

STORMWATER MANAGEMENT PLAN

for the

VILLAGE OF SCOTIA

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Scotia, New York 12302



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STORMWATER MANAGEMENT PLAN

INTRODUCTION

The Village of Scotia Stormwater Management Plan has been developed to comply with the New York State Department of Environmental Conservation General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (GP-0-10-002). It is a shared Stormwater Management Plan (SMP) providing policy and management guidance to the Village of Scotia. The Village of Scotia is a member of the Schenectady County Water Quality Coordinating Committee (SCWQCC). This program has contributed to the SMP by developing portions of the plan which are common to all agencies involved in the SCWQCC.

The Stormwater Management Plan 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, to develop a Stormwater Management Program. There are six program elements designed to reduce the discharge of pollutants to the maximum extent practicable. The program elements, titled Minimum Control Measures (MCM), include:

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

Each Minimum Control Measure and the Practices that have been implemented to maintain compliance with the NYSDEC GP-0-15-003 General Permit are described in the plan. For each Best Management Practice, responsibilities to achieve and sustain compliance are clearly defined.

Portions of the work necessary are provided through the collective efforts of the SCWQCC members. The remaining work is the responsibility of the Village of Scotia's designated Stormwater Management Officer. Certain components of this program have been codified into local law. Please see Exhibit L of this Report for copies of: Chapter 155: Flood Damage Prevention, Chapter 163: Illicit Discharges and Connections to Storm Sewer System, and Chapter 208: Stormwater Management & Erosion and Sediment Control. This Stormwater Management Plan should be updated on an annual basis in order to take into consideration the latest technologies and information to maintain compliance with the NYSDEC GP-0-15-003 General Permit and revisions thereof.

Village of Scotia maintains coverage under GP-0-15-003 so as to legally discharge stormwater from MS4 outfalls to segments of, minor tributaries to the Mohawk River, sections of the Mohawk River, as well as Collins Creek; note: all efforts are taken to limit stormwater discharges into Collins Lake.

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Overview of the Minimum Control Measures (MCM)

The permit requires development of a Stormwater Management Program (SWMP) that includes the six required program components, or the six minimum control measures (MCMs).

1. Public Education and Outreach

This includes the distribution of educational materials and outreach activities that inform the public about the impacts of polluted stormwater runoff can have on water quality.

2. Public Participation/Involvement

Provide opportunities for citizens to participate in the development, implementation, review and revision of the stormwater management program. This includes publicizing public hearings and encouraging citizens participate in the stormwater management program process.

3. Illicit Discharge Detection and Elimination

Develop, implement and enforce a plan to detect and eliminate illicit discharges. This includes developing and maintaining a map of outfall locations and their receiving waterbodies, mapping the storm sewer-shed, prohibit illicit discharges through laws or ordinances, and inform the public about the hazards associated with illegal discharges and the improper disposal of waste.

4. Construction Site Runoff Control

Develop, implement and enforce an erosion and sediment control program for construction activities that disturb greater than or equal to one acre of land.

5. Post-construction Runoff Control

Develop, implement and enforce a plan that addresses stormwater runoff from new development and redevelopment projects and incorporates enforceable mechanisms. Applicable controls could include preventative actions (e.g., protecting sensitive areas) or the use of structural controls (e.g., grassed swales or porous pavement).

6. Pollution Prevention/Good Housekeeping

Develop and implement a program to prevent or reduce pollutant runoff from municipal operations. The program must include municipal staff training on pollution prevention measures and activities to reduce the amount of pollutants in stormwater (e.g., regular street sweeping, reduce the use of pesticides or street salt, or frequent cleaning of catch-basins).

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GENERAL DEFINITIONS AND REQUIREMENTS

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 or leaks, sludge or waste disposal, or 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 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 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 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. It may be liquid, sludge, solid, or hazardous waste.

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

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) – All municipal separate storm sewers that are 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, manmade 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.

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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 or use waterways for recreational purposes.

National Pollutant Discharge Elimination System (NPDES) – The EPA’s regulatory program to control the discharge of pollutants to waters 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 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 – 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 – 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 permitted to wash into rivers and ponds.

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

Small Municipal Separate Storm Sewer Systems (SMS4s) - These are MS4s that are not merely determined by population but are much broader in scope. MS4s 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 United States.

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

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Storm Sewer – 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 – The flow of water across the land surface that occurs when the rainfall rate exceeds the ability of the soil to absorb the water. Also occurs on impervious surfaces, such as parking lots, where water cannot infiltrate at all.

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

Total Maximum Daily Load (TMDL) – 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. All 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 – 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 can retain large amounts of water during storm events.

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LIST OF COMMONLY USED ABBREVIATIONS

BMPs	Best Management Practices
CWA	Clean Water Act
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
SCWQCC	Schenectady County Water Quality Coordinating Committee
SIMs	Schenectady County's Information Mapping Portal Webpage
SIMs Lite	Public Access Online Information Mapping
SPDES	State Pollution Discharge Elimination System
SWMP	Stormwater Management Plan
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
USEPA	United States Environmental Protection Agency

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SECTION 1 – MCM 1: PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS

Description of Minimum Control Measure

The Public Education and Outreach minimum control measure consists of Best Management Practices (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 and the steps that the public can take to reduce pollutants in stormwater runoff. These BMP's describe steps that the public can take to reduce the impact of stormwater pollutants. They also describe 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. The target pollutant sources are construction site runoff, impacts from new and re-development projects, illicit discharges and other pollutant sources as identified to be of local concern, i.e. approved TMDL parameters.

