from roof drains away from septic system.
- Divert groundwater and/or sump pump discharges away from septic system.
- Prevent growth of vegetation such as woody plants from growing on top of the system.
- Annually visually inspect surface area for breakout.

Measurable Goals:

- Document number of septic systems:
  (1) at the Bullis Park Concession
  (1) at the Highway Barn.
- Document service dates for each system:
  Bullis Park: typically once every 3 to 4 years.
  Highway Barn: annually

Timeline/Implementation Schedule:

- 2016-2017 Implemented
- 2017-2022 Permit Years - Continue implementation

Specific Components and Notes:

- Employee training completed: 12/05/17, 02/26/19, 03/03/20, 03/05/21

Responsible Party for this BMP

Indicate who specifically is responsible for the implementation and monitoring of this BMP. This should be the individual who is actively involved with the BMP.

Name: Chris Countryman - Superintendent of Highways
Department: Highway Department
Phone: 315-986-7852 Ext. 102
E-mail: townofmacedon@yahoo.com

BMP Summary Sheet

Department Name: Highway Department
Category of Municipal Operations: Solid Waste Management

BMP Title: **Chemical/ Hazardous Waste**

BMP Description:

- Store hazardous materials and wastes in covered containers protected from vandalism, and in compliance with fire and hazardous waste codes.
- Place hazardous waste containers in secondary containment as necessary
- Hazardous waste is to be collected, removed, and disposed of only at authorized disposal areas.
- Hazardous materials are recycled with Safety-Kleen including oil filters
- Used oil is incinerated onsite

Measurable Goals:

- Continue training Highway Department employees

Timeline/Implementation Schedule:

- 2016-2017 Implemented
- 2017-2022 Permit Years - Continue Implementation

Specific Components and Notes:

- Employee Training completed: 12/05/17, 02/26/19, 03/03/20, 03/05/21

Responsible Party for this BMP

Indicate who specifically is responsible for the implementation and monitoring of this BMP. This should be the individual who is actively involved with the BMP.

Name: Chris Countryman - Superintendent of Highways
Department: Highway Department
Phone: 315-986-7852 Ext. 102
E-mail: townofmacedon@yahoo.com

BMP Summary Sheet

Department Name: Highway Department
Category of Municipal Operations: Solid Waste Management

BMP Title: **Illegal Dumping and Litter Control**

BMP Description:

- Mobile "No Dumping" signs are posted in areas where dumping has previoulsy occurred.
- Litter receptacles are available in busy, high pedestrian traffic areas of the community at park facilities, and at community events.
- Covered litter receptacles are cleaned out once a week to prevent spillage.
- Illicit discharge tracking spreadsheets are located with the Building & Zoning Clerk and the Highway Department Secretary.

Measurable Goals:

- Identify number of sites where illegal dumping occurs.
- Train municipal employees to notify the Building & Zoning Clerk or Highway Secretary in order to track incidents.

No Dumping signs were posted at the Macedon Cemetery in the 2019-2020 Permit Year and the Highway Department noted a decrease in dumping.

Timeline/Implementation Schedule:

- 2016-2017 Implemented
- 2017-2022 Permit Years - Continue Implementation

Specific Components and Notes:

- Employee Training completed: 12/05/17, 02/26/19, 03/03/20, 03/05/21

Responsible Party for this BMP

Indicate who specifically is responsible for the implementation and monitoring of this BMP. This should be the individual who is actively involved with the BMP.

Name: Chris Countryman - Superintendent of Highways
Department: Highway Department
Phone: 315-986-7852 Ext. 102
E-mail: townofmacedon@yahoo.com

BMP Summary Sheet

Department Name: Highway Department
Category of Municipal Operations: Solid Waste Management

BMP Title: Waste Collection

BMP Description:

- Regularly inspect solid waste containers (dumpsters & garbage cans) for structural damage. Damaged containers are to be repaired or replaced as necessary.
- Containers must be closed tightly when not in use
- Waste containers should never be filled with washout water or any other liquid
- Only appropriate solid wastes are to be added to waste containers. Certain wastes such as hazardous wastes, appliances, fluorescent lamps, pesticides, etc. may not be disposed of in solid waste containers.
- Trash storage bins are covered.
- e-Waste is covered and stored on a pallet

Measurable Goals:

- Train municipal employees

Timeline/Implementation Schedule:

- 2016-2017 Implemented
- 2017-2022 Permit Years - Continue Implementation

Specific Components and Notes:

- Employee Training completed: 12/05/17, 02/26/19, 03/03/20, 03/05/21

Responsible Party for this BMP

Indicate who specifically is responsible for the implementation and monitoring of this BMP. This should be the individual who is actively involved with the BMP.

Name: Chris Countryman - Superintendent of Highways
Department: Highway Department
Phone: 315-986-7852 Ext. 102
E-mail: townofmacedon@yahoo.com

BMP Summary Sheet

Department Name: Highway Department/Town Hall
Category of Municipal Operations: Solid Waste Management

BMP Title: **Waste Reduction and Recycling**

BMP Description:

- Wastes are recycled whenever possible. Antifreeze (Bob Taylor) , waste oil (burned onsite) and lead acid batteries (Interstate Batteries) are recycled. Materials that can not be reused or recycled should be disposed of properly.
- Recycling bins for newspaper, metal cans, plastic bottles and other recyclable household solid wastes are provided at public facilities.
- The Town Hall utilizes Waste Management for paper product recycling. The Highway Department utilizes K&D Disposal for paper products. Cans and plastic bottles are recylced by employees of both facilities.

Measurable Goals:

- Train municipal employees
- E-waste collection events continue.
- Shredding events continue.

Timeline/Implementation Schedule:

- 2016-2017 Implemented
- 2017-2022 Permit Years - Continue Implementation

Specific Components and Notes:

- Employee Training completed: 12/05/17, 02/26/19, 03/03/20, 03/05/21

Responsible Party for this BMP

Indicate who specifically is responsible for the implementation and monitoring of this BMP. This should be the individual who is actively involved with the BMP.

Name: Chris Countryman - Superintendent of Highways
Department: Highway Department
Phone: 315-986-7852 Ext. 102
E-mail: townofmacedon@yahoo.com

BMP Summary Sheet

Department Name: Highway Department
Category of Municipal Operations: Stormwater System Maintenance

BMP Title: Catch Basin/ Inlet Structures

BMP Description:
- Staff regularly inspects the storm drain system when working in an area of concern.
- Any deterioration threatening structural integrity should be immediately repaired.
- Catch basins should be cleaned before exceeding 50% of sump capacity. Cleaning frequently should be scheduled as needed to meet this standard.
- Store any collected waste appropriately away from inlets or streams. If waste is collected by vactor, dump wastes at the bermed facility across from the Highway Barns.

Measurable Goals:
- Document approximate quantity (tons or cubic yards) of material cleaned from structures.
- Document frequency of scheduled cleanings.
- Clean catch basins, inlets and other conveyance structures in high pollution load areas before the wet season to remove accumulated sediment and debris.
- Conduct inspections more frequently during wet season for problem areas where sediment or trash accumulates more often.
- Keep accurate logs of the number of catch basins cleaned and record the amount of waste collected.

Timeline/Implementation Schedule:
- 2016-2017 Implemented
- 2017-2022 Permit Years - Continue Implementation

Specific Components and Notes:
- Employee Training completed: 12/05/17, 02/26/19, 03/03/20, 03/05/21

Responsible Party for this BMP
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Name: Chris Countryman - Superintendent of Highways
Department: Highway Department
Phone: 315-986-7852 Ext. 102
E-mail: townofmacedon@yahoo.com

BMP Summary Sheet

Department Name: Highway Department
Category of Municipal Operations: Stormwater System Maintenance

BMP Title: **Open Channel, Ditch Maintenance**

BMP Description:
- If ditch scraping is necessary do it in patches with vegetated strips left down slope to capture sediments.
- Use hydroseeding immediately after scraping.
- Hydroseed early in the season to allow sufficient growing time.
- Do not hydroseed immediately before a rain.

- Town is moving towards utilizing seeding and a straw mulcher versus hydroseeding. (2021)

Measurable Goals:
- Approximate length of open drainage ditches maintained with enhanced implementation of erosion control practices in ditch (e.g. hydroseeding).

Timeline/Implementation Schedule:
- 2016-2017 Implemented
- 2017-2022 Permit Years - Continue implementation

Specific Components and Notes:
- Employee Training completed: 12/05/17, 02/26/19, 03/03/20, 03/05/21

Responsible Party for this BMP
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Name: Chris Countryman - Superintendent of Highways
Department: Highway Department
Phone: 315-986-7852 Ext. 102
E-mail: townofmacedon@yahoo.com

BMP Summary Sheet

Department Name: Highway Department
Category of Municipal Operations: Stormwater System Maintenance

BMP Title: **Storm Sewer Conveyance System**

BMP Description:

- Locate reaches of storm sewers with deposit problems and develop a flushing schedule that keeps the pipe clear of excessive buildup.
- Collect flushed effluent by vactor or pump to the sanitary sewer
- During routine maintenance field staff should look for evidence of illegal discharges or illicit connections. Any signs of spills, dumping or illicit connections should be followed up according to the illicit discharge program.

Measurable Goals:

- Document length of storm drain pipe cleaned or repaired.
- Document number of outfalls cleaned.
- Document upgrades or technology improvements implemented in overall system.
- Staff training or continuing education activities.

Timeline/Implementation Schedule:

- 2016-2017 Implemented
- 2017-2022 Permit Years - Continue Implementation

Specific Components and Notes:

- Employee Training completed: 12/05/17, 02/26/19, 03/03/20, 03/05/21

Responsible Party for this BMP

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Department: Highway Department
Phone: 315-986-7852 Ext. 102
E-mail: townofmacedon@yahoo.com

BMP Summary Sheet

Department Name: Highway Department

Category of Municipal Operations: Street Maintenance

BMP Title: **Graffiti Removal**

BMP Description:

- Graffiti removal activities are to be scheduled during dry weather.
- Nearby storm inlets are to be protected prior to removing graffiti. Runoff from sand blasting and high pressure washing should be directed into a landscaped or dirt area. If such an area is not available filter runoff through an appropriate filtering device (e.g. filter fabric) to keep sand, particles and debris out of storm sewers.
- Graffiti is typically removed with a gas powered steam jenny without the use of chemicals.
- If graffiti is found in roadways and cannot be removed using the steam jenny, then a driveway sealer is utilized.

Measurable Goals:

- Continue training municipal employees.

Timeline/Implementation Schedule:

- 2016-2017 Implemented
- 2017-2022 Permit Years - Continue Implementation

Specific Components and Notes:

- Employee training completed: 12/05/17, 02/26/19, 03/03/20, 03/05/21

Responsible Party for this BMP

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Name: Chris Countryman - Superintendent of Highways
Department: Highway Department
Phone: 315-986-7852 Ext. 102
E-mail: townofmacedon@yahoo.com

BMP Summary Sheet

Department Name: Highway Department

Category of Municipal Operations: Street Maintenance

BMP Title: Unpaved Roads and Trails

BMP Description:

- Stabilize exposed soils to prevent soil from eroding during rain events. This is particularly important on steep slopes. A Hydroseeder is typically used to spread seed, mulch and tackifier.
- Roadside areas with exposed soils are stabilized with the hydroseeder which contains a mulch or binder that will hold the soils in place while the vegetation is establishing. Native vegetation should be used.
- If vegetation cannot be established immediately, apply temporary erosion control mats/blankets, straw or gravel as appropriate.
- Where steep slopes occur or major ersion issues are noted, the Town may utilize stone rip rap or sand bags for sediment control.

Measurable Goals:

- Continue training municipal employees
- Document persistent areas of concern - The Town has one unpaved road (Pond Road) and few trails.

Timeline/Implementation Schedule:

- 2016-2017 Implemented
- 2017-2022 Permit Years - Continue Implementation

Specific Components and Notes:

- Employee training completed: 12/05/17, 02/26/19, 03/03/20, 03/05/21

Responsible Party for this BMP

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Department: Highway Department
Phone: 315-986-7852 Ext. 102
E-mail: townofmacedon@yahoo.com

BMP Summary Sheet

Department Name: Highway Department
Category of Municipal Operations: Street Maintenance

BMP Title: Roadway Patching, Resurfacing and Surface Sealing

BMP Description:

- Patching, resurfacing and sealing are to be scheduled for dry weather.
- Material stockpiles are to be kept away from streets, gutter areas, storm drain inlets or waterways
- Preheating, transfer or loading of hot bituminous material is to be done away from drainage systems or waterways. This typically occurs at the plant.
- Excess material is to be prevented from entering streets or storm inlets.
- There shall be a designated area for cleanup and proper disposal of excess material.
- The area worked is typically swept within 48 hours to remove any debris from entering the strom drainage system

Measurable Goals:

- Train municipal employees

Timeline/Implementation Schedule:

- 2016-2017 Implemented
- 2017-2022 Permit Years - Continue Implementation

Specific Components and Notes:

- Employee training completed: 12/05/17, 02/26/19, 03/03/20, 03/05/21

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BMP Summary Sheet

Department Name: Highway Department
Category of Municipal Operations: Street Maintenance

BMP Title: **Street Sweeping and Cleaning**

BMP Description:

- A consistent sweeping schedule is to be maintained. The Redbook is followed.
- Street cleaning is only to be performed during dry weather if possible.
- Street sweeping uses minimal amount of water required for dust control.
- Sweepers are to be operated at manufacturer requested optimal speed level to increase effectiveness.
- Accurate logs of the number of curb-miles swept and the amount of waste collected are to be kept.
- Do not store swept material along the side of the street or near a storm drain inlet.
- Debris storage is to be kept to a minimum during the wet season. Piles will be contained by a berm or covered.
- Sweeping debris is currently disposed of at the Highway Facility in a bermed area.

Measurable Goals:

- Approximate quantity (tons or cubic yards) of debris cleaned from streets, sidewalks and parking lots.
- Continue employee training or continuing education activities related to policies & procedures
- If contaminants are suspected, continue disposing sweeping debris and dirt at the landfill.

Timeline/Implementation Schedule:

- 2016-2017 Implemented
- 2017-2022 Permit Year - Continue Implementation

Specific Components and Notes:

- Employee training completed: 12/05/17, 02/26/19, 03/03/20, 03/05/21

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Department: Highway Department
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E-mail: townofmacedon@yahoo.com

BMP Summary Sheet

Department Name: Highway Department
Category of Municipal Operations: **Vehicle and Fleet Maintenance**

BMP Title: **Vehicle and Equipment Cleaning**

BMP Description:

- Majority of vehicles and equipment are washed inside the building and wash waters are directed to an oil/water separtor and then to the septic system.
- Wash areas are designed to properly collect and dispose of wash water when engine cleaning is conducted and when chemical additives, solvents, or degreasers are used.
- If washing must occur outside, use the designated paved wash area.

Measurable Goals:

- Continue training employees on policies, procedures, BMPs and stormwater management.
- Continue using biodegradable, phosphate-free detergents for washing vehicles, as appropriate.
- Mark the outdoor area clearly as a wash area.

Timeline/Implementation Schedule:

- 2016-2017 Implemented
- 2017-2022 Permit Years - Continue Implementation

Specific Components and Notes:

- A dry well was installed to accept outdoor wash area waters to prevent wash waters from entering the storm drain system.
- Employee training completed: 12/05/17, 02/26/19, 03/03/20, 03/05/21

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Department: Highway Department
Phone: 315-986-7852 Ext. 102
E-mail: townofmacedon@yahoo.com

BMP Summary Sheet

Department Name: Highway Department
Category of Municipal Operations: Vehicle and Fleet Maintenance

BMP Title: Vehicle and Equipment Fueling

BMP Description:

- Vehicle and Equipment Fueling occurs at the Gananda Bus Garage which is not owned or operated by the Town of Macedon.
- Spot clean leaks and drips routinely. Leaks are not cleaned up until the absorbent is picked up and disposed of properly.
- Report leaking vehicles to fleet maintenance.

Measurable Goals:

- Label drains within the Highway facility boundary to indicate whether they flow to an oil/water separator, directly to a sewer, or to a storm drain.

Timeline/Implementation Schedule:

- 2016-2017 Implemented
- 2017-2022 Permit Year - Continue implementation

Specific Components and Notes:

- Employee training completed: 12/05/17, 02/26/19, 03/03/20, 03/05/21

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E-mail: townofmacedon@yahoo.com

BMP Summary Sheet

Department Name: Highway Department
Category of Municipal Operations: **Vehicle and Fleet Maintenance**

BMP Title: **Vehicle and Equipment Repair**

BMP Description:

- Whenever feasible, move maintenance and repair activities indoors.
- Store idle equipment containing fluids under cover.
- Avoid hosing down work areas, but if work areas are washed, collect the water and direct to septic system.
- Designate a special area, with no connections to the storm drain, to drain motor fluids.
- Collect leaking or dripping fluids in drip pans or containers, and drain all fluids immediately.
- Promptly transfer used fluids to proper waste or recydling drums.
- Keep equipment clean, don't allow excess grease and oil buildup.
- If temporary work is being done outside, use a tarp, ground cloth, or drip pans to capture all spills and drips and dispose of properly.
- Regulary inspect vehicles and equipment for leaks and repair immediately.

Measurable Goals:

- Post signs to indicate storm drains and sinks are not to receive hazardous wastes.
- Plans are in place to decommission the Waste Water Treatment Plant adjacent to the Village DPW. Once the plant is decommissioned, the Town plans to explore using the facility as an indoor wash bay for vehicles and equipment.

Timeline/Implementation Schedule:

- 2016-2017 Implemented
- 2017-2022 Permit Years - Continue Implementation

Specific Components and Notes:

- Employee training completed: 12/05/17, 02/26/19, 03/03/20, 03/05/21

Responsible Party for this BMP

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Department: Highway Department
Phone: 315-986-7852 Ext. 102
E-mail: townofmacedon@yahoo.com

BMP Summary Sheet

Department Name: Highway Department
Category of Municipal Operations: Winter Road Maintenance

BMP Title: **Road Salt Application**

BMP Description:

- Calibrate salt spreaders to ensure proper application.
- Only apply the amount of salt/sand mixture needed to get the job done.
- Follow the proper application guidelines.
- Consider temperature when determining volume of salt/sand mix to apply.
- Cleanup 'trackout' after a storm event around the storage area.
- Wash waters from trucks used for salting and sanding drain to an oil/water separator before discharging to an open ditch.
- Salt is stored properly under cover and is located away from areas of flooding.
- Place salt piles in areas not subject to flooding.
- Use diversion berms to minimize water runoff from storage areas.

Measurable Goals:

- All deicing materials have been stored under cover.
- Application components have been tested, calibrated, and maintained at regular intervals. Trucks are calibrated in the fall and spot checked throughout the winter season.

Timeline/Implementation Schedule:

- 2016-2017 Implemented
- 2017-2022 Permit Years - Continue Implementation

Specific Components and Notes:

- Highway Department is now using Magic Minus Zero Liquid Deicer
- Employee Training completed: 12/05/17,0 2/26/19, 03/03/20, 03/05/21

Responsible Party for this BMP

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Name: Chris Countryman - Superintendent of Highways
Department: Highway Department
Phone: 315-986-7852 Ext. 102
E-mail: townofmacedon@yahoo.com

APPENDIX L

Municipal Facilities Inventory & Inspection Forms

(Inspection Reports Located in Separate Binder)

Town of Macedon's Inventory of Municipally Owned Facilities

Last updated 03/08/21 by Kim Boyd

Inventory of Municipally Owned Facilities	Address / Location	SWPPP Status	SWPPP Location	Type of Activities Present on Site	Inspection Date	Inspection Date
Town of Macedon Governmental Function						
Fmr. Village Hall	81 Main Street	n/a	n/a	Office Use (currently vacant except Town Fire Marshal office) Bld. not ADA compliant	9/14/2017	10/22/2020
Highway Department	2067 O'Neil Road	n/a	n/a	Town Highway Dept (shared w/ Gananda School)	10/4/2017	10/22/2020
Public Safety Building	1620 North Wayneport Road	n/a	n/a	Police and Ambulance Base	9/12/2017	10/22/2020
Town Hall / Library Complex	30 and 32 Main Street	n/a	n/a	Town Hall and Library Complex	6/12/2017	10/22/2020
Building & Grounds	135 Main Street	n/a	n/a	Minor Equipment Maintenance	10/4/2017	10/22/2020
Parks and Recreation Facilities						
Bullis Park	1777 Canandaigua Road	n/a	n/a	Park, including playground, fields, concession/bathrooms, two pavilions, parking lots, pet waste stations, etc.	6/30/2017	6/17/2020
Bullis Park Annex	off the end of Commons Parkway	n/a	n/a	Designated Walking and Hiking Trail System / Mature Woods (abuts Bullis Park)	6/30/2017	6/12/2020
Fmr. Village Wells Parcel	off the end of Commons Parkway	n/a	n/a	Wells Decomissioned as of 2017, property in process of being merged into Bullis Park	6/30/2017	6/12/2020
Gravino Park	135 Main Street	n/a	n/a	Park, including playground, fields, concession/bathrooms, one pavilion, parking lot, etc.	7/17/2017	6/17/2020
Bickford Park	SE Corner Bickford and Center Street	n/a	n/a	Pocket Park with Gazebo	6/30/2017	6/12/2020
Canal Park	Park Adjacent to Lock 30	n/a	n/a	State Canal Land under use and occupancy permit to the Town of Macedon	6/30/2017	6/17/2020
Public Parking Lots						
106 Main	Between 106 and 108 Main	n/a	n/a	Public Parking Lot / Access Driveways	6/21/2017	6/12/2020
Behind Florist at 100 Main	Rear of 100 Main	n/a	n/a	Public Parking Lot	6/21/2017	6/12/2020
Old Erie Square	109 Main (SE corner old Erie/31)	n/a	n/a	Public Parking Lot (currently in disrepair)	6/21/2017	6/12/2020
Cemeteries						
Erie Street Cemetery aka Macedon Cemetery	West side of Erie St., south of Ganargua Creek	n/a	n/a	Cemetery (active)	6/21/2017	6/25/2020
Macedon Center Cemetery	Between 1208 and 1232 Route 31F	n/a	n/a	Cemetery (not active)	6/30/2017	6/15/2020
Walworth Road Cemetery	Behind 1565 Walworth Road	n/a	n/a	Cemetery (not active)	6/30/2017	6/17/2020
Wayneport Road Cemetery	West side just south of Quaker	n/a	n/a	Cemetery (not active)	6/30/2017	6/12/2020
Sanitary Pump Stations and Treatment Plant						
Cedar Creek Pump Station	behind 1503 Cananadaigua Road	n/a	n/a	Maintained by WCWSA	9/14/2017	6/12/2020
Chase Bank Pump Station	1900 NYS Route 31	n/a	n/a	Maintained by WCWSA	7/6/2017	6/17/2020
Commons Parkway Pump Station	behind 1641 Commons Parkway	n/a	n/a	Maintained by WCWSA	6/30/2017	6/12/2020
East Park Drive Pump Station	across from 1657 East Park Drive	n/a	n/a	Maintained by WCWSA	7/7/2017	6/12/2020
Lakeview Pump Station	1936 NYS Route 31	n/a	n/a	Maintained by WCWSA	7/6/2017	6/17/2020
Marina Pump Station	1125 Marina Drive	n/a	n/a	Maintained by WCWSA	6/30/2017	6/17/2020
Peacock Circle Pump Station	3158 Peacock Circle	n/a	n/a	Maintained by Walworth Sewer Department	7/7/2017	6/15/2020
Waste Water Treatment Plant	135 Main Street	n/a	n/a	Maintained by WCWSA	11/7/2018	n/a
Water Storage Tanks						
Bunker Hill	End of Bunker Hill Drive	n/a	n/a	Maintained by WCWSA	6/30/2017	6/25/2020
Erie Street (Water Storage Tank Removed)	located at Erie St. Cemetery Hill	n/a	n/a	Tank has been removed. 06-25-20	6/21/2017	n/a
Macedon Center	adjacent to 1386 NYS Route 31F	n/a	n/a	Maintained by WCWSA	7/7/2017	6/15/2020
Town Owned Stormwater Ponds						
Pheasant Run	South end of Peacock Circle	n/a	n/a	Regional Pond	7/30/2018	3/8/2021
Wal-Mart	Large pond east of Wal-Mart, north of Sampson	n/a	n/a	Regional Pond	7/30/2018	3/4/2021
Miscellaneous Vacant Land						
Both sides of Erie St. north of creek		n/a	n/a	Undeveloped wooded floodplain	7/7/2017	6/25/2020
Former Gravel Pit Quaker Road	2400 Quaker Road	n/a	n/a	Reclaimed Gravel Pit - discussions underway to allow Pal-Mac Youth Baseball long term lease	7/7/2017	6/17/2020
Old "Race", east of Race Street	East of end of Race Street	n/a	n/a	Undeveloped woods	7/19/2017	6/15/2020
Wayneport Road lot	West side just south of Canal	n/a	n/a	Vacant - donated to town by Fairport Yacht Club - possible future canoe launch or pocket park	7/7/2017	6/12/2020
West of Kemp Drive / north of 31		n/a	n/a	Contains former trolley bed and large wetland area	7/7/2017	6/12/2020
End of Poplar Street	End of Poplar Street	n/a	n/a	Undeveloped woods	7/19/2017	6/15/2020

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Municipal Facility/Operation Assessment Form

Inspections must be conducted by a person with the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility, and evaluate the effectiveness of best management practices required by the SPDES MS4 General Permit (GP-0-17-002).

PERMIT # NYR20A391 MS4 Name Town of Macedon

Facility ID _____ Facility Type _____ Date _____

Weather Conditions _____

Is stormwater runoff present during this assessment? ☐ Yes ☐ No

Is this a High Priority Facility? ☐ Yes ☐ No

SWPPP

a. Is there a completed SWPPP available for this facility? ☐ Yes ☐ No

b. Does the facility have MS4s that discharge to any surface waters? ☐ Yes ☐ No

Comments

Good Housekeeping

a. Are paved surfaces free of sediment and debris?

b. Date the paved area was last swept or vacuumed.

c. Do outdoor waste receptacles have covers?

d. Are the waste receptacles emptied on a regular basis?

e. Are there signs of leaks, contaminants or overfilling at the waste receptacle area?

f. Are the following facility areas free of accumulated sediment, debris, contaminants and spills?

- Salt storage areas ☐ Yes ☐ No
- Container storage areas ☐ Yes ☐ No
- Maintenance areas ☐ Yes ☐ No
- Staging Areas ☐ Yes ☐ No
- Material Stockpile Areas ☐ Yes ☐ No

Comments

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Vehicle and Equipment Areas

a. Are vehicle/equipment parked indoors or under a roof? ☐ Yes ☐ No

b. Are vehicles/equipment washed in only designated areas? ☐ Yes ☐ No

c. Are vehicles washed regularly to remove contamination and prevent them from polluting stormwater? ☐ Yes ☐ No

d. Is all wash water treated in an oil water seperator prior to discharge? ☐ Yes ☐ No

e. Is all wash water captured and treated in a sanitary system? ☐ Yes ☐ No

Comments

Vehicle/Equipment Maintenance

a. Is equipment stored under shelter or elevated and covered? ☐ Yes ☐ No

b. Are fluids drained over a drip pan or pad? ☐ Yes ☐ No

c. Are funnels or pumps used when transferring fluids? ☐ Yes ☐ No

d. Are waste rags and used absorbent pads disposed of properly? ☐ Yes ☐ No

e. Are any vehicles and/or equipment leaking fluids? ☐ Yes ☐ No

f. Are drip pans immediately placed under leaks? ☐ Yes ☐ No

g. Are materials, equipment, and activities located so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to protected areas)? ☐ Yes ☐ No

Comments

Fueling areas

a. Is fueling performed under a canopy or roof? ☐ Yes ☐ No

b. Are spill cleanup materials available at the fueling area? ☐ Yes ☐ No

c. Are breakaway valves used on fueling hoses? ☐ Yes ☐ No

d. Is the fueling handle lock disconnected so the operator must attend the fueling? ☐ Yes ☐ No

e. Is stormwater runoff from fueling area treated in an oil/water seperator? ☐ Yes ☐ No

f. Is the fueling automatic stop inspected regularly to ensure it is working properly? ☐ Yes ☐ No

g. Are all fuel deliveries monitored? ☐ Yes ☐ No

Salt Storage

a. Is salt stored in a salt storage building or under a roof? ☐ Yes ☐ No

b. Are controls in place to minimize spills while adding or removing material from the pile? ☐ Yes ☐ No

c. Are salt spills cleaned up promptly? ☐ Yes ☐ No

d. Is overflow and tracked salt removed promptly from loading areas? ☐ Yes ☐ No

e. Is stormwater draining away from the salt pile directed to a vegetated filter area? ☐ Yes ☐ No

Comments

Fluids Management

a. Are all drums and containers of fluids stored with proper cover and containment? ☐ Yes ☐ No

b. Are fluids stored in appropriate containers and/or storage cabinets? ☐ Yes ☐ No

c. Are all fluids kept in original containers or labeled in a manner that describes the contents adequately? ☐ Yes ☐ No

d. Are Material Safety Data Sheets (MSDS/SDS) readily available? ☐ Yes ☐ No

e. Are all containers that are stored free of leaks or deposits? ☐ Yes ☐ No

f. Are containers of product inspected regularly? ☐ Yes ☐ No

g. Is used oil and antifreeze stored indoors and/or on spill containment pallets? ☐ Yes ☐ No

h. Is used oil and antifreeze properly disposed of or recycled? ☐ Yes ☐ No

Comments

Lead-Acid Batteries

a. Are lead-acid batteries stored indoors on spill containment pallets or in bins? ☐ Yes ☐ No

b. Are intact batteries stored on an acid-resistant rack or tub? ☐ Yes ☐ No

c. Are cracked or leaking batteries stored in labeled, closed leak-proof containers? ☐ Yes ☐ No

d. Is the date each battery was placed in storage recorded? ☐ Yes ☐ No

e. Are batteries stacked more than 5 high? ☐ Yes ☐ No

f. Are batteries inspected regularly for leaks? ☐ Yes ☐ No

Lead-Acid Batteries (continued)

g. Are acid neutralizing agents, such as baking soda, available in case of leaks? ☐ Yes ☐ No

h. Are batteries stored longer than 6 months before recycling? ☐ Yes ☐ No

i. Are lead cable ends left on the batteries to be recycled? ☐ Yes ☐ No

Comments

Spill Prevention and Control

a. Are vehicles inspected daily for leaks? ☐ Yes ☐ No

b. Is spill control equipment and absorbents readily available? ☐ Yes ☐ No

c. Are emergency phone numbers posted in conspicuous areas? ☐ Yes ☐ No

d. Are Material Safety Data Sheets (MSDS/SDS) readily available? ☐ Yes ☐ No

e. Are spills contained and cleaned up immediately? ☐ Yes ☐ No

Comments

General Material Storage Areas

a. Are leaking or damaged materials stored inside a building or another type of storm resistance shelter? ☐ Yes ☐ No

b. Are all material stockpiles within containment structures (e.g. concrete barriers, earthen berms) or stored in a manner that does not allow discharge of impacted stormwater? ☐ Yes ☐ No

c. Are used fuel tanks and other scrap metal and parts drained of fluids and stored under cover? ☐ Yes ☐ No

d. Are outdoor containers covered? ☐ Yes ☐ No

e. Are piles of spoils, asphalt, debris, etc stored under a roof or cover? ☐ Yes ☐ No

f. Are spills of material or debris cleaned up promptly? ☐ Yes ☐ No

g. Are used tire storage piles placed away from storm drains or conveyances? ☐ Yes ☐ No

h. Are tires recycled frequently to keep the number of stored tires manageable? ☐ Yes ☐ No

Comments

Stormwater Management

a. Are employees trained annually on the proper procedures, specific control measures and documentation requirements of stormwater management at the facility//operation? ☐ Yes ☐ No

b. Is uncontaminated stormwater prevented from mixing with process areas? ☐ Yes ☐ No

c. Are BMPs and treatment structures working as designed? ☐ Yes ☐ No

d. Are BMPs and treatment structures free from debris buildup or overgrown vegetation that may impair function? ☐ Yes ☐ No

e. Catch basins should be cleaned when the depth of sediment or debris reaches 50% of the sump depth. Based on this, do any catch basins need to be cleaned? ☐ Yes ☐ No

f. Are berms, curbing or other methods used to divert and direct discharges adequate and in good condition? ☐ Yes ☐ No

g. Are rooftop drains directed to areas away from pavement? ☐ Yes ☐ No

Comments

Erosion and Sediment Controls

a. Are soil stabilization measures (e.g. seed and mulch, rolled erosion control products) considered in areas that have the potential for significant soil erosion? ☐ Yes ☐ No

b. Are natural buffers maintained around surface waters? ☐ Yes ☐ No

c. Are flow velocity dissipation devices in place at stormwater outfalls and channel outlets (rock riprap, stone check dams, concrete baffles)? ☐ Yes ☐ No

d. Do controls conform to the NYS Standards and Specifications for Erosion and Sediment Control (2016), or equivalent? ☐ Yes ☐ No

Comments

Observation of Stormwater Discharges from the site

a. Is the discharge free of floating materials, visible oil sheen, discoloration, turbidity, odor, foam or any other signs of contamination? ☐ Yes ☐ No

b. Is process water commingling with stormwater or entering storm drains? ☐ Yes ☐ No

c. Were any illicit discharges observed during the inspection? Illicit discharges include wastewater, detergents, paint, de-icing materials (in excess of what is applied to control ice at the facility), oil, grease, antifreeze, garbage, chemicals, pesticides, and fertilizers. ☐ Yes ☐ No

d. If illicit discharge(s) are discovered, describe below, and initiate procediures to eliminate the illicit discharge.

Comments

Corrective Actions and Comment

Describe Inspection findings and if necessary, the corrective actions taken.

Inspector Signature _____ **Date** _____

APPENDIX M

Standard Operating Procedures

INDEX

These Standard Operating Procedures have been modified and customized for the Town of Macedon from a template provided by the Ontario-Wayne Stormwater Coalition. Some SOPs have been excluded since they did not pertain to the Town of Macedon's facilities or operations.

Introduction:

Outfalls from an engineered storm drain system can be in the form of pipes or ditches. It is important to inspect and document water quality from these outfalls under both dry weather and wet weather conditions. This SOP discusses both dry and wet weather inspection objectives.

During a dry weather period, it is anticipated that minimal flow from stormwater outfalls will be observed. Therefore, dry weather inspections aim to characterize any/all flow observed during a dry weather period and identify potential source(s) of an illicit discharge through qualitative testing.

Wet weather inspections aim to describe and evaluate the first flush of stormwater discharged from an outfall during a storm, representing the maximum pollutant load managed by receiving water.

Definition of Dry Weather Inspections

A dry weather period is a time interval during which less than 0.1 inch of rain is observed across a minimum of 72 hours. Unlike wet weather sampling, dry weather inspections are not intended to capture a "first flush" of stormwater discharge, rather they are intended to identify any/all discharges from a stormwater outfall during a period without recorded rainfall. The objective of inspections during a dry weather period is to characterize observed discharges and facilitate detection of illicit discharges.

Definition of Wet Weather Inspections

A storm is considered a representative wet weather event if greater than 0.1 inch of rain falls and occurs at least 72 hours after the previously measurable (greater than 0.1 inch of rainfall) storm event. In some watersheds, based on the amount of impervious surface present, increased discharge from an outfall may not result from 0.1 inch of rain. An understanding of how outfalls respond to different events will develop as the inspection process proceeds over several months, allowing the inspectors to refine an approach for inspections.

Ideally, the evaluation and any samples collected should occur within the first 30 minutes of discharge to reflect the first flush or maximum pollutant load.

Typical practice is to prepare for a wet weather inspection event when weather forecasts show a 40% chance of rain or greater. If the inspector intends to collect analytical samples, coordination with the laboratory for bottleware and for sample drop-off needs to occur in advance.

Visual Condition Assessment

The attached Outfall Reconnaissance Inventory/Sample Collection Field Sheet is a tool to assist in documenting observations related to the both quantitative and qualitative characteristics of any/all flows conveyed by the structure during a dry or wet period.

For any visual observation of pollution in a stormwater outfall discharge, an investigation into the pollution source should occur, but the following are often true:

1. Foam: indicator of upstream vehicle washing activities, or an illicit discharge.
2. Oil sheen: result of a leak or spill.

3. Cloudiness: indicator of suspended solids such as dust, ash, powdered chemicals and ground up materials.
4. Color or odor: Indicator of raw materials, chemicals, or sewage.
5. Excessive sediment: indicator or disturbed earth of other unpaved areas lacking adequate erosion control measures.
6. Sanitary waste and optical enhancers (fluorescent dyes added to laundry detergent and some toilet paper): indicators of illicit discharge.
7. Orange staining: indicator of high mineral concentrations.

Many of these observations are indicators of an illicit discharge. Examples of illicit discharges include: cross-connections of sewer services to engineered storm drain systems; leaking septic systems; intentional discharge of pollutants to catch basins; combined sewer overflows; connected floor drains; and sump pumps connected to the system (under some circumstances). Additional guidelines for illicit discharge investigations are included in SOP #6, “Locating Illicit Discharges”.

The Outfall Reconnaissance Inventory/Sample Collection Field Sheet includes fields where these and other specific observations can be noted. The inspector shall indicate the presence of a specific water quality indicator or parameter by check marking the appropriate “Yes” in Section 4, if physical Indicators are present in flowing outfalls. If “Yes” is checked then note the “Indicator”, “Description” and “Relative Severity Index” (1-3). If “No” is checked, then skip to Section 5.

The inspector shall indicate the presence of a specific water quality indicator or parameter by check marking “Yes” in Section 5, if physical indicators are present that are not related to flow. If “Yes” is checked, then note the “Indicator”, “Description”, and “Comments”. If “No” is checked, then skip to Section 6.

In Section 6, checkmark the overall outfall characterization: “Unlikely”, “Potential”, “Suspect”, or “Obvious”. If a sample is required, complete Section 7 (See below under Measuring Water Quality and Analytical Sample Collection).

Conditional and Qualitative Considerations

Although many of the parameters listed above are considered to be indicators of illicit discharge, the presence of a parameter is not absolute evidence of an illicit discharge. Some of these indicators may occur naturally. Orange staining may be the result of naturally occurring iron, and unrelated to pollution. Foam can be formed when the physical characteristics of water are altered by the presence of organic materials. Foam is typically found in waters with high organic content such as bog lakes, streams that originate from bog lakes, productive lakes, wetlands, or woody areas. To determine the difference between natural foam and foam cause by pollution, consider the following:

1. Wind direction or turbulence: natural foam occurrences on the beach coincide with onshore winds. Often, foam can be found along a shoreline and/or on open waters during windy days. Natural occurrences in rivers can be found downstream of a turbulent site.
2. Proximity to a potential pollution source: some entities (e.g. textile industry, paper production facilities, oil industries, and fire-fighting activities) work with materials that cause foaming in water. If these materials are released to a water body in large quantities, they can cause foaming. The presence of silt in water, such as from a construction site, can cause foam.
3. Feeling: natural foam is typically persistent, light, not slimy to the touch.
4. Presence of decomposing plants or organic material in the water.

Some of the indicators can have multiple causes or sources. For example, both bacteria and petroleum can create a sheen on the water surface. The source of the sheen can be differentiated by disturbing it,

such as with a pole. A sheen caused by oil will remain intact and move in a swirl pattern; a sheen caused by bacteria will separate and appear "blocky". Bacterial or naturally occurring sheens are usually silver or relatively dull in color and will break up into a number of small patches of sheen. The cause may be presence of iron, decomposition of organic material or presence of certain bacteria. Bacterial sheen is not a pollutant but should be noted.
Optical enhancers at high concentrations are sometimes visible to the naked eye as a bluish-purple haze in the water. However, due to physiological variation of the human eye, not all inspectors may be able to identify the presence of these materials, and quantitative testing is the preferred method to confirm the presence of these compounds. Optical enhancers are typically detected through the use of clean, white cotton pads placed within the discharge for several days, dried, and viewed under a fluorometer. If the cotton pad fluoresces, optical enhancers are assumed to be present. The magnitude of the fluorescence, as measured in fluorescent units, can be used to correlate the concentration of optical enhancers in water to other samples collected locally.

Measuring Water Quality

Based on the results of the Physical Indicators in Sections 4 & 5, it may be necessary to collect additional data about water quality. Water quality samples can be in the form of screening using field test kits and instrumentation, or by discrete analytical samples processed by a laboratory. Information on selecting and using field test kits and instrumentation is included in SOP #7, "Water Quality Screening in the Field." The Inspection Survey also provides values for what can be considered an appropriate benchmark for a variety of parameters that can be evaluated in the field. If the results of screening using field test kits indicate that the outfall's water quality exceeds the benchmarks provided, collection of discrete analytical samples should be considered.

Analytical Sample Collection

Sample collection methods may vary based on specific outfall limitations, but shall follow accepted test procedures. A discrete manual or grab sample can classify water at a distinct point in time. These samples are easily collected and used primarily when the water quality of the discharge is expected to be homogeneous, or unchanging, in nature. A flow-weighted composite sample will classify water quality over a measured period of time. These samples are used when the water quality of the discharge is expected to be heterogeneous, or fluctuating, in nature. Grab samples are common for both dry and wet weather outfall inspections due to the time-sensitive nature of the process. Protocols for collecting a grab sample shall include:

1. Do not eat, drink or smoke during sample collection and processing.
2. Do not collect or process samples near a running vehicle.
3. Do not park vehicles in the immediate sample collection area, including both running and non-running vehicles.
4. Always wear clean, powder-free nitrile gloves when handling sample containers and lids.
5. Never touch the inside surface of a sample container or lid, even with gloved hands.
6. Never allow the inner surface of a sample container or lid to be contacted by any material other than the sample water.
7. Collect samples while facing upstream and so as not to disturb water or sediments in the outfall pipe or ditch.
8. Do not overfill sample containers, and do not dump out any liquid in them. Liquids are often added to sample containers intentionally by the analytical laboratory as a preservative or for pH adjustment.
9. Slowly lower the bottle into the water to avoid bottom disturbance and stirring up sediment.
10. Do not allow any object or material to fall into or contact the collected water sample.

11. Do not allow rainwater to drip from rain gear or other surfaces into sample containers.
12. Replace and tighten sample container lids immediately after sample collection.
13. Accurately label the sample with the time and location.
14. Document on the Outfall Reconnaissance Inventory/Sample Collection Field Sheet that analytical samples were collected, specify parameters, and note the sample time in the Notes in Section 1. This creates a reference point for samples.

Analytical Sample Quality Control and Assurance

Upon completion of successful sample collection, the samples may be sent or delivered to an appropriate laboratory for analytical testing. Quality control and assurance are important to ensuring accurate analytical test results. Sample preservation is required to prevent contaminate degradation between sampling and analysis, and holding time should be minimized. Prompt laboratory analysis allows the laboratory to review the data and if analytical problems are found, re-analyze the affected samples within the holding times.

Chain of custody forms are designed to provide sample submittal information and document transfers of sample custody. The forms are typically provided by the laboratory and must be completed by the field sampling personnel for each sample submitted to the lab for analysis. The document must be signed by both the person releasing the sample and the person receiving the sample every time the sample changes hands.