General Permit Requirements

An MS4 must, at a minimum:

Plan and conduct an ongoing public education and outreach program designed to describe:

- The impacts of stormwater discharges on waterbodies
- Pollutants of concern and their sources
- Steps that contributors of these pollutants can take to reduce pollutants in stormwater runoff
- Steps contributors of non-stormwater discharges can take to reduce pollutants

Pollutants of Concern

<u>Pollutant of Concern</u>	<u>Description</u>	<u>Potential Impacts</u>	<u>Probable Local Sources</u>
Floatables	Litter and debris that floats on the surface or is near the surface of waterbodies.	Litter in waterbodies may be contaminated with toxic chemicals and bacteria, are unattractive to look at, and can cause death to aquatic animals and birds. Commonly observed floatables may include paper, cigarette butts, plastic containers, wrappers and cans.	Highway corridors, large shopping centers, and illegal dumping.
Silt and Sediment	Soil/dirt particles that quickly fall to the bottom of waterbodies.	Large amounts of silt and sediment, when dislodged and deposited in water bodies, can disrupt ecosystems by interfering with photosynthesis, respiration, growth, reproduction, and oxygen exchange in water bodies.. Storm water runoff that contains sediment can deposit harmful amounts of silt in sensitive areas such as wetlands, streams and lake bottoms harming habitat needed by aquatic insects and plants. Sediment can also transport other pollutants that are attached to it including nutrients, trace metals, and hydrocarbons.	Winter road maintenance, streambank erosion, and removal of riparian buffers.

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Suspended Solids	Smaller soil particles that are suspended within the water and typically make water cloudy.	Dense clouds of particulate matter suspended in water bodies can block sunlight, inhibiting photosynthesis by phytoplankton and bottom-dwelling aquatic plants, and can also suffocate fish.	Winter road maintenance, streambank erosion, and removal of riparian buffers.
Phosphorus	A nutrient typically found in fertilizer, excrement and detergents.	Phosphorus promotes weed and algae growth in lakes and streams. Excessive weed growth clogs waterways and blocks sunlight. When algae die, they sink to the bottom and decompose in a process that removes oxygen from the water. Fish and other aquatic organisms can't exist in water with low dissolved oxygen levels.	Lawn care, agriculture, and sanitary waste discharges or cross-connections.
Pathogens	Bacteria and viruses include infectious agents and disease producing organisms normally associated with human and animal wastes, leakage from sewers and seepage from septic tanks.	These organisms can cause disease in humans and animals when present in drinking water and through direct contact with water. Common biological contaminants in stormwater may come from litter, organic matter and animal/human waste.	Leakage from individual septic systems or sanitary sewer systems, and agricultural practices.
Oil and Grease	Oil and grease include a variety of petroleum-based products and a wide array of hydrocarbon compounds.	Oil and grease may be toxic to aquatic life, even in small amounts. Oil and grease in storm drains can generally be traced to restaurants, automotive leaks and spills, or improper disposal of used oil and automotive products into storm drains.	Illicit discharges and dumping, restaurants, gas stations or service stations, large parking lots, and leaking underground petroleum tanks.
Nitrogen	A nutrient typically found in fertilizers and excrement.	Nitrogen is considered a nutrient, and when deposited in excessive amounts into water bodies can cause a condition known as eutrophication. These nutrients can also result in excessive or accelerated growth of vegetation, such as algae, resulting in impaired use of water in lakes and other sources of water supply. In addition, un-ionized ammonia (one of the nitrogen forms) can be toxic to fish.	Agricultural activities.
Metals	Metals including lead, zinc, cadmium, copper, chromium, and nickel are may be found in stormwater. Many of the artificial surfaces of the urban environment (e.g., galvanized metal, paint, automobiles, or preserved wood) contain metals, which may enter stormwater as the surfaces corrode, flake, dissolve, decay, or leach.	Metals are of concern because they are toxic to aquatic organisms, can bioaccumulate (accumulate to toxic levels in aquatic animals such as fish), and have the potential to contaminate drinking water supplies.	Illegal dumping, hazardous waste sites, and industrial areas.

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Oxygen-Demanding Organics	Bio-degradable materials that consume dissolved oxygen in water as they decay.	Natural decomposition of these materials may deplete dissolved oxygen supplies in surface waters. Dissolved oxygen (DO) may be reduced below the threshold necessary to maintain aquatic life, impairing or killing fish and other aquatic plants and animals.	Leafy matter and debris.
Pesticides	Pesticide compounds including herbicides, fungicides, rodenticides, and insecticides.	Pesticides may be present in stormwater at toxic levels, even when pesticides have been applied in accordance with label instructions. Accumulation of these compounds in simple aquatic organisms, such as plankton, provides an avenue for biomagnification through the food web, potentially resulting in elevated levels of toxins in organisms that feed on them, such as fish and birds.	Residential and agricultural usage.

Waterbodies of Concern

<u>Waterbodies of Concern</u>	<u>Pollutants of Concern</u>
Mohawk River and Tributaries, Collins Creek, and Collins Lake	Floatables, Silt and Sediment, Suspended Solids, Pathogens, Oil and Grease, Metals, Oxygen-Demanding Organics, Pesticides, Phosphates and Nitrates

Geographic Areas of Concern (Applicable to entire Village of Scotia)

<u>Additional Detail</u>
Littering, suspended solids
Littering, metals
Oil and grease, pesticides
Littering
Littering, silt & sediment, oil & grease, pesticides, phosphorus

Target Audiences are included in Section 2 of the Plan

Non-Stormwater Discharges

The following types of non-stormwater discharges are typically exempt from the need for SPDES permit coverage. However, the State and/or the MS4's may determine the following types of discharges to be substantial contributors of pollutants. Each MS4 should examine the following types of discharges in their stormwater management program ("SWMP") to determine if they are substantial contributors to stormwater pollutants.