The sampling personnel shall keep one copy of the form and send the remaining copies to the laboratory with the samples. Custody seals, which are dated, signed and affixed to the sample container, may be used if the samples are shipped in a cooler via courier or commercial overnight shipping.

Attachment

Outfall Reconnaissance Inventory/Sample Collection Field Sheet

Related Standard Operating Procedures

1. SOP #6, Locating Illicit Discharges
2. SOP #7, Water Quality Screening in the Field

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed:		Outfall ID:	
Today's date:		Time (Military):	
Investigators:		Form completed by:	
Temperature (°F):	Rainfall (in.): Last 24 hours: Last 48 hours:		
Latitutde:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	

Land Use in Drainage Area (Check all that apply):

☐ Industrial ☐ Open Space

☐ Ultra-Urban Residential ☐ Institutional

☐ Suburban Residential Other: _____

☐ Commercial Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☐ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☐ No	***If No, Skip to Section 5***			
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	_____' _____"	Ft, In	Tape measure
	Measured length	_____' _____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1.	Sample for the lab?	☐ Yes	☐ No	
2.	If yes, collected from:	☐ Flow	☐ Pool	
3.	Intermittent flow trap set?	☐ Yes	☐ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Introduction:

Catch basins help minimize flooding and protect water quality by removing trash, sediment, decaying debris, and other solids from stormwater runoff. These materials are retained in a sump below the invert of the outlet pipe. Catch basin cleaning reduces foul odors, prevents clogs in the storm drain system, and reduces the loading of suspended solids, nutrients, and bacteria to receiving waters. During regular cleaning and inspection procedures, data can be gathered related to the condition of the physical basin structure; its frame and grate, and the quality of stormwater conveyed by the structure. Observations such as the following can indicate sources of pollution within the storm drain system:

- Oil sheen
- Discoloration
- Trash and debris

Both bacteria and petroleum can create a sheen on the water surface. The source of the sheen can be differentiated by disturbing it, such as with a pole. A sheen caused by oil will remain intact and move in a swirl pattern; a sheen caused by bacteria will separate and appear “blocky”. Bacterial sheen is not a pollutant but should be noted.

Observations such as the following can indicate a potential connection of a sanitary sewer to the storm drain system, which is an illicit discharge.

- Indications of sanitary sewage, including fecal matter or sewage odors
- Foaming, such as from detergent
- Optical enhancers, fluorescent dye added to laundry detergent

Catch basins are cleaned on an as needed basis. Catch basins in high-use areas may require more frequent cleaning. Performing street sweeping on an appropriate schedule will reduce the amount of sediment, debris, and organic matter entering the catch basins, which will in turn reduce the frequency with which structures need to be cleaned.

Cleaning Procedure

Catch basin inspection cleaning procedures should address both the grate opening and the basin’s sump. Document any and all observations about the condition of the catch basin structure and water quality on the Catch Basin Inspection & Reporting List Form (attached).

Catch basin inspection and cleaning procedures include the following:

1. Work upstream to downstream.
2. Clean sediment and trash off grate.
3. Visually inspect the outside of the grate.
4. Visually inspect the inside of the catch basin to determine cleaning needs.
5. Inspect catch basin for structural integrity.

6. Determine the most appropriate equipment and method for cleaning each catch basin.
    a. Manually use a shovel to remove accumulated sediments, or
    b. Use a bucket loader to remove accumulated sediments, or
    c. Use a high-pressure washer to clean any remaining material out of catch basin while capturing the slurry with a vacuum.
    d. If necessary, after the catch basin is clean, use the rodder of the vacuum truck to clean downstream pipe and pull back sediment that might have entered downstream pipe.
7. If contamination is suspected, chemical analysis may be required to determine if the materials are hazardous. Note the identification number of the catch basin on the sample label and note "Sample Collection" on the Catch Basin Inspection Form.
8. Properly dispose of collected sediments. See following section for guidance.
9. If fluids collected during catch basin cleaning are not being handled and disposed of by a third party, dispose of these fluids to a sanitary sewer system, with permission of the system operator.
10. If illicit discharges are observed or suspected, notify the appropriate Department (see SOP #6, "Locating Illicit Discharges").
11. At the end of each day, document location and number of catch basins cleaned, amount of waste collected, and disposal method for all screenings.
12. Report additional maintenance or repair needs to the Highway Superintendent

Disposal of Screenings

Catch basin cleanings are currently disposed of at the bermed facility across from the Highway Barns. If hazardous pollutants are suspected, the cleanings are taken to the landfill for proper disposal.

Catch basin cleanings from stormwater-only drainage systems may be disposed at any landfill that is permitted by NYS DEC to accept solid waste. NYS DEC does not routinely require stormwater-only catch basin cleanings to be tested before disposal, unless there is evidence that they have been contaminated by a spill or some other means.

Screenings may need to be placed in a drying bed to allow water to evaporate before proper disposal. In this case, ensure that the screenings are managed to prevent pollution.

Attachments

Catch Basin Inspection & Reporting List

Related Standard Operating Procedures

1. SOP #6, Locating Illicit Discharges
2. SOP #7, Water Quality Screening in the Field

Catch Basin Inspection and Reporting List

	Road:		Starting Point or Address:		Ending Point or Address:		Date:		Weather Report:	

	Condition Of Catch Basin 1 - New 5 - Bad X - Repair ASAP	Nearest Address	Poured Invert Yes No/Sump Thru Pipe	Basin Type: Concrete Plastic Brick Steel Other-Describe	Contact Your MS4 Representative Immediately If you Notice More Than "ONLY RAIN DOWN THE DRAIN" Use 1-New Thru 5-Bad or X-Replace Immediately for Condition Main Inlet Pipe : Size/Type/Cond.	Discharge Pipe: Size/Type/Cond.	Additional Inlet Pipe: #1 Size/Type/Cond.	Additional Inlet Pipe: #2 Size/Type/Cond.	Depth of Sediment Record Inches	Grate Type: Steel Plastic Cast Other	Flow Description: Heavy Moderate Slight None	Maintenance Required Tree Removal Frame/Grate Repair Blocked Pipe Erosion around Structure Concrete Work	Indicate Any Listed Residuals Foam Oil Sheen Orange Stain Gray Water Soaps	Solids Plastics Wood Leaves Pet Waste Other
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Introduction:

Municipalities are responsible for any contaminant spill or release that occurs on property they own or operate. Particular areas of concern include any facilities that use or store chemicals, fuel oil or hazardous waste, including schools, garages, DPW/DOT yards, and landfills. Implementation of proper spill response and cleanup procedures can help to mitigate the effects of a contaminant release.

Responding to a Spill

In the event of a spill, follow these spill response and cleanup procedures:

1. Notify a member of the facility's Pollution Prevention Team, the facility supervisor, and/or the facility safety officer.

2. Assess the contaminant release site for potential safety issues and for direction of flow.

3. With proper training and personal protective equipment, complete the following:

    a. Stop the contaminant release.

    b. Contain the contaminant release through the use of spill containment berms or absorbents

    c. Protect all drains and/or catch basins with the use of absorbents, booms, berms or drain covers.

    d. Clean up the spill.

    e. Dispose of all contaminated products in accordance with applicable federal, state and local regulations.

        i. Products contaminated with petroleum shall be handled and disposed of according to NYS DEC guidelines: http://www.dec.ny.gov/regulations/30902.html#Hazardous

        ii. Waste oil contaminated products:

            1. Perform the "one drop" test to ensure absorbents do not contain enough oil to be considered hazardous. Wring absorbents through a paint filter. If doing so does not generate one drop of oil, the materials are not hazardous.

            2. If absorbents pass the "one drop" test they may be discarded in the trash, unless contaminated with another hazardous waste.

                a. It is acceptable to mix the following fluids and handle them as waste oil:
                    ii. Waste Motor Oil
                    iii. Hydraulic Fluid
                    iv. Power Steering Fluid
                    v. Transmission Fluid
                    vi. Brake Fluid
                    vii. Gear Oil

b. Do not mix the following materials with waste oil, store each separately:
   i. Gasoline
   ii. Antifreeze
   iii. Brake and Carburetor Cleaners
   iv. Cleaning Solvents
   v. Other Hazardous Wastes

3. If absorbents do not pass the "one drop" test they should be placed in separate metal containers with tight fittings lids, labeled "Oily Waste Absorbents Only".

4. If you need assistance containing and/or cleaning up the spill, or preventing it from discharging to a surface water (or an engineered storm drain system), contact your local fire department:

Macedon – West Walworth	315-986-2241
Macedon Center	315-986-4736
Macedon Volunteer	315-986-4700

In the case of an emergency call 911.

Region 8 DEC Spill Response Unit must be contacted (585-226-5433) if a hazardous waste spill is detected. All petroleum spills that occur within New York State must be reported to the NYS Spill Hotline (1-800-457-7362) within 2 hours of discovery except spills which meet all of the following criteria:

1. The quantity is known to be less than 5 gallons.
2. The spill is contained and under the control of the spiller.
3. The spill has not and will not reach the state's water or any land.
4. The spill is cleaned up within 2 hours of discovery.

A spill is considered to have not impacted land if it occurs on a paved surface such as asphalt or concrete. A spill in dirt or gravel parking lot is considered to have impacted land and is reportable. Consider also whether the spill may have occurred on areas of pervious pavement.

National Response Center (1-800-424-8802) The National Response Center is the sole federal point for reporting all hazardous substances releases and oil spills that trigger federal notification requirements under several laws. For information on EPA Discharge of Oil Regulations: http://www.epa.gov/emergencies/content/lawsregs/sheenovr.htm

Procedures for Reporting Spill Response
When contacting emergency response personnel or a regulatory agency, or when reporting the contaminant release, be prepared to provide the following information:

a. Your name and the phone number you are calling from.

b. The exact address and location of the contaminant release.

c. Specifics of release, including:
   a. What was released
   b. How much was released, which may include:
      i. Pounds

ii. Gallons
iii. Number of containers.

d. Where was the release sent/what was contaminated, addressing:
   a. Pavement
   b. Soil
   c. Drains
   d. Catch Basins
   e. Water Bodies
   f. Public Street
   g. Public Sidewalk.

e. The concentration of the released contaminant.

f. What/who caused the release.

g. Is the release being contained and/or cleaned up, or is the response complete?

h. Type and amount of petroleum stored on site, if any.

i. Characteristics of contaminant container, including:
   a. Tanks
   b. Pipes
   c. Valves.

Maintenance and Prevention Guidance
Prevention of spills is preferable to even the best response and cleanup. To mitigate the effects of a contaminant release, provide proper maintenance and inspection at each facility.

To protect against contaminant release adhere to the following guidance:

1. Ensure all employees are properly trained to respond in the case of a spill, understand the nature and properties of the contaminant and understand the spill control materials and personnel safety equipment. Maintain training records of current personnel on site and retain training records of former personnel for at least three years from the date last worked at the facility.

2. Provide yearly maintenance and inspection at all municipal facilities, paying particular attention to underground storage tanks. Maintain maintenance and inspection records on site.

3. Implement good management practices where chemicals and hazardous wastes are stored.

   a. Ensure storage in closed containers inside a building and on an impervious surface.

   b. If storage cannot be provided inside, ensure secondary containment for 110 percent of the maximum volume of the storage container.

   c. Locate storage areas near maintenance areas to decrease the distance required for transfer.

   d. Provide accurate labels, MSDS information and warnings for all stored materials.

   e. Regularly inspect storage areas for leaks.

f. Ensure secure storage locations, preventing access by untrained or unauthorized persons.

g. Maintain accurate records of stored materials.

4. Replace traditional hazardous materials such as pesticides and cleansers with non-hazardous products such as bio-lubricants which can reduce response costs in the case of a spill.

5. Maintain an Oil and Grease Spill Response Kit with the following materials, at a minimum, at the Highway Barn and former Village DPW:

a. 6.5 gallon bucket with screw top lid and handle
b. 10 gallons of sand
c. 200 pounds of quick-drying absorbent
d. Drain covers
e. Spill containment berms
f. (4) 3' absorbent socks
g. (16) 16" x 18" absorbent pads
h. Goggles
i. Nitrile gloves
j. Disposable bags to dispose of used materials
k. Laminated contact list

Attachments

Spill Response and Cleanup Contact List(s)

Related Standard Operating Procedures

SOP #4, Fuel and Oil Handling Procedures

Spill Response and Cleanup Contact List

Facility: Highway Barn

Chris Countryman (Facility Supervisor/Safety Officer):	315-310-1483
Scott Allen (Stormwater Management Program Coordinator):	315-374-1288
Macedon Volunteer Fire Department:	315-986-4700
NYS Spill Hotline:	800-457-7362
National Response Center:	800-424-8802
EPA Oil Information Hotline:	800-424-9346
EPA Pesticide Hotline:	800-858-7378

Spill Response and Cleanup Contact List

Facility: Former Village DPW

Chris Countryman (Facility Supervisor/Safety Officer):	315-310-1483
Scott Allen (Stormwater Management Program Coordinator):	315-374-1288
Macedon Volunteer Fire Department:	315-986-4700
NYS Spill Hotline:	800-457-7362
National Response Center:	800-424-8802
EPA Oil Information Hotline:	800-424-9346
EPA Pesticide Hotline:	800-858-7378

Introduction:

Spills, leaks, and overfilling can occur during handling of fuels and petroleum-based materials, even in small volumes, representing a potential source of stormwater pollution. This Standard Operating Procedure addresses a variety of ways by which fuels and petroleum-based materials can be delivered, as well as steps to be taken when petroleum products (such as waste oil) are loaded onto vehicles for offsite disposal or recycling. Delivery, unloading, and loading of waste oils are hereafter referred to as "handling".

For the Town of Macedon, all vehicle and equipment fueling occurs at the Gananda Central School District Bus Garage. At times, personnel may also fill single or multiple 5 gallon gas cans at the garage and then later top off equipment in the field.

Personnel responsible for handling fueling operations at the gas pump or in the field shall ensure that the following procedures are observed:

1. There is no smoking while fuel handling is in process or underway.
2. Sources of flame are kept away while fuel handling is being completed. This includes smoking, lighting matches, carrying any flame, or carrying a lighted cigar, pipe, or cigarette.
3. No tools are to be used that could damage fuel or oil containers
4. Catch basins and drain manholes are adequately protected.
5. No flammable liquid shall be unloaded from any motor vehicle while the engine is operating, unless the engine of the motor vehicle is required to be used for the operation of a pump.
6. Local traffic does not interfere with fuel transfer operations.
7. The attending persons should watch for any leaks or spills
    a. Any small leaks or spills should be immediately stopped, and spilled materials absorbed and disposed of properly. Refer to SOP #3, "Spill Response and Cleanup Procedures", for examples of spill cleanup and response materials.
    b. In the event of a large spill or one that discharges to surface waters or an engineered storm drain system, the facility representative or responsible party shall activate the Stormwater Pollution Prevention Plan (SWPPP) and report the incident as specified within.

Delivery by Bulk (Tanker) Truck – not applicable to the Town of Macedon

Delivery of Drummed Materials – not applicable to the Town of Macedon

Removal of Waste Oil from the Facility – not applicable to the Town of Macedon, waste oil is burned onsite.

Related Standard Operating Procedures
1. SOP #3, Spill Response and Cleanup

Introduction:

Oil/water separators (OWS), also known as gas/oil separators, are structural devices intended to provide pretreatment of floor drain water from industrial and garage facilities. An OWS allows oils (and substances lighter than water) to be intercepted and removed for disposal before entering the sanitary sewer system. Substances heavier than water settle into sludge at the bottom of the unit. The remaining water passes through the unit into the sanitary sewer system.

OWS units are generally required where petroleum-based products, wastes containing petroleum, or oily and/or flammable materials are used, produced, or stored. OWS units should not be used to manage stormwater or flow from vehicle washing facilities. High flow rates through an OWS will reduce the structure's ability to separate materials. Detergents and solvents can emulsify oil and grease, allowing the particles to enter the sewer, so these should not be disposed of in drains entering the OWS.

The Town of Macedon maintains one oil/water separator located at the Highway Barn. The Town utilizes Safety-Kleen to remove and properly dispose of wastes when necessary.

General OWS Maintenance Requirements

1. Each OWS at a facility may receive different materials in different quantities, so the cleanout schedule may not be the same.
2. Employees performing inspections of an OWS must be properly trained and be familiar with the maintenance of that specific structure, since function can vary based on design. Third-party firms may be utilized to perform annual inspections.
3. Do not drain petroleum, oil, or lubricants directly to an OWS. The structures are designed to manage these materials at low and medium concentrations in sanitary sewage, not as slug loads.
4. Do not drain antifreeze, degreasers, detergents, fuels, alcohols, solvents, coolant, or paint to the OWS.
5. Separator compartment covers should be tightly sealed to ensure floor drainage only enters the first compartment of the OWS.
6. Drains should be kept free of debris and sediment to the maximum extent practicable.
7. Spill cleanup materials should be maintained in the area served by the OWS. For more information on spill cleanup and response materials, refer to SOP #3, "Spill Response and Cleanup Procedures". Daily inspection of an OWS should include a visual examination of the area served by the OWS for evidence of spills or leaks.

Weekly inspections of an OWS should include the following:

1. Visually examine the area served by the OWS for evidence of spills or leaks.
2. Inspect the point of discharge (i.e., sewer manhole) for evidence of petroleum bypassing the OWS.
3. Inspect drains for any signs of unauthorized substances entering the OWS.
4. Examine the OWS for signs of leaks or any malfunction.

Annual inspections of an OWS should include the following:

1. Complete tasks noted as appropriate for daily and weekly inspection.
2. Complete the Annual OWS Inspection Checklist, attached, during the inspection.
3. Take the following measurements to benchmark function of the OWS:

    a. Distance from rim of access cover to bottom of structure
    b. Distance from rim of access cover to top of sludge layer
    c. Depth of sludge layer (C = A – B)
    d. Distance from rim of access cover to the oil/water interface
    e. Distance from rim of access cover to the top of the liquid surface
    f. Depth of oil layer (F = D – E)

OWS Cleaning Procedures

Cleaning of the OWS is required when there has been a spill to the OWS that exceeds ten gallons of oil, one gallon of detergent or solvent, or any material prohibited by the owner of the sanitary sewer. Cleaning is also required when the levels of accumulated sludge and/or oil meet the manufacturer's recommended levels for cleaning. This will vary based on the manufacturer of the OWS. See attached Manufactures specifications.

If the manufacturer's recommendations are unknown, the following guidelines are appropriate for determining when to clean:

1. When sludge accumulates to 25% of the wetted height of the separator compartment; **or**
2. When oil accumulates to 5% of the wetted height of the separator compartment; or
3. When 75% of the retention capacity of the OWS is filled.

Cleaning should be performed a minimum of once per year. The Town of Macedon utilizes Safety-Kleen to remove materials and properly dispose of materials.

Documentation of Cleaning and Service

The operator of the premises where the OWS is located shall maintain a log describing the date and type of all inspections, service and maintenance performed in connection with the Separator. Documentation shall include the identity of the inspector (or the identity of the person or entity that performed the service and/or maintenance). Records shall also document the amount of residue removed from the OWS each time it was cleaned, and how removed materials were disposed. This documentation shall be maintained for a minimum of six years.

Attachments

Annual OWS Inspection Checklist

Related Standard Operating Procedures

1. SOP #3, Spill Response and Cleanup Procedures

OIL/WATER SEPARATOR (OWS)
ANNUAL INSPECTION CHECKLIST

Highway Barn

OWS Location: _____

Inspected by: _____

Date: _____

Visual Inspection	Are there any signs of spills or leaks in the general area?	Yes	No
	Is there any evidence of petroleum bypassing the OWS?	Yes	No
	Are there any unauthorized substances entering the OWS?	Yes	No
	Does the OWS exhibit any signs of leaks or malfunctions?	Yes	No

If you answered “yes” to any of the above questions, further inspection, repair, and/or cleaning may be necessary.

Measurements	A	Distance from rim of access cover to bottom of structure	
	B	Distance from rim of access cover to top of sludge layer	
	C = A-B	Depth of sludge layer	
	D	Distance from rim of access cover to the oil/water interface	
	E	Distance from rim of access cover to the top of the liquid surface	
	F = D-E	Depth of oil layer	

If the values for “C” and/or “F” are greater than those in the manufacturer’s recommendations, the OWS must be cleaned by a licensed OWS maintenance company.

Introduction:

An "illicit discharge" is any discharge to an engineered storm drain system that is not composed entirely of stormwater unless the discharge is defined as an allowable non-stormwater discharge under the New York State GP-0-15-003 Municipal Separate Storm Sewer Permit.

Illicit discharges may enter the engineered storm drain system through direct or indirect connections, such as: cross-connections of sewer services to engineered storm drain systems; leaking septic systems; intentional discharge of pollutants to catch basins; combined sewer overflows; connected floor drains; and sump pumps connected to the system (under some circumstances).

Illicit discharges can contribute high levels of pollutants, such as heavy metals, toxics, oil, grease, solvents, nutrients, and pathogens to receiving streams.

Illicit discharges can be located by several methods, including routine dry weather outfall inspections and catch basin inspections, which are described in detail in SOP #1, "Dry & Wet Weather Outfall Inspections" and SOP #2, "Catch Basin Inspection and Cleaning", respectively, as well as from citizen reports.

The Town of Macedon has the legal authority in place, per the requirements of the NYS MS4 permit, to prohibit the connection of non-stormwater discharges into the storm drain system, see Town Code Chapter 112 Storm Sewers Article I Illicit Discharge Detection and Elimination to prohibit illicit discharges, and implement enforcement procedures and actions as needed. Also see Town Code Chapter 112-14 for Enforcement: penalties for offenses. In the Town of Macedon, the Code Enforcement Officer is responsible for provision under this SOP.

Identifying Illicit Discharges

The following are often indicators of an illicit discharge from a stormwater outfall:

1. Foam: indicator of upstream vehicle washing activities, or an illicit discharge.
2. Oil sheen: result of a leak or spill.
3. Cloudiness: indicator of suspended solids such as dust, ash, powdered chemicals and ground up materials.
4. Color or odor: Indicator of raw materials, chemicals, or sewage.
5. Excessive sediment: indicator of disturbed earth of other unpaved areas lacking adequate erosion control measures.
6. Sanitary waste and optical enhancers (fluorescent dyes added to laundry detergent): indicator of the cross-connection of a sewer service.
7. Orange staining: indicator of high mineral concentrations.

Both bacteria and petroleum can create a sheen on the water surface. The source of the sheen can be differentiated by disturbing it, such as with a pole. A sheen caused by oil will remain intact and move in a swirl pattern; a sheen caused by bacteria will separate and appear "blocky". Bacterial sheen is not a pollutant but should be noted.

Citizen Call in Reports

Reports by residents and other users of a water body can be effective tools in identifying the presence of illicit discharges. The Town of Macedon has published an illicit discharge "hotline" on their website and Facebook page. The Town Clerk and the Highway Superintendent's secretary have also received training in how to manage and report these calls.

The Town of Macedon educates municipal employees and the general public through publications such as the Macedon Messenger on how to help identify the signs of illicit discharges and to report such incidents.

When a call is received about a suspected illicit discharge, the attached Illicit Discharge Complaint Log shall be used to document the appropriate information. Subsequent steps for taking action to trace, document, and eliminate the illicit discharge are described in the following sections.

Potential illicit discharges reported by citizens should be reviewed on an annual basis to locate patterns of illicit discharges, identify high-priority catchments, and evaluate the call-in inspection program.

Tracking Illicit Discharges

Whenever an illicit discharge is suspected, regardless of how it was identified, the attached Illicit Discharge Complaint Log should be completed for tracking purposes. The Complaint Log has been provided to the Town Clerk and to the Highway Department Secretary. Complaints logged in by the Town Clerk are given to the Code Enforcement Officer/Stormwater Management Program Coordinator and complaints logged in by the Highway Department Secretary are given to the Highway Superintendent. Complaints shall be promptly investigated.

If the presence of an illicit discharge is confirmed by the authority, but its source is unidentified, then the following procedures should be used to determine the source of the illicit discharge:

1. Review and consider information collected when illicit discharge was initially identified, for example, the time of day and the weather conditions for the previous 72 hours. Also consider and review past reports or investigations of similar illicit discharges in the area.
2. Obtain storm drain mapping for the area of the reported illicit discharge. If possible, use a tracking system that can be linked to your system map, such as GIS.
3. Complete the Illicit Discharge Incident Tracking Sheet, see attached. Document current conditions at the location of the observed illicit discharge point, including odors, water appearance, estimated flow, presence of floatables, and other pertinent information. Photograph relevant evidence.
4. If there continues to be evidence of the illicit discharge, collect water quality data using the methods described in SOP #7, "Water Quality Screening in the Field". This may include using field test kits or instrumentation, or collecting analytical samples for full laboratory analysis.
5. Move upstream from the point of observation to identify the source of the discharge, using the system mapping to determine infrastructure, tributary pipes, and drainage areas that contribute. At each point, survey the general area and surrounding properties to identify potential sources of the illicit discharge. Document observations at each point on the IDDE Incident Tracking Sheet as well as with photographs.
6. Continue this process until the illicit discharge is no longer observed, which will define the boundaries of the likely source. For example, if the illicit discharge is present in catch basin but not at the next upstream catch basin, the source of the illicit discharge is between these two structures. If the source of the illicit discharge could not be determined by this survey, consider using dye testing, smoke testing, or closed-circuit television inspection (CCTV) to locate the illicit discharge

Dye Testing

Dye testing is used to confirm a suspected illicit connection to a storm drain system. Prior to testing, permission to access the site should be obtained. Dye is discharged into the suspected fixture, and nearby storm drain structures and sanitary sewer manholes observed for presence of the dye. Each fixture, such as sinks, toilets, and sump pumps, should be tested separately. A third-party contractor may be required to perform this testing activity.

Smoke Testing

Smoke testing is a useful method of locating the source of illicit discharges when there is no obvious potential source. Smoke testing is an appropriate tracing technique for short sections of pipe and for pipes with small diameters. Smoke added to the storm drain system will emerge in connected locations. A third-party contractor may be required to perform this testing activity.

Closed Circuit Television Inspection (CCTV)

Televised video inspection can be used to locate illicit connections and infiltration from sanitary sewers. In CCTV, cameras are used to record the interior of the storm drain pipes. They can be manually pushed with a stiff cable or guided remotely on treads or wheels. A third-party contractor may be required to perform this testing activity.

If the source is located, follow steps for removing the illicit discharge. Document repairs, new sanitary sewer connections, and other corrective actions required to accomplish this objective. If the source still cannot be located, add the pipe segment to a future inspection program. This process is demonstrated in a flowchart on the last page of this SOP.

Removing Illicit Discharges

Proper removal of an illicit discharge will ensure it does not recur. Refer to Table 6-1, attached, for examples of the notification process.

In any scenario, conduct a follow up inspection to confirm that the illicit discharge has been removed.

Suspend access to the storm drain system if an “imminent and substantial danger” exists or if there is a threat of serious physical harm to humans or the environment.

Common Stormwater Pollutants, Sources and Impacts

Pollutant	Sources	Impacts
Sediment	Construction sites; eroding streambanks and lakeshore; winter sand and salt application; vehicle/boat washing, agricultural practices.	Destruction of plant and fish habitat, transportation of attached oils, nutrients and pollutants; increased maintenance costs.
Nutrients: (Phosphorus, nitrogen)	Fertilizers, malfunctioning septic systems, livestock, bird and pet waste; vehicle/boat washing, grey water, decaying grass and leaves, sewer overflows or leaks, leaking trash containers.	Increased potential for nuisance or toxic algae blooms; increased potential for low levels of dissolved oxygen which can kill aquatic organisms.
Hydrocarbons (Polycyclic Aromatic Hydrocarbons)	Vehicle and equipment leaks, vehicle and equipment emissions, pesticides, fuel spills, equipment cleaning, improper fuel storage and disposal.	Toxic at low levels.
Heavy Metals	Vehicle brake and tire wear; vehicle/equipment exhaust/ batteries; galvanized metal; paint and wood preservatives; batteries' fuels; pesticides; cleaners.	Toxic at low levels; drinking water contamination.
Pathogens	Livestock, bird and pet wastes; malfunctioning septic systems, sewer overflows or leakage.	Risk to human health; closure of beaches and swimming areas, drinking water contamination.
Toxic Chemicals	Heavy metals; PAHs; pesticides, dioxins; PCBs; spills, wear, illegal discharges and leaks.	Toxic at low levels.
Debris/Litter	Improper waste disposal and storage, fishing gear, leaking rubbish containers, cigarette butts; littering.	Potential risk to human and aquic life.

Table 6-1

Notification and Removal Procedures for Illicit Discharges into the Municipal Separate Storm Sewer System

Financially Responsible	Source Identified	Enforcement Authority	Procedure to Follow
Private Property Owner	One-time illicit discharge (e.g. spill, dumping, etc.)	Code Enforcement Officer/Stormwater Management Program Coordinator	Contact owner. Issue notice of violation. Issue fine.
Private Property Owner	Intermittent or continuous discharge from legal connection	Code Enforcement Officer/Stormwater Management Program Coordinator	Contact owner. Issue notice of violation. Determine schedule for removal. Confirm removal.
Private Property Owner	Intermittent or continuous illicit discharge from an illegal connection or indirect connection (e.g. infiltration or failed onsite wastewater treatment system)	Code Enforcement Officer/Stormwater Management Program Coordinator	Notify enforcement authority.
Municipal	Intermittent or continuous discharge from an illegal connection or indirect connection (e.g. failed sewer line)	Code Enforcement Officer/Stormwater Management Program Coordinator	Issue work order. Schedule removal. Remove connection. Confirm removal.
Exempt 3rd Party	Any	Code Enforcement Officer/Stormwater Management Program Coordinator, USEPA	Notify exempt 3rd party and USEPA of illicit discharge.

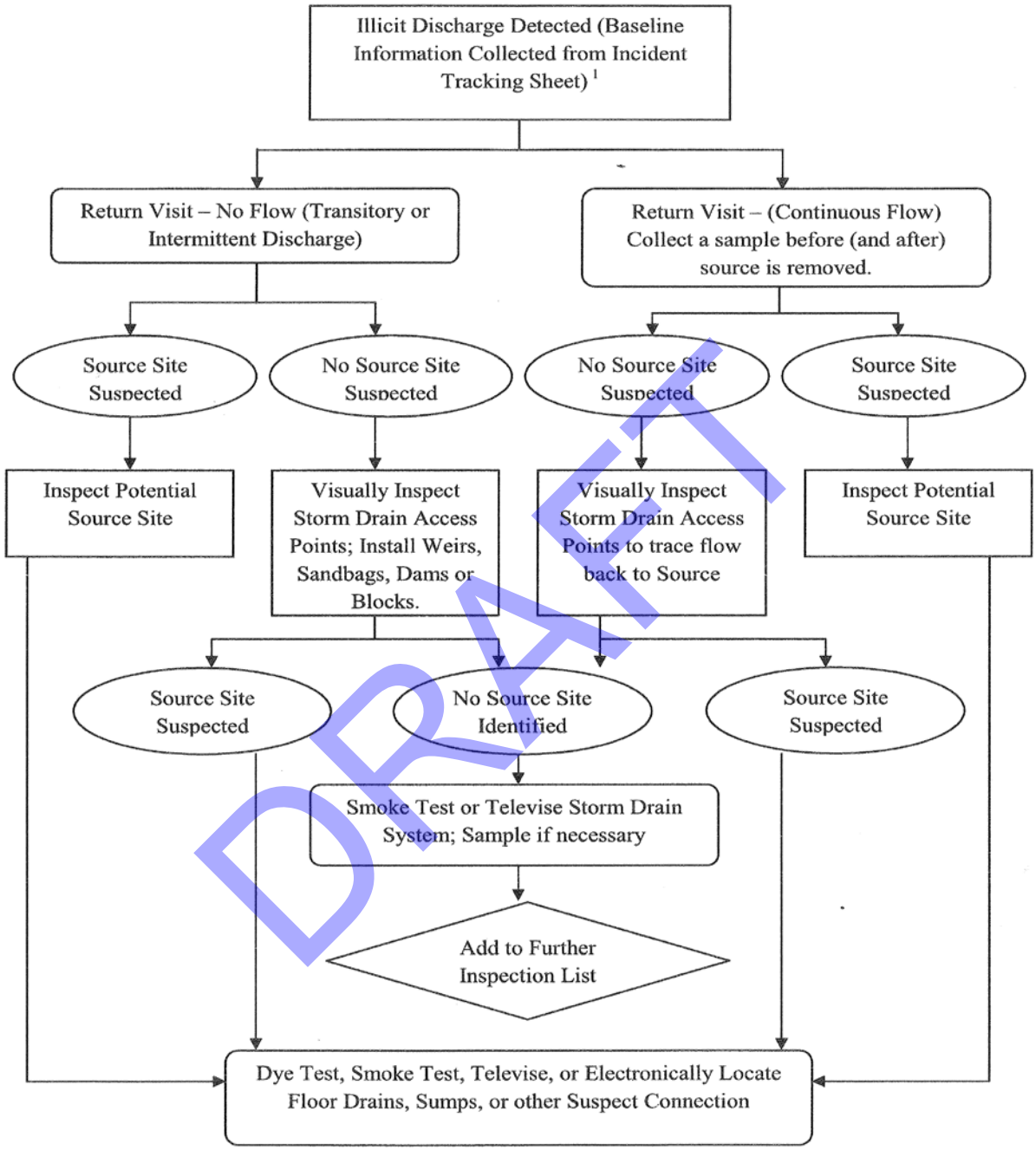
Attachment

IDDE Flowchart
Illicit Discharge Complaint Log
Illicit Discharge Incident Tracking Sheet

Related Standard Operating Procedures

1. SOP #1, Dry & Wet Weather Outfall Inspection

IDDE FLOWCHART



Illicit Discharge Complaint Log

Contact: Scott Allen for Illicit Discharge Complaints

See reverse side for examples of illicit discharges

DATE	TYPE OF DISCHARGE	ADDRESS	CONTACT INFORMATION FOR FOLLOW UP	INPECTION DATE	FOLLOW UP ACTIONS	COMPLETION DATE OF FOLLOW UP ACTIONS

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Illicit Discharge Incident Tracking Sheet

Incident ID:				
Responder Information (for citizen reported issues)				
Call Taken By:		Call Date:		
Call Time:		Precipitation (inches) in Past 24-48 hours		
Observer Information				
Date and Time of Observation:		Observed During Regular Maintenance or Inspections? Yes No		
Caller Contact Information /Municipal Employee Information:				
Observation Location (complete one or more below)				
Latitude and Longitude:				
Stream Address or Outfall #:				
Closest Street Address:				
Nearby Landmark:				
Primary Location Description		Secondary Location Description		
Stream Corridor (in or adjacent to stream		Outfall	In-Stream Flow	Along Banks
Upland Area (not adjacent to stream)		Near Storm Drain	Near other water source: stormwater pond, wetland, etc.	
Narrative description of location:				
Upland Problem indicator Description				
Dumping	Oil/Solvents/chemicals Sewage			
Detergent, suds, etc.	Other:			
Stream Corridor Problem Indicator Destcription				
Odor	None	Sewage	Rancid/Sour	Petroleum
	Sulfide Natural gas	Others: Describe in " Narrative Section"		
Appearance	Normal	Oil Sheen	Cloudy	Foam
	Optical enhancers		Discolored	
	Other: Describe in " Narrative Section"			
Floatables	None	Sewage	Algae	Trash/debris
	Other : Describe in " Narrative Section"			
Narrative description of problem indicators:				
Suspected sources: (Name, personal or vehicle description, license late #, address, etc.)				

Introduction:

Outfalls from an engineered storm drain system can be in the form of pipes or ditches. Under current and pending regulations, it is important to inspect and document water quality within the MS4 system under both dry and wet weather conditions. SOP #1, "Dry & Wet Weather Outfall Inspections" cover the objectives of these activities and how water quality parameters can be collected during both types of inspections. SOP #2, "Catch Basin Inspection and Cleaning", describes how this operation and maintenance activity can serve as an additional opportunity to collect water quality data.

SOP #1 included detailed information on how to collect discrete analytical samples to be processed by a laboratory. In contrast, this SOP addresses screening-level measurements than can be collected at outfalls, catch basins, receiving waters, or other water bodies. The measurements can be collected with field test kits or with portable meters.

Water quality screening data collected in this manner can feed into an illicit discharge detection and elimination investigation, like the process described in SOP #6, "Locating Illicit Discharges".

Visual Condition Assessment

SOP #1 and SOP #2 describe a Visual Condition Assessment to collect observations related to the quality of stormwater conveyed by an engineered storm drain system. These observations may include such visual evidence and/or potential pollutants as:

- Foaming (detergents)
- Discoloration
- Evidence of sanitary waste
- Optical enhancers (fluorescent dyes added to laundry detergent); and
- Turbidity

If a Visual Condition Assessment indicates the presence of these pollutants, it may be necessary to quantify the extent of each, and gather data on other parameters that cannot be visually observed but can be measured using field kits or meters. These parameters include:

- Ammonia
- Chloride (present in treated drinking water but not groundwater)
- Conductivity
- Fluoride
- Hardness
- pH
- Potassium

Field Kits and Sampling Methods Available

In recent drafts of new MS4 Permits, U.S. EPA has identified several test kits that are acceptable for use in the field, and other regulatory agencies have also completed similar reviews. The following table shows field test kits and portable meters that can be used for screening parameters.

Table 7-1
Field Measurements Test Kits and Instrumentation

Analyte or Parameter	Instrumentation (Portable meter)	Field Test Kit
Ammonia	CHEMetrics™ V-2000 Colorimeter Hach™ DR/890 Colorimeter Hach™ Pocket Colorimeter™ II	CHEMetrics™ K-1410 CHEMetrics™ K-1510 (series) Hach™ NI-SA Hach™ Ammonia Test Strips
Bacteria	Bacteria field test kits require 24-hour window	
Boron	N/A	Hanna™ HI 38074 Taylor™ K-1541
Chloride	CHEMetrics™ V-2000 Colorimeter Hach™ Pocket Colorimeter™ II LaMotte™ DC1200 Colorimeter	CHEMetrics™ K-2002 through K-2070 Hach™ CDS-DT Hach™ Chloride QuanTab® Test
Color		Hach™ ColorDisc
Conductivity	CHEMetrics™ I-1200	N/A
Detergents (Surfactants)	CHEMetrics™ I-2017	CHEMetrics™ K-9400 and K-9404 Hach™ DE-2
Fluoride	CHEMetrics™ V-2000 Colorimeter Hach™ Pocket Colorimeter™ II	N/A
Hardness	N/A	CHEMetrics™ K-1705 and K-1710 CHEMetrics™ K-4502 through K-4530 Hach™ HA-DT Hach™ Hardness Test Strips
Optical enhancers	Field tests still under development	
pH	CHEMetrics™ I-1000	Hach™ 17J through 17N Hach™ pH Test Strips
Potassium	Horiba™ Cardy C-131	LaMotte™ 3138 KIW
Turbidity	CHEMetrics ™ I-1300	N/A

For US EPA surface water sampling guidance: http://www.ert.org/products/2013.PDF

Each field test kit will include instructions specific to that test kit, and most kits are available in configurations that detect different ranges of the parameter. For example, the CHEMetrics™ detergents kit K-9400 shown above detects concentrations of 0 to 3 milligrams per liter (mg/L) while the K-9404 kit detects concentrations of 0 to 1,400 mg/L.

The table below shows values identified by the U.S. EPA and the Center for Watershed Protection as typical screening values for select parameters. These represent the typical concentration (or value) of each parameter expected to be found in stormwater. Screening values that exceed these benchmarks may be indicative of pollution and/or illicit discharges.

Table 7-2
Benchmark Field Measurements for Select Parameters

Analyte or Parameter	Benchmark
Ammonia	>0.5 mg/L
Conductivity	>2,000
Detergents (Surfactants)	> 0.25 mg/L
Fluoride	>0.25 mg/L
pH	<5
Potassium	>20 mg/L

If and when water quality screening samples, whether using field test kits or portable meters, exceed these benchmark concentrations, the inspector should consider collecting analytical samples for laboratory analysis.

Advantages and Disadvantages of Field Testing

Field test kits can be convenient for use as a screening tool, initial purchase costs are low $5.00 for the kits and the costs are far less than full analyses at a laboratory. However, some disadvantages of this screening method include:

- Limited shelf life
- Labor cost associated with inspector's time
- Generation of wastes, including glass vials and used reagent
- Steps and processes for each kit can vary widely, resulting in errors
- Trained staff are required in order to effectively utilize kits
- Not all kits are accepted by all regulatory agencies
- Limited useful detection range

Portable instrumentation such as the colorimeters shown in Table SOP 8-1 have the benefit of providing accurate readings, measure to low detection limits, and can be purchased pre-programmed to measure concentrations of most parameters required. Disadvantages of portable instrumentation include:

- High initial purchase cost
- Requirement for ongoing calibration and maintenance
- Individual probes require periodic replacement
- Specific storage requirements to maintain calibration
- Trained staff are required in order to effectively utilize meters

Related Standard Operating Procedures

1. SOP #1, Dry & Wet Weather Outfall Inspection
2. SOP #2, Catch Basin Cleaning and Inspection
3. SOP #6, Locating Illicit Discharges

Attached:

Water Quality Screening Form

WATER QUALITY SCREENING FORM

Outfall Identification			
Outfall Location			
Inspector's Name			
Date of Inspection		Date of Last Inspection	
Start Time		End Time	
Type of Inspection Regular	Pre-Storm Event	During Storm Event	Post-Storm Event
Most Recent Storm Event:			

FIELD WATER QUALITY SCREENING RESULTS

Sample Parameter	Field Test Kit or Portable Instrument Meter	Benchmark	Field Screening Result	Full Analytical Required?
Ammonia		> 0.5 mg/L		Yes No
Boron		> 0.35 mg/L		Yes No
Chloride		230 mg/L		Yes No
Color		> 500 units		Yes No
Specific Conductance		> 2,000 µS/cm		Yes No
Detergents & Surfactants		> 0.25 mg/L		Yes No
Fluoride		> 0.25 mg/L		Yes No
Hardness		< 10 mg/L or > 2,000 mg/L		Yes No
pH		< 5		Yes No
Potassium		> 20 mg/L		Yes No
Turbidity		> 1,000 NTU		Yes No

References: *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments, Center for Watershed Protection and Robert Pitt of University of Alabama, 2004, p. 134, Table 45.*
–Env-Ws 1703.21 Water Quality Criteria for Toxic Substances, State of New Hampshire Department Surface Water Quality Regulations.– Appendix I –
Field Measurements, Benchmarks and Instrumentation, Draft Massachusetts North Coastal Small MS4

FULL ANALYTICAL TESTING WATER QUALITY RESULTS

Sample Parameter	Analytical Test Method	Sample Collection (Time/Date)	Testing Lab	Analytical Test Result
Ammonia	EPA 350.2/SM4500-NH3C			
Bacteria	E coli: 1103.1; 1603 Enterococcus: 1106.1; 1600			
Boron	EPA 212.3			
Chloride	EPA 9251			
Color	EPA 110.2			
Specific Conductance	SM 2510B			
Detergents and Surfactants	EPA 425.1/SM5540C			
Fluoride	EPA 300.0			
Hardness	EPA 130.1/SM 2340B			
Optical Enhancers	N/A *			
pH	EPA 150.1/SM 4500H			
Potassium	EPA 200.7			
Turbidity	SM 2130B			

- There is presently no US EPA Standard Method for analysis of optical enhances. Typically, sample pads are described as with “Present or Not Present” for fluorescing dye when exposed to UV light or a fluorometer.

Introduction:

Municipalities conduct numerous activities that can pose a threat to water quality if practices and procedures are not in place to prevent pollutants from entering the Municipal Separate Storm Sewer System (MS4). In-house employee training programs are established to teach employees about stormwater management, potential sources of stormwater contaminants in the workplace and Best Management Practices (BMPs).

Applicability

In accordance with the New York State Department of Environmental Conservation's SPDES General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4) –Permit No. GP-0-15-003, covered entities must *"…include[s] an employee pollution prevention and good housekeeping training program and ensure[s] that staff receive and utilize training."*

Employee Training

Municipal employees who are educated about the link between their work and stormwater quality can assist in reducing the amount of stormwater pollution conveyed into receiving waters. In order for municipal pollution prevention and good housekeeping programs to be successful, employees must be trained in measures to incorporate pollution prevention and good housekeeping practices into their everyday activities.

Municipal employees shall be provided with specific information about the actions they can take to prevent or reduce stormwater pollution. The Employee Training Program Table presents a range of training topics that shall be provided to each municipality. If employees are unfamiliar with the requirements of the SPDES Permit, a general training session is a good opportunity for education.

The most effective pollution prevention and good housekeeping training programs provide appropriate information to appropriate employees. For example: employees responsible for maintaining fleet vehicles should be trained in proper management of fuels, and employees responsible for oil/water separators should be trained in inspection and proper waste disposal.

A variety of methods may be used to educated municipal employees about stormwater pollution prevention and good housekeeping practices, including

- Brochures
- Workshops
- Employee meetings
- Training sessions and programs offered through Ontario County Soil and Water Conservation District and Wayne County Soil and Water Conservation District
- Videos
- Walkthroughs with checklists
- Workplace posters
- Field training programs

An effective program ensures that institutional knowledge about pollution prevention and good housekeeping practices is maintained over time. A tracking system such as the attached Employee Training Form identifies the trainings completed on an annual basis, as well as the municipal staff members who have attended the trainings. Tracking this information is critical to ensure the effectiveness of the pollution prevention and good housekeeping employee training program.

Attachments

Municipal Employee Training Program Table

Municipal Employee Training Tracking Form

Municipal Employee Training Program Table

Municipal Operation	Employees	Topics / Procedures
Municipal Building Maintenance	Stormwater Management Program Coordinator (SMO) Highway Superintendent Department of Public Works Employees	Outdoor Container Storage; Plaza & Sidewalk Cleaning; Spill Prevention Control & Cleanup; Oil/Water Separator Maintenance
Parks & Open Space Maintenance	SMO Highway Superintendent Department of Public Works Employees	Landscape Maintenance Pet Waste Collection
Post-Construction Stormwater Management	Planning Board Officials SMO Highway Superintendent Department of Public Works Employees	Post-Construction Stormwater BMP Maintenance; *See "Maintenance Guidance for Stormwater Management Practices"*
Septic System Maintenance	SMO Highway Superintendent Department of Public Works Employees	Prevent improperly treated wastewaters from septic systems
Solid Waste Management	SMO Highway Superintendent Department of Public Works Employees	Chemical/Hazardous Waste; Illegal Dumping & Litter Control; Waste Collection; Waste Reduction & Recycling
Stormwater System Maintenance	SMO Highway Superintendent Department of Public Works Employees	Catch Basin Inspection & Cleaning; Spill Response & Cleanup Procedures; Open Channel, Ditch Maintenance; Storm Sewer Conveyance System
Street Maintenance	SMO Highway Superintendent Department of Public Works Employees	Graffiti Removal; Unpaved Roads & Trails; Roadway Patching, Resurfacing and Surface Sealing; Street Sweeping & Cleaning; Winter Road Maintenance; Spill Response & Cleanup Procedures
Vehicle, Equipment Maintenance and Maintenance Facilities Procedures	SMO Highway Superintendent Department of Public Works Employees	Vehicle & Equipment Cleaning; Vehicle & Equipment Fueling; Vehicle & Equipment Repair
Illicit Discharge Detection & Elimination	SMO Highway Superintendent Department of Public Works Employees, Town Clerk	Detecting illicit discharges Reporting illicit discharges
General Stormwater Awareness	Municipal Officials Planning Board Officials SMO Highway Superintendent Department of Public Works Employees	MS4 program requirements including minimum control measures; Goal of MS4 programs; Principles of stormwater management and maintenance

DATE OF TRAINING: _____

TRAINER: _____

DEPARTMENT(S): Highway Department

Employee training program covers BMPs and SOPs as described in the Municipal Employee Training Program Table. Attach the program sign-in sheet..

Topic	Check Mark Topic's Covered	Participants (Targeted audience)
Municipal Building Maintenance		**Highway Department**
Parks & Open Space Maintenance		**Highway Department**
Post-Construction Stormwater Management		**Highway Department**
Septic System Maintenance		**Highway Department**
Solid Waste Management		**Highway Department**
Stormwater System Maintenance		**Highway Department**
Street Maintenance		**Highway Department**
Vehicle, Equipment Maintenance and Maintenance Facilities Procedures		**Highway Department**
Illicit Discharge Detection & Elimination		**Highway Department**
General Stormwater Awareness		**Highway Department**

Introduction:

Regulatory information prohibiting the transportation of invasive aquatic plants, animals, and many weeds can be found on the NYS DEC Regulations website under 6 NYCRR Chapter V - Resource Management Services; Subchapter C: Invasive Species, Part 575: Prohibited and Regulated Invasive Species and Part 576: Aquatic Invasive Species Spread Prevention. http://www.dec.ny.gov/regs/2490.html

Alien Invasive Species (AIS) are non-native species that can cause harm to the environment, the economy or to human health. Invasive species are one of the greatest threats to New York's biodiversity. They cause or contribute to:

- Habitat degradation and loss
- Loss of native fish, wildlife and tree species
- Loss of recreational opportunities and income
- Crop damage and disease in humans and livestock
- Property damage

The goal of this SOP is to minimize the risk of spreading any organisms, within or between field sites as a result of fieldwork, reconnaissance activities or other operations. For a list and photos of common aquatic invasive species in NY, visit the following website: http://www.dec.ny.gov/animals/50272.html

AQUATIC USE EQUIPMENT CLEANING

All equipment that contacts water, sediment, plants or the ground during site access, reconnaissance and sample collection should be cleaned after that contact. Equipment includes but is not limited to: wading boots or shoes, samplers, ropes, nets, boats, canoes, kayaks, trailers, vehicles, anchors, chains, water and sediment grab samplers, cables, probes, multi-probes, flow measuring or gaging devices and others. Felt-sole waders – waders with any sort of fibrous surface affixed to the sole – require decontamination because of their ability to trap and hold mud, vegetation and moisture.

The following may be required, depending upon the equipment used in sampling and the decontamination method being used:

- A clean water supply free of mud and debris
- Scrub brushes and bucket
- Hose adapters for flushing outboard boat motors
- Hand tools for attaching hoses or taking apart equipment if necessary

If decontamination is required:

- Treatment chemicals as indicated (See Appendix A);
- Means of containing and transporting and applying chemicals
- Thermometer to monitor temperature if using hot water for decontamination
- Means to monitor treatment times
- Adequate supply of hot water if using for decontamination

Procedures:

Prior to Conducting Field Work and during Field Work, determine if the activity is located within an area of known invasive species presence. The following website: www.nyimapinvasives.org is a resource that may assist in that determination. Handbooks identifying invasive organisms should be available to all personnel.

Decontamination will be needed for all equipment that contacts aquatic sediment, aquatic vegetation and fish. Use equipment that can be easily inspected and cleaned to both avoid spreading invasive species and reduce time spent cleaning. If possible, bring extra sets of field equipment in case cleaning and decontamination (if required) can't be accomplished before arrival at a new sampling site.

Wading gear has been implicated in the spread of New Zealand mudsnails, *Didymosphenia geminate* (aka. Didymo or "Rock Snot") and fish and amphibian diseases. To the extent possible consider using non-felt soles and boot-foot waders.

Conduct Field Activities to Minimize Contact between Equipment and Potential Sources of Invasive Species, Particularly Aquatic Plants, Sediment and Fish:

- Sample from least to most contaminated areas (e.g. upstream to downstream or areas of less weed growth to dense weed growth).
- Minimize wading and avoid running watercraft into sediment.
- Avoid getting plants, sediment and fish inside watercraft or sampling gear.
- Use a catch pan under dredges, etc., to keep potential AIS off boat decks and out of bilges.
- Avoid driving or walking through areas of mud and high weed growth.

After Field Work

- Inspect, clean and drain all equipment that contacted (terrestrial or aquatic) soil, vegetation or water.
- Remove any visible vertebrates, invertebrates, plants, algae or sediment.
- If necessary, use a scrub brush to remove debris and rinse with clean water.
- Drain all water in bilges, samplers or other equipment that could hold water from the site.
- Flush areas that can't be seen with clean water until the rinse water is clean.

Complete the initial treatment (scrubbing and rinsing) before leaving the sampling site, if possible. If cleaning after leaving the field site, ensure that no debris will leave the equipment and potentially spread invasive species during transit or cleaning. Acceptable wash sites include DOT facilities, commercial car wash businesses, or other facilities provided with drains that do not lead to surface waters.

Decontaminate felt sole waders and, in areas of concern, equipment that contacted aquatic sediment, aquatic vegetation or fish.

Wipe smooth-surfaced sampling equipment that can be easily and fully wiped down until dry. The equipment must be smooth enough that no cracks or crevices could harbor a sand-grain-sized juvenile New Zealand mudsnail.

Use one of the decontamination treatments from Table 9-1 for all other equipment.

Decontamination treatments should take place where the procedure can be carried out effectively and safely. Wash and rinse water must not drain to surface water and all chemicals must be disposed of to a sanitary sewer.

Equipment Storage

Store gear in a manner to facilitate drying. Store boots and waders on a drying rack. Open hatches and leave out drain plugs on watercraft.

Watercraft Check Points

- Clean and remove all visible plants, animals, fish and mud from the watercraft, trailer or equipment. Dispose of removed material in a trash container on land.
- Drain water from bilge, live wells, ballast tanks and any other location with water before leaving launch.
- Dry anything that comes into contact with water. A drying time of at least five days is recommended.
- Never release plants, fish or other animals into a waterway unless they came from that waterway.

CONSTRUCTION AND RESTORATION PROJECTS AIS AVOIDANCE AND EQUIPMENT CLEANING

Prevention is the least expensive and most effective way to halt the spread of invasive weeds. Preventing the establishment or spread of weeds relies upon:

- Educating workers about the importance of managing weeds on an on-going basis
- Properly identifying weed species
- Avoiding or treating existing weed populations
- Incorporating measures into projects that prevent weed seeds or plant parts from establishing new or larger populations

Procedures

1. Provide training to staff on identification of AIS, the importance of weed control and measures to minimize their spread.
2. Remind staff that weed seeds readily spread via clothing and boots (and could infest their own home property by that means.)
3. Road maintenance programs should include monitoring and treatment for AIS.
4 . Minimize ground disturbing activities.
5. Identify and remove existing AIS in project areas prior to activities to avoid contaminating construction/earth moving equipment.
6. Avoid moving weed-infested gravel, rock and other fill material to relatively weed-free locations.
7. Gravel and fill should come from weed-free locations. Inspect gravel pits and fill sources to identify weed-free sources.
8. Use only certified weed-free straw and mulch for erosion control. Consider the use of weed-free fiber roll barriers or sediment logs in sensitive areas
9. Clean off-road equipment (power or high-pressure cleaning) of all mud, soil and plant parts before moving into relatively weed-free areas.
10. Keep active road construction/maintenance sites that are in relatively weed-free areas closed to vehicles not involved with construction/ maintenance.

11. Wash, or using an air compressor, blow clean all vehicles (including tires and undercarriage) that may have entered weed-infested areas prior to entering un-infested areas of a job site.
12. Quickly treat individual plants or small infestations before they become established, produce seed or are able to spread.

After project is complete:

1. Revegetate or otherwise prevent the establishment of weeds in project area through monitoring and post-activity weed treatment.
2. Revegetate using soil components and mulches obtained from non-weed infested sources.
3. Revegetate using plant materials that have a high likelihood of survival.
4. Utilize seed and other plant materials that have been certified as AIS-free and have a weed content of 0.05 % or less.

Attachment:

Table 9-1 Decontamination Treatment Options, Aquatic AIS

Table 9-1 – Decontamination Treatment Options, Aquatic AIS:

Decontamination employs chemicals, freezing, drying, or hot water. While chemical treatments can be used, they are not generally recommended for most equipment, boats, and trailers. The effects of chemical treatments on some equipment have yet to be researched. Several of the chemicals contain ammonia compounds that could contaminate ammonia samples. Also, chemical treatments need to address safe and environmentally sound storage, handling, and disposal of the chemicals.

The treatment options listed in this table utilize temperature (heat or cold) or chemicals to ensure that contaminants such as New Zealand mudsnails that may have been missed during the initial treatment will be killed. At this time, hot water or drying are the recommended treatments for large equipment such as boats and boat trailers.

Treatment	Concentration or temperature	Exposure Time	Comments
Hot water wash or soak	140° F (60º C)	5 minutes for felt soled boots and nets, 5 seconds for all other	Ensure all parts of the equipment reach temperature for the full exposure time
Hot water wash or soak	120°F (49º C)	10 minutes for felt soled boots and nets, 5 minutes for all other equipment	Ensure all parts of the equipment reach temperature for the full exposure time
Cold	24º F (-4°C)	4 hours minimum	Time starts after equipment reaches indicated temperature
Drying	Low humidity, in sunlight is best	48 hours	Time starts after equipment is thoroughly dry
Formula 409 All-Purpose	100% (full strength)	10 minutes	Follow proper procedures for storage and handling.
Sparquat 256[2]	3.1% or higher	10 minutes	Follow proper procedures for storage and handling
Quat 128	4.60%	10 minutes	Follow proper procedures for storage and handling
Hydrogen Peroxide	30,000 ppm (3%)	15 minutes	Spray on until soaked, keep damp for contact time (cover or place gear in a dry bag)
Virkon Aquatic®	2%	20 minutes	Must soak (not spray on). Follow proper procedures for storage and handling. Rinse gear after soak to prolong life. Solution degrades, lasts up to 7 days, best if mixed fresh.

Introduction:

Construction sites that lack adequate stormwater controls can contribute a significant amount of sediment to nearby bodies of water. The 2015 New York State MS4 Permit requires that permittees develop, implement and enforce a program to "reduce pollutants in any storm water runoff to the MS4" from construction activities of a certain size. The MS4 Permit established that permittees must implement this requirement for proposed construction activities involving soil disturbances of one (1) or more acres; including disturbances of less than one acre that are part of a larger common plan of development or sale that will ultimately disturb one or more acres of land.

This Standard Operating Procedure (SOP) describes the Town of Macedon's procedures for SWPPP review, pre-construction oversight, construction site inspections, and the Enforcement Response Plan.

SWPPP Review:
The Town of Macedon contracts SWPPP reviews to third party contractors, who are identified in the SWMP. The third-party contractors must:

1. Review the SWPPP for the conformance with the requirements of the most current SPDES General Permit for Stormwater Associated with Construction Activities;
2. Prioritize projects as a high priority if the proposed project:
    a. directly discharges to an impaired waterbody as listed in Appendix E of the GP
    b. directly discharges to a stream classified with a (T) or Trout Spawning (TS) designation
    c. will disturb >5 acres of earth at any one time
    d. with earth disturbance within 100 feet of any lake or pond
    e. within 50 feet of any rivers or streams (perennial or seasonal)
    f. directly discharges to State or Federal designated wetlands;
3. Prioritize projects as low priority if the proposed project does not meet the requirements of #2;
4. Document the SWPPP review using a SWPPP review checklist and provide the checklist to the Town of Macedon;
5. Sign the MS4 SWPPP Acceptance Form and forward the signed form to the Stormwater Management Program Coordinator (SMPC). The SMPC will then sign the MS4 Acceptance Form and forward the document to the owner/operator or their designated Engineer.

The SMPC will request at least two copies of the SWPPP. One copy will be forwarded to the third-party contractor responsible for reviewing the document and one will be placed at the Public Library for public access and review. After receiving the SWPPP, the SMPC will announce the receipt and location of the SWPPP at the following Town Board meeting to allow for the public to review and make comments. Notification of the SWPPP will also be made on Facebook and the Town of Macedon's MS4 website page.

Pre-Construction Oversight:
Prior to site disturbances, the SMPC or representative will meet with the owner/operator and general contractor to review the Pre-Construction Oversight Checklist, see attached checklist. During this meeting, the SMPC will 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. The SMPC will also review the MS4 oversight inspection process and expectations for compliance.

Construction Site Inspections:
The construction site stormwater control program applies to proposed construction activities involving soil disturbances of one (1) or more acres; including disturbances of less than one acre that are part of a larger common plan of development or sale that will ultimately disturb one or more acres of land. The construction site stormwater control program applies to the owners/operators who are listed on the Notice of Intent and to the contractors and subcontractors working onsite.

The Town of Macedon contracts construction site inspections to third party contractors, who are identified in the SWMP. The third-party contractors should:

1. Inspect high priority sites at least once every 30 days during active earthwork disturbances;
2. Inspect low priority sites at least once during active construction and at a minimum once a year while active construction occurs;
3. Document all inspections using an inspection form to include digital photos that clearly show the condition of all practices that have been identified as needing corrective actions;
4. If corrective actions are necessary, conduct a follow-up inspection to confirm corrective actions are completed within identified timeframes and include photos of the corrected condition;
5. Forward inspection reports to the SMPC, owner/operator, and general contractor.

Enforcement Response Plan (ERP) for Construction Site Inspections:

The ERP provides guidance to staff following a complaint or construction site inspection. It is critical that the inspector maintain complete and accurate records of inspections and correspondence and communicate with the property owner or representative to support future enforcement.

If determined during the review of a construction site inspection or in response to a complaint that a construction site is non-compliant with the Town of Macedon's Town Code Chapters 113 & 135, the inspector or SMPC may begin enforcement procedures. Upon observing or becoming aware of a deficiency, the inspector or SMPC will follow a procedure of progressive actions to ensure compliance by the property owner. The actions are as follows:

1. The inspector/SMPC will verbally notify the property owner of the observed deficiency and will ask for corrective action. The inspector/SMPC will also notify the property owner that a follow-up inspection will occur within 7 days for high priority sites and within 30 days for low priority sites.

2. If the corrective action has not been corrected or sufficiently initiated within the abovementioned timeframes, the inspector/SMPC may issue a written notice of violation stating that the verbal notification was not acted upon. As per §113-8, the Notice of Violation shall contain:

    a. The name and address of the landowner, developer or applicant;

    b. The address, when available, or a description of the building, structure or land upon which the violation is occurring;

    c. A statement specifying the nature of the violation;

d. A description of the remedial measures necessary to bring the land development activity into compliance with §135-43 and a time schedule for the completion of such remedial action;

e. A statement of the penalty or penalties that shall or may be assessed against the person to whom the notice of violation is directed;

f. A statement that the determination of the violation may be appealed to the municipality by filing a written notice of appeal within 15 days of service of notice of violation.

3. Stop-work orders. The Town of Macedon may issue a stop-work order for violations of §113 & 135-43. Persons receiving a stop-work order shall be required to halt all land development activities, except those activities that address the violations leading to the stop-work order. The stop-work order shall be in effect until the Town of Macedon confirms that the land development activity is in compliance and the violation has been satisfactorily addressed. Failures to address a stop-work order is a timely manner may result in civil, criminal, or monetary penalties in accordance with the enforcement measures authorized in §135-43 and §113.

4. Penalties. See §113-8 (D) for penalty amounts.

5. Withholding of certificate of occupancy. If any building or land development activity is installed or conducted in violation of §135-43 or §113, the SMPC may prevent the occupancy of said building or land.

6. Restoration of lands. Any violator may be required to restore land to its undisturbed condition. In the event that restoration is not undertaken within a reasonable time after notice, the Town of Macedon may take necessary corrective action, the cost of which shall become a lien upon the property until paid.

7. The Town of Macedon may require any person undertaking land development activities regulated by §135-43 and §113 to pay reasonable costs at prevailing rates for review of SWPPPs, inspections, or Stormwater Management Practice maintenance performed by the Town of Macedon or performed by a third party for the Town of Macedon.

Attachments

Stormwater Pollution Prevention Plan Review Checklist

Pre-Construction Oversight Checklist

Construction Site Inspection Report for SPDES MS4 General Permit GP-0-15-003

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF WATER
SPDES General Permit for Stormwater Discharges from Construction Activity
(GP-0-15-002)

Stormwater Pollution Prevention Plan Review Checklist

Project Name:	☐ **Basic SWPPP (E&SC Plan)**	☐ **Full SWPPP**
Site Address:	**Watershed:**	**Date:**
MS4 Operator:		
MS4 Permit #:	**Appendix E 303(d) segment:**	**SPDES General Permit ID Number:** NYR1__ _____
Owner/Operator:	**Phone:**	**Reviewer:**
Address:	**Fax:**	

Site Priority **HIGH** ☐ **LOW** ☐ **Citation** MS4 permit IV.D.6

General Requirements

Yes	No	N/A or N/R		Citation
☐	☐	☐	SWPPP contains completed final NOI	III.A.1.
☐	☐	☐	SWPPP identifies potential sources of pollutants in runoff	III.A.2.
☐	☐	☐	SWPPP identifies Trained Contractor.	III.A.6.
☐	☐	☐	Contractor/Subcontractor certification statements have been signed.	III.A.6.
☐	☐	☐	SWPPP is signed by responsible corporate officer, general partner, proprietor, principal executive officer, ranking elected official, or duly authorized representative.	VII.H.2.
☐	☐	☐	OPRHP documentation	

Erosion & Sediment Control Requirements

Yes	No	N/A or N/R		Citation
☐	☐	☐	Location, type and size of project are described.	III.B.1.a.
☐	☐	☐	Phasing plan and sequence of operations are described.	III.B.1.d.
☐	☐	☐	HSG is identified.	III.B.1.c.
☐	☐	☐	SWPPP identifies contractor/subcontractor responsible for installing, constructing, repairing, replacing, inspecting and maintaining the E&SCs.	III.A.6.
☐	☐	☐	SWPPP documents selection, design, dimensions, material specifications, installation details, implementation & maintenance of E&SCs, including soil stabilization plans	III.A.1. III.B.1.f. III.B.1.h.
☐	☐	☐	E&SCs are designed in conformance with the NYS Standards and Specifications for Erosion and Sediment Control; or equivalence to this standard is demonstrated and reason for the alternative is provided.	III.B.1. III.B.1.l.
☐	☐	☐	**Maps** of general location and site are present showing: Legend, scale, north arrow total area, all improvements, areas disturbed and not disturbed, existing vegetation, onsite and adjacent offsite surface waters, floodplain/floodway boundaries, wetlands and drainage patters that could be affected the project,	III.B.1.b. III.B.1.

Stormwater Pollution Prevention Plan Review Checklist

			existing and final contours, locations of soil types & boundaries, material/waste/borrow/equipment storage areas, locations of stormwater discharges, and location/size/length of each E&SC	III.B.1.g.
☐	☐	☐	Location and sizing of any temporary sediment basins or structural practices planned to divert flows from exposed soils are included	III.B.1.h.
☐	☐	☐	Maintenance inspection schedule, in accordance with the NYS Standards & Specs for E&SCs is included	III.B.1.i.
☐	☐	☐	Pollution Prevention measures to control litter, chemicals, debris are described.	III.B.1.j.
☐	☐	☐	Description & location of any industrial stormwater discharges (i.e., concrete, asphault, etc.) is included	III.B.1.k.

Post-construction Stormwater Management Practices

Yes	No	N/A or N/R		Citation
☐	☐	☐	SWPPP is prepared by a Qualified Professional.	III.A.3.
☐	☐	☐	SWPPP identifies contractor/subcontractor responsible for constructing the SMPs.	III.A.6.
☐	☐	☐	Design Manual planning process for reducing runoff is employed: Site planning to preserve natural features and reduce impervious cover, Calculation of the WQ_v for the site, Incorporation of runoff reduction techniques and standard SMPs with Runoff Reduction Volume (RR_v) capacity, Determine minimum RR_v required, Use of standard SMPs, where applicable, to treat the remaining WQ_v not addressed by runoff reduction techniques and standard SMPs with RR_v capacity, design of volume and peak rate control practices where required	III.B.2.
☐	☐	☐	SWPPP documents selection, design, installation, implementation and maintenance of SMPs	III.A.1.
☐	☐	☐	SMPs are designed in conformance with the applicable sizing and performance criteria in the NYS Stormwater Management Design Manual (Jan. 2015); or equivalence to this standard is demonstrated and reason for the alternative is provided.	III.B.2. III.B.2.c.vi.
☐	☐	☐	All SMPs are identified, including dimensions, material specs & installation details.	III.B.2.a.
☐	☐	☐	Location & size of SMPs are shown on a site map or construction drawing.	III.B.2.b.
☐	☐	☐	The SWPPP includes a Stormwater Modeling and Analysis Report that contains: • Predevelopment map w/ watershed/subcatchment boundaries, flow paths &design points, *(list further detail per App. G Design Manual?)* • Post-development map showing same plus SMPs, • Hydrology & Hydraulics results for required storm events including supporting calculations, methodology and a summary table comparing pre & post-development runoff rates & volumes for the different storm events, • Summary table w/ calculations showing that ea. SMP conforms w/ the Design Manual sizing criteria	III.B.2.c.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF WATER

SPDES General Permit for Stormwater Discharges from Construction Activity
(GP-0-15-002)

Stormwater Pollution Prevention Plan Review Checklist

- Identification of any Design Manual sizing criteria that are not required under the General Permit

Yes	No	N/A or N/R		
☐	☐	☐	Soil testing results and locations of test pits and borings are included	III.B.2.d.
☐	☐	☐	Infiltration test results are included if needed	III.B.2.e.
☐	☐	☐	O&M plan, including inspection & maintenance schedules, is included and Identifies the responsible entity	III.B.2.f.
☐	☐	☐	Enhanced Phosphorus Removal Standards sizing criteria are included if required.	III.B.3.

PRE-CONSTRUCTION OVERSIGHT CHECKLIST

FOR CONSTRUCTION SITE OWNERS/OPERATORS & CONTRACTORS

Date: _____ Site: _____

Owner's Name: _____ Signature: _____

Owner's Address: _____

Owner's Email: _____ Owner's Telephone #: _____

General Contractor's Name: _____ Signature: _____

GC's Address: _____

GC's Email: _____ GC's Telephone #: _____

1. SWPPP and SWPPP Qualified Inspection reports to be posted onsite and accessible Note Location of SWPPP: _____	
2. Obtain Signed Contractor Certifications	
3. Obtain Copies of 4 – Hour DEC Endorsed 4 Hour ESC Training Card	
4. Once a week inspections by a Qualified Inspector are required if soil disturbances areas are < 5 acres	
5. Twice a week inspections by a Qualified Inspector are required if soil disturbances are > 5 acres	
6. Twice a week inspections are required by a Qualified Inspector are required if site discharges to a 303(d)	
7. Install and maintain stabilized construction entrance(s)	
8. Remove sediment from streets and paved areas as needed	
9. Install perimeter controls	
10. Install interior erosion and sediment controls as per plan (as grading permits)	
11. Maintain erosion and sediment controls	
12. Install a designated concrete truck washout area with liner. Install a minimum of 100 feet from drainage swales, storm drain inlets, wetlands, streams and other surface waters.	
13. Utilize dust control as needed	
14. Stabilize soils not worked in 7 days (>5 acres) or 14 days (<5 acres). Seeding should occur within 24 hours of final grading to minimize the need for scarification	
15. Stabilize inactive stockpiles, install silt fence at downslope perimeter	
16. Utilize winter stabilization as needed (2 tons per acre of straw with seed, 4 tons of straw if seed is not applied)	
17. Submit for approval a written Notice of Inspection Frequency Reduction to the Town's Code Enforcement Officer prior to reducing inspections.	
18. Other:	

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF WATER

Construction Site Inspection Report for SPDES
MS4 General Permit GP-0-15-003

Project Name and Location: _____	Date:
	Weather:
	Permit # (if any): **NYR1**
MS4 Operator Name: _____ MS4 Permit ID: NYR20A_____	Entry Time: / Exit Time:
Name of SPDES Permittee:_____ Contacted: Yes ☐ No ☐	Inspection Type: ☐ NOT ☐ Complaint ☐ Compliance ☐ Referral
On-site Representative(s) and Company(s):_____ Phone Number(s):_____	

General Permit Requirements

	Yes	No	N/A		Citation
1.	☐	☐	☐	Does the project have permit coverage (if required)?	I.E. & II. B.1
2.	☐	☐	☐	Is a copy of the General Permit available on site?	II.C.2.
3.	☐	☐	☐	Is a copy of the MS4 SWPPP Acceptance Form available on site?	II.C.2.
4.	☐	☐	☐	Is a current copy of the signed SWPPP retained at the construction site?	II.C.2.
5.	☐	☐	☐	Is a copy of the NOI & Acknowledgment Letter retained at the construction site?	II.C.2.
6.	☐	☐	☐	Was written authorization issued for any disturbance greater than 5 acres?	II.C.3.

SWPPP General Requirements

	Yes	No	N/A		Citation
7.	☐	☐	☐	Is the SWPPP current (accurate Permittee information, reflect current project)?	II.E. & III.A.4
8.	☐	☐	☐	SWPPP identifies potential sources of pollutants in runoff	III.A.2
9.	☐	☐	☐	SWPPP identifies Trained Contractor.	III.A.6.
10.	☐	☐	☐	Contractor/Subcontractor certification statements have been signed.	III.A.6.
11.	☐	☐	☐	SWPPP is signed by responsible corporate officer, general partner, proprietor, principal executive officer, ranking elected official, or duly authorized representative.	VII.H.2.

Recordkeeping

	Yes	No	N/A		Citation
12.	☐	☐	☐	Does Trained Contractor have current certification card?	VII.O.
13.	☐	☐	☐	Are self-inspections performed at permit-required frequency?	
				Daily during periods of soil disturbance by Trained Contractor	IV.B.1.
				Weekly during soil disturbance by Owner/Operator for excepted projects	IV.C.1.
				Weekly for soil disturbances <= 5 acres by Qualified Inspector	IV.C.2.a.
				Twice weekly for soil disturbances >5acres or if water segment listed in App. C or E	IV.C.2.b.&e.
				Monthly during periods of temporary stabilization by Qualified Inspector	IV.C.2.c
14.	☐	☐	☐	Do the qualified inspector's reports include the minimum reporting requirements?	IV.C.4.
15.	☐	☐	☐	Are the qualified inspector's reports signed and retained onsite?	IV.C.6.
16.	☐	☐	☐	Do the inspection reports identify deficiencies that are recurring &/or corrective measures that have not been implemented, & include date-stamped color photos	IV.C.4.

Visual Observations

Yes	No	N/A	Citation

17.	☐	☐	☐	Are all erosion and sediment control measures installed properly? IV.C.4.g.
18.	☐	☐	☐	Are all erosion and sediment control measures being maintained properly? IV.C.4.f.
19.	☐	☐	☐	Have stabilization measures been implemented in inactive areas per Permit? I.B.1.b.
20.	☐	☐	☐	Are post-construction SMPs constructed/installed correctly? IV.C.4.i.
21.	☐	☐	☐	Has final site stabilization been achieved and temporary E&SC measures removed prior to NOT submittal? V.A.2.
22.	☐	☐	☐	Was there a discharge from the site on the day of inspection? I.B.1.e. & f.
23.	☐	☐	☐	Is there evidence that a discharge caused or contributed to a violation of water quality standards? ECL 17-0501, and 6 NYCRR 703.2 and I.B.

Water Quality Observations

Describe the discharge(s): location, source(s), impact on receiving water(s), etc.

_____

_____

_____

_____

Describe the quality of the receiving water(s) both upstream and downstream of the discharge

_____

_____

_____

Describe any other water quality standards or permit violations

_____

_____

_____

Additional Comments

_____

_____

_____

☐ Photographs attached

Overall Inspection Rating: ❑ Satisfactory ❑ Marginal ❑ Unsatisfactory	
Name/Agency of Inspector: Kimberly Boyd, CPESC #6234	**Signature of Lead Inspector:**
Names/Agencies of Other Inspectors:	

Introduction: Best Management Practices (BMPs) are policies, procedures and structures designed to reduce stormwater pollution, prevent contaminant discharges to natural water bodies, and reduce stormwater facility maintenance costs. Constructed BMPs are permanent site features designed to treat stormwater before infiltration to the subsurface or discharge to a surface water body.

Post-Construction Controls are to be inspected annually either in the Spring or in the Fall. This Standard Operating Procedure provides a general summary of inspection procedures for five common constructed BMPs, including:

1. Stormwater Ponds/Wetlands
2. Infiltration Trenches
3. Sand/Organic Filters
4. Bioretention Areas
5. Open Channels

For inspection forms see the most current Maintenance Guidance Stormwater Management Practices (SMPs) produced by the Department of Environmental Conservation (March 31, 2017).

1. **Stormwater Ponds/Wetlands** – Stormwater Ponds are intended to treat stormwater quality through the removal of sediments and soluble pollutants. A permanent pool of water allows sediments to settle and removes the soluble pollutants, including some metals and nutrients. Additional dry storage is required to control peak discharges during large storm events. If properly designed and maintained, stormwater ponds can add fire protection, wildlife habitat and aesthetic values to a property. Stormwater wetlands maximize the pollutant removal from stormwater through the use of wetland vegetation uptake, retention and settling. Stormwater wetlands must be used in conjunction with other BMPs, such as sediment forebays.

   General Inspection and Maintenance - Regular inspection and maintenance are important to prevent premature failure of Stormwater Ponds/Wetlands. To ensure proper operation, stormwater pond outfalls should be inspected for evidence of clogging or excessive outfall releases. Potential problems to investigate include erosion within the basin and banks, damage to the emergency spillway, tree growth on the embankment, sediment accumulation around the outlet and the emergence of invasive species. Should any of these problems be encountered, perform repairs immediately.

2. **Infiltration Trenches** - Infiltration trenches are designed to contain stormwater quantity and provide groundwater recharge. Pollution prevention and pretreatment are required to ensure that contaminated stormwater is not infiltrated. Infiltration trenches reduce local flooding and preserve the natural water balance of the side: however, high failure rates often occur due to improper siting, inadequate pretreatment, poor design and lack of maintenance.

General Inspection and Maintenance - Regular inspection and maintenance are important to prevent premature failure of infiltration trenches. To ensure proper operation, infiltration inflow and outflow pipes should be inspected for evidence of clogging or excessive debris. Sediment traps and forebays should be inspected for excessive sediment accumulation. Potential problems to investigate include erosion within the trench and banks, damage to the emergency spillway, tree growth on the embankment, sediment accumulation in the trench, and the emergence of invasive species. Should any of these problems be encountered, perform repairs immediately.

3. **Sand/Organic Filters** – Sand and organic filters, also known as filtration basins, are intended for quality control rather than quantity control. These filters improve water quality by removing pollutants through a filtering media and settling pollutants on top of the sand bed and/or in a pretreatment basin. Pretreatment is required to prevent filter media from clogging. Runoff from the filters is typically discharged to another BMP for additional treatment.

   General Inspection and Maintenance - If properly maintained, sand and organic filters have a long design life. Maintenance requirements include raking the sand and removing sediment, trash and debris from the surface of the BMP. Over time, fine sediments will penetrate deep into the sand, requirement replacement of several inches or the entire sand layer. Discolored sand is an indicator of the presence of fine sediments, suggesting that replacement of the sand should occur.

4. **Bioretention Areas** – Bioretention areas are shallow depressions filled with permeable soil, topped with a layer of mulch and planted with dense native vegetation. There are two types of bioretention cells:

   1. Filtering bioretention area: areas that are designed solely as an organic filter.
   2. Exfiltration bioretention area: areas that are configured to recharge groundwater in addition to acting as a filter.

   General Inspection and Maintenance - Regular inspection and maintenance are important to prevent premature failure of bioretention areas. Regular inspection and maintenance of pretreatment devices and bioretention cells for sediment buildup, structural damage and standing water can extend the life of the soil media.

5. **Open Channels** – Dry swales are explicitly designed to detain and promote the filtration of stormwater runoff into the soil media. Wet swales are designed to retain water or intercept groundwater for quality treatment.

   General Inspection and Maintenance - Regular inspection and maintenance are important to prevent premature failure of open channels. Sediment build-up within the bottom of the channel or filter strip is removed when 25% of the original water quality volume has been exceeded. Vegetation in dry swales is mowed as required during the growing season to maintain grass heights in the 4 to 6-inch range.

Inspection Procedures for MS4 owned Post-Construction Facilities:

Prior to conducting any inspections refer to the applicable chapter for both Level 1 and Level 2 Inspections of the Maintenance Guidance SMPs developed by the NYSDEC. Level 1 Inspection Checklists may be used by Town or Coalition Interns. Level 2 Inspections Checklists will be used by Qualified Inspectors.

Utilizing the applicable Inspection Checklist, input the following information: SMP ID #, SMP Owner, Private/Public, SMP Location, Party Responsible for Maintenance, System Type, Type of Site, Inspection Date, Inspection Time, Inspector, and Date of Last Inspection. Note your observations on the checklist. If any unacceptable condition exists, mark the appropriate check box and complete the Notes section of the form, fully describing the condition. The inspector will also photograph the deficiency and attach photos to the inspection report. Notify the Stormwater Management Program Coordinator (SMPC) if any unacceptable condition exists or if a Level 2 or Level 3 inspection is necessary.

Follow Up:

If any deficiencies are noted, the SMPC or Qualified Inspector will add the deficiency to a work order spreadsheet. The spreadsheet and a copy of the inspection report will be given to the Superintendent of Highways. The Superintendent of Highways will schedule the work to be completed within 90 days of receiving the work order. Upon work completion, the Superintendent of Highways will notify the SMPC that the work has been completed and the SMPC will schedule a follow up inspection to verify completion of work. If repairs are excessive and cannot be completed within 90 days, the Superintendent of Highways and the SMPC will create a schedule to include acquisition of funding or materials for repairs. The schedule *should* not exceed one calendar year.

Inspection Procedures for Privately Owned Post-Construction Facilities:

The Town of Macedon intends to explore issuing written notification to private owners of post-construction facilities requiring property owners to obtain an Engineer Certified Inspection report including photos of facilities and recommended maintenance.

Enforcement Response Plan (ERP) for Privately Owned Post-Construction Facilities:

The ERP provides guidance to staff following a complaint or post-construction facility inspection. It is critical that the inspector maintain complete and accurate records of inspections and correspondence and communicate with the property owner or representative to support future enforcement.

If determined during the review of an Engineer's Certified Inspection report or in response to a complaint that a post-construction facility is non-compliant with the Town of Macedon's Town Code Chapters 113 & 135, the SMPC or Qualified Inspector may begin enforcement procedures. Upon observing or becoming aware of a deficiency, the inspector or SMPC will follow a procedure of progressive actions to ensure compliance by the property owner. The actions are as follows:

1. The SMPC or Qualified Inspector will verbally notify the property owner of the observed deficiency and will ask for corrective action. The SMPC or Qualified Inspector will provide a copy of an inspection report with photos to the property owner detailing the deficiency(ies) and notifying the property owner that a follow-up inspection will occur within 90 days.

2. If the corrective action has not been corrected or sufficiently initiated within 90 days, the SMPC or Qualified Inspector may issue a written notice of violation stating that the verbal notification was not acted upon. The written notice shall also set forth a deadline within which such corrective action must be completed. The notice will also advise that, should the violator fail to conduct the corrective action within the established deadline, the work will be done by a designated governmental agency or a contractor, and the expense thereof shall be charged to the violator.

3. Any person receiving a notice of violation may appeal the determination of the SMPC or Qualified Inspector to the Macedon Town Board within 15 days of its issuance, which shall hear the appeal within 30 days after the filing of the appeal, and within five days of making its decision.

Attachment

SMP Level 1 Inspection Checklist
SMP Level 2 Inspection Checklist

Pond and Wetland Stormwater Management Practices Level 1 Inspection Checklist

SMP ID #		**SMP Owner**		☐ Private ☐ Public
SMP Location (Address; Latitude & Longitude)				
	Latitude		**Longitude**	

Party Responsible for Maintenance	**System Type**		**Type of Site**
☐ Same as SMP Owner ☐ Other _____	☐ Seasonal ☐ Continuous Use ☐ Other	☐ Above Ground ☐ Below Ground	☐ Commercial ☐ Industrial ☐ Residential ☐ State

Inspection Date		**Inspection Time**	
Inspector			
Date of Last Inspection			

PW Drainage Area

Look for areas that are uphill from the pond.

Problem (Check if Present)	Follow-Up Actions
☐ Bare soil, erosion of the ground (rills washing out the dirt)	☐ Seed and straw areas of bare soil to establish vegetation. ☐ Fill in eroded areas with soil, compact, seed and mulch with straw to establish vegetation. ☐ Other:

	☐ Bare soil, erosion of the ground (rills washing out the dirt)	☐ Kick-Out to Level 2 Inspection: If a rill or small channel is forming, try to redirect water flowing to this area by creating a small berm or adding topsoil to areas that are heavily compacted. ☐ If large areas of soil have been eroded or larger channels are forming, this may require rerouting of flow paths or use of an erosion-control seed mat or blanket to reestablish acceptable ground cover or anchor sod where it is practical.
	☐ Piles of grass clippings, mulch, dirt, salt, or other materials	☐ Remove or cover piles of grass clippings, mulch, dirt, etc. ☐ Remove excessive vegetation or woody debris that can block drainage systems. ☐ Other:
	☐ Open containers of oil, grease, paint, or other substances exposed to rain in the drainage area	☐ Cover or properly dispose of materials; consult your local solid waste authority for guidance on materials that may be toxic or hazardous. ☐ Other:

Pond Inlets

Look for all areas where water flows into the pond during storms. Note that there may be multiple points of inflow and types of structures (e.g., pipes, open ditches, etc.).

Problem (Check if Present)		Follow-Up Actions
	☐ Inlets are buried, covered or filled with silt, debris, or trash, or blocked by excessive vegetation.	☐ If the problem can be remedied with hand tools and done in a safe manner, remove vegetation, trash, woody debris, etc. from blocking inlet structures. ☐ Other: ☐ Kick-Out to Level 2 or 3 Inspection: If the amount of material is too large to handle OR there are ANY safety concerns about working in standing water, soft sediment, etc., the work will likely have to be performed by a qualified contractor.

Pond Inlets

Look for all areas where water flows into the pond during storms. Note that there may be multiple points of inflow and types of structures (e.g., pipes, open ditches, etc.).