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Non-stormwater discharges are defined in the MS4 Permit and include:

- Waterline flushing
- Landscape irrigation
- Diverted stream flows
- Rising ground waters
- Uncontaminated ground water infiltration
- Uncontaminated pumped ground water
- Discharges from potable water sources
- Foundation and footing drains
- Air conditioning condensate
- Irrigation water
- Springs
- Water from crawl space and basement sump pumps
- footing drains
- Lawn watering runoff
- Water from individual residential car washing
- Flows from riparian habitats and wetlands
- De-chlorinated swimming pool and water reservoir discharges
- Residual street wash water
- Discharges or flows from firefighting activities
- Any SPDES permitted discharge

Addressing Pollutants of Concern

Much of how the Village addresses pollutants of concern pertaining to stormwater, are conveyed within this Stormwater Management Plan (SWMP). Note this plan is a living document and will be updated as required. More specifically, to address these issues it is necessary for the MS4 to undertake several critical stormwater management tasks such as, but not limited to; defining community goals for stormwater management practices, tailoring local laws to meet stormwater management goals and objectives, supporting land use planning and decision making to accomplish the best methods for managing stormwater in developed or developing areas, providing for community education and public participation, and managing municipal operations in a way to reduce pollutants in stormwater.

Methodology for Compliance with Permit Requirements

The Village of Scotia and the SCWQCC has developed many of the BMP's necessary for this MCM. Measures to inform, educate, ignite buy in, and encourage involvement of the Public include brochures, posters, webpage, education packages, and kiosk display for community events. These practices will be updated by the Village of Scotia and the SCWQCC on an annual basis and made available to each MS4 that is a member of the SCWQCC.

As Collins Lake is on the Section 303d list due to a high concentration of phosphorus, the Village will develop a list of target audiences to inform about the issue and what can be done to help improve the problem. One such group would be the residential homes, that are in the watershed of the Lake that could be educated on proper fertilizer application procedures. Another would be any of the groups that routinely use the park.

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Best Management Practices

Stormwater Pollution Prevention Brochures

Description / Methodology

Display brochures within municipal buildings to target contractors, businesses, and schools. Specifically, the brochures are available at Village Hall, the DPW offices, and the library.

Brochures will be distributed through trade associations, public outreach events, and seminars. In recent years, the stormwater kiosk, developed by the SCWQCC, has been displayed at:

- miSci the Schenectady Museum of Innovation and Science, for area school elementary and middle school field trips,
- Mohawk River Symposium,
- NYS Stormwater and Flood-Plain Managers' Association Annual Conference, and
- The Village of Scotia's Father's Day.

The number of brochures handed out at events and the number of events that the kiosk is displayed at each year will be recorded as measurable goals and reported in the Annual MS4 report.

Stormwater Management Officer

Brochures on display and available to the public at Village Hall.

Webpage

Description / Methodology

- Develop a website designed to educate the public on the impacts of stormwater runoff on local waterbodies.
- Develop a list of subjects for inclusion and discussion in the website based on consideration of the following subjects:
 - Citizen reporting under the illicit discharge and construction programs.
 - Water quality impacts of stormwater runoff to local water bodies.
 - Steps the public can take to reduce stormwater pollution.
 - Public involvement programs.
 - Design and publish the website to the internet for public access.
 - Develop a website maintenance schedule that is consistent with the implementation schedule of other BMP's included in this SWMP.
 - Work with Schenectady County to upload to the SIMs the Village's MS4 mapping initiative information

Stormwater Management Officer

- Develop links from the Village website to other storm water websites, including the Schenectady Internet Mapping online system, SIMs Lite, which will have layers to show Impaired Waterbodies and Steam Segments within the Village.
- Update and maintain the Village of Scotia website as necessary.
- Develop measurable goals, such as tracking comments pertaining to the Annual Report, etc.

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K-12 Education Packages

Description / Methodology / Goals

- Develop and distribute educational materials to school age children in order to foster an early age respect for the environment.
- Publicize environmental education opportunities to local educators regarding pollution prevention and stormwater quality issues to discuss in the classroom.
- Develop age appropriate materials for distribution to local school students.
- Distribute educational materials to local schools.
- Update education materials as necessary to maintain consistency with current standards and to reflect input from school administrators and teachers.
- Maintain records of the number and types of education materials distributed to local schools.

Public Education Display for Community Events

Description / Methodology

Develop a public education display that can be used at community events. A stormwater kiosk display has been prepared and is maintained by the SCWQCC.

Stormwater Management Officer

Incorporate stormwater public education into community events or programs. Information targeting stormwater pollution prevention for households may include:

- Any video and audio public service announcements developed by NYSDEC or USEPA.
- Printed public service announcements developed by the SCWQCC.
- Invitation for public to review Annual Report
- Invitation for Community Cleanup Events

Procedures for Public Education and Outreach on Stormwater Impacts

The Village has set the following procedures for the Public Education and Outreach on Stormwater Impacts, which shall be modified and expanded as necessary.