Problem (Check if Present)		Follow-Up Actions
	☐ Inlets are buried, covered or filled with silt, debris, or trash, or blocked by excessive vegetation.	☐ Kick-Out to Level 2 or 3 Inspection: If the amount of material is too large to handle OR there are ANY safety concerns about working in standing water, soft sediment, etc., the work will likely have to be performed by a qualified contractor.
	☐ Inlets are broken, and, with pieces of pipe or concrete falling into the pond, there is erosion around the inlet, there is open space under the pipe, or there is erosion where the inlet meets the pond	☐ Kick-Out to Level 2 Inspection: These types of structural or erosion problems are more serious and will require a qualified contractor to repair.

PW Pond Area and Embankments

Examine both interior and exterior pond banks as well as the pond body. Observe from the inlet pipes to the outfall structure and emergency overflow.

Problem (Check if Present)		Follow-Up Actions
	☐ The pretreatment area(s) or forebay(s) are filled with sediment, trash, vegetation, or other debris.	☐ If the problem can be remedied with hand tools and done in a safe manner, use a flat shovel or other equipment to remove small amounts of sediment. ☐ Remove trash and excessive vegetation from forebays if this can be done in a safe manner. ☐ Other:

PW Pond Area and Embankments

Examine both interior and exterior pond banks as well as the pond body. Observe from the inlet pipes to the outfall structure and emergency overflow.

Problem (Check if Present)		Follow-Up Actions
	☐ The pretreatment area(s) or forebay(s) are filled with sediment, trash, vegetation, or other debris.	☐ Kick-Out to Level 2 Inspection: Large amounts of sediment or debris will have to be removed by a qualified contractor. ANY condition that poses a safety concern for working in standing water or soft sediments should be referred to a Level 2 Inspection or qualified contractor.
	☐ The pond area itself has accumulated sediment, trash, debris, or excessive vegetation that is choking the flow of the water, OR the pond area is covered with algae or aquatic plants.	☐ Level 1 includes handling only small amounts of material that can be removed by hand, or with rakes or other hand tools. Do not attempt any repair that poses a safety issue. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Most cases will call for a Level 2 Inspection and/or a qualified contractor. ☐ You are not sure what type and amount of vegetation is supposed to be in the pond. ☐ The algae or aquatic plants should be identified so that proper control techniques can be applied.
	☐ The side slopes of the pond are unstable, eroding, and have areas of bare dirt.	☐ If there are only minor areas, try filling in small rills or gullies with topsoil, compacting, and seeding and mulching all bare dirt areas with an appropriate seed. Alternatively, try using herbaceous plugs to get vegetation established in tricky areas, such as steep slopes. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Erosion and many bare dirt areas on steep side slopes will require a Level 2 Inspection and repair by a qualified contractor.

PW Pond Area and Embankments

Examine both interior and exterior pond banks as well as the pond body. Observe from the inlet pipes to the outfall structure and emergency overflow.

Problem (Check if Present)		Follow-Up Actions
	☐ The riser structure is clogged with trash, debris, sediment, vegetation, etc., OR is open, unlocked, or has a steep drop and poses a safety concern. The pond level may have dropped below its "normal" level.	☐ If you can safely access the riser on foot or with a small boat, clear minor amounts of debris and remove it from the pond area for safe disposal. ☐ Other: ☐ Kick-Out to Level 2 Inspection: The riser cannot be accessed safely, the amount of debris is substantial, or the riser seems to be completely clogged and the water level has risen too high. ☐ There are safety issues with the riser and concern about access to pipes, drops, or any other life safety concern. ☐ The riser is leaning, broken, settling or slumping, corroded, eroded or any other structural problem.
	☐ The dam/embankment is slumping, sinking, settling, eroding, or has medium or large trees growing on it.	☐ If there are small isolated areas, try to fix them by adding clean material (clay and topsoil) and seeding and mulching. ☐ Periodically mow embankments to enable inspection of the banks and to minimize establishment of woody vegetation. ☐ Remove any woody vegetation that has already established on embankments. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Most of these situations will require a Level 2 Inspection or evaluation and repair by a qualified contractor. Seepage through the dam or problems with the pipe through the dam can be a serious issue that should be addressed to avoid possible dam failure.

PW Pond Area and Embankments

Examine both interior and exterior pond banks as well as the pond body. Observe from the inlet pipes to the outfall structure and emergency overflow.

Problem (Check if Present)		Follow-Up Actions
	☐ The emergency spillway or outfall (if it exists) has ☐ Erosion, settlement, or loss of material. Rock-lined spillways have excessive debris or vegetation.	☐ Clear light debris and vegetation. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Displacement of rock lining, excessive vegetation and erosion/settlement may warrant review and decision by Level 2 Inspector to check against original plan. ☐ Any uncertainty about the integrity of the emergency spillway should be referred to a Level 2 Inspector. ☐ Erosion or settlement such that design has been compromised should be reviewed by an engineer.

PW Pond Outlet

Examine the outlet of the pipe on the downstream side of the dam/embankment where it empties into a stream, channel, or drainage system.

Problem (Check if Present)	Follow-Up Actions
 ☐ The pond outlet is clogged with sediment, trash, debris, vegetation, or is eroding, caving in, slumping, or falling apart.	☐ If there is a minor blockage, remove the debris or vegetation to allow free flow of water. ☐ Remove any accumulated trash at the outlet. ☐ Outlet: ☐ Kick-Out to Level 2 Inspection: ☐ If the area at the outlet cannot be easily accessed or if the blockage is substantial, a Level 2 Inspection is warranted. ☐ Erosion at and downstream of the outfall should be evaluated by a qualified professional. ☐ Any structural problems, such as broken pipes, structures falling into the stream, or holes or tunnels around the outfall pipe, should be evaluated by a Level 2 Inspector and will require repair by a qualified contractor. ☐ The pool of water at the outlet pipe is discolored, has an odor, or has excessive algae or vegetative growth.

Additional Notes:

Inspector:_____ Date: _____

Complete the following if follow-up/corrective actions were identified during this inspection:

Certified Completion of Follow-Up Actions:

"I hereby certify that the follow-up/corrective actions identified in the inspection performed on _____ (DATE) have been completed and any required maintenance deficiencies have been adequately corrected."

Inspector/Operator: _____ Date: _____

Pond and Wetland Stormwater Management Practices Level 2 Inspection Checklist

SMP ID #		**SMP Owner**		☐ Private ☐ Public
SMP Location (Address; Latitude & Longitude)				
	Latitude		**Longitude**	

Party Responsible for Maintenance	**System Type**		**Type of Site**
☐ Same as SMP Owner ☐ Other _____	☐ Seasonal ☐ Continuous Use ☐ Other	☐ Above Ground ☐ Below Ground	☐ Commercial ☐ Industrial ☐ Residential ☐ State

Inspection Date		**Inspection Time**	
Inspector			
Date of Last Inspection			

Level 2 Inspection: PONDS and WETLANDS	
Recommended Repairs and Required Skills	**Triggers for Level 3 Inspection**
Observed Condition: Bare Soil or Erosion in the Drainage Area	
☐ Condition 1: Extensive problem spots, but no channels or rills forming Reseed problem areas. If problem persists or grass does not take, consider hiring a landscape contractor. ☐ Condition 2: Problem is extensive, and rills/channels are beginning to form May be necessary to divert or redirect water that is causing the erosion problem. If it appears that simple regrading—such as installing a berm or leveling a low spot–will fix the problem, make repairs and ensure that the problem is repaired after the next storm.	• Large rills or gullies are forming in the drainage area. • An attempt to regrade the drainage area has been unsuccessful. • Fixing the problem would require major regrading (i.e., redirecting more than a 100-square-foot area. • It is not clear why the problem is occurring. ☐ Level 3 inspection necessary
Observed Condition: Manholes or Inlet Pipe Buried or Covered with Vegetation	
☐ Condition 1: Nearest manhole and inlet pipe not found Consult as-built drawings to get to closest suspected location and use metal detector to search for metal manhole cover. If unsuccessful, identify nearest drain inlets and approximate pipe direction to locate next manhole. ☐ Condition 2: Manhole located and inspected Never enter a manhole, except by following confined-space entry protocols. If outlet pipe is not visible or greater than 25% full of sediment/debris or trash, it will typically require a qualified contractor to flush, clean and clear blockages. ☐ Condition 3: Inlet pipe not found at pond Clear vegetation and brush that may be covering the inlet pipe. Buried inlet pipes may be found through use of a metal probe. ☐ Condition 4: Inlet pipe buried in sediment or blocked by vegetation Once located, the pipe path can be cleared of vegetation with brush hook or other brush tools. Light digging may clear sediment from the end of the pipe.	• To locate buried manholes and lost storm lines, it is sometimes necessary to hire a pipeline inspection contractor with televising equipment or ground-penetrating radar and enter at the closest upstream access point. • Locating a buried inlet pipe may require wading in the edge of the pond and using a metal probe and brush axe to find and expose the pipe. • If other than light digging is necessary to remove accumulated sediment, a contractor with heavy equipment may be required. ☐ Level 3 inspection necessary

Level 2 Inspection: PONDS and WETLANDS	
Recommended Repairs and Required Skills	**Triggers for Level 3 Inspection**
Observed Condition: Pipe or Headwall Settlement, Erosion, Corrosion or Failure	
☐ Condition 1: Pipe or headwall settlement or failure Severe sinkholes, settlement or corrosion should be kicked out to Level 3 Inspection. ☐ Condition 2: Flow not confined to pipe and visible outside pipe wall With flashlight, observe the inside of the pipe and note its condition. Take photographs. Look for sinkholes developing that indicate pipe failure beneath the surface. Kick out to Level 3 inspection.	• Where blockages are visible, a decision is needed on whether to clear them or leave in place. If a third of the pipe is full of sediment, it should be removed by a contractor with pipe-cleaning equipment. • Corrosion of inlet pipes that allows flow around the pipe exterior is a structural concern because it can lead to settlement, sinkholes and undermining pond embankment. Evidence of this type of failure may require specialized pipe-inspection equipment and investigation by an engineer. ☐ Level 3 inspection necessary
Observed Condition: Pond Conditions	
☐ Condition 1: Pond pre-treatment zone is full of sediment or not constructed as shown on as-built drawings. ☐ Condition 2: Excessive buildup of sediment or overgrowth If the pre-treatment area or pond pool is overgrown or filled with sediment so that the original design is compromised, corrective measures are required. If plants have died, then replanting is necessary. If none of the original design exists due to alteration or sediment, kick out to Level 3 inspection.	• It may require inspection by an engineer to determine next steps for clearing, replanting or reconstruction. • Erosion or settlement such that design has been compromised should be reviewed by an engineer. Recurring erosion may require redesign and/or regrading to direct flow away from eroding area. • If sediment has filled more than 50% of the pond's capacity, dredging is likely needed and should be evaluated by a qualified contractor. • Removal or control of excessive algae or aquatic plants can be assessed by a qualified pond maintenance company. ☐ Level 3 inspection necessary

Notes:

Inspector:_____ Date: _____

Complete the following if follow-up/corrective actions were identified during this inspection:

Certified Completion of Follow-Up Actions:

"I hereby certify that the follow-up/corrective actions identified in the inspection performed on _____ (DATE) have been completed and any required maintenance deficiencies have been adequately corrected."

Inspector/Operator: _____ Date: _____

Infiltration Stormwater Management Practices Level 1 Inspection Checklist

SMP ID #		**SMP Owner**		☐ Private ☐ Public
SMP Location (Address; Latitude & Longitude)				
	Latitude		**Longitude**	
Party Responsible for Maintenance	**System Type**		**Type of Site**	
☐ Same as SMP Owner ☐ Other _____	☐ Seasonal ☐ Continuous Use ☐ Other	☐ Above Ground ☐ Below Ground	☐ Commercial ☐ Industrial ☐ Residential ☐ State	
Inspection Date		**Inspection Time**		
Inspector				
Date of Last Inspection				

IN Drainage Area		
Look for both pervious and impervious areas that are uphill from the Infiltration cell.		
Problem (Check if Present)		**Follow-Up Actions**
	☐ Bare soil, erosion of the ground (rills washing out the dirt)	☐ Seed and straw areas of bare soil to establish vegetation. ☐ Fill in erosion areas with soil, compact, and seed and straw to get vegetation established. ☐ If a rill or small channel is forming, try to redirect water flowing to this area by creating a small berm or adding topsoil to areas that are heavily compacted. ☐ Other:

IN Drainage Area

Look for both pervious and impervious areas that are uphill from the Infiltration cell.

Problem (Check if Present)		Follow-Up Actions
		☐ Kick-Out to Level 2 Inspection: Large areas of soil have been eroded, or larger channels are forming. May require rerouting of flow paths.
☐ For Dry Wells: Leaves, sticks, or other debris in gutters and downspouts		☐ Remove all debris by hand. ☐ Other:
	☐ Piles of grass clippings, mulch, dirt, salt, or other materials	☐ Remove or cover piles of grass clippings, mulch, dirt, etc. ☐ Other:
	☐ Open containers of oil, grease, paint, or other substances	☐ Cover or properly dispose of materials; consult your local solid waste authority for guidance on materials that may be toxic or hazardous. ☐ Other:

IN Inlets

Look for all the places where water flows into the Infiltration practice.

Problem (Check if Present)	Follow-Up Actions
	☐ Use a flat shovel to remove grit and debris (especially at curb inlets or openings). Parking lots generate fine grit that will accumulate at these spots. ☐ Pull out clumps of growing grass or weeds and scoop out the soil or grit that the plants are growing in. ☐ Remove any grass clippings, leaves, sticks, and other debris that is collecting at inlets. ☐ For pipes and ditches, remove sediment and debris that is partially blocking the pipe or ditch opening where it enters the Infiltration practice. ☐ Dispose of all material properly in an area where it will not re-enter the practice. ☐ Other:
☐ Inlets are collecting grit and debris or grass/weeds are growing. Some water may not be getting into the Infiltration practice.	☐ Kick-Out to Level 2 Inspection: Inlets are blocked to the extent that most of the water does not seem to be entering the Infiltration practice.
☐ Some or all of the inlets are eroding so that rills, gullies, and other erosion is present, or there is bare dirt that is washing into the Infiltration practice.	☐ For small areas of erosion, smooth out the eroded part and apply rock or stone (e.g., river cobble) to prevent further erosion. Usually, filter fabric is placed under the rock or stone. ☐ In some cases, reseeding and applying erosion-control matting can be used to prevent further erosion. Some of these materials may be available at a garden center, but it may be best to consult a landscape contractor. ☐ Other:
	☐ Kick-Out to Level 2 Inspection: Erosion is occurring at most of the inlets and it looks like there is too much water that is concentrating at these points. The inlet design may have to be modified.

IN Infiltration Area

Examine the surface of the infiltration area and the observation well. Note: The following Problem and Follow-Up Actions apply to infiltration practice pretreatment areas also.

Problem (Check if Present)	Follow-Up Actions
 ☐ For grass-covered Infiltration practices: grass has grown very tall, *Photo credit: Stormwater Maintenance, LLC*	☐ Mow infiltration area at least twice per year. ☐ Other:
 ☐ For grass-covered Infiltration practices: sparse vegetation cover or bare spots	☐ Add topsoil (as needed), grass seed, straw, and water during the growing season to re-establish consistent grass coverage. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Sparse vegetation cover can be a sign that the infiltration area is not infiltrating at the proper rate and water is standing too long after a storm. The surface may be saturated or squishy, and the conditions do not enable grass to grow. This situation should be evaluated by a Level 2 Inspection and likely corrected by a qualified contractor.
☐ Minor areas of sediment, grit, trash, or other debris are accumulating on the surface.	☐ Use a shovel to scoop out minor areas of sediment or grit, especially in the spring after winter sanding materials may wash in and accumulate. Dispose of the material where it cannot re-enter the Infiltration practice. ☐ If removing the material creates a hole or low area, rake the surface smooth and level. ☐ Remove trash, debris, and other undesirable materials. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Sediment has accumulated more than 2-inches deep and covers 25% or more of the surface of the Infiltration area.

IN Infiltration Area

Examine the surface of the infiltration area and the observation well. Note: The following Problem and Follow-Up Actions apply to infiltration practice pretreatment areas also.

Problem (Check if Present)	Follow-Up Actions
 ☐ There is erosion on the surface; water seems to be carving out rills as it flows across the surface of the Infiltration area or sinkholes are forming in certain areas.	☐ For minor areas of erosion, try filling the eroded areas with clean topsoil, sand, or stone (whatever the existing cover is). ☐ If the problem recurs, you may have to use larger stone (e.g., river cobble) to fill in problem areas. ☐ Other: ☐ Kick-Out to Level 2 Inspection: The problem persists or the erosion is more than 3-inches deep and seems to be an issue with how water enters and moves through the infiltration area. ☐ Kick-Out to Level 2 Inspection: The problem does not seem to be caused by flowing water but a collapse or sinking of the surface (e.g., "sinkhole") due to some underground problem.
 ☐ Observation well is damaged or cap is missing	☐ Kick-Out to Level 2 Inspection: Requires replacing pipes or caps.

IN Infiltration Area

Examine the surface of the infiltration area and the observation well. Note: The following Problem and Follow-Up Actions apply to infiltration practice pretreatment areas also.

Problem (Check if Present)	Follow-Up Actions
 ☐ Water still visible in the observation well more than 72 hours after a rain storm. The Infiltration practice does not appear to be draining properly.	☐ Kick-Out to Level 2 Inspection: This is generally a serious problem, and it will be necessary to activate a Level 2 Inspection.

IN Outlets

Locate and inspect all outlets.

Problem (Check if Present)	Follow-Up Actions
 ☐ Outlet obstructed with sediment, debris, trash, etc.	☐ Remove the debris and dispose of it where it cannot re-enter the infiltration area. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Outlet is completely obstructed; there is too much material to remove by hand or with simple hand tools.
☐ Rills or gullies are forming at outlet.	☐ For minor rills, fill in with soil, compact, and seed and straw to establish vegetation. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Rills are more than 2" to 3" deep and require more than just hand raking and re-seeding.

Additional Notes:

Inspector:_____ Date: _____

Complete the following if follow-up/corrective actions were identified during this inspection:

Certified Completion of Follow-Up Actions:

"I hereby certify that the follow-up/corrective actions identified in the inspection performed on _____ (DATE) have been completed and any required maintenance deficiencies have been adequately corrected."

Inspector/Operator: _____ Date: _____

Infiltration Stormwater Management Practices Level 2 Inspection Checklist

SMP ID #		**SMP Owner**		☐ Private ☐ Public
SMP Location (Address; Latitude & Longitude)				
	Latitude		**Longitude**	
Party Responsible for Maintenance	**System Type**		**Type of Site**	
☐ Same as SMP Owner ☐ Other _____	☐ Seasonal ☐ Continuous Use ☐ Other	☐ Above Ground ☐ Below Ground	☐ Commercial ☐ Industrial ☐ Residential ☐ State	
Inspection Date		**Inspection Time**		
Inspector				
Date of Last Inspection				

Level 2 Inspection: INFILTRATION

Recommended Repairs	Triggers for Level 3 Inspection
Observed Condition: Water Stands on Surface for More than 72 Hours after Storm	
☐ Condition 1: Small pockets of standing water For infiltration basins with soil, use a soil probe or auger to examine the soil profile. For gravel infiltration trenches or basins, use a shovel to dig into the gravel layer where the problem is occurring. If isolated areas have accumulated grit, fine silt, or vegetative debris or have bad soil or clogged gravel, try removing and replacing with clean material. If the practice is supposed to have grass cover, it will likely be necessary to replant once the problem is resolved. ☐ Condition 2: Standing water is widespread or covers entire surface Look in the observation well (if it exists) and use a tape measure to estimate the depth of water standing in the soil or gravel. Requires diagnosis and resolution of problem: • Too much sediment/grit washing in from drainage area? • Too much ponding depth? • Improper infiltration media? • Underlying soil not suitable for infiltration? As above, the resolution will likely require replanting and re-establishment of good grass cover if this is part of the design.	• Infiltration media is clogged and problem cannot be diagnosed from Level 2 inspection. • Level 2 inspection identifies problem, but it cannot be resolved easily or it is associated with the original design of the practice. ☐ Level 3 Inspection necessary
Observed Condition: Severe erosion of infiltration bed, inlets, or around outlets	
☐ Condition 1: Erosion at inlets The lining (e.g., grass, matting, stone, rock) may not be adequate for the actual flow velocities coming through the inlets. First line of defense is to try a less erosive lining and/or extending the lining further down to where inlet slopes meet the infiltration surface. If problem persists, analysis by a Qualified Professional is warranted. ☐ Condition 2: Erosion of infiltration bed This is often caused by "preferential flow paths" along the surface. The source of flow should be analyzed and methods employed to dissipate energy and disperse the flow (e.g., check dams, rock splash pads).	• Erosion (rills, gullies) is more than 12 inches deep • The issue is not caused by moving water but some sort of subsurface defect, which may manifest as a sinkhole or linear depression and be associated with problems with the underlying stone or soil. ☐ Level 3 Inspection necessary

Notes:

Inspector:_____ Date: _____

Complete the following if follow-up/corrective actions were identified during this inspection:

Certified Completion of Follow-Up Actions:

"I hereby certify that the follow-up/corrective actions identified in the inspection performed on _____ (DATE) have been completed and any required maintenance deficiencies have been adequately corrected."

Inspector/Operator: _____ Date: _____

Sand and Organic Filter Stormwater Management Practices Level 1 Inspection Checklist

SMP ID #		**SMP Owner**		☐ Private ☐ Public
SMP Location (Address; Latitude & Longitude)				
	Latitude		**Longitude**	

Party Responsible for Maintenance	**System Type**		**Type of Site**
☐ Same as SMP Owner ☐ Other _____	☐ Seasonal ☐ Continuous Use ☐ Other	☐ Above Ground ☐ Below Ground	☐ Commercial ☐ Industrial ☐ Residential ☐ State

Inspection Date		**Inspection Time**	
Inspector			
Date of Last Inspection			

SF Drainage Area

Look for both pervious and impervious areas that are uphill from the filter.

Problem (Check if Present)	Follow-Up Actions
☐ Bare soil, erosion of the ground (rills washing out the dirt; reference below)	☐ Seed and straw areas of bare soil to get vegetation established. ☐ Fill in erosion areas with soil, compact, and seed and straw to establish vegetation. ☐ If a rill or small channel is forming, try to redirect water flowing to this area by creating a small berm or adding topsoil to areas that are heavily compacted. ☐ Other:

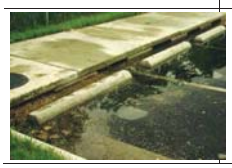
SF Drainage Area

Look for both pervious and impervious areas that are uphill from the filter.

Problem (Check if Present)	Follow-Up Actions
 ☐ Bare soil, erosion of the ground (rills washing out the dirt)	☐ Kick-Out to Level 2 Inspection: Large areas of soil have been eroded, or larger channels are forming. May require rerouting of flow paths.
 ☐ Piles of grass clippings, mulch, dirt, salt, or other materials	☐ Remove or cover piles of grass clippings, mulch, dirt, etc. ☐ Other:
 ☐ Open containers of oil, grease, paint, or other substances	☐ Cover or properly dispose of materials; consult your local solid waste authority for guidance on materials that may be toxic or hazardous. ☐ Other:

SF Inlets

Look for all the places where water flows into the filter practice.

Problem (Check if Present)	Follow-Up Actions
 ☐ Inlets are collecting grit and debris or grass/weeds growing. Some water may not be getting into the filter practice.	☐ Use a flat shovel to remove grit and debris (especially at curb inlets or openings). Parking lots generate fine grit that accumulates at these spots. ☐ Pull out clumps of growing grass or weeds and scoop out the soil or grit that the plants are growing in. ☐ Remove any grass clippings, leaves, sticks, and other debris that is collecting at inlets. ☐ For pipes and ditches, remove sediment and debris that is partially blocking the pipe or ditch opening where it enters the Filter practice. ☐ Dispose of all material properly in an area where it will not re-enter the practice. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Inlets are blocked to the extent that most of the water does not seem to be entering the filter practice.
 ☐ Some or all of the inlets are eroding so that rills, gullies, and other erosion are present, or there is dirt washing into the filter practice.	☐ For small areas of erosion, smooth out the eroded part and apply rock or stone (e.g., river cobble) to prevent further erosion. Usually, filter fabric is placed under the rock or stone. ☐ In some cases, reseeding and applying erosion-control matting can be used to prevent further erosion. Some of these materials may be available at a garden center, but it may be best to consult a landscape contractor. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Erosion is occurring at most of the inlets and it looks like there is too much water concentrating at these points. The inlet design may have to be modified.
 ☐ For an underground filter, water is ponding and doesn't seem to be getting through the filter.	☐ Kick-Out to Level 2 Inspection: This is generally a more serious problem and should be referred for a Level 2 Inspection because it will require opening up the filter vault to check for clogging.

SF Filter Area (for Surface Sand Filters)	
Examine the surface of the filter and the observation well, if present.	
Problem (Check if Present)	**Follow-Up Actions**
 ☐ Filter has grass and vegetation growing on more than 25% of the filter bed, threatening to clog the filter.	☐ Vegetation growing in the filter bed should be removed either manually or with a water-safe herbicide (e.g., glysophate without surfactants). ☐ Other: ☐ Kick-Out to Level 2 Inspection: The filter seems clogged, or vegetation and weeds have proliferated past the point where the Level 1 person can manage it.
☐ Minor amounts of sediment, grit, trash, or other debris are accumulating on the surface.	☐ Use a shovel to scoop out minor amounts of sediment or grit, especially in the spring after winter sanding materials wash in and accumulate. Dispose of the material where it cannot re-enter the filter. ☐ If removing the material creates a hole or low area, rake the surface smooth and level. ☐ Remove trash, debris, and other undesirable materials. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Sediment (other than sand) has accumulated more than 2-inches deep and covers 25% or more of the surface of the filter area.
 ☐ There is erosion on the surface; water seems to be carving out rills as it flows across the filter surface, or sinkholes are forming in certain areas.	☐ For minor areas of erosion, try filling the eroded areas with clean, coarse construction sand. ☐ Other: ☐ Kick-Out to Level 2 Inspection: The problem persists or the erosion is more than 3-inches deep and seems to be an issue with how water enters and moves through the filter area. ☐ Kick-Out to Level 2 Inspection: The problem does not seem to be caused by flowing water but by a collapse or sinking of the surface (e.g., "sinkhole") due to some underground problem.

SF Filter Area (for Surface Sand Filters)	
Examine the surface of the filter and the observation well, if present.	
Problem (Check if Present)	**Follow-Up Actions**
 ☐ Water is still visible on the surface and/or the standpipe (if present) more than 72 hours after a rainstorm. The filter practice drains very slowly or is completely clogged.	☐ Kick-Out to Level 2 Inspection: This is generally a serious problem, and it will be necessary to activate a Level 2 Inspection.

Additional Notes:

Inspector:_____ Date: _____

Complete the following if follow-up/corrective actions were identified during this inspection:

Certified Completion of Follow-Up Actions:

"I hereby certify that the follow-up/corrective actions identified in the inspection performed on _____ (DATE) have been completed and any required maintenance deficiencies have been adequately corrected."

Inspector/Operator: _____ Date: _____

Sand and Organic Filter Stormwater Management Practices Level 2 Inspection Checklist

SMP ID #		**SMP Owner**		☐ Private ☐ Public
SMP Location (Address; Latitude & Longitude)				
	Latitude		**Longitude**	
Party Responsible for Maintenance	**System Type**		**Type of Site**	
☐ Same as SMP Owner ☐ Other _____	☐ Seasonal ☐ Continuous Use ☐ Other	☐ Above Ground ☐ Below Ground	☐ Commercial ☐ Industrial ☐ Residential ☐ State	
Inspection Date		**Inspection Time**		
Inspector				
Date of Last Inspection				

Table 3.12.1 Level 2 Inspection: SAND AND ORGANIC FILTERS	
Recommended Repairs	**Triggers for Level 3 Inspection**
Observed Condition: Water Stands on Surface for More than 72 Hours after Storm	
☐ Condition 1: Small pockets of standing water Use a soil probe or auger to examine the sand or filter profile. If isolated areas have accumulated grit, fine silt, vegetative debris, oily sludge or bad sand media, try scraping off top 3 inches of media and replacing with clean, coarse construction sand. ☐ Condition 2: Standing water is widespread or covers entire surface Look in the underdrain cleanout (if present) and use a tape measure to estimate the depth of water standing in the sand layer. Requires diagnosis and resolution of problem: • Clogged underdrain • Filter fabric between the sand layer and underdrain gravel OR on top of the sand filter layer (usually held in place by a thin layer of gravel) • Too much sediment/grit/vegetative debris/oily sludge washing in from drainage area • Too much ponding depth • Improper sand media	• Sand or organic media is clogged, but problem was not evident from Level 2 inspection. • Level 2 inspection identifies problem, but it cannot be resolved easily or is associated with the original design of the practice. • The problem seems to be filter fabric placement, but this is specified in the original design. • The entire filter media layer or filter cartridges need to be replaced. • The problem is associated with improper configuration of underdrain pipes or outlet structures. ☐ Level 3 Inspection necessary

Notes:

Inspector:_____ Date: _____

Complete the following if follow-up/corrective actions were identified during this inspection:

Certified Completion of Follow-Up Actions:

"I hereby certify that the follow-up/corrective actions identified in the inspection performed on _____ (DATE) have been completed and any required maintenance deficiencies have been adequately corrected."

Inspector/Operator: _____ Date: _____

Bioretention Stormwater Management Practices Level 1 Inspection Checklist

SMP ID #		**SMP Owner**		☐ Private ☐ Public
SMP Location (Address; Latitude & Longitude)				
	Latitude		**Longitude**	
Party Responsible for Maintenance	**System Type**		**Type of Site**	
☐ Same as SMP Owner ☐ Other _____	☐ Seasonal ☐ Continuous Use ☐ Other	☐ Above Ground ☐ Below Ground	☐ Commercial ☐ Industrial ☐ Residential ☐ State	
Inspection Date		**Inspection Time**		
Inspector				
Date of Last Inspection				

BR Drainage Area

Look for areas that are uphill from the Bioretention cell.

Problem (Check if Present)	Follow-Up Actions
 ☐ Bare soil, erosion of the ground (rills washing out the dirt)	☐ Seed and mulch areas of bare soil to establish vegetation. ☐ Fill in erosion areas with soil, compact, and seed and straw to establish vegetation. ☐ If a rill or small channel is forming, try to redirect water flowing to this area by creating a small berm or adding topsoil to areas that are heavily compacted. ☐ Other:

BR Drainage Area

Look for areas that are uphill from the Bioretention cell.

Problem (Check if Present)	Follow-Up Actions
	☐ Kick-Out to Level 2 Inspection: Large areas of soil have been eroded, or larger channels are forming. May require rerouting of flow paths.
 ☐ Piles of grass clippings, mulch, dirt, salt, or other materials	☐ Remove or cover piles of grass clippings, mulch, dirt, etc. ☐ Other:
 ☐ Open containers of oil, grease, paint, or other substances	☐ Cover or properly dispose of materials; consult your local solid waste authority for guidance on materials that may be toxic or hazardous. ☐ Other:

BR Inlets

Stand in the Bioretention cell itself and look for all the places where water flows in. Often there will be multiple points of inflow to the practice.

Problem (Check if Present)	Follow-Up Actions
 ☐ Inlets collect grit and debris or grass/weeds. Some water may not be getting into the Bioretention cell. The objective is to have a clear pathway for water to flow into the cell.	☐ Use a flat shovel to remove grit and debris (especially at curb inlets or openings). Parking lots generate fine grit that will accumulate at these spots. ☐ Pull out clumps of growing grass or weeds and scoop out the soil or grit that the plants are growing in. ☐ Remove any grass clippings, leaves, sticks, and other debris that is collecting at inlets. ☐ For pipes and ditches, remove sediment and debris that is partially blocking the pipe or ditch opening where it enters the Bioretention cell. ☐ Dispose of all material properly where it will not re-enter the Bioretention cell. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Inlets are blocked to the extent that most of the water does not seem to be entering the Bioretention cell.
 ☐ Some or all of the inlets are eroding so that rills, gullies, and other erosion is present, or there is bare dirt that is washing into the Bioretention cell.	☐ For small areas of erosion, smooth out the eroded part and apply rock or stone (e.g., river cobble) to prevent further erosion. Usually, filter fabric is placed under the rock or stone. ☐ In some cases, reseeding and applying erosion-control matting can be used to prevent further erosion. Some of these materials may be available at a garden center, but it may be best to consult a landscape contractor. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Erosion is occurring at most of the inlets, and it looks like there is too much water that is concentrating at these points. The inlet design may have to be modified.

BR Ponding Area

Examine the entire Bioretention surface and side slopes

Problem (Check if Present)	Follow-Up Actions
 ☐ Mulch (if used) needs to be replaced or replenished. The mulch layer had decomposed or is less than 1-inch thick.	☐ Add new mulch to a total depth (including any existing mulch that is left) of 2 to 3 inches. The mulch should be shredded hardwood mulch that is less likely to float away during rainstorms. ☐ Avoid adding too much mulch so that inlets are obstructed or certain areas become higher than the rest of the Bioretention surface. ☐ Other:
 ☐ Minor areas of sediment, grit, trash, or other debris are accumulating on the bottom.	☐ Use a shovel to scoop out minor areas of sediment or grit, especially in the spring after winter sanding materials may wash in and accumulate. Dispose of the material where it cannot re-enter the Bioretention cell . ☐ If removing the material creates a hole or low area, fill with soil mix that matches original mix and cover with mulch so that the Bioretention surface area is as flat as possible. ☐ Remove trash, vegetative debris, and other undesirable materials. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Sediment has accumulated more than 2-inches deep and covers 25% or more of the Bioretention surface. ☐ Kick-Out to Level 2 Inspection: The Bioretention cell is too densely vegetated to assess sediment accumulation or ponding; see BR-4, Vegetation.

BR Ponding Area

Examine the entire Bioretention surface and side slopes

Problem (Check if Present)	Follow-Up Actions
 ☐ There is erosion in the bottom or on the side slopes. Water seems to be carving out rills as it flows across the Bioretention surface or on the slopes, or sinkholes are forming in certain areas. ☐ Source: Stormwater Maintenance, LLC.	☐ Try filling the eroded areas with clean topsoil or sand, and cover with mulch. ☐ If the problem recurs, you may have to use stone (e.g., river cobble) to fill in problem areas. ☐ If the erosion is on a side slope, fill with clay that can be compacted and seed and mulch the area. ☐ Other: ☐ Kick-Out to Level 2 Inspection: The problem persists or the erosion is more than 3-inches deep and seems to be an issue with how water enters and moves through the Bioretention cell. ☐ Kick-Out to Level 2 Inspection: The problem does not seem to be caused by flowing water, but a collapse or sinking of the surface (e.g., "sinkhole") due to some underground problem.
 ☐ The bottom of the Bioretention cell is not flat, and the water pools at one end, along an edge, or in certain pockets. The whole bottom is not uniformly covered with water. See design plan to verify that bioretention surface is intended to be flat. Check during or immediately after a rainstorm.	☐ If the problem is minor (just small, isolated areas are not covered with water), try raking the surface OR adding mulch to low spots to create a more level surface. You may need to remove and replace plantings in order to properly even off the surface. ☐ Check the surface with a string and bubble level to get the surface as flat as possible. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Ponding water is isolated to less than half of the Bioretention surface area, and there seem to be elevation differences of more than a couple of inches across the surface.

BR Ponding Area

Examine the entire Bioretention surface and side slopes

Problem (Check if Present)	Follow-Up Actions
 ☐ Water stands on the surface more than 72 hours after a rainstorm and /or wetland-type vegetation is present. The Bioretention cell does not appear to be draining properly.	☐ Kick-Out to Level 2 Inspection: This is generally a serious problem, and it will be necessary to activate a Level 2 Inspection.

BR Vegetation

Examine all Bioretention cell vegetation.

Problem (Check if Present)	Follow-Up Actions
 ☐ Vegetation requires regular maintenance—pulling weeds, removing dead and diseased plants, replacing mulch around plants, adding plants to fill in areas that are not well vegetated, etc.	☐ If you can identify which plants are weeds or not intended to be part of the planting plan, eliminate these, preferably by hand pulling. ☐ If weeds are widespread, check with the local stormwater authority and/or Extension Office about proper use of herbicides for areas connected with the flow of water. ☐ Even vegetation that is intended to be present can become large, overgrown, and/or crowd out surrounding plants. Prune and thin accordingly. ☐ If weeds or invasive plants have overtaken the whole Bioretention cell , bush-hog the entire area before seedheads form in the spring. It will be necessary to remove the root mat manually or with appropriate herbicides, as noted above. ☐ Re-plant with species that are aesthetically pleasing and seem to be doing well in the Bioretention cell. ☐ Other: ☐ Kick-Out to Level 2 Inspection: You are unsure of the original planting design, or the vegetation maintenance task is beyond your capabilities of time, expertise, or resources. If you are unsure of the health of the vegetation (e.g. salt damage, invasives, which plants are undesirable) or the appropriate season to conduct vegetation management, consult a landscape professional before undertaking any cutting, pruning, mowing, or brush hogging.

BR Vegetation

Examine all Bioretention cell vegetation.

Problem (Check if Present)	Follow-Up Actions
 ☐ Vegetation is too thin, is not healthy, and there are many spots that are not well vegetated.	☐ The original plants are likely not suited for the actual conditions within the Bioretention cell . If you are knowledgeable about plants, select and plant more appropriate vegetation (preferably native plants) so that almost the entire surface area will be covered by the end of the second growing season. ☐ Other: ☐ Kick-Out to Level 2 Inspection: For all but small practices (e.g., rain gardens), this task will likely require a landscape design professional or horticulturalist.

BR Outlets

Examine outlets that release water out of the Bioretention cell.

Problem (Check if Present)	Follow-Up Actions
☐ Erosion at outlet	☐ Add stone to reduce the impact from the water flowing out of the outlet pipe or weir during storms. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Rills have formed and erosion problem becomes more severe.
 ☐ Outlet obstructed with mulch, sediment, debris, trash, etc.	☐ Remove the debris and dispose of it where it cannot re-enter the Bioretention cell . ☐ Other: ☐ Kick-Out to Level 2 Inspection: Outlet is completely clogged or obstructed; there is too much material to remove by hand or with simple hand tools.

Additional Notes:

Inspector:_____ Date: _____

Complete the following if follow-up/corrective actions were identified during this inspection:

Certified Completion of Follow-Up Actions:

"I hereby certify that the follow-up/corrective actions identified in the inspection performed on _____ (DATE) have been completed and any required maintenance deficiencies have been adequately corrected."

Inspector/Operator: _____ Date: _____

Bioretention Stormwater Management Practices Level 2 Inspection Checklist

SMP ID #		**SMP Owner**		☐ Private ☐ Public
SMP Location (Address; Latitude & Longitude)				
	Latitude		**Longitude**	
Party Responsible for Maintenance	**System Type**		**Type of Site**	
☐ Same as SMP Owner ☐ Other _____	☐ Seasonal ☐ Continuous Use ☐ Other	☐ Above Ground ☐ Below Ground	☐ Commercial ☐ Industrial ☐ Residential ☐ State	
Inspection Date		**Inspection Time**		
Inspector				
Date of Last Inspection				

Level 2 Inspection: BIORETENTION
NOTE: Key Source for this Information *(CSN, 2013)*

Recommended Repairs	Triggers for Level 3 Inspection
Observed Condition: Water Stands on Surface for More than 72 Hours after Storm	
☐ Condition 1: Small pockets of standing water Use a soil probe or auger to examine the soil profile. If isolated areas have accumulated grit, fines, or vegetative debris or have bad soil media, try scraping off top 3 inches of media and replacing with clean material. Also check to see that surface is level and water is not ponding selectively in certain areas.	• Soil media is clogged and problem is not evident from Level 2 inspection. • Level 2 inspection identifies problem, but it cannot be resolved easily or is associated with the original design of the practice.
☐ Condition 2: Standing water is widespread or covers entire surface Requires diagnosis and resolution of problem: • Clogged underdrain? • Filter fabric between soil media and underdrain stone? • Need to install underdrain if not present? • Too much sediment/grit washing in from drainage area? • Too much ponding depth? • Improper soil media?	☐ Level 3 inspection necessary
Observed Condition: Vegetation is sparse or out of control	
☐ Condition 1: Original design planting plan seems good but has not been maintained, so there are many invasives and/or dead plants Will require some horticultural experience to restore vegetation to intended condition by weeding, pruning, removing plants, and adding new plants.	• Vegetation deviates significantly from original planting plan; Bioretention has been neglected and suffered from deferred maintenance. • Owner/responsible party does not know how to maintain the practice.
☐ Condition 2: Original design planting plan is unknown or cannot be actualized A landscape architect or horticulturalist will be needed to redo the planting plan. Will likely require analysis of soil pH, moisture, organic content, sun/shade, and other conditions to make sure plants match conditions. Plan should include invasive plant management and maintenance plan to include mulching, watering, disease intervention, periodic thinning/pruning, etc.	☐ Level 3 inspection necessary
Observed Condition: Bioretention does not conform to original design plan in surface area or storage	
☐ Condition 1: Level 2 Inspection reveals that practice is too small based on design dimension, does not have adequate storage (e.g., ponding depth) based on the plan, and/or does not treat the drainage area runoff as indicated on the plan Small areas of deviation can be corrected by the property owner or responsible party, but it is likely that a Qualified Professional will have to revisit the design and attempt a redesign that meets original objectives or that can be resubmitted to the municipality for approval.	• More than a 25% departure from the approved plan in surface area, storage, or drainage area; sometimes less than this threshold at the discretion of the Level 2 inspector. ☐ Level 3 inspection necessary

Level 2 Inspection: BIORETENTION NOTE: Key Source for this Information *(CSN, 2013)*	
Recommended Repairs	**Triggers for Level 3 Inspection**
Observed Condition: Severe erosion of filter bed, inlets, or around outlets	
☐ Condition 1: Erosion at inlets The lining (e.g., grass, matting, stone, rock) may not be adequate for the actual flow velocities coming through the inlets. First line of defense is to try a more non-erosive lining and/or to extend the lining further down to where inlet slopes meet the Bioretention surface. If problem persists, analysis by a Qualified Professional is warranted. ☐ Condition 2: Erosion of Bioretention filter bed This is often caused by "preferential flow paths" through and along the Bioretention surface. The source of flow should be analyzed and methods employed to dissipate energy and disperse the flow (e.g., check dams, rock splash pads). ☐ Condition 3: Erosion on side slopes Again, the issue is likely linked with unanticipated flow paths down the side slopes (probably overland flow that concentrates as it hits the edge of the slope). For small or isolated areas, try filling, compacting, and re-establishing healthy ground cover vegetation. If the problem is more widespread, further analysis is required to determine how to redirect the flow.	• Erosion (rills, gullies) is more than 12 inches deep at inlets or the filter bed or more than 3 inches deep on side slopes. • If the issue is not caused by moving water but some sort of subsurface defect. This may manifest as a sinkhole or linear depression and be associated with problems with the underdrain stone or pipe or underlying soil. ☐ Level 3 inspection necessary
Observed Condition: Significant sediment accumulation, indicating an uncontrolled source of sediment	
☐ Condition 1: Isolated areas of sediment accumulation, generally less than 3-inches deep Sediment source may be from a one-time or isolated event. Remove accumulated sediment and top 2 to 3 inches of Bioretention soil media; replace with clean material. Check drainage area for any ongoing sources of sediment. ☐ Condition 2: Majority of the surface is caked with "hard pan" (thin layer of clogging material) or accumulated sediment that is 3-inches deep or more This can be caused by an improper construction sequence (drainage area not fully stabilized prior to installation of Bioretention soil media) or another chronic source of sediment in the drainage area. Augering several holes down through the media can indicate how severe the problem is; often the damage is confined to the first several inches of soil media. Removing and replacing this top layer (or to the depth where sediment incursion is seen in auger holes) can be adequate, as long as the problem does not recur.	• More than 2 inches of accumulated sediment cover 25% or more of the Bioretention surface area. • "Hard pan" of thin, crusty layer covers majority of Bioretention surface area and seems to be impeding flow of water down through the soil media. • New sources of sediment seem to be accumulating with each significant rainfall event. ☐ Level 3 inspection necessary

Notes:

Inspector:_____ Date: _____

Complete the following if follow-up/corrective actions were identified during this inspection:

Certified Completion of Follow-Up Actions:

"I hereby certify that the follow-up/corrective actions identified in the inspection performed on _____ (DATE) have been completed and any required maintenance deficiencies have been adequately corrected."

Inspector/Operator: _____ Date: _____

Swale Stormwater Management Practices Level 1 Inspection Checklist

SMP ID #		**SMP Owner**		☐ Private ☐ Public
SMP Location (Address; Latitude & Longitude)				
	Latitude		**Longitude**	
Party Responsible for Maintenance	**System Type**		**Type of Site**	
☐ Same as SMP Owner ☐ Other _____	☐ Seasonal ☐ Continuous Use ☐ Other	☐ Above Ground ☐ Below Ground	☐ Commercial ☐ Industrial ☐ Residential ☐ State	
Inspection Date		**Inspection Time**		
Inspector				
Date of Last Inspection				

SW Drainage Area	
Look at areas that are uphill from the swale.	
Problem (Check if Present)	**Follow-Up Actions**
 ☐ Bare soil, erosion of the ground (rills washing out the dirt)	☐ Seed and mulch or sod areas of bare soil to establish vegetation. ☐ Fill in erosion areas with soil, compact, and add seed and straw to establish vegetation. ☐ If a rill or small channel is forming, try to redirect water flowing to this area by creating a small berm or adding topsoil to areas that are heavily compacted. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Large areas of soil have been eroded, or larger channels are forming. May require rerouting of flow paths
 ☐ Piles of grass clippings, mulch, dirt, salt, or other materials	☐ Remove or cover piles of grass clippings, mulch, dirt, etc. ☐ Other:
 ☐ Open containers of oil, grease, paint, or other substances	☐ Cover or properly dispose of materials; consult your local solid waste authority for guidance on materials that may be toxic or hazardous.
☐ Grass dying at edge of road	☐ Seed and mulch; add topsoil or compost if needed. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Grass on edge of pavement continues to die off for unknown reasons. Swale edge may need to be replaced with other materials (e.g., stone diaphragm).

SW Inlets

Stand in the swale and look for all the places where water flows in.

Problem (Check if Present)	Follow-Up Actions
☐ Inlets or the swale edge are collecting grit, grass clippings, or debris or have grass/weeds growing. Some water may not be getting into the swale. The objective is to have a clear pathway for water to flow into the swale.	☐ Use a flat shovel to remove grit and debris (especially at curb inlets or opening). Parking lots will generate fine grit that will accumulate at these spots. ☐ Pull out clumps of growing grass or weeds, and scoop out the soil or grit that the plants are growing in. ☐ Remove any grass clippings, leaves, sticks, and other debris that is collecting at inlets or along the edge of the swale where water is supposed to enter. ☐ For pipes and ditches, remove sediment and debris that is partially blocking the pipe or ditch opening where it enters the swale. ☐ Dispose of all material properly in an area where it will not re-enter the swale. ☐ Other:
	☐ Kick-Out to Level 2 Inspection: Inlets are blocked to the extent that most of the water does not seem to be entering the swale.
 ☐ Some or all of the inlets are eroding so that rills, gullies, and other erosion are present, or there is bare dirt that is washing into the swale.	☐ For small areas of erosion, smooth out the eroded part and apply rock or stone (e.g., river cobble) to prevent further erosion. Usually, filter fabric is placed under the rock or stone. ☐ In some cases, reseeding and applying an erosion control matting can be used to prevent further erosion. Some of these materials may be available at a garden center, but it may be best to consult a landscape contractor. ☐ Other:
	☐ Level 2 Inspection: Erosion is occurring at most of the inlets or along much of the swale edge. The inlet design may have to be modified.

SW Surface Area

Examine the entire swale surface and side slopes.

Problem (Check if Present)	Follow-Up Actions
☐ Minor areas of sediment, grit, trash, or other debris are accumulating in the swale.	☐ Use a shovel to scoop out minor areas of sediment or grit, especially in the spring after winter sanding materials may wash in and accumulate. Dispose of the material where it cannot re-enter the swale. ☐ If removing the material creates a hole or low area, fill with good topsoil and add seed and straw to re-vegetate. ☐ Remove trash, vegetative debris, and other undesirable materials. ☐ If the swale is densely vegetated, it may be difficult to do the maintenance; check for excessive ponding or other issues described in this section to see if the accumulated material is causing a problem. ☐ Other:
	☐ Kick-Out to Level 2 Inspection: Sediment has accumulated more than 3 inches deep and covers 25% or more of the swale surface. ☐ The source of sediment is unknown or cannot be controlled with simple measures.
 ☐ There is erosion in the bottom or on the side slopes. Water seems to be carving out rills as it flows through the swale or on the slopes.	☐ Try filling the eroded areas with clean topsoil, and then seed and mulch to establish vegetation. ☐ If the problem recurs, you may have to use some type of matting, stone (e.g., river cobble), or other material to fill in eroded areas. ☐ If the erosion is on a side slope, fill with soil and cover with erosion-control matting or at least straw mulch after re-seeding.
	☐ Kick-Out to Level 2 Inspection: The problem persists or the erosion is more than 3 inches deep and seems to be an issue with how water enters and moves through the swale. ☐ Kick-Out to Level 2 Inspection: The problem does not seem to be caused by flowing water, but a collapse or sinking of the surface (e.g., "sinkhole") due to some underground problem.
☐ Water does not flow evenly down the length of the swale, but ponds in certain areas for long periods of time (e.g., 72 hours after a storm). The swale does not seem to have "positive drainage." Check during or immediately after a rain storm.	☐ If the problem is minor (just small, isolated areas), try using a metal rake or other tools to create a more even flow path; remove excessive vegetative growth, sediment, or other debris that may be blocking the flow. ☐ Other:
	☐ Kick-Out to Level 2 Inspection: Water ponds in more than 25% of the swale for three days or more after a storm. The issue may be with the underlying soil or the grade of the swale. ☐ Water ponds behind check dams for three days or more after a storm. Check dams may be clogged or not functioning properly.

SW Surface Area

Examine the entire swale surface and side slopes.

Problem (Check if Present)	Follow-Up Actions
 ☐ Check dams (if present): water is flowing around the edges of check dams, creating erosion or sinkholes on the uphill or downhill side, or the check dams are breaking apart or breaching .	☐ If the problem is isolated to just a few check dams, try simple repairs. ☐ It is very important for the center of each check dam (where most of the water flows) to be lower (by at least several inches) than the edges of the check dams where they meet the side slopes. Also, the check dams should be keyed into side slopes so water does not flow between the check dam and side slope. ☐ Use a level to check the right check-dam configuration, as noted above. Repair by moving around stone, filling and compacting soil, or adding new material so that water will be directed to the center of the check dam instead of the edges. ☐ Other:
	☐ Kick-Out to Level 2 Inspection: Many check dams are impacted and/or the problem seems to be a design issue with height, spacing, shape, or materials used to construct them.

SW Vegetation

Assess the swale vegetation.

Problem (Check if Present)	Follow-Up Actions
 ☐ Vegetation is too overgrown to access swale for maintenance activities	☐ Mow or bush-hog the path. ☐ Other:

SW Vegetation

Assess the swale vegetation.

Problem (Check if Present)	Follow-Up Actions
 ☐ Vegetation requires regular maintenance: pulling weeds, removing dead and diseased plants, adding plants to fill in areas that are not well vegetated, etc.	☐ If you can identify which plants are weeds or not intended to be part of the planting plan, eliminate these, preferably by hand pulling. ☐ If weeds are widespread, check with the local stormwater authority and/or Extension Office about proper use of herbicides for areas connected with the flow of water. ☐ Even vegetation that is intended to be present can become large, overgrown, block flow, and/or crowd out surrounding plants. Prune and thin accordingly. ☐ If weeds or invasive plants have overtaken the whole swale, bush-hog the entire area before seed heads form in the spring. It will be necessary to remove the root mat manually or with appropriate herbicides, as noted above. ☐ Replant with species that are aesthetically pleasing and seem to be doing well in the swale. ☐ Other:
	☐ Kick-Out to Level 2 Inspection: You are unsure of the original planting design or the vegetation maintenance task is beyond your capabilities of time, expertise, or resources. If you are unsure of the health of the vegetation (e.g. salt damage, invasives, which plants are undesirable) or the appropriate season to conduct vegetation management, consult a landscape professional before undertaking any cutting, pruning, mowing, or brush hogging.
☐ Vegetation is too thin, is not healthy, and there are many spots that are not well vegetated.	☐ The original plants are likely not suited for the actual conditions within the swale. If you are knowledgeable about plants, select and plant more appropriate vegetation (preferably native plants) so that almost the entire surface area will be covered by the end of the second growing season. ☐ Other:
	☐ Kick-Out to Level 2 Inspection: For all but small practices (e.g., in residential yards), this task will likely require a landscape design professional or horticulturalist.

SW Outlets

Examine outlets that release water out of the swale.

Problem (Check if Present)	Follow-Up Actions
☐ Outlet is obstructed with mulch, sediment, debris, trash, etc.	☐ Remove the debris and dispose of it where it cannot re-enter the swale. ☐ Other:
	☐ Kick-Out to Level 2 Inspection: Outlet is completely clogged or obstructed; there is too much material to remove by hand or with simple hand tools.

Swale Stormwater Management Practices Level 2 Inspection Checklist

SMP ID #		**SMP Owner**		☐ Private ☐ Public
SMP Location (Address; Latitude & Longitude)				
	Latitude		**Longitude**	
Party Responsible for Maintenance	**System Type**		**Type of Site**	
☐ Same as SMP Owner ☐ Other _____	☐ Seasonal ☐ Continuous Use ☐ Other	☐ Above Ground ☐ Below Ground	☐ Commercial ☐ Industrial ☐ Residential ☐ State	
Inspection Date		**Inspection Time**		
Inspector				
Date of Last Inspection				

Level 2 Inspection: SWALE	
Recommended Repairs	**Triggers for Level 3 Inspection**
Observed Condition: Water Stands on Surface for More than 72 Hours after Storm	
☐ Condition 1: Small pockets of standing water Use a soil probe or auger to examine the soil profile. If isolated areas have accumulated grit, fines, or vegetative debris or have compacted soil, try scraping off top 3 to 6 inches of soil and replacing with clean material. Also check to see that surface is level and water is not ponding selectively in certain areas. ☐ Condition 2: Standing water is widespread or covers entire surface Requires diagnosis and resolution of problem: • Bad or compacted soil • Filter fabric on the swale bottom • Too much sediment/grit washing in from drainage area? • Too much ponding depth? • Longitudinal slope is too flat?	• Soil is overly compacted or clogged and problem is not evident from Level 2 inspection. • Level 2 inspection identifies problem, but it cannot be resolved easily or is associated with the original design of the practice (e.g., not enough slope down through the swale). ☐ Level 3 inspection necessary
Observed Condition: Vegetation is predominantly weeds and invasive species	
For a small area, weed and dig up invasive plants. Replant with natives or plants from original planting plan. If longer than 100 feet, develop a new planting plan and have it professionally reviewed.	• Vegetation deviates significantly from original planting plan; swale has been neglected and suffered from deferred maintenance. • Owner/responsible party does not know how to maintain the practice. • For large area, hire a professional to develop a grading plan and develop a planting plan. ☐ Level 3 inspection necessary

Notes:

Additional Notes:

Inspector:_____ Date: _____

Complete the following if follow-up/corrective actions were identified during this inspection:

Certified Completion of Follow-Up Actions:

"I hereby certify that the follow-up/corrective actions identified in the inspection performed on _____ (DATE) have been completed and any required maintenance deficiencies have been adequately corrected."

Inspector/Operator: _____ Date: _____

Inspector:_____ Date: _____

Complete the following if follow-up/corrective actions were identified during this inspection:

Certified Completion of Follow-Up Actions:

"I hereby certify that the follow-up/corrective actions identified in the inspection performed on _____ (DATE) have been completed and any required maintenance deficiencies have been adequately corrected."

Inspector/Operator: _____ Date: _____

APPENDIX N

NYS DEC SPDES General Permit for Stormwater Discharges From Municipal Separate Storm Sewer Systems (MS4s)

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

From

MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)

Permit No. GP-0-15-003

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

Effective Date: May 1, 2015 Expiration Date: April 30, 2017

Modification Dates
July 15, 2015 - Correction of Table IX.C and Appendix 2 to reflect GP-0-10-002 October 2011 Modification

January 13, 2016 - Additional reporting for covered entities in the watersheds listed in Part IX

Stu Fox
Deputy Chief Permit Administrator

Stuart M. Fox 1 / 12 / 16
Authorized Signature Date

Address: NYS DEC
Division of Environmental Permits
625 Broadway, 4th Floor
Albany, N.Y. 12233-17

PREFACE

Pursuant to Section 402 of the Clean Water Act ("CWA"), operators of *small municipal separate storm sewer systems* ("small MS4s"), located in *urbanized areas* ("UA") and those *additionally designated* by New York State are unlawful unless they are 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*.

A *covered entity* authorized under GP-0-10-002 as of the effective date of GP-0-15-003, shall be permitted to discharge in accordance with the renewed permit, GP-0-15-003, upon the submission of their Annual Report, unless otherwise notified by the *Department*.

An *operator* not authorized under GP-0-15-003 may[1] 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 A). They are also available on the *Department*'s website:

http://www.dec.ny.gov/permits/6045.html

Submitting an NOI is an affirmation that an initial *SWMP* has been *developed* and will be *implemented* in accordance with the terms of this *SPDES general permit*.

*** Note: all italicized words within this *SPDES general permit* are defined in Part X. Acronyms and Definitions.**

[1] The term "may is used to recognize that there are circumstances under which the *operator* is ineligible for coverage under this *g 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*.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SPDES GENERAL PERMIT FOR DISCHARGES FROM
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)

Table of Contents

Part I. PERMIT COVERAGE AND LIMITATIONS

A. Permit Application

1. This *SPDES general permit* authorizes *discharges* of *stormwater* from *small municipal separate storm sewer systems* ("MS4"s) as defined in 40 CFR 122.26(b)(16), provided all of the eligibility provisions of this *SPDES general permit* are met.

2. Exempt Non-Stormwater Discharges. The following non-stormwater *discharges* are exempt from the need for *SPDES general permit* coverage unless the *Department* has determined them to be substantial contributors of pollutants to a particular *small MS4* applying for coverage under this *SPDES general permit*. If the *Department* determines that one or more of the *discharges* listed below is a substantial contributor of pollutants to a *small MS4*, the identified *discharges* will be considered *illicit*. In that event, the *covered entity* must eliminate such discharges by following the *illicit discharge* minimum control measure ("MCM") requirements (See Part VII.A.3 or VIII.A.3, and Part IX.A.3, B.3, C.3, and D.3 where applicable).

   a. water line flushing
   b. landscape irrigation
   c. diverted stream flows
   d. rising ground waters
   e. uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(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 swimming pool discharges
   r. residual street wash water
   s. discharges or flows from firefighting activities

(Part I.A.2.)

   t. dechlorinated water reservoir discharges
   u. any SPDES permitted discharge.

   Even if the non-stormwater discharges are determined not to be substantial contributors of pollutants, the *Department* recommends that the *covered entity's stormwater management program* ("SWMP") include public education and outreach activities directed at reducing pollution from these discharges.

B. Limitations on Coverage

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

1. *Stormwater discharges* whose unmitigated, direct, indirect, interrelated, interconnected, or interdependent impacts would jeopardize a listed endangered or threatened species or adversely modify designated critical habitat;

2. *Stormwater discharges* or *implementation* of a *covered entity's SWMP*, 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* to territorial seas not of the State of New York, the contiguous zone, and the oceans unless such *discharges* are in compliance with the ocean *discharge* criteria of 40 CFR 125 subpart M;

4. *Stormwater discharges*, the permitting of which is prohibited under 40 CFR 122.4 and/ or the *ECL*;

C. Exemption Criteria

For *stormwater discharges* from a designated *small MS4* that are mixed with non-*stormwater* or *stormwater* associated with *industrial activity*, the *Department* may determine them to be exempt from the requirements of this *SPDES general permit* if the *discharges* are:

1. Effectively addressed by and in compliance with a different *SPDES general permit* or an *individual SPDES permit*; or

2. Identified by and in compliance with Part I.A.2 of this *SPDES general permit*.

Part II. OBTAINING PERMIT COVERAGE

A. Permit coverage is obtained by submission of a complete and accurate Notice of Intent.

B. Permit coverage is public noticed by the Department.

NOIs will be public noticed and an opportunity for public comment provided on the contents of submitted NOIs.

a. NOIs and the location of the SWMPs and Annual Reports for existing MS4s will be posted in the Environmental Notice Bulletin (ENB).

b. A deadline of 28 calendar days from the posting in the ENB will be provided for receiving comments.

c. After the public comment period has expired, the *Department* may extend the public comment period, require submission of an application for an individual SPDES permit or alternative *SPDES general permit*, or accept the NOI or SWMP as complete.

C. Continuance of Permit Coverage for Covered Entities Authorized by GP-0-10-002 (Continuing Covered Entities)

As of May 1, 2015, entities with coverage under GP-0-10-002 will continue to have authorization to discharge on an interim basis for up to 180 days from the effective date of this *SPDES general permit*. Covered entities may gain coverage under this *SPDES general permit* by submission of their 2014 Annual Report due in June 2015. For public participation purposes, the updated Annual Report will be considered equivalent to submission of an NOI.

When the operator changes, a new operator is added, or the individual responsible for the SWMP changes, these changes must be indicated on the MCC form submitted in accordance with Part V.D. It is not necessary to submit a revised Notice of Intent (NOI).

D. Permit Coverage for Covered Entities Newly Designated Under GP-0-15-003 (Small MS4s not Previously Authorized by GP-0-10-002)

Certain *small MS4s* designated by 40CFR Section 122.32(a)(1) were not authorized by GP-0-10-002, but are now required to gain coverage under this *SPDES general permit*. The *small MS4s* were not previously authorized because they were either:

- required to gain coverage under GP-0-10-002, but were granted a waiver from that requirement;
- were not required to gain coverage under GP-0-10-002 based on the designation criteria, but they are now within an *Additionally Designated Area*; or

(Part II.D.)

- were otherwise not permitted under GP-0-10-002.

1. In order for *stormwater discharges* from *small MS4s* to be newly authorized under this *SPDES general permit*, an *operator* must:

   a. within 180 days of receiving written notification from the *Department* that a permit for discharges from MS4s is required, prepare an NOI using the form provided by the *Department* (or a photocopy thereof); and

   b. submit the NOI, signed in accordance with Part VI.J of this *SPDES general permit*, to:

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

2. *Operators* who submit a complete NOI in accordance with the requirements of this *SPDES general permit* are authorized to *discharge stormwater* from *small MS4s,* under the terms and conditions of this *SPDES general permit,* upon written notification from the Department that a complete NOI has been received.

E Small MS4s Not Required to Gain Coverage

Operators of unregulated *small MS4s* may apply for coverage under this *SPDES general permit* at any time, per Part II.B.

F. Extension of Permit Coverage to Covered Entity's Full Jurisdiction

Operators of traditional land use control MS4s must extend the implementation of minimum control measures (MCMs) 4 and 5 in accordance with *Criterion 3* of the Designation Criteria or apply for a waiver, if eligible.

Operators of all regulated *small MS4s* may also extend the implementation of any of the six MCMs to areas under their control, but outside of the existing area covered by this *SPDES general permit*. This may be done by describing the program components (MCMs) being extended and the geographic extent to which they are being extended in the annual report (Part V.C.) and indicating in the Municipal Compliance Certification (MCC) form (Part V.D.) that the program was extended to the *covered entity's* full jurisdiction.

(Part II.)

G. Single Entity to Cover the MS4

A single entity may gain coverage for, and on behalf of, one or more regulated MS4s to implement a part of an MCM, one, or all the MCMs. A single entity shall be defined by watershed, municipal boundaries, special district boundaries, or other specifically defined boundaries. The single entity must demonstrate to the *Department* that it was formed in accordance with applicable state and/or local legislation, and that it has the legal authority and capacity (financial, resources, etc.) to meet the requirements of this *SPDES general permit*. Depending on the MCM(s) implemented, the single entity shall demonstrate that it has the following capacities, as applicable for each MCM that the single entity is seeking coverage under this SPDES general permit:

1. Initiate and administer appropriate enforcement procedures,
2. Collect, finance, bond or otherwise borrow money for capital projects,
3. Control the management and operation of the storm sewer system,
4. Implement best management practices at all municipal facilities discharging to the MS4, and
5. Obtain access to property that may be necessary for siting stormwater management facilities and/or practices.

The single entity must submit a complete NOI form to the *Department*, detailing which of the regulated MS4s it will gain coverage for and which of the MCMs, or parts of MCMs, it will implement for each particular regulated MS4. A copy of the document forming the single entity, and detailing the legal authority and capacity of the single entity, must be attached to the NOI. Prior to the single entity gaining coverage under this SPDES general permit, each regulated MS4, for which the single entity will implementing one or more MCM must submit a complete notice of termination (NOT). This notice shall specify which of the minimum control measures the single entity will implement for the MS4 and which of the minimum control measures the MS4 will implement.

Part III. SPECIAL CONDITIONS

A. Discharge Compliance with Water Quality Standards

Where a *discharge* is already authorized under this *SPDES general permit* and is later determined to directly or indirectly cause or have the reasonable potential to cause or contribute to the violation of an applicable *water quality standard*, the *Department* will notify the *covered entity* of such violation(s) and may take enforcement actions for such violations. The *covered entity* must take all necessary actions to ensure future *discharges* do not directly or indirectly cause or contribute to the violation of a *water quality standard*, and the *covered entity* must document these actions in the *SWMP*.

(Part III.A.)

Compliance with this requirement does not preclude, limit, or eliminate any enforcement activity as provided by the Federal and / or State law for the underlying violation. 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 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. Impaired Waters

1. Impaired Waters Without Watershed Improvement Strategies or Future TMDLs

If a *small MS4 discharges* a stormwater pollutant of concern (POC) to an *impaired* water listed in Appendix 2, the covered entity must ensure no net increase in its *discharge* of the listed *POC* to that water.

By January 8, 2013, *covered entities* must assess potential sources of discharge of stormwater *POC*(s), identify potential stormwater pollutant reduction measures, and evaluate their progress in addressing the POC(S). Newly authorized covered entities must perform the above tasks within 5 years after gaining coverage under this SPDES general permit. Covered entities must evaluate their *SWMP* with respect to the MS4's effectiveness in ensuring there is no net increase discharge of stormwater *POC*(s) to the impaired waters for *storm sewersheds* that have undergone non-negligible changes such as changes to land use and impervious cover greater than one acre, or stormwater management practices during the time the MS4 has been covered by this *SPDES general permit*. This assessment shall be conducted for the portions of the *small MS4 storm sewershed* that *discharge* to the listed waters (see Appendix 2). The assessment shall be done using *Department* supported modeling of pollutant loading.

If the modeling shows increases in loading of the POC, the SWMP must be modified to reduce the loading to meet the no net increase requirement. The subsequent annual reports must contain an assessment of priority stormwater problems, potential management practices that are effective for reduction of stormwater POC(s), and document a gross estimate of the extent and cost of the potential improvements.

2. Watershed Improvement Strategies

The *SWMPs* for *covered entities* in the watersheds listed below must be modified to comply with the following requirements and the watershed improvement strategies. *Covered entities* implementing the pollutant-specific BMPs in addition to the BMPs required of all *covered entities* will be taking satisfactory steps towards achieving compliance with TMDL requirements. *Covered entities* under the MS4 *SPDES general*

permit are required to make best efforts to participate in locally based watershed planning efforts that involve the NYSDEC, other covered entities, stakeholders and other interested parties for implementation of load reduction BMPs. Covered entities may form a Regional Stormwater Entity (RSE) to implement stormwater retrofits collectively. The *covered entities* must ensure that discharges of the *POC* to the *TMDL* waterbody are reduced through these or additional changes to the *SWMP* so that the waste load allocation is met.

MS4s are required to meet the reduction of the POC defined by the TMDL program defined in Part IX of this *SPDES general permit*. By the deadlines defined in Part IX of the general permit, *covered entities* must assess their progress and evaluate their *SWMP* to determine the *MS4's* effectiveness in reducing their discharges of *TMDL POC*(s) to *TMDL* water bodies. Newly designated watershed improvement strategy areas must perform the assessment within 5 years from authorization under this SPDES general permit. This assessment shall be conducted for the portions of the *small MS4 storm sewershed* that are within the *TMDL* watershed. The assessment shall be done using *Department* supported modeling of pollutant loading from the *storm sewershed*. The *covered entities* or an RSE must prepare and implement, participate in or utilize the results of existing or ongoing ambient water quality monitoring programs to validate the accuracy of models and evaluate the effectiveness of the additional BMPS for watershed improvement strategies.

If the modeling shows that loading of the POC is not being reduced to meet the waste load allocation, the SWMP must be modified to reduce the pollutant loading to meet the waste load allocation.

Each regulated MS4 is responsible for an individual load reduction, which is a fraction of the total required load reduction in the TMDL. If MS4s form an RSE and stormwater retrofits are approached collectively, the *Department* would allow compliance with this condition of the SPDES general permit to 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, to allow design and installation of retrofits where they are most feasible, without restricting MS4s to site retrofit projects 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.

a. New York City Watershed East of the Hudson River
Covered entities shall modify their *SWMP* to meet the additional requirements as set forth in Part IX.A to address phosphorus as the *POC* for the portion of their *storm sewershed* in the watershed. A map of the watershed is shown in Appendix 3.

b. Other Phosphorus Watersheds
Covered entities shall modify their *SWMP* to meet the additional requirements as set forth in Part IX.B to address phosphorus as the *POC* for the portion of their *storm sewershed* in the watershed. Maps of the watersheds are shown in Appendices 4, 5, and 10.

c. Pathogen Watersheds
Covered entities shall modify their SWMP to meet the additional requirements as set forth in Part IX.C to address pathogens as the *POC* for the portion of their *storm sewershed* in any of the watersheds. Maps of the watersheds are shown in Appendices 6, 7, and 9.

d. Nitrogen Watersheds
Covered entities shall modify their *SWMP* to meet the additional requirements as set forth in Part IX.D to address nitrogen as the *POC* for the portion of their *storm sewershed* in the watershed. Maps of the watersheds are shown in Appendix 8.

3. Future TMDL Areas
If a *TMDL* is approved in the future by EPA for any waterbody or watershed into which a *small MS4 discharges*, the *covered entity* must review the applicable *TMDL* to see if it includes requirements for control of *stormwater discharges*. If a *covered entity* is not meeting the *TMDL* wasteload allocations, it must, within 180 days of written notification from the *Department*, modify its *SWMP* to ensure that the reduction of the *POC* specified in the *TMDL* is achieved. It will be the MS4's obligation to meet the waste load allocations specified in the TMDL through modification of its *SWMP plan* according to the schedule of Part IX of this *SPDES general permit*.

Modifications must be considered for each of the six MCMs. Refer to assistance documents or enhanced requirements for specific pollutants in documents on the *Department's* website for modifications specific to the *TMDL*. Revised *SWMPs* must include updated schedules for implementation.

Within three years of having modified its SWMP to ensure that reduction of the POC specified in the TMDL is achieved, covered entities in future TMDL areas must assess their progress and evaluate their *SWMP* to determine the *MS4's* effectiveness in reducing their discharges of *TMDL POC*(s) to *TMDL* water bodies. This assessment shall be conducted for the portions of the *small MS4 storm sewershed* that are within the *TMDL* watershed. The assessment shall be done using *Department* supported modeling of pollutant loading from the *storm sewershed*.

Part IV. Stormwater Management Program (SWMP) Requirements

A. SWMP Background

Covered entities must *develop (for newly authorized MS4s, implement)*, and enforce a *SWMP* designed to reduce the *discharge* of pollutants from *small MS4s* to the *maximum extent practicable* ("MEP") in order to protect water quality and to satisfy the appropriate water quality requirements of the *ECL* and the CWA. The objective of the permit is for MS4s to assure achievement of the applicable water quality standards. *Covered entities* under GP-0-10-002 must have prepared a *SWMP plan* documenting modifications to their *SWMP*. See Part X.B. (Definitions) for more information about the *SWMP* and *SWMP plan*.

The *SWMP* and *SWMP plan* may be created by an individual *covered entity,* by a shared effort through a group or coalition of individual *covered entities,* or by a third party entity. The *SWMP plan* shall be made readily available to covered entity's staff, to the public and to *Department* and EPA staff.

B. Cooperation Between Covered Entities Encouraged

The *Department* encourages *covered entities* to cooperate when *developing* and *implementing* their *SWMP*[2]. However, each *covered entity* is responsible for obtaining its own permit coverage and for filing its own NOI. Irrespective of any agreements between *covered entities*, each individual *covered entity* remains legally responsible for satisfying all GP-0-15-003 requirements and for its own *discharges*. If one *covered entity* is relying on another *covered entity* to satisfy one or more of its permit obligations, that fact must be noted on the *covered entity's* MCC form. The other entity must, in fact,

[2] For example, villages are encouraged to cooperate with towns, towns with counties, and adjacent counties with each other. In addition, municipal governments are encouraged to coordinate and cooperate with non-traditional MS4s such as DOT, school and fire districts, Federal and State facilities located within and adjacent to their jurisdictions. Sewer boards, water boards, or other non-traditional entities are encouraged to partner with the municipality (municipalities) that they serve.

implement the MCM(s) and must agree to *implement* the MCM(s) on the first *covered entity's* behalf. This agreement between the two or more parties must be documented in writing and signed by both (all) parties. Part IV.G. below may apply if such an agreement is not already in place. The agreement must be included in the *SWMP plan*, and be retained by the *covered entity* for the duration of this *SPDES general permit*, including any administrative extensions of the permit term.

Covered entities that are working together to *develop (for newly authorized MS4s)* or *implement* their *SWMPs* are encouraged to complete shared annual reports. *Covered entities* may also hold a group meeting to present their annual reports to the public and to receive comments on their annual reports. These options are discussed in more detail in Part V.C.2.

C. SWMP Coverage Area

At a minimum, *covered entities* are required to *develop (for newly authorized MS4s)* and *implement SWMPs* in the automatically designated *urbanized areas* ("UA") and *additionally designated* areas (40CFR Section 122.32(a)(1) or 122.32(a)(2)) under their jurisdiction[3].

SWMP coverage shall include all UA or additionally designated areas within the *covered entity*'s jurisdiction that drain into their *small MS4* and subsequently *discharge* to *surface waters of the State* directly or through other *small MS4s*.

Operators of *small MS4s* whose jurisdiction includes regulated and unregulated areas are encouraged to include their entire jurisdiction in their *SWMP* (refer to Part II.D).

D. SWMP Development and Implementation for Covered entities Authorized by GP-0-10-002(Continuing Covered entities)

Covered entities authorized under GP-0-10-002 shall continue to fully *implement* their *SWMP,* unless otherwise stated in this *SPDES general permit*. A *covered entity* may modify its *SWMP* if it determines changes are needed to improve *implementation* of its *SWMP*. Any changes to a *SWMP* shall be reported to the *Department* in the MS4's

[3] The purpose of this section is to minimize conflicts between adjacent *small MS4s*. For the purposes of this *SPDES general permit*, areas under the *covered entity's* jurisdiction shall mean areas where the legal authority exists for the subject *covered entity* to *develop* and *implement* an *SWMP* including the six MCMs. It is not a permit requirement for *covered entities* to *implement* and enforce any portion of their *SWMP* in any area that is under the jurisdiction of another *covered entity*. For example, if a portion of a town drains directly into a stormwater system owned and operated by the State DOT, and this area of the town is regulated, the DOT will not be required to implement and enforce any portion of a *SWMP* in the area lying outside of its right of way. In this case, the town would be required to implement the program in the subject area in accordance with this *SPDES general permit*, this despite the fact that the subject drainage does not directly enter the town's system.

annual report and Municipal Compliance Certification (MCC) form (See Part V.C and V.D).

E. SWMP Development and Implementation for Newly Regulated Covered entities (Small MS4s not Previously Authorized by GP-0-10-002)

Certain *small MS4s* designated by 40CFR Section 122.32(a)(1) were not authorized by GP-0-10-002, but are now required to gain coverage under this *SPDES general permit*. The *small MS4s* were not previously authorized because they were either:

- required to gain coverage under GP-0-10-002, but were granted a waiver from that requirement;
- were not required to gain coverage under GP-0-10-002 based on the designation criteria, but they now meet the additional designation criteria in NYS DEC "Designation Criteria for Identifying Regulated Municipal Separate Storm Sewer Systems" ; or
- were otherwise not permitted under GP-0-10-002.

Operators of *small MS4s* newly regulated under this *SPDES general permit* must *develop* an initial *SWMP* and provide adequate resources to fully *implement* the *SWMP* no later than three years from the date of the individual MS4's authorization.

A newly regulated *covered entity* may modify its *SWMP* to comply with the terms and conditions of this *SPDES general permit* if it determines changes are needed to improve *implementation* of its *SWMP*. Any changes to a *SWMP* shall be documented in the *SWMP plan* and reported to the *Department* in the annual report (See Part V.C).

Covered entities are required to make steady progress toward full *implementation* in the first three years after the date of authorization. Full *implementation* of *SWMP*s for newly regulated *small MS4s* is expected no later than three years from the date of coverage under this *SPDES general permit*.

F. Minimum Control Measures

Each *covered entity* is required to develop *(for newly authorized MS4s)* and implement a *SWMP* that satisfies the requirements for each of six required program components, known as minimum control measures (MCMs).

The MCMs for *traditional land use control MS4s* are listed in Part VII. The MCMs for *traditional non-land use control MS4s* and *non-traditional MS4s* are listed in Part VIII. Additional MCMs that *covered entities* in watersheds with improvement strategies must address, referred to in Part III.B.2, are described in Part IX.

G. Reliance Upon Third Parties

This section applies when a *covered entity* relies upon any third party entity to *develop* or *implement* any portion of its *SWMP*. Examples of such entities include, but are not

limited to a non-government, commercial entity that receives payment from the *covered entity* for services provided (for example businesses that create policies or procedures for *covered entities*, perform illicit discharge identification and track down, maintain roads, remove snow, clean storm sewer system, sweep streets, etc. as contracted by the covered entity).

The covered entity must, through a signed certification statement, contract or agreement provide adequate assurance that the third parties will comply with permit requirements applicable to the work performed by the third party. The certification statement, contract or other agreement must:

- provide adequate assurance that the third party will comply with permit requirements;
- identify the activities that the third party entity will be responsible for and include the name and title of the person providing the signature;
- the name, address and telephone number of the third party entity;
- an identifying description of the location of the work performed; and
- the date the certification statement, contract or other agreement is signed.

Example certification language is provided below:

Contracted Entity Certification Statement:

"I certify under penalty of law that I understand and agree to comply with the terms and conditions of the (covered entity's name) stormwater management program and agree to implement any corrective actions identified by the (covered entity's name) or a representative. I also understand that the (covered entity'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 ("MS4s") 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 (covered entity's name) will not diminish, eliminate, or lessen my own liability."

Part V. PROGRAM ASSESSMENT, RECORD KEEPING, REPORTING AND CERTIFICATION REQUIREMENTS

A. Assessment

Covered entities are required to collect and report information about the *development* and *implementation* of their SWMPs. Specific information the *small MS4s* are required to collect is identified in Parts VII or VIII, depending on the type of *small MS4*. The *small MS4s* are encouraged to collect additional information that will help them evaluate their *SWMP*. Collection of information over time will facilitate the evaluation of the *covered entity's SWMP* by allowing the examination of trends in the information collected.

The *covered entity* must conduct an annual evaluation of its program compliance, the appropriateness of its identified *BMPs*, meeting new permit requirements, and progress towards achieving its identified *measurable goals*, which must include reducing the *discharge* of pollutants to the *MEP*.
Where the evaluation shows that the SWMP is not reducing discharges to the *MEP*, the SWMP shall be revised to reduce discharges to the *MEP*. Update to the SWMP and the SWMP plan must be completed within a year from the annual evaluation of their SWMP with an implementation schedule no later than 3 years from the annual evaluation.

B. Recordkeeping

The *covered entity* must keep records required by this *SPDES general permit* (records that document *SWMP*, records included in *SWMP plan*, other records that verify reporting required by the permit, NOI, past annual reports, and comments from the public and the *Department*, etc.) for at least five (5) years after they are generated. Records must be submitted to the *Department* within 5 business days of receipt of a *Department* request for such information. The *covered entity* shall keep duplicate records (either hard copy or electronic), to have one copy for public observation and a separate working copy where the *covered entity's* staff, other individuals responsible for the *SWMP* and regulators, such as *Department* and EPA staff can access them. Records, including the NOI and the *SWMP plan*, must be available to the public at reasonable times during regular business hours.

C. Annual Reporting

1. Annual Report Submittal

The annual reporting period ends March 9 of each year. The annual report must be received in the *Department*'s Central Office, electronic or hard copy, no later than June 1 of each reporting year. If electronic, submit in accordance with procedures set forth by the *Department*. If mailed, send to the address below:

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

Failure to submit a complete annual report and a complete MCC form (Part V.D) shall constitute a permit violation.

a. Annual Report Submittal for Newly Regulated Covered entities (Small MS4s not Previously Authorized by GP-0-10-002)

Newly regulated covered entities *developing* their *SWMP* are to submit their Annual Report in a format provided by the *Department*. They will provide, at a minimum, the information on the annual report form and the information required by Parts VII or VIII.

Newly regulated *covered entities* are required to submit their first annual report the year that authorization is granted if authorization is granted on or before December 31 of that reporting year.

b. Annual Report Submittal for Covered entities Authorized by GP-0-10-002 (Continuing Covered entities)

Beginning with annual reports due in 2010 *covered entities* implementing their *SWMP* shall submit, at a minimum, information specified by the *Department* in Part VII or VIII in a format provided by the *Department*.

2. Shared Annual Reporting and Submittal

Covered entities working together to *develop (for newly authorized MS4s)* and /or *implement* their *SWMP*s may complete a shared annual report. The shared annual report is an annual report that outlines and explains group activities, but also includes the tasks performed by individual *covered entities* (*BMPs, measurable goals*, schedules of planned activities, etc.). To facilitate the submission of one annual report for the entire group of *covered entities*, individual *covered entity's* activities may be incorporated into the report by either:

- providing the details specific to their *small MS4*(s) to a person(s) who incorporates that information into the group report. That one group report is submitted to the *Department* for all participating *small MS4s*; or
- providing the details specific to their *small MS4*(s) on a separate sheet(s) that will be attached with the one group report.

(Part V.C.2.)

Regardless of the method chosen, each *covered entity* must, by June 1 of the annual reporting year:

a. Provide their individual MCC form (see Part V.D) to be submitted with the shared annual report. Each *covered entity* must sign and submit an MCC form 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 *covered entity*;

b. Present their draft annual report at a meeting (see Part VII.A.2.d or Part VIII.A.2.d for more information). For completed shared annual reports, the report may be presented by each participating individual *covered entity* at an existing *municipal* meeting or may be made available for comments on the internet. Additionally, *covered entities* participating in shared annual reporting may combine meetings to have a group or regional meeting. While the group meeting is allowable, each *covered entity* shall ensure that local public officials and members of the public are informed about the program, activities and progress made; and

c. Submit a summary of any comments received and (intended) responses on the individual *covered entity*'s information or the shared annual report information, as applicable. This information should be included with the annual report submission. Changes made to the *SWMP* in response to comments should be described in the annual report.

3. Annual Report Content

The annual report shall summarize the activities performed throughout the reporting period (March 10 to March 9) and must include at a minimum:

a. The status of compliance with permit conditions, including Watershed Improvement Strategy conditions;
b. An assessment/evaluation of:
   i. the appropriateness of the identified *BMPs*;
   ii. progress towards achieving the statutory goal of reducing the *discharge* of pollutants to the *MEP*; and
   iii. the identified *measurable goals* for each of the MCMs.
c. Results of information collected and analyzed, monitoring data, and an assessment of the *small MS4*'s *SWMP* progress toward the statutory goal of reducing the *discharge* of *pollutants* to the *MEP* during the reporting period. This could include results from required *SWMP* reporting, estimates of pollutant loading (from parameters such as identified illicit discharges, physically interconnected *small MS4*s that may contribute substantially to pollutant

loadings from the *small MS4*) and pollutant load reductions (such as illicit discharges removed). This assessment may be submitted as an attachment;

d. When required to be completed, results of assessments of effectiveness in meeting no net increase requirements or TMDL loadings as required by III. B.1 and 2. These results must be submitted in evaluation forms and as an attachment;

e. A summary of the stormwater activities planned to be undertaken during the next reporting cycle (including an implementation schedule);

f. Any change in identified *BMPs* or *measurable goals* and justification for those changes;

g. Notice that a *small MS4* is relying on another entity to satisfy some or all of its permit obligations (if applicable);

h. A summary of the public comments received on this annual report at the public presentation required in Part VII.A.2. or VIII.A.2. And, as appropriate, how the *small MS4* will respond to comments and modify the program in response to the comments;

i. A statement that the final report and, beginning in 2009, the SWMP plan are available for public review and the location where they are available; and

j. The information specified under the reporting requirements for each MCM (Part VII or VIII).

D. Interim Progress Reporting

In accordance with 6 NYCRR Part 750-1.14, *covered entities* that own or operate MS4s 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 *covered entity* 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.

E. Annual Report Certification

A signed original hard copy and a photocopy of the MCC form must be submitted to the *Department* no later than June 1 of each reporting year. If the annual report is mailed (Part V.C. above), the MCC form must be submitted with the annual report.

The MCC form, provided by the *Department*, certifies that all applicable conditions of Parts IV, VII, VIII and IX of this *SPDES general permit* are being *developed*, *implemented* and complied with. It must be signed by an individual as described in Part VI.J.2. The certification provided by the MCC form does not affect, replace or negate the certification required under Part VI.J.2 (d). If compliance with any requirement cannot be certified to on the MCC form, a complete explanation with a description of corrective measures must be included as requested on the MCC form.

Failure to submit a complete annual report (Part V.C.) and a complete MCC form shall constitute a permit violation.