1. The Village will maintain availability of informational stormwater fliers “After the Storm” obtained from the EPA at the following locations: Village Hall and the Scotia Library. The number of fliers picked up by the public will be tracked and recorded.
2. A summary of the Draft MS4 Annual Report shall be prepared and read during a Board meeting a minimum of one month prior to the deadline to submit to NYSDEC on June 1st. Public comments will be recorded and considered. The number in attendance will be recorded by the presenter.
3. The website will include a copy of the current MS4 Annual Report and Stormwater Management Plan. The Draft MS4 Annual Report will be placed on the website by no later than April 1st. The draft copy can be removed once the finalized copy has been placed on the website.
4. The website shall include links to the following web addresses:

<http://www.dec.ny.gov/chemical/8468.html> (Stormwater Information - NYSDEC)

SIMS Lite - <http://www.simsgis.org/lite/> with layers updated for the Village of Scotia

<http://www.dec.ny.gov/public/44330.html> (Create a Rain Garden - NYSDEC)

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SECTION 2 – MCM 2: PUBLIC PARTICIPATION / INVOLVEMENT

Description of Minimum Control Measure

The Public Involvement/Participation minimum control measure consists of Best Management Practices (BMPs) that focus on involving the local public in development and implementation of the SWMP. Compliance with State and local public notice requirements will facilitate involvement of the public in development and implementation of the public involvement/participation program. The BMPs describe the plan to actively involve the public in development and implementation of the SWMP and the types of public involvement activities included in the program. The target audiences for the public involvement program are all groups that may have an interest in the particular BMPs, in addition to all ethnic and economic groups and the general public located within the permitted boundary.

General Permit Requirements

An MS4 must, at a minimum:

Comply with State and local public notice requirements when implementing a public involvement/participation program. Comply with public participation and involvement provisions of the CWA as applicable. Design and conduct a public involvement/participation program which:

- Identifies key individuals and groups, public and private, who are interested in or affected by the stormwater permitting program.
- Identifies types of input the MS4 would seek from them to support development and implementation of the program and how it is used.
- Describes the public involvement/participation activities the MS4 will undertake to provide program access to those who want it and to gather the needed input. The activities may include but are not limited to; stewardship activities, stream cleanup, storm drain marking, volunteer water quality monitoring.
- Identifies a local point of contact for public concerns regarding stormwater management and compliance with this 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.

Prior to submitting the annual report to NYSDEC by June 1st of each reporting year, the Village presents the draft annual report at a regular board meeting that is open to the public and it is posted to the website, where the public is able to ask questions about and make comments on the report.

Make public the following information if to be presented at a public meeting:

- The placement of the report on the agenda of this meeting
- The opportunity for public comment
- The date and time of the meeting
- The availability of the draft report for prior review

Recommendations for publicizing this public review opportunity are available from the NYSDEC and EPA websites.

Include a summary of comments and intended responses in the Annual Report and make the final report available for public inspection.

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Target Audiences

<u>Target Audiences</u>	<u>Reasons for Including this Audience</u>
Fire Departments	Discharges from firefighting activities
Schools	Education opportunities
Scotia Industrial Park	Industrial Warehousing
Grocery Stores	Food storage and distribution facility
Restaurants	Potential grease, litter
Auto Repair & gas stations	Potential oil/grease/fuel spills
Car Washes	Potential phosphorus, detergents
Rotary	Education opportunities, public service
Elks	Education opportunities, public service
Apartment & Condo Associations	Education opportunities
Churches	Education opportunities, public service
Little Leagues	Education opportunities, public service

Methodology for Compliance with Permit Requirements

In order to comply with this MCM, each municipality must involve the local public in their SWMP. By participating in the SCWQCC the Village of Scotia can comply with certain aspects of the SWMP such as incorporating a feedback mechanism into joint community cleanup events. MS4's will be responsible for allowing public review of the SWMP and Annual Report. MS4's can also develop programs such as volunteer monitoring of outfalls, adopt-a-stream program, and storm sewer stenciling. These BMP's are not General Permit requirements but do foster public involvement and may be of interest to the local MS4 for incorporating into their SWMP.

Best Management Practices

Identify Contact Person for Stormwater Program

Description / Methodology

Establish a "Stormwater Management Officer" that is responsible for the management of the Village of Scotia's Stormwater Management Program. (Completed 2005 – DPW Superintendent) A consultant cannot be appointed as Stormwater Management Officer.

Municipal Board

Stormwater Management Officer was established as the DPW Superintendent in 2006

Incorporate Feedback Mechanism into Webpage

Description / Methodology

Through the Village of Scotia website, provide a means for public input/comment regarding the stormwater management program.

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STORMWATER MANAGEMENT PLAN

Stormwater Management Officer

Document input and comments received, and actions taken.

Public Review of Stormwater Management Plan

Description / Methodology

Provide the public with an opportunity to review and comment on the Stormwater Management Plan. Upon adoption of a Stormwater Management Plan, measures must be in place to evaluate its effectiveness in conjunction with the public.

Stormwater Management Officer

Provide an opportunity for the public to comment on the effectiveness of the Stormwater Management Plan and offer suggestions for improvements. This will be accomplished during the required public meeting to review the Annual Report.

Public Review of Annual Report

Description / Methodology

All regulated MS4s must submit an annual report by June 1st of each year that updates the NYSDEC on the status of their stormwater management program. Before submittal of the Annual Report to NYSDEC, a draft report is prepared and made available to the public for their review and comment.

Stormwater Management Officer

Publish a notice in the local paper and on the stormwater website that notifies residents of their opportunity to review the annual report at the office of the Stormwater Management Officer, during a public meeting or online at the Village website.

Include a summary of comment and intended responses in the final Annual Report. Changes made to the SWMP in response to comments should be described in the Annual Report.

Community Cleanup Event

Description / Methodology

Inform and encourage residents about the many opportunities that exist to participate in area community cleanup events; Household Hazardous Waste Day held once per year by the County, the nationally sponsored Littoral Society "Stream Cleanup" events that can be organized locally, and locally sponsored, volunteer cleanup activities such as Collins Park and Freedom Park cleanup dates.

Stormwater Management Officer

Publish a notice in the local paper and on the stormwater website that notifies residents of their opportunity to participate in the Village of Scotia's Park cleanup dates.

Have information on local cleanup opportunities available at the office of the Stormwater Management Officer and the Village Clerk's office.

Additional Information / Resources

Information on the Littoral Society Cleanup event.

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STORMWATER MANAGEMENT PLAN

Storm Drain Stenciling

Description / Methodology

The Village has been installing stormwater plaques on catch basins and inlet structures with messages related to stormwater quality issues for several years.

- The first target area selected was the busiest pedestrian streets, then working into other less busy streets. Some of the plaques were installed by Village employees, but the majority have been installed by summer interns while performing the storm sewer system mapping.
- Other groups that may be willing to participate in the storm drain stenciling program include:
 - Local boy and girl scout organizations
 - Local school groups
 - Local fund-raising groups
 - Other civic organizations
- Develop slogans, logos, and/or text for stenciling stormwater inlet structures.
- Invite targeted groups to participate in the storm drain stenciling program.
- Provide necessary support for volunteer storm drain stenciling groups, e.g. stencils, paint, rollers, traffic control, safety equipment, trash bags, and landfill access or bulk litter collection.
- Maintain records of storm drain stenciling and volunteer participation.
- Annually report on number of storm drains stenciled by volunteers.

Stormwater Management Officer

Identify target areas or streets to be included in the storm drain stenciling program.

Develop slogans, logos, and/or text for stenciling stormwater inlet structures and create templates.

Invite targeted groups to participate in the storm drain stenciling program.

Update the Measurable Goals based on the program that is developed.

SECTION 3 – MCM3: ILLICIT DISCHARGE DETECTION & ELIMINATION

Description of Minimum Control Measure

The Illicit Discharge Detection and Elimination minimum control measure consists of Best Management Practices (BMPs) that focus on the detection and elimination of illicit discharges into the MS4. 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 and procedures for tracing and locating the source of an illicit discharge; procedures for locating priority areas; and procedures for removing the source of the illicit discharge.

VILLAGE OF SCOTIA

STORMWATER MANAGEMENT PLAN

General Permit Requirements

An MS4 must, at a minimum:

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

Develop and maintain a map, showing the location of all outfalls and the names and location of all waters of the United States that receive discharges from those outfalls. To the extent allowable under State or local law, effectively prohibit through ordinance, or other regulatory mechanism, illicit discharges into the storm sewer system and implement appropriate enforcement procedures and actions. Develop and implement a program to detect and address non-stormwater discharges, including illegal dumping to the system .

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

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 Village's jurisdiction at least once every five years, with reasonable progress each year.

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

Implement a program to detect and address non-stormwater discharges, including illegal dumping, to the small MS4 in accordance with State and EPA guidelines.

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

The following discharges are exempt from discharge prohibitions established by local law unless the NYSDEC or the Municipality determines them to be a significant contributor of pollutants:

- Waterline flushing
- Landscape irrigation
- Diverted stream flows
- Rising ground waters
- Uncontaminated ground water infiltration
- Uncontaminated pumped ground water
- Discharges from potable water sources
- Foundation and footing drains
- Air conditioning condensate
- Irrigation water
- Springs
- Water from crawl space and basement sump pumps
- Lawn watering runoff
- Water from individual residential car washing
- Flows from riparian habitats and wetlands
- Dechlorinated swimming pool and water reservoir discharges
- Residual street wash water
- Discharges or flows from firefighting activities
- Any SPDES permitted discharge

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STORMWATER MANAGEMENT PLAN

Methodology for Compliance with the Permit Requirements

The Village of Scotia has located most of its storm sewer outfalls by field inspection and has obtained GPS coordinates of each. These field inspections have been incorporated into a digital map showing the location of each outfall as well as an associated form containing information for each outfall. Photographs of each outfall were taken at the time of inspection to document the conditions and include the outfall number for easy reference with the map.

Best Management Practices

Outfall Mapping

Description / Methodology

A map of storm sewer outfalls within the regulated boundaries of the MS4 has been developed. The map identifies each outfall with a unique number which is linked to a table of outfall inspections that records pertinent properties of each outfall.

Additional Information / Resources

- Schenectady County MS4 Cooperative Coordinated Outfall Reconnaissance Inventory Form (see Exhibit D)
- Minimum Data Entry Requirements for Outfall Inspection/Monitoring

Sample Comprehensive Outfall Reconnaissance Form "Outfall Reconnaissance Inventory/Sample Collection Field Sheet"

- Visual Inspection of Outfalls Physical Conditions
- Guidelines for Visual Inspections of Stormwater Outfalls

Updating Outfall Mapping/Outfall Information Management

Description / Methodology

Update information to base outfall map during routine maintenance visits, scheduled outfall inspections during dry weather conditions, new residential or commercial developments and responses to complaints. Outfall mapping is managed by the Village of Scotia's Department of Public Works.

Update the outfall map as necessary with additional outfalls that have been added to the system. In 2013, the urbanized area within the Village was increased, the Village has secured funding to map and inspect these new outfalls to the MS4.