Part VI. STANDARD PERMIT CONDITIONS

A. General Authority to Enforce

Three of the MCMs (illicit discharge detection and elimination, construction site *stormwater* runoff control and post-construction *stormwater* management) require local laws, ordinances or other regulatory mechanisms to ensure successful implementation of the MCMs. Some *covered entities*, however, are not enabled by state law to adopt local laws or ordinances. Those *covered entities* (typically non-traditional MS4s and traditional, non-land use control MS4s) are expected to utilize the authority they do possess to create or modify existing regulatory mechanisms, including but not limited to contracts, bid specifications, requests for proposals, etc. to ensure successful implementation.

B. Duty To Comply

A *covered entity* 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.

C. Enforcement

Failure of the *covered entity,* its contractors, subcontractors, agents and/or assigns 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.

D. Continuation of the Expired SPDES General Permit

This *SPDES general permit* expires five years from the effective date of this permit. However, an administratively extended *SPDES general permit* continues in force and effect until the *Department* issues a new permit, unless a *covered entity* receives written notice from the *Department* to the contrary. *Operators* of the *MS4s* authorized under the administratively extended expiring *SPDES general permit* seeking coverage under the new *SPDES general permit* must refer to the terms within the new *SPDES general permit* to continue coverage.

E. Technology Standards

Covered entities, in accordance with written notification by the *Department*, must comply with all applicable technology-based effluent standards or limitations promulgated by EPA pursuant to Sections 301 and 304 of the CWA. If an effluent standard or limitation more stringent than any effluent limitation in the *SPDES general permit* or controlling a pollutant not limited in the permit is promulgated or approved

after the permit is issued, the *SWMP plan* shall be promptly modified to include that effluent standard or limitation.

F. Need To Halt or Reduce Activity Not a Defense

It shall not be a defense for a *covered entity* 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*.

G. Duty to Mitigate

The *covered entity* 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.

H. Duty to Provide Information

The *covered entity* shall, within five (5) business days, make available for inspection and copying or furnish to the *Department* or an authorized representative of the *Department* any information that is requested to determine compliance with this *SPDES general permit*. Failure to provide information requested shall be a violation of the terms of this *SPDES general permit* and applicable regulation.

I. Other Information

Covered entities who become aware of a failure to submit any relevant facts or have submitted incorrect information in the NOI or in any other report to the *Department* must promptly submit such facts or information.

J. Signatory Requirements

All NOIs, reports, certifications or information submitted to the *Department*, or that this *SPDES general permit* requires be maintained by the *covered entity*, shall be signed as follows:

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 entity 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*, including MCC forms (part V.D.), shall be signed by a person

described above or by a duly authorized representative of that person[4]. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in VI.J.1 above 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 facility or activity, such as the position of plant manager, operator of a well or well field, superintendent, or position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the *covered entity* (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 and be attached to the MCC form; and

d. **Changes to authorization.** If an authorization to discharge is no longer accurate because a different *covered entity* has responsibility for the overall operation of another *covered entity's* program, these changes must be indicated on the MCC form submitted to the *Department* per Part V.D.

e. **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 VI.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 VI.J.2 must be submitted to the *Department* with any reports to be signed by an authorized representative.

f. **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 evaluated the

[4]Positions that must be duly authorized include, but are not limited to, Environmental Directors, Deputy Supervisors, Safety and Environmental Managers, Assistant Directors, and Chief Health and Safety Officers.

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."

Under Part VI.J. (Signatory Requirements), it shall constitute a permit violation if an incorrect and/or improper signatory authorizes any required forms, and/or reports.

K. Penalties for Falsification of Reports

Article 17 of the *ECL* provides a civil penalty of $37,500 per day per violation of this permit. Articles 175 and 210 of the New York State Penal Law provide for a criminal penalty of a fine and / or imprisonment for falsifying reports required under this permit..

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 *covered entity* 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. 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.

N. 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.

O. Requiring an Individual Permit or an Alternative General Permit

1. In its sole discretion, 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 *covered entity* 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 covered entity'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 *covered entity* 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 *covered entity* 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 *covered entity* 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.

P. 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 *covered entity* 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 *covered entity* from any responsibility or requirements under other environmental statutes or regulations.

Q. Proper Operation and Maintenance

A *covered entity* 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 *covered entity* 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,

(Part VI.Q.)

installed by a *covered entity* only when necessary to achieve compliance with the conditions of the *SPDES general permit*.

R. Inspection and Entry

The *covered entity* 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:

1. Enter upon the *covered entity'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*;

2. 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

3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment), practices, or operations regulated or required under the permit.

S. Permit Actions

At the *Department*'s sole discretion, this *SPDES general permit* may be modified, revoked, suspended, or renewed for cause at any time.

T. Anticipated noncompliance

The covered entity 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.

U. Permit Transfers.

Coverage under this *SPDES general permit* is not transferable to any person except after notice to the *Department.* The *Department* may require modification or revocation and reissuance of this SPDES general permit to change the responsible party and incorporate such other requirements as may be necessary.

Part VII. MINIMUM CONTROL MEASURES - TRADITIONAL LAND USE CONTROL

A. Traditional Land-Use Control MS4 Minimum Control Measures (MCMs)

These MCMs apply to t*raditional land use control MS4s* (cities, towns, villages). The SWMP for these *small MS4s* must be comprised of the 6 MCMs below. It is recommended that covered entities refer to assistance and guidance documents available from the *State* and EPA.

Continuing covered entities were required to develop a SWMP with the MCM requirements below by January 8, 2008 (if authorized by GP-02-02) and within three years of gaining coverage (if authorized by GP-0-10-002). Under this *SPDES general permit*, the continuing *covered entities* are required to implement their SWMP, including the MCM requirements below. Notwithstanding any sooner deadlines contained elsewhere within this permit, newly regulated *covered entities* are required to develop their SWMP, containing the MCM requirements below, within the first 3 years of coverage and then commence implementation.

For each of the elements of the SWMP plan, the *covered entity* must identify (i) the agencies and/or offices that would be responsible for implementing the SWMP plan element and (ii) any protocols for coordination among such agencies and/or offices necessary for the implementation of the plan element.

The *covered entity* may *develop (for newly authorized MS4s)* and /or *implement* their *SWMP* within their jurisdiction on their own. The *covered entity* may also *develop (for newly authorized MS4s)* and / or *implement* part or all of their *SWMP* through an intermunicipal program with another *covered entity*(s) or through other cooperative or contractual agreements with third parties that provide services to the *covered entities*.

1. **Public Education and Outreach - SWMP Development / Implementation**

At a minimum, all *covered entities* must:

a. Identify *POCs*, waterbodies of concern, geographic areas of concern, target audiences;

b. *Develop (for newly authorized MS4s)* and *implement* an ongoing public education and outreach program designed to describe to the general public and target audiences:
   i. the impacts of *stormwater discharges* on waterbodies;
   ii. *POCs* and their sources;
   iii. steps that contributors of these pollutants can take to reduce pollutants in *stormwater* runoff; and

(Part VII.A.1.b.)

iv. steps that contributors of non-*stormwater discharges* can take to reduce pollutants (non-*stormwater discharges* are listed in Part I.A.2);

c. *Develop (for newly authorized MS4s)*, record, periodically assess, and modify as needed, *measurable goals*; and

d. Select and implement appropriate education and outreach *activities* and *measurable goals* to ensure the reduction of all *POCs* in *stormwater discharges* to the *MEP*.

Required SWMP Reporting

e. **Program *implementation* reporting** for **continuing *covered entities*** (MS4s covered for 3 or more years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

i. list education / outreach *activities* performed for the general public and target audiences and provide any results (for example, number of people attended, amount of materials distributed, etc.);
ii. *covered entities* performing the education and outreach activities required by other MCMs (listed below), may report on those activities in MCM 1 and provide the following information applicable to their program:
   - IDDE education *activities* planned or completed for public employees, businesses, and the general public, as required by Part VII.A.3;
   - construction site *stormwater* control training planned or completed, as required by Part VII.A.4; and
   - employee pollution prevention / good housekeeping training planned or completed, as required by Part VII.A.6; and

   To facilitate shared annual reporting, if the education and outreach activities above are implemented by a third party, and the third party is completing the associated portions of the annual report, that third party may report on the education and outreach activities within MCM 1 of the annual report and not within the MCMs that the education and outreach activities are required by,
iii. report on effectiveness of program, *BMP* and *measurable goal* assessment; and
iv. maintain records of all training activities.

f. Reporting for **newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

i. **program *development* deadlines and reporting**:

(Part VII.A.1.f.i.)

Complete in Year 1 (report changes in Year 2 and 3 as needed):
- list (and describe if necessary) *POCs*;
- *development* of education and outreach program and *activities* for the general public and target or priority audiences that address *POCs*, geographic areas of concern, and / or *discharges* to *303(d) / TMDL* waterbodies;
- *covered entities* developing education and outreach programs required by other MCMs (listed below), may report on development (and implementation of those activities, if occurring during the three year development period) in MCM 1 and provide the following information applicable to their program:
  - IDDE education *activities* planned or completed for public employees, businesses, and the general public for IDDE, as required by Part VII.A.3;
  - Construction site stormwater control training planned or completed, as required by Part VII.A.4; and
  - employee pollution prevention / good housekeeping training planned or completed, as required by Part VII.A.6;

  To facilitate shared annual reporting, if the education and outreach activities above are developed by a third party, and the third party is completing the associated portions of the annual report, that third party may report on the education and outreach activities within MCM 1 of the annual report and not within the MCMs that the education and outreach activities are required by.

ii. **program *implementation* reporting** as set forth in Part VII.A.1(e) above. Commence *implementation* reporting after three year *development* period. *Implementation* reporting may begin earlier if *implementation* begins during *development* period.

2. **Public Involvement / Participation - SWMP Development / Implementation**

At a minimum, all *covered entities* must:

a. Comply with the *State Open Meetings Law* and local public notice requirements, such as *Open Meetings Law*, when implementing a public involvement / participation program;

b. *Develop (for newly authorized MS4s)* and *implement* a public involvement/participation program that:

i. identifies key individuals and groups, public and private, who are interested in or affected by the *SWMP* ;

ii. identifies types of input the *covered entity* will seek from the key individuals and groups, public and private, to support *development* and *implementation* of the SWMP program and how the input will be used; and
iii. describes the public involvement / participation activities the *covered entity* will undertake to provide program access to those who want it and to gather the needed input. The activities included, but are not limited to a water quality hotline (report spills, dumping, construction sites of concern, etc.), stewardship activities like stream cleanups, storm drain marking, and volunteer water quality monitoring;
iv. provide the opportunity for the public to participate in the *development*, *implementation,* review, and revision of the *SWMP.*

c. **Local stormwater public contact.**
Identify a local point of contact for public concerns regarding *stormwater* management and compliance with this *SPDES general permit*. The name or title of this contact and the telephone number must be published in public outreach and public participation materials and kept updated with the *Department* on the MCC form;

d. **Annual report presentation.**
Below are the requirements for the annual report presentation:

i. prior to submitting the final annual report to the *Department*, by June 1 of each reporting year (see Part V.C.), present the draft annual report in a format that is open to the public, where the public can ask questions about and make comments on the report. This can be done:

- at a meeting that is open to the public, where the public attendees are able to ask questions about and make comments on the report. This may be a regular meeting of an existing board, such as planning, zoning or the town board. It may also be a separate meeting, specifically for *stormwater*. If multiple *covered entities* are working together, they may have a group meeting (refer to Part V.C.2); or

- on the internet by:
  - making the annual report available to the public on a website;
  - providing the public the opportunity to provide comments on the internet or otherwise; and

  - making available the opportunity for the public to request an open meeting to ask questions about and make comments on the report. If a public meeting is requested by 2 or more persons, the covered entity must hold such a meeting. However, the covered entity need only hold a public meeting once to satisfy this requirement.

ii. provide public notice about the presentation, making public the following information when noticing the presentation in accordance with the local public notice requirements:

- the placement of the annual report on the agenda of this meeting or location on the internet;
- the opportunity for public comment. This *SPDES general permit* does not require a specified time frame for public comments, although it is recommended that *covered entities* do provide the public an opportunity to comment for a period after the meeting. Comments received after the final annual report is submitted shall be reported with the following year's annual report. *Covered entities* must take into account those comments in the following year;
- the date and time of the meeting or the date the annual report becomes available on the internet; and
- the availability of the draft report for prior review prior to the public meeting or duration of availability of annual report on the internet;

iii. the *Department* recommends that announcements be sent directly to individuals (public and private) known to have a specific interest in the *covered entity's SWMP*;

iv. include a summary of comments and (intended) responses with the final annual report. Changes made to the *SWMP* in response to comments should be described in the annual report; and

v. ensure that a copy of the final report and, beginning in 2009, the SWMP plan are available for public inspection;

e. *Develop (for newly authorized MS4s)*, record, periodically assess and modify as needed *measurable goals*; and

f. Select and implement appropriate public involvement / participation *activities* and *measurable goals* to ensure the reduction of *POCs* in *stormwater discharges* to the *MEP*.

Required SWMP Reporting

g. **Program *implementation* reporting** for **continuing *covered entities*** (MS4s covered for 3 or more years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

i. annual report presentation information (date, time, attendees) or information about how the annual report was made available for comment;
ii. comments received and intended responses (as an attachment);
iii. public involvement / participation *activities* (for example stream cleanups including the number of people participating, the number of calls to a water quality hotline, the number and extent of storm drain stenciling); and
iv. report on effectiveness of program, *BMP* and *measurable goal* assessment.

h. Reporting for **newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

i. **program *development* deadlines and reporting**:
Complete for Year 1, 2 and 3:
- annual report presentation information (date, time, attendees);
- comments received and intended responses (as an attachment);

Complete by end of Year 2 (report changes by end of Year 3 as needed):
- key stake holders identified;
- *development* of public involvement / participation plan based on the *covered entity's* needs, *POCs*, target audiences, geographic areas of concern, *discharges* to *303(d)* / *TMDL* waterbodies; and
- *development* of public involvement / participation *activities* (for example stream cleanups including the number of people participating, the number of calls to a dumping / water quality hotline, the number or percent of storm drains stenciled);

ii. **program *implementation* reporting**, as set forth in Part VII.A.2(g) above. Commence *implementation* reporting after three year *development* period. *Implementation* reporting may begin earlier if *implementation* begins during development period.

3. **Illicit Discharge Detection and Elimination (IDDE) - SWMP Development / Implementation**
At a minimum, all *covered entities* must:
a. *Develop (for newly authorized MS4s), implement* and enforce a program to detect and eliminate *illicit discharges* (as defined at 40CFR 122.26(b)(2)) into the *small MS4*;

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;

c. Field verify *outfall* locations;

d. Conduct an outfall reconnaissance inventory, as described in the EPA publication entitled Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessment, addressing every *outfall* within the *urbanized area* and *additionally designated area* within the *covered entity's* jurisdiction at least once every five years, with reasonable progress each year;

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

f. Prohibit, through a law, ordinance, or other regulatory mechanism, *illicit discharges* into the *small MS4* and *implement* appropriate enforcement procedures and actions. This mechanism must be equivalent to the *State's* model IDDE local law "NYSDEC Model Local Law to Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer Systems". The mechanism must be certified by the attorney representing the *small MS4* as being equivalent to the *State*'s model illicit discharge local law. Laws adopted during the GP-02-02 permit cycle must also be attorney-certified as effectively assuring implementation of the *State*'s model IDDE law;

g. *Develop (for newly authorized MS4s)* and *implement* a program to detect and address non-stormwater *discharges,* including illegal dumping, to the *small MS4* in accordance with current assistance and guidance documents from the State and EPA. The program must include: procedures for identifying priority areas of concern (geographic, audiences, or otherwise) for the IDDE program; description of priority areas of concern, available equipment, staff, funding, etc.; procedures for identifying and locating *illicit discharges* (trackdown); procedures for eliminating *illicit discharges*; and procedures for documenting actions;

h. Inform public employees, businesses, and the general public of the hazards associated with illegal *discharges* and improper disposal of waste, and maintain records of notifications;

i. Address the categories of non-stormwater *discharges* or flows listed in Part I.A.2 as necessary;

j. *Develop (for newly authorized MS4s)*, record, periodically assess, and modify as needed, *measurable goals*; and

k. Select and implement appropriate IDDE *BMPs* and *measurable goals* to ensure the reduction of all *POCs* in *stormwater discharges* to the *MEP*.

Required SWMP Reporting

l. **Program *implementation* reporting** for **continuing *covered entities*** (MS4s covered for 3 or more years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

i. number and percent of *outfalls* mapped;
ii. number of *illicit discharges* detected and eliminated;
iii. percent of outfalls for which an outfall reconnaissance inventory has been performed. ;
iv. status of system mapping;
v. activities in and results from informing public employees, businesses, and the general public of hazards associated with illegal *discharges* and improper disposal of waste;
vi. regulatory mechanism status - certification that law is equivalent to the *State's* model IDDE law (if not already completed and submitted with an earlier annual report); and
vii. report on effectiveness of program, *BMP* and *measurable goal* assessment.

m. Reporting for **newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

i. **program *development* deadlines and reporting**:
Complete in Year 1 (revise in Year 2 and 3 if changes are made):
- describe procedures for identifying priority areas of concern (geographic, audiences, or otherwise) for IDDE program;
- describe priority areas of concern, available equipment, staff, funding, etc.;

Initiate by end of Year 1; complete by end of Year 2 (revise in Year 3 if changes are made):

- describe procedures for identifying and locating *illicit discharges* (trackdown);
- describe procedures for eliminating *illicit discharges*;
- describe procedures for enforcing against illicit dischargers;
- describe procedures for documenting actions;
- describe the program being developed for informing public employees, businesses, and the general public of hazards associated with illegal *discharges* and improper disposal of waste;

Initiate by end of Year 1; complete by end of Year 3:
- regulatory mechanism status development and adoption - by end of Year 3 certify that regulatory mechanism is equivalent to the *State's* model IDDE law (if not already completed and submitted with an earlier report);

Initiate by end of Year 2; complete by end of Year 3:
- number and percent of *outfalls* mapped; and

Complete by Year 3:
- *outfall* map.

ii. **program *implementation* reporting** as set forth in Part VIII.A.3(l) above. Commence *implementation* reporting after three year *development* period. *Implementation* reporting may begin earlier if *implementation* begins during development period.

4. Construction Site Stormwater Runoff Control - SWMP Development / Implementation

At a minimum, all *covered entities* must:

a. *Develop (for newly authorized MS4s)*, *implement*, and enforce a program that:

i. provides equivalent protection to the NYS SPDES General Permit for Stormwater Discharges from Construction Activities (either GP-02-01, GP-0-08-001 or GP-0-15-002), unless more stringent requirements are contained within this *SPDES general permit*;

ii. addresses *stormwater* runoff to the *small MS4* from *construction activities* that result in a land disturbance of greater than or equal to one acre. Control of *stormwater discharges* from *construction activity* disturbing less than one acre must be included in the program if:
- that *construction activity* is part of a *larger common plan of development or sale* that would disturb one acre or more; or
- if controlling such activities in a particular watershed is required by the *Department*;

iii. includes a law, ordinance or other regulatory mechanism to require a *SWPPP* for each applicable land disturbing activity that includes erosion and sediment controls that meet the *State's* most current technical standards:
- this mechanism must be equivalent to one of the versions of the "NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control"; and
- equivalence must be documented
-by adoption of one of the sample local laws without changes;
- by using the NYSDEC Gap Analysis Workbook; or
- by adoption of a modified version of the sample law, or an alternative law, and, in either scenario, certification by the attorney representing the small MS4 that the adopted law is equivalent to one of the sample local laws.

iv. contains requirements for construction site operators to implement erosion and sediment control management practices;

v. allows for sanctions to ensure compliance to the extent allowable by State law;

vi. contains requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality, pursuant to the requirement of construction permit;

vii. describes procedures for *SWPPP* review with consideration of potential water quality impacts and review of individual *SWPPPs* to ensure consistency with *State* and local sediment and erosion control requirements;

- ensure that the individuals performing the reviews are adequately trained and understand the *State* and local sediment and erosion control requirements;
- all *SWPPPs* must be reviewed for sites where the disturbance is one acre or greater; and
- after review of *SWPPPs*, the *covered entity* must utilize the "MS4 SWPPP Acceptance Form" created by the *Department* and required by the SPDES General Permit for Stormwater Discharges from Construction Activity when notifying construction site owner / operators that their plans have been accepted by the *covered entity*;

viii. describes procedures for receipt and follow up on complaints or other information submitted by the public regarding construction site storm water runoff;

ix. describes procedures for site inspections and enforcement of erosion and sediment control measures including steps to identify priority sites for inspection and enforcement based on the nature of the construction activity, topography, and the characteristics of soils and receiving water;
- the *covered entity* must ensure that the individual(s) performing the inspections are adequately trained and understand the *State* and local sediment and erosion control requirements. Adequately trained means receiving inspector training by a *Department* sponsored or approved training;
- all sites must be inspected where the disturbance is one acre or greater;
- *covered entities* must determine that it is acceptable for the owner or operator of a construction project to submit the Notice of Termination (NOT) to the *Department* by performing a final site inspection themselves or by accepting the Qualified Inspector's final inspection certification(s) required by the SPDES General Permit for Stormwater Discharges from Construction Activity. The principal executive officer, ranking elected official, or duly authorized representative (see Part VI.J.) shall document their determination by signing the "MS4 Acceptance" statement on the NOT.

x. educates construction site owner / operators, design engineers, *municipal* staff and other individuals to whom these regulations apply about the *municipality's* construction *stormwater* requirements, when construction *stormwater* requirements apply, to whom they apply, the procedures for submission of *SWPPPs*, construction site inspections, and other procedures associated with control of construction stormwater;

xi. ensures that construction site operators have received erosion and sediment control training before they do work within the *covered entity's* jurisdiction and maintain records of that training. Small home site construction (construction where the Erosion and Sediment Control Plan is developed in accordance with Appendix E of the "New York Standards and Specifications for Erosion and Sediment Control") is exempt from the requirements below:
- training may be provided by the *Department* or other qualified entities (such as Soil and Water Conservation Districts);
- the *covered entity* is not expected to perform such training, but they may co-sponsor training for construction site operators in their area;
- the *covered entity* may ask for a certificate of completion or other such proof of training; and
- the *covered entity* may provide notice of upcoming sediment and erosion control training by posting in the building department or distribute with building permit application;

xii. establishes and maintains an inventory of active construction sites, including the location of the site, owner / operator contact information;

xiii. *develop (for newly authorized MS4s)*, record, periodically assess and modify as needed *measurable goals*; and

xiv. select and appropriate construction *stormwater BMPs* and *measurable goals* to ensure the reduction of all *POCs* in *stormwater discharges* to the *MEP*.

Required SWMP Reporting

b. **Program *implementation* reporting** for **continuing *covered entities*** (MS4s covered for 3 or more years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

i. number of *SWPPPs* reviewed;
ii. number and type of enforcement actions;
iii. percent of active construction sites inspected once;
iv. percent of active construction sites inspected more than once;
v. number of construction sites authorized for disturbances of one acre or more; and
vi. report on effectiveness of program, *BMP* and *measurable goal* assessment.

c. Reporting for **newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

i. **program *development* deadlines and reporting**:

Initiate by end of Year 1:
- procedures, activities and identify personnel to educate and train construction site operators about requirements to develop and implement a SWPPP and any other requirements that must be met within the MS4's jurisdiction;

Complete in Year 1 (revise in Year 2 and 3 if changes are made):
- describe procedures for the receipt and consideration of information submitted by the public. Identify the responsible personnel;

Initiate by end of Year 1; complete by end of Year 3:
- regulatory mechanism development and adoption status - by end of Year 3 certify that regulatory mechanism is equivalent to one of the NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control (if not already completed and submitted with an earlier report);

Initiate by end of Year 2; complete by end of Year 3:
- describe procedures for SWPPP review that incorporate consideration of potential water quality impacts and ensure consistency with local sediment and erosion control requirements;
- describe procedures for construction site inspections; and
- describe procedures for enforcement of control measures and sanctions to ensure compliance.

ii. **program *implementation* reporting** as set forth in Part VII.A.4(b) above. Commence *implementation* reporting after three year *development* period. *Implementation* reporting may begin earlier if *implementation* begins during development period.

5. Post-Construction Stormwater Management - SWMP Development/Implementation

At a minimum, all *covered entities* must:

a. *Develop (for newly authorized MS4s)*, *implement*, and enforce a program that:

i. provides equivalent protection to the NYS SPDES General Permit for Stormwater Discharges from Construction Activities (either GP-02-01, GP-0-08-001, or GP-0-15-002), unless more stringent requirements are contained within this *SPDES general permit*;

ii. addresses *stormwater* runoff from new development and redevelopment projects to the *small MS4* from projects that result in a land disturbance of greater than or

equal to one acre. Control of *stormwater discharges* from projects of less than one acre must be included in the program if:
- that project is part of a *larger common plan of development or sale*; or
- if controlling such activities in a particular watershed is required by the *Department*;

iii. includes a law, ordinance or other regulatory mechanism to require post construction runoff controls from new development and re-development projects to the extent allowable under *State* law that meet the *State's* most current technical standards:
- the mechanism must be equivalent to one of the versions of the" NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control"; and
- equivalence must be documented
  -by adoption of one of the sample local laws without changes;
  - by using the NYSDEC Gap Analysis Workbook; or
  - by adoption of a modified version of the sample law, or an alternative law, and, in either scenario and certification by the attorney representing the small MS4 that the adopted law is equivalent to one of the sample local laws;

iv. includes a combination of structural or non-structural management practices (according to standards defined in the most current version of the NYS Stormwater management Design Manual) that will reduce the *discharge* of pollutants to the MEP. In the development of the watershed plans, municipal comprehensive plans, open space preservation programs, local law, ordinances and land use regulations, covered entities must consider principles of *Low Impact Development* (LID), *Better Site Design* (BSD), and other *Green Infrastructure* practices to the MEP. In the development of the watershed plans, municipal comprehensive plans, open space preservation programs, local law, ordinances and land use regulations, covered entities must consider smart growth principles, natural resource protection, impervious area reduction, maintaining natural hydrologic conditions in developments, riparian buffers or set back distances for protection of environmentally sensitive areas such as streams, wetlands, and erodible soils.

- *covered entities* are required to review according to the *Green Infrastructure* practices defined in the Design Manual at a site level, and are encouraged to review, and revise where appropriate, local codes and laws that include provisions that preclude green infrastructure or construction techniques that minimize or reduce pollutant loadings.

- if a *stormwater* management practice is designed and installed in accordance with the New York State Stormwater Management Design Manual or has been demonstrated to be equivalent and is properly operated and maintained, then *MEP* will be assumed to be met for post-construction *stormwater* discharged by the practice;

v. describes procedures for *SWPPP* review with consideration of potential water quality impacts and review of individual *SWPPPs* to ensure consistency with state and local post-construction *stormwater* requirements;
- ensure that the individuals performing the reviews are adequately trained and understand the *State* and local post construction *stormwater* requirements;
- ensure that the individuals performing the reviews for SWPPPs that include post-construction stormwater management practices are *qualified professionals* or under the supervision of a *qualified professional*;
- all *SWPPPs* must be reviewed for sites where the disturbance is one acre or greater;
- after review of *SWPPPs*, the *covered entity* must utilize the "MS4 SWPPP Acceptance Form" created by the *Department* and required by the SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002) when notifying construction site owner / operators that their plans have been accepted by the *covered entity*;

- utilize available training from sources such as Soil and Water Conservation Districts, Planning Councils, The New York State Department of State, USEPA, and/or the *Department* to educate municipal boards and Planning and Zoning Boards on low impact development principles, better site design approach, and green infrastructure applications.

vi. maintain an inventory of post-construction stormwater management practices within the *covered entities* jurisdiction. At a minimum, include practices discharging to the *small MS4* that have been installed since March 10, 2003, all practices owned by the *small MS4*, and those practices found to cause or contribute to water quality standard violations.
- the inventory shall include at a minimum: location of practice (street address or coordinates); type of practice; maintenance needed per the NYS Stormwater Management Design Manual, *SWPPP*, or other provided documentation; and dates and type of maintenance performed; and

vii. ensures adequate long-term operation and maintenance of management practices identified in Part VII.5.a.vi by trained staff, including inspection to ensure that practices are performing properly.
- The inspection shall include inspection items identified in the maintenance requirements (NYS Stormwater Management Design Manual, *SWPPP*, or other maintenance information) for the practice. *Covered entities* are not required to collect *stormwater* samples and perform specific chemical analysis;

viii. Covered entities may include in the SWMP Plan provisions for development of a banking and credit system. MS4s must have an existing watershed plan based on which offsite alternative stormwater management in lieu of or in addition to on-site stormwater management practices are evaluated. Redevelopment projects must be evaluated for pollutant reduction greater than required treatment by the state standards. The individual project must be reviewed and approved by the *Department*. Use of a banking and credit system for new development is only acceptable in the impaired watersheds to achieve the no net increase requirement and watershed improvement strategy areas to achieve pollutant reductions in accordance with watershed plan load reduction goals. A banking and credit system must at minimum include:
- Ensure that offset exceeds a standard reduction by factor of at least 2
- Offset is implemented within the same watershed
- Proposed offset addresses the POC of the watershed
- Tracking system is established for the watershed
- Mitigation is applied for retrofit or redevelopment
- Offset project is completed prior to beginning of the proposed construction
- A legal mechanism is established to implement the banking and credit system

b. *Develop (for newly authorized MS4s)*, *implement*, and provide adequate resources for a program to inspect development and re-development sites by trained staff and to enforce and penalize violators;

c. *Develop (for newly authorized MS4s)*, record, annually assess and modify as needed *measurable goals*; and

d. Select and implement appropriate post-construction *stormwater BMPs* and *measurable goals* to ensure the reduction of all *POCs* in *stormwater discharges* to the *MEP*.

Required SWMP Reporting

e. **Program *implementation* reporting** for **continuing *covered entities*** (MS4s covered for 3 or more years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

i. number of *SWPPPs* reviewed;
ii. number and type of enforcement actions;
iii. number and type of post-construction stormwater management practices inventoried;
iv. number and type of post-construction stormwater management practices inspected;
v. number and type of post-construction stormwater management practices maintained;
vi. regulatory mechanism status - certification that regulatory mechanism is equivalent to one of the "NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control" (if not already done); and
vii. report on effectiveness of program, BMP and measurable goal assessment, and implementation of a banking and credit system, if applicable;

f. Reporting for **newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

i. **program *development* deadlines and reporting**:
Initiate by end of Year 1; complete by end of Year 3:
- regulatory mechanism development and adoption status - by end of Year 3 certify that regulatory mechanism is equivalent to one of the NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control (if not already completed and submitted with an earlier report);

Initiate by end of Year 2; complete by end of Year 3:
- procedures for SWPPP review to ensure that post-construction stormwater management practices meet the most current version of the state technical standards;
- procedures for inspection and maintenance of post-construction management practices;
- procedures for enforcement and penalization of violators; and

Complete by the end of year 3:

- provide resources for the program to inspect new and re-development sites and for the enforcement and penalization of violators.

ii. **program *implementation* reporting** as set forth in Part VII.A.5(e) above. Commence *implementation* reporting after three year *development* period. *Implementation* reporting may begin earlier if *implementation* begins during *development* period.

6. Pollution Prevention/Good Housekeeping For Municipal Operations - SWMP Development / Implementation
At a minimum, all *covered entities* must:

a. *Develop (for newly authorized MS4s)* and *implement* a pollution prevention / good housekeeping program for *municipal* operations and facilities that:

i. addresses *municipal* operations and facilities that contribute or potentially contribute *POCs* to the *small MS4* system. The operations and facilities may include, but are not limited to: street and bridge maintenance; winter road maintenance; stormwater system maintenance; vehicle and fleet maintenance; park and open space maintenance; municipal building maintenance; solid waste management; new construction and land disturbances; right-of-way maintenance; marine operations; hydrologic habitat modification; or other;

ii. at a minimum frequency of once every three years, perform and document a self assessment of all municipal operations addressed by the SWMP to:
- determine the sources of pollutants potentially generated by the *covered entity*'s operations and facilities; and
- identify the *municipal* operations and facilities that will be addressed by the pollution prevention and good housekeeping program, if it is not done already;

iii. determines *management practices*, policies, procedures, etc. that will be *developed* and *implemented* to reduce or prevent the discharge of (potential) pollutants. Refer to management practices identified in the "NYS Pollution Prevention and Good Housekeeping Assistance Document" and other guidance materials available from the EPA, *State,* or other organizations;

iv. prioritizes pollution prevention and good housekeeping efforts based on geographic area, potential to improve water quality, facilities or operations most in need of modification or improvement, and *covered entity*'s capabilities;

v. addresses pollution prevention and good housekeeping priorities;

vi. includes an employee pollution prevention and good housekeeping training program and ensures that staff receive and utilize training;

vii. requires third party entities performing contracted services, including but not limited to street sweeping, snow removal, lawn / grounds care, etc., to meet permit requirements as the requirements apply to the activity performed ; and

viii. requires *municipal* operations and facilities that would otherwise be subject to the NYS Multi-sector General Permit (MSGP, GP-0-12-001) for industrial stormwater discharges to prepare and *implement* provisions in the SWMP that comply with Parts III. A, C, D, J, K and L of the MSGP. The covered entity must also perform monitoring and record keeping in accordance with Part IV. of the MSGP. Discharge monitoring reports must be attached to the MS4 annual report. Those operations or facilities are not required to gain coverage under the MSGP. *Implementation* of the above noted provisions of the SWMP will ensure that MEP is met for discharges from those facilities;

b. Consider and incorporate cost effective runoff reduction techniques and green infrastructure in the routine upgrade of the existing stormwater conveyance systems and municipal properties to the MEP. Some examples include replacement of closed drainage with grass swales, replacement of existing islands in parking lots with rain gardens, or curb cuts to route the flow through below grade infiltration areas or other low cost improvements that provide runoff treatment or reduction.

c. *Develop (for newly authorized MS4s)*, record, periodically assess and modify as needed measurable goals; and

d. Select and implement appropriate pollution prevention and good housekeeping *BMPs* and *measurable goals* to ensure the reduction of all *POCs* in *stormwater discharges* to the *MEP*.

e. Adopt techniques to reduce the use of fertilizers, pesticides, and herbicides, as well as potential impact to surface water.

Required SWMP Reporting

f. **Program *implementation* reporting** for **continuing *covered entities*** (MS4s covered for 3 or more years on the *reporting date*). *Covered entities* are required to report on

all *municipal* operations and facilities within their jurisdiction (*urbanized area* and *additionally designated area*) that their program is addressing. The *covered entity* shall report at a minimum on the items below:

i. indicate the *municipal* operations and facilities that the pollution prevention and good housekeeping program assessed;
ii. describe, if not done so already, the management practices, policies and procedures that have been developed, modified, and / or implemented and report, at a minimum, on the items below that the *covered entity's* pollution prevention and good housekeeping program addressed during the reporting year:

- acres of parking lot swept;
- miles of street swept;
- number of catch basins inspected and, where necessary, cleaned;
- post-construction control stormwater management practices inspected and, where necessary, cleaned;
- pounds of phosphorus applied in chemical fertilizer
- pounds of nitrogen applied in chemical fertilizer; and
- acres of pesticides / herbicides applied.

iii. staff training events and number of staff trained; and
iv. report on effectiveness of program, *BMP* and *measurable goal* assessment. If the pollution prevention and good housekeeping program addresses other operations than what is listed above in Part VII.A.6.a(ii), the *covered entity* shall report on items that will demonstrate program effectiveness.

g. Reporting for **newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). *Covered entities* are required to report on all *municipal* operations and facilities within their jurisdiction (*urbanized area* and *additionally designated area*) that their program is addressing. The *covered entity* shall report at a minimum on the items below:

i. **program *development* deadlines and reporting** (first three years after authorization is granted):
Complete by end of Year 1:
- identify the municipal operations and facilities that will be considered for inclusion in the pollution prevention and good housekeeping program;
- describe the pollution prevention and good housekeeping program priorities (geographic area, potential to improve water quality; facilities or operations most in need of modification or improvement);

- describe management practices, policies, procedures, etc. that will be developed or modified;
- identify the staff and equipment available;

Initiate by end of Year 2; complete by end of Year 3:
- describe employee pollution prevention and good housekeeping program training program and begin training, report on number of staff trained; and

Complete by end of Year 3:
- description of developed management practices.

ii. **program *implementation* reporting** as set forth in Part VII.A.6.(d) above. Commence reporting after three year *development* permit. *Implementation* reporting may begin earlier if *implementation* begins during development period.

PART VIII. MINIMUM CONTROL MEASURES - TRADITIONAL NON-LAND USE CONTROL AND NON-TRADITIONAL MS4s

A. Traditional Non-Land Use Control and Non-traditional MS4 Minimum Control Measures (MCMs)

These MCMs apply to *traditional non-land use control MS4s* and *non-traditional MS4s*. The SWMP for these *small MS4s* must be comprised of the 6 MCMs below. It is recommended that covered entities refer to assistance and guidance documents available from the *State* and EPA.

Under this *SPDES general permit*, the continuing *covered entities* are required to implement their SWMP, including the MCM requirements below. Newly regulated covered entities are required to develop their SWMP, containing the MCM requirements below, within the first 3 years of coverage and then commence implementation.

The *covered entity* may *develop (for newly authorized MS4s)* and / or *implement* their *SWMP* within their jurisdiction on their own. The *covered entity* may also *develop (for newly authorized MS4s)* and / or *implement* part or all of their *SWMP* through an intermunicipal program with another *covered entity*(s) or through other cooperative or contractual agreements with third parties that provide services to the *covered entity(s)*.

For each of the elements of the SWMP plan, the *covered entity* must identify (i) the agencies and/or offices that would be responsible for implementing the SWMP plan element and (ii) any protocols for coordination among such agencies and/or offices necessary for the implementation of the plan element.

To comply with the requirements of this *SPDES general permit*, the *traditional non-land use control MS4s* and *non-traditional MS4s* should consider their public to be the employee / user population, visitors, or contractors / developers. Examples of the public include, but are not limited to:
- transportation *covered entities* - general public using or living along transportation systems, staff, contractors;
- educational *covered entities* - faculty, other staff, students, visitors;
- other government *covered entities* - staff, contractors, visitors.

1. Public Education and Outreach on Stormwater Impacts SWMP Development / Implementation
At a minimum, all *covered entities* must:

a. Identify *POC*s, waterbodies of concern, geographic areas of concern, target audiences;

b. *Develop (for newly authorized MS4s)* and *implement* an ongoing public education and outreach program designed to describe:
i. the impacts of *stormwater discharges* on waterbodies;
ii. *POCs* and their sources;
iii. steps that contributors of these pollutants can take to reduce pollutants in *stormwater* runoff; and
iv. steps that contributors of non-*stormwater discharges* can take to reduce pollutants (non-*stormwater discharges* are listed in Part I.A.2);

c. Educational materials may be made available at, locations including, but not limited to:
i. at service areas, lobbies, or other locations where information is made available;
ii. at staff training;
iii. on *covered entity's* website;
iv. with pay checks; and
v. in employee break rooms;

d. *Develop (for newly authorized MS4s)*, record, periodically assess and modify as needed *measurable goals*; and

e. Select and implement appropriate education and outreach *activities* and *measurable goals* to ensure the reduction of all *POCs* in *stormwater discharges* to the *MEP*.

Required SWMP Reporting

f. At a minimum, the *covered entity* shall report on the items below:

i. list education / outreach *activities* performed and provide any results (number of people attended, amount of materials distributed, etc.);
ii. education of the public about the hazards associated with illegal *discharges* and improper disposal of waste as required by Part VIII.A.3, may be reported in this section;
iii. *covered entity's* performing the education and outreach activities required by other MCMs (listed below), may report on those activities in MCM 1 and provide the following information applicable to their program:
- IDDE education *activities* planned or completed for the public, as required by Part VIII.A.3;
- construction site *stormwater* control training planned or completed, as required by Part VIII.A.4; and
- employee pollution prevention / good housekeeping training planned or completed, as required by Part VIII.A.6;

To facilitate shared annual reporting, if the education and outreach activities

(Part VIII.A.1.f.iii.)

above are implemented by a third party, and the third party is completing the associated portions of the annual report, that third party may report on the education and outreach activities within MCM 1 of the annual report and not within the MCMs that the education and outreach activities are required by;

iv. report on effectiveness of program, *BMP* and *measurable goal* assessment; and

v. maintain records of all training activities

g. Reporting for **newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

i. **program *development* deadlines and reporting**:
Complete in Year 1 (report changes in Year 2 and 3 as needed):
- list (and describe if necessary) POCs;
- *development* of education and outreach program and activities for the public that address *POCs*, geographic areas of concern, and / or *discharges* to *303(d) / TMDL* waterbodies;
- *covered entities* developing education and outreach programs required by other MCMs (listed below), may report on development (and implementation of
those activities, if occurring during the three year development period) in MCM 1 and provide the following information applicable to their program:
  - IDDE education *activities* planned or completed for the public, as required by Part VIII.A.3;
  - construction site *stormwater* control training planned or completed, as required by Part VIII.A.4; and
  - employee pollution prevention / good housekeeping training planned or completed, as required by Part VIII.A.6.

To facilitate shared annual reporting, if the education and outreach activities above are implemented by a third party, and the third party is completing the associated portions of the annual report, that third party may report on the education and outreach activities within MCM 1 of the annual report and not within the MCMs that the education and outreach activities are required by.

ii. **Program *implementation* reporting** as set forth in Part VIII.A.1(f) above. Commence *implementation* reporting after three year *development* period. *Implementation* reporting may begin earlier if *implementation* begins during *development* period.

2. Public Involvement/Participation - SWMP Development / Implementation

At a minimum, all *covered entities* must:

(Part VIII.A.2.)

a. Comply with *State* and local public notice requirements identified below when implementing a public involvement / participation program:

i. *traditional non-land use control MS4s* shall comply with the *State Open Meetings Law* and local public notice requirements, such as *Open Meetings Law*; and

ii. *traditional non-land use control MS4s* and *non-traditional MS4s* may comply with this requirement by determining who their public is (staff, visitors, contractors, etc.) and posting notifications (as needed) in areas viewable by the public. Such areas include common areas, bulletin boards, agency/office web pages, etc. For *small MS4s* whose public are in multiple locations, notifications shall be made available to the public in all locations within the urbanized or additionally designated areas;

b. Provide the opportunity for the public to participate in the *development*, *implementation,* review, and revision of the *SWMP*;

c. **Local stormwater public contact.**
Identify a local point of contact for public concerns regarding *stormwater* management and compliance with this *SPDES general permit*. The name or title of this contact and the telephone number must be published in public outreach and public participation materials and kept updated with the *Department* on the MCC form;

d. **Annual report presentation.**
Below are the requirements for the annual report presentation:

i. prior to submitting the final annual report to the *Department*, by June 1 of each reporting year (see Part V.C.), present the draft annual report in a format that is open to the public, where the public can ask questions and make comments on the report. This can be done:
- at a meeting that is open to the public, where the public attendees are able to ask questions about and make comments on the report. This may be a regular meeting of an existing board. It may also be a separate meeting, specifically for *stormwater*. If multiple *covered entities* are working together, they may have a group meeting (refer to Part V.C.2); or
- on the internet by:
  - making the annual report available to the public on a website:
  - providing the public the opportunity to provide comments on the internet or otherwise; and

(Part VIII.A.2.d.i.)