Stormwater Management Officer

The Village has developed a schedule for outfall inspections, with a minimum of each outfall being inspected once over the course of a five-year cycle. (20% per year)

Additional Information / Resources

- Minimum Data Entry Requirements for Outfall Inspection/Monitoring
- Schenectady County MS4 Cooperative Coordinated Outfall Reconnaissance Form "Outfall Reconnaissance Inventory/Sample Collection Field Sheet"
- Visual Inspection of Outfalls Physical Conditions
- Guidelines for Visual Inspections of Stormwater Outfalls

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STORMWATER MANAGEMENT PLAN

It is recommended, but not required, that the Village of Scotia define the drainage areas that contribute flow to each outfall. Scotia has schematically delineated their entire storm sewer system. Having the drainage areas defined is helpful in tracking down illicit discharge sources.

Outfall Inspection & Pollutant Source Tracking Procedures

Description / Methodology

DPW employees will perform a visual inspection of a minimum of 20% of the Village's storm water outfalls each year, during dry weather conditions. Additional inspections may take place during the year but are not required. These additional inspections may be concentrated in areas of higher potential for illicit discharges identified from the land use information.

The DPW shall maintain outfall pipes so that they are free of brush & obstructions for ease of inspection, ensure that flow from the pipe is non-erosive with the use of rip-rap or erosion control products and shall repair or replace pipes or headwalls found to be in poor condition.

Municipal personnel will be trained to identify illicit discharges so that they may be identified even when just driving around performing other job duties.

Every attempt will be made to have the same employees inspect the outfalls each year to help track any changes.

An inspection form (included in Exhibits) is completed for each outfall. Pictures of each outfall should be taken, if possible.

Inspection forms are reviewed and filed.

A chart (spreadsheet) will be developed and maintained to record and track annual inspection data.

A priority area list will be developed where the likelihood of illicit connections may be high (such as industrial areas, etc.)

The SMO and DPW Superintendent will be notified if an illicit discharge is discovered during the annual inspection.

Discharge will be documented and investigated by DPW staff or contracted to Village Designated Engineering Firm Qualified in, experienced with MS4 requirements and with a familiarity and experience with the Village's Stormwater Management System.

DPW will use storm water system mapping hard copy as well as mapping SIMS as a tool to assist in tracing discharges to its source, using a sewer camera, dye-testing, smoke-testing, and interior building visual inspections, as necessary. If sampling of the storm water for suspected pollutants is necessary, The Village will contract with a lab to obtain proper sample containers and will submit the samples for testing. Test results will be compared with known byproducts from businesses or industrial users upstream from the outfall.

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If the source is definitively located, appropriate action will be taken according to Village Code Chapter 163 Illicit Discharges, Activities, and Connections to Separate Storm Sewer System §163-1 - §163-19.

Any actions taken will be documented and included in the annual report.

Stormwater Management Officer

Customize the sampling procedure and program to track down sources of pollution to meet the municipality's needs.

Implement enforcement action per the stormwater management ordinance

Customize the spill response plan to meet municipality's needs

Additional Resources:

None

Adopt Stormwater Management Ordinance

Description / Methodology

The Village adopted stormwater management ordinances to prohibit illicit discharges, and implement enforcement procedures and actions as needed

Stormwater Management Officer

Customize enforcement action procedures to meet municipality's requirements

Municipal Board

Adopted stormwater management ordinances See Exhibit L.

Stormwater Management Officer & Municipal Board

Adjust stormwater ordinance(s) as necessary to maintain compliance with NYS Standards and Requirements.

Addressing Categories of Non-Stormwater Discharges

Description / Methodology

The following discharges are exempt from discharge prohibitions established by local law unless the NYSDEC or the municipality has determined them to be substantial contributors of pollutants, waterline 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, irrigating water, springs, water from individual residential car washing, natural riparian habitat or wetland flows, dechlorinated swimming pool discharges, residential street wash water, water from firefighting activities, and any other water source not containing pollutants. Such exempt discharges shall be made in accordance with an appropriate plan for reducing pollutants.

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STORMWATER MANAGEMENT PLAN

Stormwater Management Officer

- Develop list of non-stormwater discharges allowed to the MS4.
- Update non-stormwater discharge list as necessary such that no exempt stormwater discharge is a substantial contribution of pollutants.

Additional Information / Resources

None

Education

Description / Methodology

The education of public employees, businesses and the general public about the hazards associated with illegal discharges and improper disposal of waste is an important tool to eliminate illicit discharges to the storm sewer system. See MCM 1 Public Education and Outreach for pollutants of concern and target audiences. Also, see MCM 6 Good Housekeeping for Training of Public Employees.

Stormwater Management Officer

Review and update, as necessary, list of pollutants of concern and target audiences annually.

Track and record public employees that receive IDDE training.

Measurable Goals

Description / Methodology

Measurable goals are intended to gauge permit compliance and program effectiveness. The measurable goals, as well as BMPs should reflect the needs and characteristics of the area served by the storm sewer system.

Stormwater Management Officer

- Review BMPs annually and update, as necessary.
- Tally number of employees that receive IDDE training.
- Record the number of letters that are sent to businesses or groups describing what illicit discharges are, and how they can be prevented.
- Track the number or percentage of outfalls inspected.
- Document number of illicit discharge complaints received.
- Record number of illicit discharges investigated and found.
- Total the number of illicit discharge sources removed.
- Input all of the above information into the computer tracking system, so that the program effectiveness can be tracked from year to year.

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SECTION 4 – MCM 4: CONSTRUCTION SITE RUNOFF CONTROL

Description of Minimum Control Measure

The Construction Site Runoff Minimum Control Measure consists of Best Management Practices (BMP's) that focus on the reduction of pollutants in any stormwater runoff 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 activity 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 BMP's described in this section have application to both types of projects.

As this MCM relates to construction, the Village has designated the Code Enforcement Officer as the key stormwater contact, as the stormwater inspection requirements mesh well with the other construction site inspections that a person in this position already performs. The Village may have a Designated Engineer (TDE) also perform SWPPP inspections to ensure that the requirements are being properly followed in the field.

General Permit Requirements

An MS4 must, at a minimum:

Develop, implement, and enforce a program to reduce pollutants in any stormwater runoff to the 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 NYSDEC.
- At a minimum, a program must provide equivalent protection to the NYS SPDES General Permit for Stormwater Discharges from Construction Activities, and must include the development and implementation of:
 - An ordinance or other regulatory mechanism to require erosion and sediment controls.
 - Requirements for construction site operators to implement erosion and sediment control management practices.
 - Sanctions to ensure compliance to the extent allowable by State or local law.
 - 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.

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- Procedures for site plan review that incorporate consideration of potential water quality impacts and review of individual preconstruction site plans to ensure consistency with local sediment and erosion control requirements.
- Procedures for receipt and consideration of information submitted by the public.
- Procedures for site inspections and enforcement of 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.
- Education and training measures for construction site operators regarding the requirement to develop and implement a Stormwater Pollution Prevention Plan (SWPPP) and any other requirements they must meet for construction sites within the MS4's jurisdiction.

Methodology for Compliance with Permit Requirements

The Village of Scotia adopted an ordinance regulating these activities in 2006. This ordinance authorizes the Village of Scotia to enforce a program that reduces pollutant runoff from construction sites. The Village of Scotia working in conjunction with the Village of Scotia designated Engineer [TDE – Prime AE] for reviewing SWPPP's, and inspecting construction sites, and enforcing the permit requirements assuring developers stay in compliance and keeping those that do not comply with the regulations accountable. The Village of Scotia will also provide information on training to developers, contractors, and design engineers in order to inform them of the regulations. Training will also be provided to the Village of Scotia personnel that will be responsible for inspecting the construction sites and enforcing the permit requirements.

Best Management Practices

Stormwater Ordinance

Description / Methodology

Adopt a stormwater management ordinance to establish minimum stormwater management requirements and controls to protect the general health, safety, and welfare of the public. Stormwater ordinance to address issues relating to:

- Erosion and Sediment Control
- Stormwater Design Requirements
- Construction Requirements
- Fees for municipal services relating to SWPPP reviews, inspections, and maintenance

Additional resources:

- Review Sample Stormwater Management Local Law developed by NYSDEC.
- Modify fee structure for planning review services relating to SWPPP reviews, inspections, and maintenance.

Municipal Board

Customize the fee structure and ordinance to incorporate municipality's requirements. Fee structure should be referenced in Local Law but not a part of it in order to allow for future updates to the fee structure without having to revise the Local Law.

Adopted stormwater management ordinance.

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STORMWATER MANAGEMENT PLAN

Stormwater Management Officer & Municipal Board

- Revise fee schedule as needed.
- Adjust stormwater ordinance as necessary to maintain compliance with NYS Standards and Requirements.

Additional Information / Resources

NYSDEC Sample Stormwater Management Local Law.

Design Requirements

Description / Methodology

Evaluate existing in-house practices related to review of project planning and design criteria for required changes based on compliance with local, state and/or federal construction stormwater regulations. Develop project planning, design requirements, and communicate requirements to the design and construction communities.

Some Village of Scotia-owned and managed projects, and some privately-owned and managed projects, have special conditions which make implementation of standard pollution prevention practices, as defined in the NYS Stormwater Management Design Manual, impractical to implement. Such projects include highway reconstruction, demolition/redevelopment, waterline construction, and other linear-type construction. Acceptable design criteria for these special condition projects must be approved by NYSDEC on a project-by-project basis, and the owner's preparation of the GP-0-10-002 Notice of Intent (NOI) is the mechanism by which accepted practices are evaluated by NYSDEC.

Stormwater Management Officer & Municipal Board

Customize construction design and permitting guidelines to incorporate any local requirements.

Revise design and permitting guidelines as necessary.

Additional Information / Resources

- General Permit for Construction Activity GP-0-10-002
- Stormwater Permit Process Flowchart
- Notice of Intent for Stormwater Discharges Associated with Construction Activity, GP-0-10-002
- Notice of Termination for Stormwater Discharges Associated with Construction Activity, GP-0-10-002
- Interim Strategy for Redevelopment Projects
- FAQ's about Technical Requirements of the SPDES General Permit for
- Stormwater Discharges from Construction Activities
- FAQ's about Permit Requirements of the SPDES General Permit for Stormwater Discharges from Construction Activities

Construction Plan & SWPPP Review

Description / Methodology

There are two potential paths for new project reviews in the Village of Scotia: A project requiring Site Plan Review, or Subdivision, will go through the Planning Board and a project only requiring a Building Permit will go through the Building Department. In either case, the applicant will be provided with a SWPPP Preparation and Review Checklist (see enclosed) that will help them to develop and submit the proper information to the Village. A SWPPP submitted to the Building Department may be reviewed by Department personnel or a Designated Engineer (TDE – Prime AE) may be hired for the review, if over one

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acre of disturbance is proposed. A SWPPP submitted to the Planning Department will be reviewed by a TDE. Once the TDE has approved the SWPPP, the Supervisor will sign the SWPPP Acceptance Form and provide to the site owner / operator to include with the SWPPP submission to NYSDEC to obtain permit coverage.