- making available the opportunity for the public to request an open public meeting to ask questions about and make comments on the report;

ii. *traditional non-land use control MS4s* must comply with Part VIII.A.2.(d)(i) above. If they choose to present the draft annual report at a meeting, it may be presented at an existing meeting (e.g. a meeting of the Environmental Management Council , Water Quality Coordinating Committee, other agencies, or a meeting specifically for stormwater), or made available for review on the internet. The *covered entity* must make public the following information when noticing the presentation in accordance with *Open Meetings Law* or other local public notice requirements:
- the placement of the annual report on the agenda of this meeting or location on the internet;
- the opportunity for public comment. This *SPDES general permit* does not require a specified time frame for public comments, although it is recommended that *covered entities* provide the public an opportunity to comment for a period after the meeting. Comments received after the final annual report is submitted shall be reported with the following year's annual report. *Covered entities* must take into account those comments in the following year;
- the date and time of the meeting or date annual report becomes available on the internet; and
- the availability of the draft report for review prior to the public meeting or duration of availability of the annual report on the internet;

iii. *non-traditional MS4s* typically do not have regular meetings during which a presentation on the annual report can be made. Those *covered entities* may comply with this requirement by either:
- noticing the availability of the report for public comment by posting a sign, posting on web site, or other methods with information about the availability and location where the public can view it and contact information for those that read the report to submit comments; or
- following the internet presentation as explained in Part VIII.A.2(d)(i) above;

iv. the *Department* recommends that announcements be sent directly to individuals (public and private interested parties) known to have a specific interest in the covered entity's *SWMP*;

(Part VIII.A.2.d.)

v. include a summary of comments and intended responses with the final annual report. Changes made to the *SWMP* in response to comments should be described in the annual report; and

vi. ensure that a copy of the final report and, beginning in 2009, the SWMP plan are available for public inspection;

e. *Develop (for newly authorized MS4s),* record, periodically assess and modify as needed *measurable goals*; and

f. Select and implement appropriate public involvement / participation *activities* and *measurable goals* to ensure the reduction of all of the *POCs* in *stormwater discharges* to the *MEP*.

Required SWMP Reporting

g. **Program *implementation* reporting** for **continuing *covered entities*** (MS4s covered for 3 or more years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:
i. annual report presentation information (date, time, attendees) or information about how the annual report was made available for comment;
ii. comments received and intended responses (as an attachment); and
iii. report on effectiveness of program, *BMP* and *measurable goal* assessment;

h. Reporting for **newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

i. **program *development* deadlines and reporting**:
Complete for Year 1, 2, and 3:
- annual report presentation information (date, time, attendees) or information about how the annual report was made available for comment; and
- comments received and intended responses (as an attachment).

ii. **program *implementation* reporting** as set forth in Part VIII.A.2.g above. Commence *implementation* reporting after three year *development* period. *Implementation* reporting may begin earlier if *implementation* begins during development period.

3. Illicit Discharge Detection and Elimination (IDDE) - SWMP Development / Implementation

At a minimum, all *covered entities* must:

(Part VIII.A.3.)

a. *Develop (for newly authorized MS4s)*, *implement* and enforce a program to detect and eliminate *illicit discharges* (as defined at 40CFR 122.26(b)(2)) into the *small MS4;*

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* determined using GIS or other tools, even if they extend outside of the *urbanized area* (to facilitate trackdown), 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 trackdown, the *covered entity's* storm sewer system in accordance with available *State* and EPA guidance;

c. Field verify *outfall* locations;

d. Conduct an outfall reconnaissance inventory, as described in the EPA publication entitled Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessment, addressing every *outfall* within the *urbanized area* and *additionally designated area* within the *covered entity's* jurisdiction at least once every five years, with reasonable progress each year;

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

f. Prohibit *illicit discharges* into the *small MS4* and *implement* appropriate enforcement procedures and actions below, as applicable:

i. for *traditional non-land use control MS4s*:
- effectively prohibit, through a law, ordinance, or other regulatory mechanism, *illicit discharges* into the *small MS4* and *implement* appropriate enforcement procedures and actions; and
- the law, ordinance, or other regulatory mechanism must be equivalent to the *State*'s model *IDDE* local law "NYSDEC Model Local Law to Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer Systems" developed by the *State*, as determined and certified to be equivalent by the attorney representing the *small MS4* ; and

(Part VIII.A.3.f.)

ii. for *non-traditional MS4s*:
- prohibit and enforce against *illicit discharges* through available mechanisms (i.e. tenant lease agreements, bid specifications, requests for proposals, standard contract provisions, connection permits, maintenance directives / BMPS, access permits, consultant agreements, internal policies);
- procedures or policies must be developed for implementation and enforcement of the mechanisms;
- a written directive from the person authorized to sign the NOI stating that updated mechanisms must be used and who (position(s)) is responsible for ensuring compliance with and enforcing the mechanisms for the *covered entity's IDDE* program; and
- the mechanisms and directive must be equivalent to the *State*'s model illicit discharge local law;

g. *Develop (for newly authorized MS4s)* and *implement* a program to detect and address non-stormwater *discharges*, including illegal dumping, to the *small MS4* . The program must include: procedures for identifying priority areas of concern (geographic, audiences, or otherwise) for IDDE program; description of priority areas of concern, available equipment, staff, funding, etc.; procedures for identifying and locating *illicit discharges* (trackdown); procedures for eliminating *illicit discharges*; and procedures for documenting actions;

h. Inform the public of the hazards associated with illegal *discharges* and the improper disposal of waste;

i. Address the categories of non-stormwater *discharges* or flows listed in Part I.A.2 as necessary and maintain records of notification;

j. *Develop (for newly authorized MS4s)*, record, periodically assess, and modify as needed, *measurable goals;* and

k. Select and implement appropriate IDDE *BMPs* and *measurable goals* to ensure the reduction of all *POCs* in *stormwater discharges* to the *MEP*

Required SWMP Reporting

l. **Program *implementation* reporting** for **continuing *covered entities*** (MS4s covered for 3 or more years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

i. number and percent of *outfalls* mapped;

(Part VIII.A.3.l.)

ii. number of *illicit discharges* detected and eliminated;
iii. percent of outfalls for which an outfall reconnaissance inventory has been performed. ;
iv. status of system mapping;
v. activities to and results from informing the public of hazards associated with illegal *discharges* and improper disposal of waste;
vi. for traditional non-land use control MS4s, regulatory mechanism status - certification that law is equivalent to the *State*'s model *IDDE* local law (if not already completed and submitted with a prior annual report); and
vii. report on effectiveness of program, *BMP* and *measurable goal* assessment.

m. Required reporting for **newly authorized *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

i. **program *development* deadlines and reporting**:
Initiate by end of Year 1; complete by end of Year 3:
- regulatory mechanism development and adoption - by end of Year 3 certify that regulatory mechanism is equivalent to the *State's* model *IDDE* local law (traditional non-land use control MS4s) or certification of equivalence may be accomplished as set forth in Part VIII.A.3(f)(ii).

Complete in Year 1 (revise in Year 2 and 3 if changes are made):
- describe procedures for identifying priority areas of concern (geographic, audiences, or otherwise) for IDDE program;
- describe priority areas of concern, available equipment, staff, funding, etc.;

Initiate by end of Year 1; complete by end of Year 2 (revise in Year 3 if changes are made):
- describe procedures for identifying and locating *illicit discharges* (trackdown);
- describe procedures for eliminating *illicit discharges*;
- describe procedures for enforcing against illicit dischargers;
- describe procedures for documenting actions;
- describe the program being developed for informing the public of hazards associated with illegal *discharges* and improper disposal of waste;

Initiate by end of Year 2; complete by end of Year 3:
- number and percent of *outfalls* mapped;

(Part VIII.A.3.m.i.)

Complete by Year 3:
- *outfall* map; and

ii. **program *implementation* reporting** as set forth in Part VIII.A.3(l) above. Commence *implementation* reporting after three year *development* period. *Implementation* reporting may begin earlier if *implementation* begins during development period.

4. Construction Site Stormwater Runoff Control - SWMP Development / Implementation
At a minimum, all *covered entities* must:

a. *Develop (for newly authorized MS4s)*, *implement*, and enforce a program that:

i. provides equivalent protection to the NYS SPDES General Permit for Stormwater Discharges from Construction Activities, unless more stringent requirements are contained within this *SPDES general permit*;

ii. addresses *stormwater* runoff to the *small MS4* from *construction activities* that result in a land disturbance of greater than or equal to one acre. Control of *stormwater discharges* from *construction activity* disturbing less than one acre must be included in the program if:
- that *construction activity* is part of a *larger common plan of development or sale* that would disturb one acre or more; or
- if controlling such activities in a particular watershed is required by the *Department;*

iii. incorporates mechanisms for construction runoff requirements from new development and redevelopment projects to the extent allowable under *State* and local law that meet the *State*'s most current technical standards:
- through available mechanisms (i.e. tenant lease agreements, bid specifications, requests for proposals, standard contract provisions, connection permits, maintenance directives / BMPS, access permits, consultant agreements, internal policies);
- procedures or policies must be developed for implementation and enforcement of the mechanisms;
- a written directive from the person authorized to sign the NOI stating that updated mechanisms must be used and who (position(s)) is responsible for ensuring compliance with and enforcing the mechanisms for construction projects that occur on property owned, under easement to, within the

(Part VIII.A.4.a.iii.)

right-of-way of, or under the maintenance jurisdiction by the *covered entity* or within the maintenance jurisdiction of the MS4; and
- the mechanisms and directive must be equivalent to the requirements of the NYS SPDES General Permit for Stormwater Discharges from Construction Activities.

iv. allows for sanctions to ensure compliance to the extent allowable by *State* law;

v. describes procedures for receipt and follow up on complaints or other information submitted by the public regarding construction site stormwater runoff;

vi. educates construction site operators, design engineers, *municipal* staff and other individuals to whom these regulations apply about the construction requirements in the *covered entity's* jurisdiction, including the procedures for submission of *SWPPPs*, construction site inspections, and other procedures associated with control of construction stormwater;

vii. Ensures that construction site contractors have received erosion and sediment control training, including the *trained contractors* as defined in the SPDES general permit for construction, before they do work within the *covered entity's* jurisdiction:
- training may be provided by the *Department* or other qualified entities (such as Soil and Water Conservation Districts);
- the *covered entity* is not expected to perform such training, but they may co-sponsor training for construction site operators in their area;
- the *covered entity* may ask for a certificate of completion or other such proof of training; and
- the *covered entity* may provide notice of upcoming sediment and erosion control training by posting in the building department or distribute with building permit application.

viii. establishes and maintains an inventory of active construction sites, including the location of the site, owner / operator contact information;

ix. develop *(for newly authorized MS4s)*, record, periodically assess and modify as needed *measurable goals*; and

(Part VIII.A.4.a.)

x. select and implement appropriate construction stormwater *BMPs* and *measurable goals* to ensure the reduction of all *POCs* in *stormwater discharges* to the *MEP*.

Required SWMP Reporting

b. **Program *implementation* reporting** for **continuing *covered entities*** (MS4s covered for 3 or more years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:
i. number and type of sanctions employed;
ii. status of regulatory mechanism - certify that mechanisms will assure compliance with the NYS SPDES General Permit for Stormwater Discharges from Construction Activities;
iii. number of construction sites authorized for disturbances of one acre or more; and
iv. report on effectiveness of program, *BMP* and *measurable goal* assessment.

c. Reporting for **newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:
i. **Program *development* deadlines and reporting**:
Initiate by end of Year 1:
- procedures, activities and identify personnel to educate and train construction site operators about requirements to develop and implement a SWPPP and any other requirements that must be met within the MS4's jurisdiction;

Initiate by the end of Year 1; complete by the end of Year 3:
- status of mechanism for construction runoff requirements - by end of Year 3 certify that mechanisms will assure compliance with the NYS SPDES General Permit for Stormwater Discharges from Construction Activities; and

Complete in Year 1 (revise in Year 2 and 3 if changes are made):
- describe procedures for the receipt and consideration of information submitted by the public. Identify the responsible personnel.

ii. Program implementation reporting as set forth in Part VIII.A.4(b) above. Commence *implementation* reporting after three year development period. *Implementation* reporting may begin earlier if *implementation* begins during development period.

(Part VIII.A.)

5. Post-Construction Stormwater Management SWMP Development / Implementation
At a minimum, all *covered entities* must:
a. *Develop (for newly authorized MS4s)*, *implement*, and enforce a program that:
i. provides equivalent protection to the NYS SPDES General Permit for Stormwater Discharges from Construction Activities, unless more stringent requirements are contained within this *SPDES general permit*;

ii. addresses *stormwater* runoff from new development and redevelopment projects to the *small MS4* from projects that result in a land disturbance of greater than or equal to one acre. Control of *stormwater discharges* from projects of less than one acre must be included in the program if:
- that project is part of a *larger common plan of development or sale*;
- if controlling such activities in a particular watershed is required by the *Department*;

iii. incorporates enforceable mechanisms for post-construction runoff control from new development and re-development projects to the extent allowable under *State* or local law that meet the *State*'s most current technical standards:
- through available mechanisms (i.e. tenant lease agreements, bid specifications, requests for proposals, standard contract provisions, connection permits, maintenance directives / BMPS, access permits, consultant agreements, internal policies);
- procedures or policies must be developed for implementation and enforcement of the mechanisms;
- a written directive from the person authorized to sign the NOI stating that updated mechanisms must be used and who (position(s)) is responsible for ensuring compliance with and enforcing the mechanisms for construction projects that occur on property owned by the *covered entity* or within the maintenance jurisdiction of the MS4; and
- the mechanisms and directive must assure compliance with the requirements of the NYS SPDES General Permit for Stormwater Discharges from Construction Activities;

iv. includes a combination of structural or non-structural management practices (according to standards defined in the most current version of the NYS Stormwater management Design Manual) that will reduce the *discharge* of pollutants to the MEP. In the development of environmental plans such as watershed plans, open space preservation programs, local laws, and ordinances covered entities must incorporate principles of *Low Impact Development* (LID), *Better Site Design* (BSD) and other *Green Infrastructure* practices to the MEP.

(Part VIII.A.5.a.iv.)

Covered entities must consider natural resource protection, impervious area reduction, maintaining natural hydrologic condition in developments, buffers or set back distances for protection of environmentally sensitive areas such as streams, wetlands, and erodible soils in the development of environmental plans.

- if a *stormwater* management practice is designed and installed in accordance with the New York State Stormwater Management Design Manual or has been demonstrated to be equivalent and is properly operated and maintained, then *MEP* will be assumed to be met for the post construction *stormwater* discharged by the practice;

v. establish and maintain an inventory of post-construction stormwater management practices to include at a minimum practices discharging to the *small MS4* that have been installed since March 10, 2003, those owned by the small MS4, and those found to cause water quality standard violations.
- the inventory shall include, at a minimum: location of practice (street address or coordinates); type of practice; maintenance needed per the NYS Stormwater Management Design Manual, *SWPPP*, or other provided documentation; and dates and type of maintenance performed; and

vi. ensures adequate long-term operation and maintenance of management practices by trained staff, including assessment to ensure that the practices are performing properly.
- The assessment shall include the inspection items identified in the maintenance requirements (NYS Stormwater Management Design Manual, *SWPPP*, or other maintenance information) for the practice. *Covered entities* are not required to collect *stormwater* samples and perform specific chemical analysis;

vii. Covered entities may include in the SWMP Plan provisions for development of a banking and credit system. MS4s must have an existing watershed plan based on which offsite alternative stormwater management in lieu of or in addition to on-site stormwater management practices are evaluated. Redevelopment projects must be evaluated for pollutant reduction greater than required treatment by the state standards. The individual project must be reviewed and approved by the *Department*. Use of a banking and credit system for new development is only acceptable in the impaired watersheds to achieve the no net increase requirement and watershed improvement strategy areas to achieve pollutant reductions in accordance with watershed plan load reduction goals. A banking and credit system must at minimum include:

(Part VIII.A.5.a.vii.)

- Ensures offset exceeds standard reduction by factor of at least 2
- Offset is implemented within the same watershed
- Proposed offset addresses the POC of the watershed
- Tracking system is established for the watershed
- Mitigation is applied for retrofit or redevelopment
- Offset project is completed prior to beginning the proposed construction
- A legal mechanism is established to implement the banking and credit system

b. *Develop (for newly authorized MS4s)*, *implement*, and provide adequate resources for a program to inspect development and re-development sites by trained staff and to enforce and employ sanctions;

c. *Develop (for newly authorized MS4s)*, record, annually assess and modify as needed *measurable goals*; and

d. Select and implement appropriate post-construction *stormwater BMPs* and *measurable goals* to ensure the reduction of all *POCs* in *stormwater discharges* to the *MEP*.

Required SWMP Reporting

e. Program *implementation* reporting for continuing *covered entities* (MS4s covered for 3 or more years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

i. number and type of sanctions;
ii. number and type of post-construction stormwater management practices;
iii. number and type of post-construction stormwater management practices inspected;
iv. number and type of post-construction stormwater management practices maintained;
v. status of regulatory mechanism, equivalent mechanism, that regulatory mechanism is equivalent; and
vi. report on effectiveness of program, *BMP* and *measurable goal* assessment, and implementation of a banking and credit system, if applicable.

f. Program reporting for **newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

(Part VIII.A.5.f.)

i. **program *development* deadlines and reporting**:
Initiate by end of Year 1; complete by end of Year 3:
- mechanism of post-construction stormwater management - by end of Year 3 certify that mechanisms will assure compliance with the NYS Construction General Permit (GP-0-15-002);

Initiate by end of Year 2; complete by end of Year 3:
- procedures for inspection and maintenance of post-construction management practices; and
- procedures for enforcement and penalization of violators;

ii. **program *implementation* reporting** as set forth in Part VIII.A.5(e). Commence *implementation* reporting after three year development period. *Implementation* reporting may begin earlier if *implementation* begins during *development* period.

6. Pollution Prevention/Good Housekeeping For Municipal Operations

SWMP Development / Implementation

At a minimum, all *covered entities* must:

a. *Develop (for newly authorized MS4s)* and *implement* a pollution prevention / good housekeeping program for *municipal* operations and facilities that:

i. addresses *municipal* operations and facilities that contribute or potentially contribute *POCs* to the *small MS4* system. The operations and facilities may include, but are not limited to: street and bridge maintenance; winter road maintenance; stormwater system maintenance; vehicle and fleet maintenance; park and open space maintenance; municipal building maintenance; solid waste management; new construction and land disturbances; right-of-way maintenance; marine operations; hydrologic habitat modification, or other;

ii. includes the performance and documentation of a self assessment of all municipal operations to:
- determine the sources of pollutants potentially generated by the *covered entity*'s operations and facilities; and
- identify the *municipal* operations and facilities that will be addressed by the pollution prevention and good housekeeping program, if it is not done already;

iii. determines *management practices*, policies, procedures, etc. that will be *developed* and *implemented* to reduce or prevent the discharge of (potential)

(Part VIII.A.6.a.iii.)

pollutants. Refer to *management practices* identified in the "NYS Pollution Prevention and Good Housekeeping Assistance Document" or other guidance materials available from the EPA, the *State*, or other organizations;

iv. prioritizes pollution prevention and good housekeeping efforts based on geographic area, potential to improve water quality, facilities or operations most in need of modification or improvement, and *covered entity*'s capabilities;

v. addresses pollution prevention and good housekeeping priorities;

vi. includes an employee pollution prevention and good housekeeping training program and ensure that staff receive and utilize training;

vii. requires third party entities performing contracted services, including but not limited to, street sweeping, snow removal, lawn / grounds care, etc., to make the necessary certification in Part IV.G; and

viii. requires *municipal* operations and facilities that would otherwise be subject to the NYS Multisector General Permit (MSGP, GP-0-12-001) for industrial stormwater discharges to prepare and *implement* provisions in the SWMP that comply with Parts III. A, C, D, J, K and L of the MSGP. The covered entity must also perform monitoring and record keeping in accordance with Part IV. of the MSGP. Discharge monitoring reports must be attached to MS4 annual report. Those operations or facilities are not required to gain coverage under the MSGP. *Implementation* the above noted provisions of the SWMP will ensure that MEP is met for discharges from those facilities;

b. Consider and incorporate cost effective runoff reduction techniques and green infrastructure in the routine upgrade of the existing stormwater conveyance systems and municipal properties to the MEP. Some examples include replacement of closed drainage with grass swales, replacement of the existing islands in parking lots with rain garden, or curb cuts to route the flow through below grade infiltration areas or other low cost improvements that provide runoff treatment or reduction.

c. *Develop (for newly authorized MS4s)*, record, periodically assess and modify as needed *measurable goals;* and

(Part VIII.A.6.)

d. Select and implement appropriate pollution prevention and good housekeeping *BMPs* and *measurable goals* to ensure the reduction of all *POCs* in *stormwater discharges* to the *MEP*.

e. Adopt techniques to reduce the use of fertilizers, pesticides, and herbicides, as well as potential impact to surface water.

Required SWMP Reporting

f. **Program *implementation* reporting** for **continuing *covered entities*** (MS4s covered for 3 or more years on the *reporting date*). *Covered entities* are required to report on all *municipal* operations and facilities within their jurisdiction (*urbanized area* and *additionally designated area*) that their program is addressing. The *covered entity* shall report at a minimum on the items below:

i. indicate the *municipal* operations and facilities that the pollution prevention and good housekeeping program assessed;
ii. describe, if not done so already, the management practices, policies and procedures that have been developed, modified, and / or implemented and report, at a minimum, on the items below that the *covered entity*'s pollution prevention and good housekeeping program addresses during the reporting year:
  - acres of parking lot swept;
  - miles of street swept;
  - number of catch basins inspected and, where necessary, cleaned;
  - post-construction control stormwater management practices inspected and, where necessary, cleaned;
  - pounds of phosphorus applied in chemical fertilizer
  - pounds of nitrogen applied in chemical fertilizer; and
  - acres of pesticides / herbicides applied.
iii. staff training events and number of staff trained; and
iv. report on effectiveness of program, *BMP* and *measurable goal* assessment. If the pollution prevention and good housekeeping program addresses other operations than what is listed above in Part VIII.A.6.a(ii), the *covered entity* shall report on items that will demonstrate program effectiveness.

g. Reporting for **newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). *Covered entities* are required to report on all *municipal* operations and facilities within their jurisdiction (*urbanized area* and *additionally*

(Part VIII.A.6.g.)

designated area) that their program is addressing. The *covered entity* shall report at a minimum on the items below:

i. **program *development* deadlines and reporting**:
Complete by end of Year 1:
- identify the municipal operations and facilities that will be considered for inclusion in the pollution prevention and good housekeeping program;
- describe the pollution prevention and good housekeeping program priorities (geographic area, potential to improve water quality; facilities or operations most in need of modification or improvement);
- describe management practices, policies, procedures, etc. that will be developed or modified;
- identify the staff and equipment available;

Initiate by Year 2; complete Year 3:
- describe employee pollution prevention and good housekeeping program training program and begin training, report on number of staff trained;

Complete by end of Year 3:
- description of developed management practices.

ii. **program *implementation* reporting** as set forth in Part VIII.A.6(d) above. Commence *implementation* reporting after three year *development* permit. *Implementation* reporting may begin earlier if *implementation* begins during *development* period.

Part IX. WATERSHED IMPROVEMENT STRATEGY REQUIREMENTS

The covered entities in the watershed improvement strategy areas must develop or modify their SWMP to address the additional watershed specific requirements to achieve the pollutant load reduction by the deadlines specified in Tables IX.A through D. The requirements contained in this Part are in addition to the applicable requirements in Part VII or VIII, depending on the type of MS4. The Pollutant Load Reductions are the reductions necessary from the discharge loads associated with MS4s that, when combined with reductions in the discharge loads from non-MS4s to the waterbody, will meet water quality standards. The calculated reductions are based on TMDL models and may be recalculated according to 40CFR Part 130.

The MS4 portion of the pollutant load reduction shall be achieved by implementation of BMPs required of all MS4s, reductions from implementation of additional BMPS for watershed improvement strategy areas including any retrofits required by this permit. These reductions are intended to be targeted and credited using models, loading factors and load reductions predicted based on the best scientific information available. In accordance with NYCRR Part 750-1.14, all covered entities that own or operate MS4s in the watershed improvement strategy areas shall submit to the Department progress reports, described in Part V.D, 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.

The Pollutant Load Reduction Deadlines are deadlines by which the MS4 portion of the pollutant load reduction must be met. Watershed Improvement Strategy Deadlines are the deadlines by which the watershed improvement strategy requirements for addressing the POC are to be completed and implemented. Retrofit Plan Submission Deadlines are the deadlines by which the retrofit plan component of the watershed improvement strategies are submitted to the *Department* for review and approval.

Ultimately, the effectiveness of the load reductions in meeting water quality standards will be verified by ambient monitoring of the affected waterbody. Where ambient monitoring demonstrates consistent compliance with water quality standards, the covered entity may request that the *Department* suspend the additional BMP requirements to install stormwater retrofits.

(Part IX.)

A. New York City East of Hudson Watershed MS4s - (Mapped in Appendix 3)

Table IX.A - Pollutant Load Reduction and Timetable for New York City East of Hudson Phosphorus Watershed Improvement Strategy Area

Watershed	Watershed Improvement Strategy Deadline	Retrofit Plan Submission Deadline	Pollutant Load Reduction (Load Allocation)	Pollutant Load Reduction Deadline
New York City East of Hudson Watershed	05/01/2011	03/09/ 2009 (single) and 12/ 31/2009 (RSE)	In accordance with the TMDL Implementation Plan	03/09/2019 (single) 12/31/2019 (RSE)

By the deadlines specified in Table IX.A, covered entities that own or operate MS4s within the listed watershed shall develop and implement the following pollutant specific BMPs. Covered entities that own or operate MS4s in these watersheds shall also submit to the Department, progress reports as specified in Part V.D.

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 phosphorus (the *POC*) on waterbodies. The program must identify potential sources of phosphorus in *stormwater* runoff and describe steps that contributors can take to reduce the concentration of this *POC* in *stormwater* runoff. The program must also describe steps that contributors of non-*stormwater* discharges (Part I.A.2) can take to reduce phosphorus.

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

i. understanding the phosphorus issue;

ii. septic systems as a source of phosphorus;

iii. phosphorus concerns with fertilizer use;

iv. phosphorus concerns with grass clippings and leaves entering streets and storm sewers;

v. construction sites as a source of phosphorus; and

vi. phosphorus concerns with detergent use.

2. Public Involvement/ Participation

No additional requirements proposed for this permit term.

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.

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.

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.

b. On-site wastewater systems - applicable to *traditional land use control* and *traditional non-land use control MS4s*.

- *Develop*, *implement* and enforce a program that ensures 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. Regular field investigations/inspections should be done 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. Program development shall include the establishment of the necessary legal authority to implement the program.

4. Construction Site Stormwater Runoff Control- applicable to *traditional land use control MS4s*.

a. *Develop*, *implement* and enforce a program to reduce pollutants in *stormwater* runoff to the *small MS4* from construction activities that result in a land disturbance of greater than or equal to five thousand (5000) square feet. At a minimum, the program must provide equivalent protection to the NYS DEC SPDES General Permit for Stormwater Discharges from Construction Activity and must include the development and implementation of:

i. by December 31, 2009, an ordinance or other regulatory mechanism that requires erosion and sediment controls designed in accordance with the most current version of the technical standard New York State Standards and Specifications for Erosion and Sediment Control for all construction activities that disturb between five thousand (5000) square feet and one acre of land. For construction activities that disturb between five thousand (5000) square feet and one (1) acre of land, one of the standard erosion and sediment control plans included in Appendix E (Erosion & Sediment Control Plan For Small Homesite Construction) of the New York Standards and Specifications for Erosion and Sediment Control may be used as the Stormwater Pollution Prevention Plan (SWPPP);

ii. policy and procedures for the *covered entity* to perform, or cause to be performed, compliance inspections at all sites with a disturbance of one (1) or more acres. By December 31, 2009, the *covered entity* shall have started performing, or cause to be performed, compliance inspections at all sites with a disturbance between five thousand (5000) square feet and one (1) acre of land;

5. Post-Construction Stormwater Management

a. Construction stormwater program - applicable to *traditional land use control*, *traditional non-land use control* and *non-traditional MS4s*.

(Part IX.A.5.a.)

Develop, *implement* and enforce a program to address post-construction *stormwater* runoff from new development and redevelopment projects that disturb greater than or equal to one (1) acre. This includes projects of less than one acre that are part of a larger common plan of development or sale. At a minimum, the program must provide equivalent protection to the NYS DEC SPDES General Permit for Stormwater Discharges from Construction Activity and must include the *development* and *implementation* of:

i. a law or other mechanism that requires post-construction stormwater management controls designed in accordance with the most current version of the technical standards the New York State Stormwater Management Design Manual including the Enhanced Phosphorus Removal Design Standards. An MS4 must ensure that their ordinance or other mechanism requires post-construction stormwater management controls to be designed in accordance with the final version of the Enhanced Phosphorus Removal Design Standards by September 30, 2008.

b. Retrofit program - 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 existing erosion and/or pollutant loading problems, with a particular emphasis placed on the pollutant phosphorus. At a minimum, the MS4 shall:

i. establish procedures to identify sites with erosion and/or pollutant loading problems;

ii. establish policy and procedures for project selection. Project selection should be based on the phosphorus 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 *covered entity* should participate in locally based watershed planning efforts which involve the *Department*, other *covered entities*, stakeholders and other interested parties;

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

(Part IX.A.5.b.)

iv. for covered entities that develop their own retrofit program, by March 9, 2009 develop and submit approvable plans with schedules for completing retrofit projects, including identification of funding sources. Upon DEC approval of those schedules, the plans and schedules shall become enforceable requirements of this permit.

v. pursuant to Part IV. B (Cooperation Between Covered entities Encouraged), retrofit projects can be completed in cooperation with other covered entities in the East of Hudson Watershed through the formation of a cooperative entity with other MS4s. Participating MS4s shall work with the Department and other members of the cooperative entity in implementing the requirements of i, ii and iii above. In addition, each covered entity that becomes a member of the cooperative entity shall work closely with the Department and other members of the cooperative entity to, by December 31, 2009, develop and submit approvable plans and schedules for completing retrofit projects, including identification of funding sources. Upon DEC approval of those plans and schedules, 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*, *traditional non-land use control* and *non-traditional MS4s*.

a. By December 31, 2009, develop and implement a Stormwater Conveyance System inspection and maintenance program. At a minimum, the program shall include the following:

i. policy and procedures for the inspection and maintenance of catch basin and manhole sumps. Catch basin and manhole sumps should be inspected in the early spring and late fall for sediment and debris build-up. If sediment and debris fills greater than 50% of the sump volume, the sump should be cleaned. All sediment and debris removed from the catch basins and manholes shall be properly disposed of;

ii. policy and procedures for the inspection, maintenance and repair of conveyance system *outfalls*. Beginning June 30, 2008, the MS4 must inspect 20% of their *outfalls* each year and make repairs as necessary. 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;

(Part IX.A.6.a.)

iii. policy and procedures for the inspection, maintenance and repair of a *covered entity's* stormwater management practices. The inspection and maintenance schedule for all stormwater management practices shall assure continued operation of stormwater management practices; and

iv. develop a Corrective Action Plan for each Stormwater Conveyance System component that has been identified as needing repair. A file of all corrective actions implemented and *illicit discharges* detected and repaired should be maintained for a period of not less than five years.

b. By December 31, 2010, develop and implement a turf management practices and procedures policy. The policy shall address the following:

i. procedures for proper fertilizer application on municipally-owned lands. 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;

ii. procedures for the proper disposal 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;

iii. procedures for the proper disposal of leaves from municipally-owned lands where leaves are collected. Leaves shall be disposed of in a compost pile or a proper containment device so that they cannot enter *small MS4s* or surface waters;

iv. for municipalities with lawn waste collection programs, the development of a curbside lawn waste management policy which ensures that lawn waste does not decay and release phosphorus to the storm sewer system; and

v. the planting of wildflowers and other native plant material to lessen the frequency of mowing and the use of chemicals to control vegetation.

(Part IX.)

B. Other Phosphorus Watershed MS4s (Mapped in Appendices 4, 5, and 10)

Table IX.B - Pollutant Load Reduction and Timetable for Other Phosphorus Watershed Improvement Strategy Areas

Watershed	Watershed Improvement Strategy Deadline	Retrofit Plan Submission Deadline	Pollutant Load Reduction (Waste Load Allocation %*)	Pollutant Load Reduction Deadline
Greenwood Lake	05/01/2011	03/09/2011	43* (load allocation)	03/09/2011
Onondaga Lake	TMDL approval + 3 years	TMDL approval + 3 years	TBD	TMDL approval + 13 years
Oscawana Lake	05/01/2013	Not Applicable	18	2020

By the deadlines specified in Table IX.B, covered entities that own or operate MS4s within the listed watersheds shall develop and implement the following pollutant specific BMPs for MS4 sewersheds discharging to the listed waterbody. Covered entities that own or operate MS4s in these watersheds shall also submit to the Department, progress reports as specified in Part V.D.

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 phosphorus (the POC) on waterbodies. The program must identify potential sources of Phosphorus in stormwater runoff and describe steps that contributors can take to reduce Phosphorus in stormwater runoff.

b. develop, or acquire if currently available, specific educational material dealing with sources of Phosphorus in stormwater and pollutant reduction practices. At a minimum, the educational material should address the following topics:
   i. understanding the phosphorus issue;
   ii. septic systems as a source of phosphorus; and
   iii. phosphorus concerns with fertilizer use.

2. Public Involvement/ Participation

No additional requirements proposed for at this time.

3. Illicit Discharge Detection and Elimination applicable to *traditional land use control* and *traditional non-land use control* MS4s, except within the Onondaga Lake Watershed.

a. *Develop*, *implement* and enforce a program that ensures 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 of regular field investigations/inspections should be done 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. Program development shall include the establishment of the necessary legal authority to implement the program.

4. Construction Site Stormwater Runoff Control

No additional requirements at this time.

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

a. The *covered entity* must require the use of the "Enhanced Phosphorus Removal Design Standards"in accordance with NYS Stormwater Design Manual;

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

   i. establish procedures to identify sites with erosion and/or pollutant loading problems;

   ii. establish policy and procedures for project selection. Project selection should be based on the Phosphorus 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 *covered entity* should participate in locally based watershed planning efforts which involve the *Department*, other *covered entities*, stakeholders and other interested parties;

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

   iv. by the date specified for each watershed in the appropriate Watershed Improvement Strategy Requirement Table develop and submit approvable plans and schedules for completing retrofit projects, including identification of funding

sources. Upon DEC approval of those plans and schedules, 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*, *traditional non-land use control* and *non-traditional MS4s*.

a. Develop a turf management practices and procedures policy. The policy should address the following:

   i. procedures for proper fertilizer application on municipally-owned lands. 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; and

   ii. the planting of native plant material to lessen the frequency of mowing and the use of chemicals to control vegetation.

(Part IX.)

C. Pathogen Impaired Watershed MS4s (Mapped in Appendix 6, 7 and 9)

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*	05/01/2013	09/30/2012	61	09/30/2022
Stirling Creek*	05/01/2013	09/30/2012	28	09/30/2022
Town & Jockey Creeks*	05/01/2013	09/30/2012	76	09/30/2022
Goose Creek*	05/01/2013	09/30/2012	70	09/30/2022
Hashamomuck Pond, Zone HP-1*	05/01/2013	09/30/2012	77	09/30/2022
Hashamomuck Pond , Zone HP-2*	05/01/2013	09/30/2012	43	09/30/2022
Richmond Creek*	05/01/2013	09/30/2012	71	09/30/2022
Deep Hole Creek*	05/01/2013	09/30/2012	29	09/30/2022
James Creek*	05/01/2013	09/30/2012	51	09/30/2022
Flanders Bay	05/01/2012	03/09/2012	98	03/09/2021
Reeves Bay	05/01/2012	03/09/2012	97	03/09/2021
Sebonac Creek	05/01/2012	03/09/2012	58	03/09/2021
North Sea Harbor, Zone NSH-1	05/01/2012	03/09/2012	97	03/09/2021
North Sea Harbor, Zone NSH-2	05/01/2012	03/09/2012	62	03/09/2021
North Sea Harbor, Zone NSH-3	05/01/2012	03/09/2012	99	03/09/2021
North Sea Harbor, Zone NSH-5	05/01/2012	03/09/2012	74	03/09/2021
Wooley Pond	05/01/2012	03/09/2012	97	03/09/2021
Noyac Creek, Zone NC-1	05/01/2012	03/09/2012	64	03/09/2021
Sag Harbor, Zone SH-2*	05/01/2013	09/30/2012	50	09/30/2022
Northwest Creek*	05/01/2013	09/30/2012	76	09/30/2022
Acabonac Harbor, Zone AH-2*	05/01/2013	09/30/2012	42	09/30/2022
Acabonac Harbor, Zone AH-3*	05/01/2013	09/30/2012	85	09/30/2022
Acabonac Harbor, Zone AH-4*	05/01/2013	09/30/2012	81	09/30/2022
Acabonac Harbor, Zone AH-5*	05/01/2013	09/30/2012	87	09/30/2022
Montauk Lake, Zone LM-1*	05/01/2013	09/30/2012	52	09/30/2022
Montauk Lake, Zone LM-2*	05/01/2013	09/30/2012	52	09/30/2022
Montauk Lake, Zone LM-3*	05/01/2013	09/30/2012	48	09/30/2022
Little Sebonac Creek	05/01/2012	03/09/2012	70	03/09/2021
Oyster Bay (Harbor 2)	05/01/2012	03/09/2012	20	03/09/2021
Oyster Bay (Harbor 3)	05/01/2012	03/09/2012	90	03/09/2021

*Additionally Designated Area

Watershed	Watershed Improvement Strategy Deadline	First Retrofit Plan Submission Deadline	Pollutant Reduction (Waste Load Allocation %)	Pollutant Load Reduction Deadline
Hempstead Harbor, north, and tidal tributaries	05/01/2013	09/30/2012	95	09/30/2022
Cold Spring Harbor, and tidal tributaries, Inner	05/01/2013	09/30/2012	95	09/30/2022
Cold Spring Harbor, Eel Creek	05/01/2013	09/30/2012	90	09/30/2022
Huntington Harbor	05/01/2013	09/30/2012	89	09/30/2022
Centerport Harbor	05/01/2013	09/30/2012	91	09/30/2022
Northport Harbor	05/01/2013	09/30/2012	92	09/30/2022
Stony Brook Harbor and West Meadow Creek	05/01/2013	09/30/2012	99	09/30/2022
Stony Brook Creek	05/01/2013	09/30/2012	99	09/30/2022
Stony Brook Yacht Club	05/01/2013	09/30/2012	48	09/30/2022
Port Jefferson Harbor, North and tribs	05/01/2013	09/30/2012	94	09/30/2022
Conscience Bay and tidal tribs	05/01/2013	09/30/2012	99	09/30/2022
Setaukut Harbor, Little Bay	05/01/2013	09/30/2012	84	09/30/2022
Setauket Harbor, East Setauket	05/01/2013	09/30/2012	79	09/30/2022
Setauket Harbor, Poquot	05/01/2013	09/30/2012	100	09/30/2022
Mt. Sinai Harbor, Crystal Brook	05/01/2013	09/30/2012	88	09/30/2022
Mt. Sinai Harbor, Inner Harbor	05/01/2013	09/30/2012	96	09/30/2022
Mt. Sinai Harbor, Pipe Stave Hollow	05/01/2013	09/30/2012	93	09/30/2022
Mattituck Inlet/Creek, Low, and tidal tributaries	05/01/2013	09/30/2012	64	09/30/2022
Goldsmith Inlet	05/01/2013	09/30/2012	91	09/30/2022
West Harbor - Darby Cove	05/01/2013	09/30/2012	41	09/30/2022
Georgica Pond, Upper	05/01/2013	09/30/2012	93	09/30/2022

Georgica Pond, Lower	05/01/2013	09/30/2012	93	09/30/2022
Georgica Pond Cove	05/01/2013	09/30/2012	92	09/30/2022
Sagaponack Pond	05/01/2013	09/30/2012	88	09/30/2022
Mecox Bay and tributaries	05/01/2013	09/30/2012	89	09/30/2022
Heady Creek and tributaries	05/01/2013	09/30/2012	88	09/30/2022
Taylor Creek and tributaries	05/01/2013	09/30/2012	52	09/30/2022
Penny Pond	05/01/2013	09/30/2012	31	09/30/2022
Weesuck Creek and tidal tributaries	05/01/2013	09/30/2012	37	09/30/2022
Penniman Creek and tidal tributaries	05/01/2013	09/30/2012	32	09/30/2022
Ogden Pond	05/01/2013	09/30/2012	28	09/30/2022
Quantuck Bay-Quantuck Creek	05/01/2013	09/30/2012	91	09/30/2022
Quantuck Canal/Moneybogue Bay	05/01/2013	09/30/2012	62	09/30/2022
Seatuck Cove	05/01/2013	09/30/2012	94	09/30/2022
Harts Cove	05/01/2013	09/30/2012	12	09/30/2022
Narrow Bay	05/01/2013	09/30/2012	16	09/30/2022
Bellport Bay, Beaver Dam Creek	05/01/2013	09/30/2012	94	09/30/2022
Bellport Bay, West Cove	05/01/2013	09/30/2012	94	09/30/2022
Patchogue Bay, Swan River	05/01/2013	09/30/2012	90	09/30/2022
Patchogue Bay, Mud Creek	05/01/2013	09/30/2012	71	09/30/2022

By the deadlines specified in Table IX.C, covered entities 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. Covered entities who own or operate MS4s within these watersheds shall also submit to the Department, progress reports as specified in Part V.D.

(Part IX.C)

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 *BMP*s.

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

(Part IX.C.3.a)

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 *covered entity* 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;

(Part IX.C.5.)

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 *covered entity* should participate in locally based watershed planning efforts which involve the *Department*, other *covered entities*, stakeholders and other interested parties;

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

d. by March 9, 2011, 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.

(Part IX.)

D. Nitrogen Watershed MS4s (Mapped in Appendix 8)

Table IX.D - Pollutant Load Reduction and Timetable for Nitrogen Watershed Improvement Strategy Area

Watershed	Watershed Improvement Strategy Deadline	Retrofit Plan Submission Deadline	Pollutant Reduction (Load Allocation %)	Pollutant Load Reduction Deadline
Lower Peconic River & Tidal Tributaries	05/01/2011	03/09/2011	15	03/09/2021
Western Flanders Bay & Lower Sawmill Creek				
Meetinghouse Creek				
Terrys Creek & Tributaries				

By the deadlines specified in Table IX.D, covered entities that own or operate MS4s within the listed watersheds shall develop and implement the following pollutant specific BMPs for MS4 sewersheds discharging to the listed waterbodies. Covered entities that own or operate MS4s within these watersheds shall also submit to the Department, progress reports as specified in Part V.D.

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 Nitrogen (the POC) on waterbodies. The program must identify potential sources of Nitrogen in stormwater runoff and describe steps that contributors can take to reduce the Nitrogen in stormwater runoff.

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

i. understanding the Nitrogen issue;
ii. septic systems as a source of Nitrogen; and

(Part IX.D.1.b)

iii. Nitrogen concerns with fertilizer use.

2. Public Involvement/ Participation

No additional requirements proposed for at this time.

3. Illicit Discharge Detection and Elimination - applicable to *traditional land use control* and *traditional non-land use control MS4s*

a. 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 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 existing erosion and/or pollutant loading problems, with a particular emphasis placed on the pollutant Nitrogen. At a minimum, the MS4 shall:

a. establish procedures to identify sites with erosion and/or pollutant loading problems;

(Part IX.D.5)

b. establish policy and procedures for project selection. Project selection should be based on the Nitrogen 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 *covered entity* should participate in locally based watershed planning efforts which involve the *Department*, other *covered entities*, stakeholders and other interested parties;

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

d. by March 9, 2011, develop and submit approvable plans and schedules for completing retrofit projects, including identification of funding sources. Upon DEC approval of those plans and schedules, 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*, *traditional non-land use control* and *non-traditional MS4s*.

a. Develop a turf management practices and procedures policy. The policy should address the following:

i. procedures for proper fertilizer application on municipally-owned lands. The application of any Nitrogen-containing fertilizer shall only be allowed under the supervision of a Certified Crop Advisor or Certified Landscape Architect; and

ii. the planting of native plant material to lessen the frequency of mowing and reduce the use of chemicals to control vegetation.

Part X. ACRONYMS AND DEFINITIONS

A. Acronym List

BMP - Best Management Practice
CFR - Code of Federal Regulations
CWA - Clean Water Act
ECL - Environmental Conservation Law
MCC - Municipal Compliance Certification
MCM - Minimum Control Measure
MEP - Maximum Extent Practicable
MS4 - Municipal Separate Storm Sewer System
NPDES - National Pollutant Discharge Elimination System
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

B. Definitions

Activities - See best management practice

Additionally Designated Areas - EPA required the Department to develop a set of criteria for designating additional MS4 areas as subject to these regulations. The following criteria have been adopted to designate additional MS4s in New York State:

Criteria 1: MS4s discharging to waters for which and EPA-approved TMDL required reduction of a pollutant associated with stormwater beyond what can be achieved with existing programs (and the area is not already covered under automatic designation as UA).

Criteria 2: MS4s contiguous to automatically designated urbanized areas (town lines) that discharge to sensitive waters classified as AA Special (fresh surface waters), AA (fresh surface waters) with filtration avoidance determination or SA (saline surface waters).

Criterion 3: Automatically designated MS4 areas are extended to Town, Village or City boundaries, but only for Town, Village or City implementation of Minimum Control Measures (4) Construction Site Stormwater Runoff Control and (5) Post Construction Stormwater Management in Development and Redevelopment. This additional designation may be waived, by written request to the Department, where the automatically designated area is a small portion of the total area of the Town, Village or City (less than 15 %) and where there is

little or no construction activity in the area outside of the automatically designated area (less than 5 disturbed acres per year).

Best Management Practice - means schedules activities, 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 (if determined necessary by the covered entity), 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 this *SPDES general permit*.

Better Site Design (BSD) - Better Site Design incorporates non-structural and natural approaches to new and redevelopment projects to reduce impacts on watersheds by conserving natural areas, reducing impervious cover and better integrating stormwater treatment. Better site design is a form of Green Infrastructure and is similar to Low Impact Development (LID). See also Green Infrastructure and Low Impact Development.

Construction Activity(ies) - means any clearing, grading, excavation, demolition or stockpiling activities that result 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.

Covered entity - means the holder of this *SPDES general permit* or an entity required to gain coverage under this *SPDES general permit*. The owner / operator of the small MS4.

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

Development - period after initial authorization under this *SPDES general permit* when the covered entity creates, designs or develops 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.

Discharge Authorized by a SPDES Permit - means discharges of wastewater or stormwater from sources listed in the permit, that do not violate ECL Section 17-0501, that are through outfalls listed in the permit, and that are:
1. discharges within permit limitations of pollutants limited in the SPDES permit;

2. discharges within permit limitations of pollutants limited by an indicator limit in the SPDES permit;
3. discharges of pollutants subject to action level requirements in the SPDES permit;
4. discharges of pollutants not explicitly listed in the SPDES permit, but reported in the SPDES permit application record as detected in the discharge or as something the covered entity knows or has reason to believe to be present in the discharge, provided the special conditions section of the applicable SPDES permit does not otherwise forbid such a discharge and provided that such discharge does not exceed, by an amount in excess of normal effluent variability, the level of discharge that may reasonably be expected for that pollutant from information provided in the SPDES permit application record;
5. discharges of pollutants not required to be reported on the appropriate and current New York State SPDES permit application; provided the special conditions section of the permit does not otherwise forbid such a discharge. The Department may, in accordance with law and regulation, modify the permit to include limits for any pollutant even if that pollutant is not required to be reported on the SPDES permit application; or
6. discharges from fire fighting activities; fire hydrant flushings; testing of fire fighting equipment, provided that such equipment is for water only fire suppression; potable water sources including waterline flushings; irrigation drainage; lawn watering; uncontaminated infiltration and inflow; leakage from raw water conveyance systems; routine external building washdown and vehicle washing which does not use detergents or other compounds; pavement washwaters where spills or leaks of toxic or hazardous materials, other than minor and routine releases from motor vehicles, have not occurred (unless such material has been removed) and where detergents are not used; air conditioning and steam condensate; springs; uncontaminated groundwater; and foundation or footing drains where flows are not contaminated with process materials such as solvents provided that the covered entity has implemented an effective plan for minimizing the discharge of pollutants from all of the sources listed in this subparagraph.

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

Green Infrastructure - Green infrastructure approaches essentially infiltrate, evapotranspirate 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. See also Low Impact Development and Better Site Design.

Groundwater - means 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 Discharges - discharges not entirely composed of stormwater into the small MS4, except those identified in Part I.A.2. 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 covered entity 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 meet its designated use(s). For purposes of this permit 'impaired' refers to impaired waters for which TMDLs have been established, for which existing controls such as permits are expected to resolve the impairment, and those needing a TMDL. Impaired waters compilations are also sometimes referred to as 303(d) lists; 303(d) lists generally include only waters for which TMDLs have not yet been developed. States will generally have associated, but separate lists of impaired waters for which TMDLs have already been established.

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

Individual SPDES Permit - means a SPDES permit issued to a single facility in one location in accordance with this Part (as distinguished from a *SPDES general permit*).

Industrial Activity - as defined by the SPDES Multi-Sector General Permit (GP-0-12-001).

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.

Low Impact Development - is a site design strategy with a goal of maintaining or replicating the predevelopment hydrologic regime through the use of design techniques to create a functionally equivalent hydrologic landscape. Hydrologic functions of storage, infiltration,

and ground water recharge, as well as the volume and frequency of discharges are maintained through the use of integrated and distributed micro scale stormwater retention and detention areas, reduction of impervious surfaces, and the lengthening of flow paths and runoff time. Other strategies include the preservation/protection of environmentally sensitive site features such as riparian buffers, wetlands, steep slopes, valuable (mature) trees, flood plains, woodlands and highly permeable soils. LID principles are based on controlling stormwater at the source by the use of micro scale controls that are distributed throughout the site. This is unlike conventional approaches that typically convey and manage runoff in large facilities located at the base of drainage areas. See also Green Infrastructure and Better Site Design.

Management Practices - See best management practices

Maximum Extent Practicable - is a technology-based standard established by Congress in the Clean Water Act '402(p)(3)(B)(iii). Since no precise definition of MEP exists, it allows for maximum flexibility on the part of MS4 operators as they develop their programs. (40CFR 122.2 See also: Stormwater Phase II Compliance Assistance Guide EPA 833-R-00-002, March 2000). When trying to reduce pollutants to the MEP, there must be a serious attempt to comply, and practical solutions may not be lightly rejected. If a covered entity chooses only a few of the least expensive methods, it is likely that MEP has not been met. On the other hand, if a covered entity employs all applicable BMPs except those where it can be shown that they are not technically feasible in the locality, or whose cost would exceed any benefit to be derived, it would have met the standard. MEP required covered entities to choose effective BMPs, and to reject applicable BMPs only where other effective BMPs will serve the same purpose, the BMPs would not be technically feasible, or the cost would be prohibitive.

Measurable Goals - are the goals of the SWMP that should reflect the needs and characteristics of the covered entity and the areas served by its small MS4. Furthermore, the goals should be chosen using an integrated approach that fully addresses the requirements and intent of the MCM. The assumption is that the program schedules would be created over a 5 year period and goals would be integrated into that time frame. For example, a larger MS4 could do an outfall reconnaissance inventory for 20% of the collection system every year so that every outfall is inspected once within the permit cycle

Municipal / Municipalities - referred to in the federal rule that describes the Phase II stormwater program includes not only the State's municipal governments (cities, towns, villages and counties), but any publicly funded entity that owns or operates 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 Separate Storm Sewer System - 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.

Open Meetings Law - per Public Officers Law, Article 7, Open Meetings Law, Section 104, Public notice:
1. Public notice of the time and place of a meeting scheduled at least one week prior thereto shall be given to the news media and shall be conspicuously posted in one or more designated public locations at least seventy two hours before such meeting.
2. Public notice of the time and place of every other meeting shall be given, to the extent practicable, to the news media and shall be conspicuously posted in one or more designated public locations at a reasonable time prior thereto.
3. The public notice provided for by this section shall not be construed to require publication as a legal notice.
4. If videoconferencing is used to conduct a meeting, the public notice for the meeting shall inform the public that videoconferencing will be used, identify the locations for the meeting, and state that the public has the right to attend the meeting at any of the locations.

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*.

Outfall - is defined as any point where a municipally owned and operated separate storm sewer system 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. However, 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.

Pollutants of Concern - there are POCs that are primary (comprise the majority) sources of stormwater pollutants and others that are secondary (less likely).

- The POCs that are primarily of concern are: nitrogen, phosphorus, silt and sediment, pathogens, flow, and floatables impacting impaired waterbodies listed on the Priority Waterbody List known to come in contact with stormwater that could be discharged to that water body.

- The POCs that are secondarily of concern include but are not limited to petroleum hydrocarbons, heavy metals, and polycyclic aromatic hydrocarbons (PAHs), where stormwater or runoff is listed as the source of this impairment.

- The primary and secondary POCs can also impair waters not on the 303(d) list. Thus, it is important for the covered entity to assess known and potential POCs within the area served by their small MS4. This will allow the covered entity to address POCs appropriate to their MS4.

Qualified Professional - means 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.

Reporting Date – means the end of the annual reporting period, March 9, as indicated in Part V.C.1.

Retrofit - means modifying or adding to existing infrastructure for the purpose of reducing pollutant loadings. Examples, some of which may not be effective for all pollutants, include:

Better site design approaches such as roof top disconnection, diversion of runoff to infiltration areas, soil de-compaction, riparian buffers, rain gardens, cisterns

Rehabilitation of existing storm sewer system by installation of standard stormwater treatment systems (ponds, wetlands, filtering, infiltration) or proprietary practices

Stabilize dirt roads (gravel, stone, water bar, check dam, diversion)

Conversion of dirt parking lots to pervious pavement, grassed or stone cover

Conversion of dry detention ponds to extended detention or wetland treatment systems

Retrofit by converting abandoned buildings to stormwater treatment systems

Retrofit of abandoned building to open space

Retrofit road ditches to enhance open channel design

Control the downstream effects of runoff from existing paved surfaces resulting in flooding and erosion in receiving waters

Control stream erosion by plunge pool, velocity dissipaters, and flow control devices for discharges from conveyance systems

Upgrade of an existing conveyance system to provide water quality and /or quantity control within the drainage structure

Section 303(d) Listed Waters - Section 303(d) is part of the federal CWA that requires the Department to periodically to prepare a list of all surface waters in the State for which beneficial uses of the water – such as for drinking, recreation, aquatic habitat, and industrial use – are impaired by pollutants. These 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. Refer to impaired waters for more information.

Single entity - An entity, formed in accordance with the applicable state and/or local legislation, with a legal authority and capacity (financial, resources, etc...) that gains coverage under the MS4 general permit to implement all or parts of the MS4 program within a jurisdiction on behalf of multiple MS4s in that geographic area.

Small MS4 - MS4 system within an urbanized area or other areas designated by the State.

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 covered entity or contracted entity.

State - means the State of New York.

State Pollutant Discharge Elimination System - 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 - means that portion of precipitation that, once having fallen to the ground, is in excess of the evaporative or infiltrative capacity of soils, or the retentive capacity of surface features, which flows or will flow off the land by surface runoff to waters of the state.

Stormwater Management Program - the program implemented by the covered entity. Covered entities are required at a minimum to develop, implement and enforce a SWMP designed to address POCs and reduce the discharge of pollutants from the small MS4 to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of the *ECL* and Clean Water Act. The SWMP must address the MCM described in Part VIII.

The *SWMP* needs to include *measurable goals* for each of the *BMPs*. The measurable goals will help the covered entities assess the status and progress of their program. The SWMP should:

1. describe the BMP / measureable goal;
2. identify time lines / schedules and milestones for development and implementation;
3. include quantifiable goals to assess progress over time; and
4. describe how the covered entity will address POCs.

Guidance on developing SWMPs is available from the Department on its website. Examples of successful SWMPs and suggested measurable goals are also provided in EPA's Menu of BMPs available from its website. Note that this information is for guidance purposes only. An MS4 may choose to develop or implement equivalent methods equivalent to those made available by the Department and EPA to demonstrate compliance with the MCMs.

When creating the *SWMP*, the *covered entities* should assess activities already being performed that could help meet, or be modified to meet, permit requirements and be included in the *SWMP*. *Covered entities* can create their *SWMP* individually, with a group of other individual *covered entities* or a coalition of *covered entities*, or through the work of a third party entity.

Stormwater Management Program Plan- used by the covered entity to document developed, planned and implemented SWMP elements. The *SWMP plan* must describe how pollutants in stormwater runoff will be controlled. For previously unauthorized *small MS4s* seeking coverage, information included in the NOI should be obtained from the *SWMP plan*.

The *SWMP plan* is a separate document from the NOI and should not be submitted with the NOI or any annual reports unless requested.

The *SWMP plan* should include a detailed written explanation of all management practices, activities and other techniques the covered entity has developed, planned and implemented for their SWMP to address POCs and reduce pollutant discharges from their small MS4 to the MEP. The *SWMP plan* shall be revised to incorporate any new or modified *BMPs* or *measurable goals*.

Covered entities can create their *SWMP plan* individually, with a group of other individual *covered entities* or a coalition of *covered entities*, or through the work of a third party entity.

Documents to include are: applicable local laws, inter-municipal agreements and other legal authorities; staffing and staff development programs and organization charts; program budget; policy, procedures, and materials for each minimum measure; outfall and small MS4 system maps; stormwater management practice selection and measurable goals; operation and maintenance schedules; documentation of public outreach efforts and public comments; submitted construction site SWPPPs and review letters and construction site inspection reports.

The *SWMP plan* shall be made readily available to the covered entity's staff and to the public and regulators, such as *Department* and EPA staff. Portions of the *SWMP plan*, primarily policies and procedures, must be available to the management and staff of a *covered entity* that will be called upon to use them. For example, the technical standards and associated technical assistance documents and manuals for stormwater controls should be available to code enforcement officers, review engineers and planning boards. The local laws should be readily available to the town board and planning board. An integrated pest management program would have to be available to the parks department and the stormwater outfall and available sewer system mapping and catch basin cleaning schedule would have to be available to the department of public works.

Storm sewershed - the catchment 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.

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.

SWPPP - as defined per the NYS DEC SPDES General Permit for Stormwater Discharges from Construction Activity or NYS DEC SPDES Multi-Sector General Permit for Stormwater Associated with Industrial Activity .

Total Maximum Daily Load - 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 wasteload allocations for point source discharges, load allocations for nonpoint sources, and a margin of safety.

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 - 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. Outlines the extent of automatically regulated areas, often do not extend to the political boundaries of a city, town, or village. SWMPs are only required within the UA. However, the Department encourages covered entities to voluntarily extend their SWMP programs at least to the extent of the storm sewershed that flows into the UA or extend further to their entire jurisdiction. For ease of creation and administration of local laws, ordinances or other regulatory mechanisms, these should be created to apply to the full jurisdictional boundary of municipalities.

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.

Part XI. RE-OPENER CLAUSE

If there is evidence indicating that the stormwater discharges authorized by this permit cause or have the reasonable potential to cause or contribute to a violation of a water quality standard, the covered entity may be required at the Department 's sole discretion to obtain an individual SPDES permit or an alternative *SPDES general permit* or the permit may be modified. In addition, coverage under this permit could terminate, meaning the discharge must cease.

APPENDICES

APPENDIX 1. LIST OF NYS DEC REGIONAL OFFICES

Region	Covering the following counties:	Division of Environmental Permits (DEP) Permit Administrators	Division of Water (DOW) Water (SPDES) Program
1	Nassau and Suffolk	50 Circle Road Stony Brook, NY 11790 Tel. (631) 444-0365	50 Circle Road Stony Brook, NY 11790-3409 Tel. (631) 444-0405
2	Bronx, Kings, New York, Queens and Richmond	1 Hunters Point Plaza, 47-40 21st St. Long Island City, NY 11101-5407 Tel. (718) 482-4997	1 Hunters Point Plaza, 47-40 21st St. Long Island City, NY 11101-5407 Tel. (718) 482-4933
3	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster and Westchester	21 South Putt Corners Road New Paltz, NY 12561-1696 Tel. (845) 256-3059	100 Hillside Avenue, Suite 1w White Plains, NY 10603 Tel. (914) 428 - 2505
4	Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady and Schoharie	1150 North Westcott Road Schenectady, NY 12306-2014 Tel. (518) 357-2069	1130 North Westcott Road Schenectady, NY 12306-2014 Tel. (518) 357-2045
5	Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren and Washington	1115 State Route 86, Po Box 296 Ray Brook, NY 12977-0296 Tel. (518) 897-1234	232 Golf Course Road, Po Box 220 Warrensburg, NY 12885-0220 Tel. (518) 623-1200
6	Herkimer, Jefferson, Lewis, Oneida and St. Lawrence	State Office Building 317 Washington Street Watertown, NY 13601-3787 Tel. (315) 785-2245	State Office Building 207 Genesee Street Utica, NY 13501-2885 Tel. (315) 793-2554
7	Broome, Cayuga, Chenango, Cortland, Madison, Onondaga, Oswego, Tioga and Tompkins	615 Erie Blvd. West Syracuse, NY 13204-2400 Tel. (315) 426-7438	615 Erie Blvd. West Syracuse, NY 13204-2400 Tel. (315) 426-7500
8	Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne and Yates	6274 East Avon-Lima Road Avon, NY 14414-9519 Tel. (585) 226-2466	6274 East Avon-Lima Rd. Avon, NY 14414-9519 Tel. (585) 226-2466
9	Allegany, Cattaraugus, Chautauqua, Erie, Niagara and Wyoming	270 Michigan Avenue Buffalo, NY 14203-2999 Tel. (716) 851-7165	270 Michigan Ave. Buffalo, NY 14203-2999 Tel. (716) 851-7070

APPENDIX 2. IMPAIRED SEGMENTS AND PRIMARY POLLUTANTS OF CONCERN

APPENDIX 2 (CONTINUED)
IMPAIRED SEGMENTS AND SECONDARY POLLUTANTS OF CONCERN

COUNTY	WATERBODY NAME	POLLUTANT
Albany	Ann Lee (Shakers) Pond, Stump Pond	phosphorus
Albany	Basic Creek Reservoir	phosphorus
Bronx	Van Cortlandt Lake	phosphorus
Bronx	Bronx River, Lower	pathogens
Bronx	Bronx River, Lower	floatables
Bronx	Bronx River, Middle, and tribs	pathogens
Bronx	Bronx River, Middle, and tribs	floatables
Bronx	Westchester Creek	floatables
Bronx	Hutchinson River, Lower, and tribs	Floatables
Broome	Susquehanna River, Lower, Main Stem	Pathogens
Broome	Whitney Point Lake/Reservoir	phosphorus
Broome	Park Creek and tribs	pathogens
Broome	Beaver Lake	phosphorus
Broome	White Birch Lake	phosphorus
Cayuga	Little Sodus Bay	phosphorus
Cayuga	Owasco Lake	pathogens
Cayuga, Tompkins	Owasco Inlet, Upper, and tribs	phosphorus
Chautauqua	Lake Erie (Dunkirk Harbor)	pathogens
Chautauqua	Chadakoin River and tribs	phosphorus
Chautauqua	Chautauqua Lake, South	phosphorus
Chautauqua	Chautauqua Lake, North	phosphorus
Chautauqua	Bear Lake	phosphorus
Chautauqua	Lower Cassadaga Lake	phosphorus
Chautauqua	Middle Cassadaga Lake	phosphorus
Chautauqua	Findley Lake	phosphorus
Chenango	Unadilla River, Lower, Main Stem	pathogens
Clinton	Lake Champlain, Main Lake, North	phosphorus
Clinton	Lake Champlain, Main Lake, Middle	phosphorus
Clinton	Great Chazy River, Lower, Main Stem	silt/sediment
Columbia	Robinson Pond	phosphorus
Columbia	Kinderhook Lake	phosphorus
Delaware	Cannonsville Reservoir	phosphorus
Dutchess	Hillside Lake	phosphorus
Dutchess	Wappinger Lakes	phosphorus
Dutchess	Wappinger Lakes	silt/sediment
Dutchess	Fall Kill and tribs	phosphorus
Dutchess	Rudd Pond	phosphorus

COUNTY	WATERBODY NAME	POLLUTANT
Erie	Ellicott Creek, Lower, and tribs	phosphorus
Erie	Ellicott Creek, Lower, and tribs	silt/sediment
Erie	Ransom Creek, Lower, and tribs	pathogens
Erie	Ransom Creek, Upper, and tribs	pathogens
Erie	Beeman Creek and tribs	phosphorus
Erie	Beeman Creek and tribs	pathogens
Erie	Murder Creek, Lower, and tribs	phosphorus
Erie	Murder Creek, Lower, and tribs	pathogens
Erie	Two Mile Creek and tribs	pathogens
Erie	Two Mile Creek and tribs	floatables
Erie	Scajaquada Creek, Lower, and tribs	floatables
Erie	Scajaquada Creek, Lower, and tribs	pathogens
Erie	South Branch Smoke Cr, Lower, and tribs	phosphorus
Erie	South Branch Smoke Cr, Lower, and tribs	silt/sediment
Erie	Rush Creek and tribs	pathogens
Erie	Rush Creek and tribs	phosphorus
Erie	Little Sister Creek, Lower, and tribs	phosphorus
Erie	Little Sister Creek, Lower, and tribs	pathogens
Essex	Lake Champlain, Main Lake, South	phosphorus
Essex	Lake Champlain, South Lake	phosphorus
Genesee	Tonawanda Creek, Middle, Main Stem	phosphorus
Genesee	Tonawanda Creek, Middle, Main Stem	silt/sediment
Genesee	Tonawanda Creek, Upper, and minor tribs	silt/sediment
Genesee	Bowen Brook and tribs	phosphorus
Genesee	Little Tonawanda Creek, Lower, and tribs	silt/sediment
Genesee	Oak Orchard Cr, Upper, and tribs	phosphorus
Genesee	Black Creek, Upper, and minor tribs	phosphorus
Genesee	Bigelow Creek and tribs	phosphorus
Greene	Schoharie Reservoir	silt/sediment
Greene	Shingle Kill and tribs	pathogens
Greene	Sleepy Hollow Lake	silt/sediment
Herkimer	Unadilla River, Middle, and minor tribs	pathogens
Herkimer	Mohawk River, Main Stem	pathogens
Herkimer	Mohawk River, Main Stem	floatables
Herkimer	Steele Creek tribs	phosphorus
Herkimer	Steele Creek tribs	silt/sediment
Jefferson	Moon Lake	phosphorus
Kings	Coney Island Creek	pathogens
Kings	Coney Island Creek	floatables
Kings	Gowanus Canal	floatables
Kings	Hendrix Creek	nitrogen
Kings	Hendrix Creek	pathogens

COUNTY	WATERBODY NAME	POLLUTANT
Kings	Hendrix Creek	floatables
Kings	Paerdegat Basin	floatables
Kings	Mill Basin and tidal tribs	floatables
Lewis	Beaver River, Lower, and tribs	pathogens
Lewis	Beaver River, Lower, and tribs	floatables
Lewis	Mill Creek/South Branch, and tribs	phosphorus
Lewis	Mill Creek/South Branch, and tribs	pathogens
Livingston	Conesus Lake	phosphorus
Livingston	Jaycox Creek and tribs	phosphorus
Livingston	Jaycox Creek and tribs	silt/sediment
Livingston	Mill Creek and minor tribs	silt/sediment
Madison	Canastota Creek, Lower, and tribs	pathogens
Monroe	Rochester Embayment - West	pathogens
Monroe	Mill Creek and tribs	phosphorus
Monroe	Mill Creek and tribs	pathogens
Monroe	Shipbuilders Creek and tribs	phosphorus
Monroe	Shipbuilders Creek and tribs	pathogens
Monroe	Minor Tribs to Irondequoit Bay	phosphorus
Monroe	Minor Tribs to Irondequoit Bay	pathogens
Monroe	Thomas Creek/White Brook and tribs	phosphorus
Monroe	Buck Pond	phosphorus
Monroe	Long Pond	phosphorus
Monroe	Cranberry Pond	phosphorus
Monroe	Genesee River, Lower, Main Stem	phosphorus
Monroe	Genesee River, Lower, Main Stem	pathogens
Monroe	Genesee River, Lower, Main Stem	silt/sediment
Monroe	Genesee River, Middle, Main Stem	phosphorus
Monroe	Black Creek, Lower, and minor tribs	phosphorus
Nassau	Long Island Sound, Nassau County	pathogens
Nassau	Long Island Sound, Nassau County	nitrogen
Nassau	Manhasset Bay, and tidal tribs	pathogens
Nassau	Manhasset Bay, and tidal tribs	pathogens
Nassau	Hempstead Harbor, south, and tidal tribs	pathogens
Nassau	Glen Cove Creek, Lower, and tribs	pathogens
Nassau	Glen Cove Creek, Lower, and tribs	silt/sediment
Nassau	Dosoris Pond	pathogens
Nassau	Mill Neck Creek and tidal tribs	pathogens
Nassau	South Oyster Bay	pathogens
Nassau	East Bay	pathogens
Nassau	LI Tribs (fresh) to East Bay	phosphorus
Nassau	LI Tribs (fresh) to East Bay	silt/sediment
Nassau	Middle Bay	pathogens

COUNTY	WATERBODY NAME	POLLUTANT
Nassau	East Rockaway Inlet	pathogens
Nassau	Reynolds Channel, east	pathogens
Nassau	East Meadow Brook, Upper, and tribs	silt/sediment
Nassau	Hempstead Bay	Nitrogen
Nassau	Hempstead Bay	Pathogens
Nassau	Hempstead Lake	Phosphorus
Nassau	Grant Park Pond	Phosphorus
Nassau	Woodmere Channel	Pathogens
New York	East River, Lower	Floatables
New York	Harlem River	Floatables
Niagara	Bergholtz Creek and tribs	Phosphorus
Niagara	Bergholtz Creek and tribs	Pathogens
Oneida	Utica Harbor	Pathogens
Oneida	Utica Harbor	Floatables
Oneida	Mohawk River, Main Stem	Pathogens
Oneida	Mohawk River, Main Stem	Floatables
Oneida	Mohawk River, Main Stem	Pathogens
Oneida	Mohawk River, Main Stem	Floatables
Oneida	Ballou, Nail Creeks and tribs	Phosphorus
Oneida	Ninemile Creek, Lower, and tribs	Pathogens
Onondaga	Limestone Creek, Lower, and minor tribs	Pathogens
Onondaga	Seneca River, Lower, Main Stem	Pathogens
Onondaga	Onondaga Lake, northern end	Phosphorus
Onondaga	Onondaga Lake, southern end	pathogens
Onondaga	Onondaga Lake, southern end	phosphorus
Onondaga	Minor Tribs to Onondaga Lake	phosphorus
Onondaga	Minor Tribs to Onondaga Lake	pathogens
Onondaga	Bloody Brook and tribs	pathogens
Onondaga	Ley Creek and tribs	pathogens
Onondaga	Ley Creek and tribs	phosphorus
Onondaga	Onondaga Creek, Lower, and tribs	phosphorus
Onondaga	Onondaga Creek, Lower, and tribs	pathogens
Onondaga	Onondaga Creek, Middle, and tribs	silt/sediment
Onondaga	Onondaga Creek, Middle, and tribs	phosphorus
Onondaga	Onondaga Creek, Middle, and tribs	pathogens
Onondaga	Onondaga Creek, Upper, and minor tribs	silt/sediment
Onondaga	Harbor Brook, Lower, and tribs	phosphorus
Onondaga	Harbor Brook, Lower, and tribs	pathogens
Onondaga	Ninemile Creek, Lower, and tribs	phosphorus
Onondaga	Ninemile Creek, Lower, and tribs	pathogens
Ontario	Hemlock Lake Outlet and minor tribs	phosphorus
Ontario	Hemlock Lake Outlet and minor tribs	pathogens

COUNTY	WATERBODY NAME	POLLUTANT
Ontario	Honeoye Lake	phosphorus
Ontario	Great Brook and minor tribs	phosphorus
Ontario	Great Brook and minor tribs	silt/sediment
Orange	Greenwood Lake	phosphorus
Oswego	Lake Neatahwanta	phosphorus
Otsego	Susquehanna River, Main Stem	pathogens
Putnam	Croton Falls Reservoir	phosphorus
Putnam	West Branch Reservoir	phosphorus
Putnam	Boyd Corners Reservoir	phosphorus
Putnam	Middle Branch Reservoir	phosphorus
Putnam	Lake Carmel	phosphorus
Putnam	Diverting Reservoir	phosphorus
Putnam	East Branch Reservoir	phosphorus
Putnam	Bog Brook Reservoir	phosphorus
Putnam	Oscawana Lake	phosphorus
Queens	Newtown Creek and tidal tribs	floatables
Queens	East River, Upper	floatables
Queens	East River, Upper	floatables
Queens	Flushing Creek/Bay	nitrogen
Queens	Flushing Creek/Bay	floatables
Queens	Little Neck Bay	pathogens
Queens	Alley Creek/Little Neck Bay Trib	floatables
Queens	Jamaica Bay, Eastern, and tribs	nitrogen
Queens	Jamaica Bay, Eastern, and tribs	pathogens
Queens	Jamaica Bay, Eastern, and tribs	floatables
Queens	Thurston Basin	floatables
Queens	Bergen Basin	Nitrogen
Queens	Bergen Basin	pathogens
Queens	Bergen Basin	floatables
Queens	Shellbank Basin	nitrogen
Queens	Spring Creek and tribs	pathogens
Queens	Spring Creek and tribs	floatables
Rensselaer	Snyders Lake	phosphorus
Richmond	Raritan Bay (Class SA)	pathogens
Richmond	Arthur Kill (Class I) and minor tribs	floatables
Richmond	Newark Bay	floatables
Richmond	Kill Van Kull	floatables
Richmond	Grasmere, Arbutus and Wolfes Lakes	phosphorus
Saratoga	Dwaas Kill and tribs	Phosphorus
Saratoga	Dwaas Kill and tribs	silt/sediment
Saratoga	Schuyler Creek and tribs	phosphorus
Saratoga	Schuyler Creek and tribs	pathogens

COUNTY	WATERBODY NAME	POLLUTANT
Saratoga	Lake Lonely	phosphorus
Saratoga	Tribs to Lake Lonely	Phosphorus
Saratoga	Tribs to Lake Lonely	pathogens
Schenectady	Collins Lake	phosphorus
Schoharie	Cobleskill Creek, Lower, and tribs	pathogens
Schoharie	Engleville Pond	phosphorus
Schoharie	Summit Lake	phosphorus
St.Lawrence	Black Lake Outlet/Black Lake	phosphorus
Steuben	Lake Salubria	phosphorus
Steuben	Smith Pond	phosphorus
Suffolk	Millers Pond	phosphorus
Suffolk	Beach/Island Ponds, Fishers Island	pathogens
Suffolk	Dering Harbor	pathogens
Suffolk	Tidal Tribs to Gr Peconic Bay, Northshr	pathogens
Suffolk	Mattituck (Marratooka) Pond	phosphorus
Suffolk	Mattituck (Marratooka) Pond	pathogens
Suffolk	Flanders Bay, West/Lower Sawmill	nitrogen
Suffolk	Meetinghouse/Terrys Creeks and tribs	nitrogen
Suffolk	Meetinghouse/Terrys Creeks and tribs	pathogens
Suffolk	Peconic River, Lower, and tidal tribs	nitrogen
Suffolk	Peconic River, Lower, and tidal tribs	pathogens
Suffolk	Scallop Pond	pathogens
Suffolk	Oyster Pond/Lake Munchogue	pathogens
Suffolk	Phillips Creek, Lower, and tidal tribs	pathogens
Suffolk	Quogue Canal	pathogens
Suffolk	Forge River, Lower and Cove	pathogens
Suffolk	Tidal tribs to West Moriches Bay	Nitrogen
Suffolk	Tidal tribs to West Moriches Bay	pathogens
Suffolk	Canaan Lake	silt/sediment
Suffolk	Canaan Lake	phosphorus
Suffolk	Nicoll Bay	pathogens
Suffolk	Lake Ronkonkoma	phosphorus
Suffolk	Lake Ronkonkoma	pathogens
Suffolk	Great Cove	pathogens
Tompkins	Cayuga Lake, Southern End	phosphorus
Tompkins	Cayuga Lake, Southern End	silt/sediment
Tompkins	Cayuga Lake, Southern End	pathogens
Ulster	Ashokan Reservoir	silt/sediment
Ulster	Esopus Creek, Upper, and minor tribs	silt/sediment
Warren	Lake George	silt/sediment
Warren	Tribs to L.George, Village of L George	silt/sediment
Warren	Huddle/Finkle Brooks and tribs	silt/sediment

COUNTY	WATERBODY NAME	POLLUTANT
Warren	Indian Brook and tribs	silt/sediment
Warren	Hague Brook and tribs	silt/sediment
Washington	Lake Champlain, South Bay	phosphorus
Washington	Tribs to L.George, East Shore	silt/sediment
Washington	Cossayuna Lake	phosphorus
Wayne	Blind Sodus Bay	phosphorus
Wayne	Port Bay	phosphorus
Westchester	Saw Mill River, Lower, and tribs	floatables
Westchester	New Croton Reservoir	phosphorus
Westchester	Upper New Croton/Muscoot Reservoir	phosphorus
Westchester	Amawalk Reservoir	phosphorus
Westchester	Lake Lincolndale	phosphorus
Westchester	Peach Lake	pathogens
Westchester	Peach Lake	phosphorus
Westchester	Titicus Reservoir	phosphorus
Westchester	Cross River Reservoir	phosphorus
Westchester	Lake Meahaugh	phosphorus
Westchester	Bronx River, Upper, and tribs	pathogens
Westchester	New Rochelle Harbor	pathogens
Westchester	New Rochelle Harbor	floatables
Westchester	Long Island Sound, Westchester Co	pathogens
Westchester	Long Island Sound, Westchester Co	nitrogen
Westchester	Larchmont Harbor	pathogens
Westchester	Larchmont Harbor	floatables
Westchester	Hutchinson River, Middle, and tribs	pathogens
Westchester	Mamaroneck Harbor	pathogens
Westchester	Mamaroneck Harbor	floatables
Westchester	Mamaroneck River, Lower	silt/sediment
Westchester	Mamaroneck River, Upper, and minor	silt/sediment
Westchester	Sheldrake River and tribs	phosphorus
Westchester	Sheldrake River and tribs	silt/sediment
Westchester	Milton Harbor	pathogens
Westchester	Milton Harbor	floatables
Westchester	Blind Brook, Lower	silt/sediment
Westchester	Blind Brook, Upper, and tribs	silt/sediment
Westchester	Port Chester Harbor	pathogens
Westchester	Port Chester Harbor	floatables
Westchester	Byram River, Lower	pathogens
Wyoming	Java Lake	phosphorus
Wyoming	Silver Lake	phosphorus
Oneida	Mohawk River, Main Stem	Copper
Westchester	Hutchinson River, Middle and tribs	Oil and Grease

APPENDIX 3. NEW YORK CITY WATERSHED EAST OF THE HUDSON RIVER WATERSHED MAP

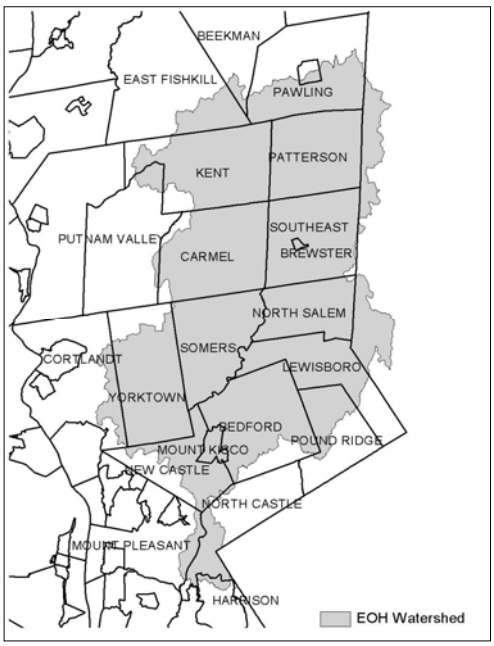


Figure 1. The requirements of watershed improvement strategies apply to the sewersheds within the shaded areas.

APPENDIX 4. ONONDAGA LAKE WATERSHED MAP

Figure 2. The requirements of watershed improvement strategies apply to the sewersheds within the shaded areas.

APPENDIX 5. GREENWOOD LAKE WATERSHED MAP

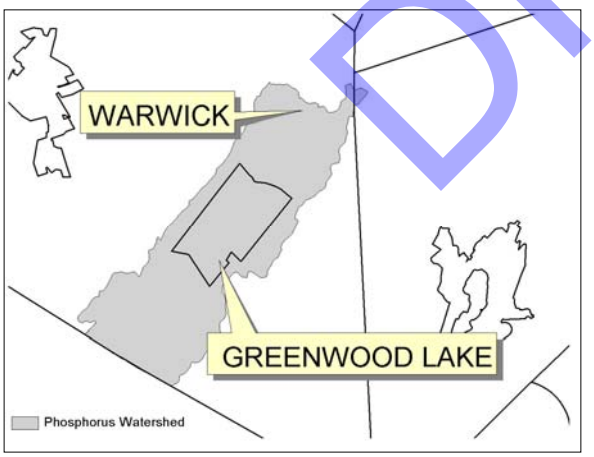


Figure 3. The requirements of watershed improvement strategies apply to the sewersheds within the shaded areas.

APPENDIX 6. OYSTER BAY WATERSHED MAP

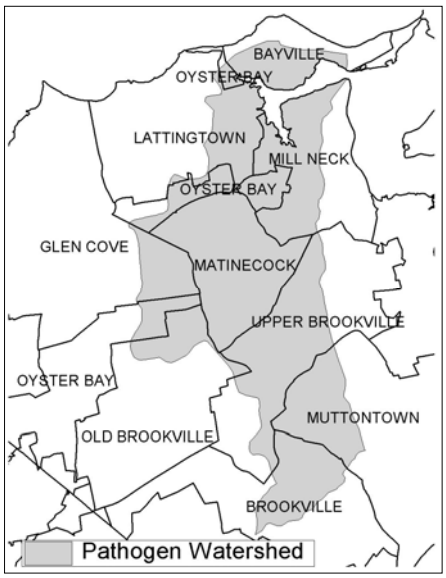


Figure 4. The requirements of watershed improvement strategies apply to the sewersheds within the shaded areas.

APPENDIX 7. PECONIC ESTUARY PATHOGEN WATERSHED MAP

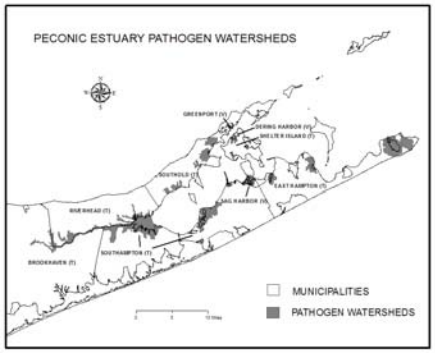


Figure 5. The requirements of watershed improvement strategies apply to the sewersheds within the shaded areas.

APPENDIX 8. PECONIC ESTUARY NITROGEN WATERSHED MAP

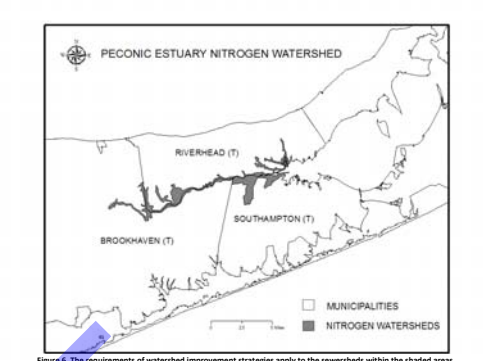


Figure 6. The requirements of watershed improvement strategies apply to the sewersheds within the shaded areas.

APPENDIX 9. THE 27 LONG ISLAND SHELLFISHING IMAPIRED EMBAYMENT MAP

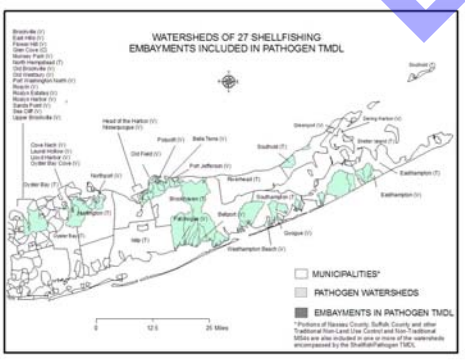


Figure 7. The requirements of watershed improvement strategies apply to the sewersheds within the shaded areas.

APPENDIX 10. LAKE OSCAWANA WATERSHED MAP

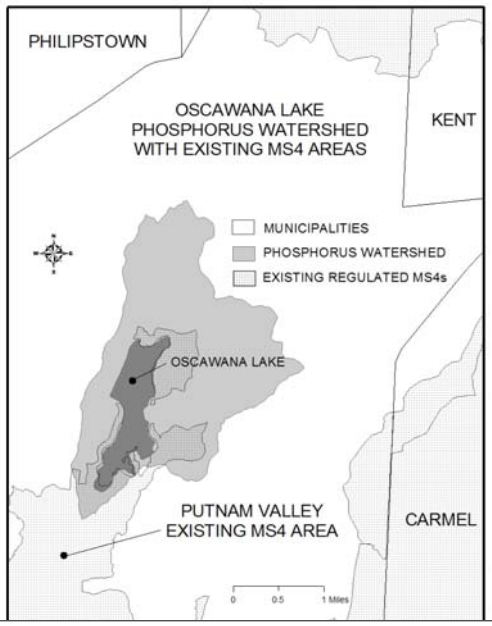


Figure 8. The requirements of watershed improvement strategies apply to the sewersheds within the shaded areas.