- Develop a set of criteria to be utilized by the municipality to verify construction plan compliance with local, state, and/or federal construction stormwater regulations.
- Prepare a list of approved structural and non-structural BMP's that meets the requirements of the stormwater regulations. This list will identify if the BMP needs to be used in combination with other BMP's in order to completely satisfy the regulations requirements.
- Develop internal tracking and plan review procedures to cover the following issues:
 - Conformance to local stormwater regulations
 - Appropriate use of temporary erosion controls
 - Inclusion of any required local, state, and/or federal stormwater permit documents

Prepare a checklist of items that must be verified by the reviewer for each construction plan review. This checklist will be available to developers, contractors, engineers, and architects to assist them in preparing satisfactory plans. The standard NYSDEC checklist is currently used.

Provide training for municipal engineers, building department staff, and other municipal representatives that will be completing the construction plan reviews within each municipality. Training opportunities have been offered through cooperation with the Schenectady County Soil and Water Department.

Educate the local construction community (contractors, developers, engineers, architects) on the construction plans review process.

Stormwater Management Officer

- Implement the construction plans review procedures for local construction sites. Notify the owners of construction plans when deficiencies are found in the plans during the review process.
- Maintain records of plans reviewed and approved for construction under this program and track active construction sites. A record of all stormwater management facilities installed from 2003 to present date is currently being set up in the BAS computer system. This system will be used to track the requirements for inspection and maintenance of stormwater management facilities. As inspection and maintenance is provided at the various sites, records will be kept in the BAS computer system.
- Develop inspection forms and procedures necessary to inspect local construction sites in order to ensure compliance with local construction stormwater regulations.
- Notify the local construction community (contractors, developers, engineers, architects) for them to review the draft inspection documents and procedures. Provide notification to the local construction community of the final inspection procedures.
- Develop internal procedures for tracking new and ongoing construction activities.
- Train Village of Scotia inspection personnel on local construction stormwater regulations and inspection procedures.
- Inspect qualifying construction sites using appropriate inspection procedures and forms to ensure compliance with local stormwater regulations.

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- Issue enforcement actions to owners and operators of local construction sites that are not in compliance with local construction stormwater regulations.
- Maintain records of construction site inspections, enforcement actions, and corrective actions performed by local construction site owners and operators.

Additional Information / Resources

Refer to Exhibits for Sample Inspection Forms.

Project Status Monitoring and Reporting

Description / Methodology

The Village's Department of Public Works is responsible for site inspections and enforcement actions. The Village will hire a TDE (or inspector with proper DEC sponsored erosion and sediment control training) to perform the required SWPPP inspections and complete an inspection report (see enclosed DEC checklist). All active construction sites with a SWPPP will be tracked in the BAS database. Any violations noted on the inspection reports will be brought to the attention of the Department of Public Works so that appropriate actions may be taken, which could include a stop work order and fines. The TDE (or certified inspector) will perform a final site inspection to determine if all work has been completed in accordance with the approved SWPPP. The Owner or operator of the construction project will then be allowed to submit the Notice of Termination (NOT) to NYSDEC once the Supervisor has signed the "MS4 Acceptance" statement on the NOT.

A SWPPP Preparation and Review Checklist, as well as the Erosion and Sediment Control Plan Review Checklist and Construction Site Logbook requirements will be provided to the TDE for each new project that is being reviewed, and the completed forms will be required to be submitted along with a review letter for the project.

As part of the enforcement requirements of the stormwater ordinance, records must be maintained to determine construction sites that are either in compliance or not in compliance with state and/or federal construction stormwater permits.

The Village of Scotia is also required to report the number of construction projects that are permitted under state and/or federal construction stormwater regulations.

Stormwater Management Officer

The Village will maintain compliance records for all construction sites requiring state and/or federal construction stormwater permits.

Report on the number of construction projects permitted under state and/or federal construction stormwater regulations. Periodically check that this agrees with the NYSDEC permitted project list.

Record number of SWPPPs reviewed, number of enforcement actions, number of inspections and effectiveness of BMPs.

Additional Information / Resources

Annual Report

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STORMWATER MANAGEMENT PLAN

Public Review of Design Plans and Construction Projects

Description / Methodology

Provide the public with an opportunity to review and comment on proposed design plans and construction sites. This is currently provided during the site plan review at Planning Board meetings.

Develop procedures for the public to request information and relay concerns to the representative of the municipality.

Stormwater Management Officer

Provide notice to the public for them to review and comment on proposed design plans. Typically, this should correspond with the Planning Board or Village Board agendas for proposed projects.

Stormwater Management Officer or Planning Department

Document the comments received from the public and any actions taken.

Additional Information / Resources

None

Education and Training Measures for Construction Site Operators

Description / Methodology

Provide educational material and training opportunities to developers, contractors, engineers, and architects to inform them of the local, state, and/or federal regulations that will impact their developments.

Develop planning and design requirements for release to the local construction community including contractors, developers, engineers, and architects.

SECTION 5 – MCM 5: POST-CONSTRUCTION STORMWATER MANAGEMENT

Description of Minimum Control Measure

The Post-Construction Stormwater Management minimum control measure consists of Best Management Practices (BMP's) that focus on the prevention or minimization of water quality impacts from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale that discharge into the Village of Scotia system. The BMP's 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 BMP's.

General Permit Requirements

An MS4 must, at a minimum:

Develop and implement a program that includes a combination of structural and/or nonstructural management practices appropriate for the community that will reduce the discharge of pollutants to the maximum extent practicable. The program must also develop and implement the following:

- Adopt an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State or local law.

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- Ensure adequate long-term operation and maintenance of management practices, including monitoring to determine whether the practices are reducing the discharge of pollutants to the maximum extent practicable.
- Develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre. This includes projects of less than one acre that are part of a larger common plan of development or sale, or that have been designated by the NYSDEC to protect water quality, and to control water quantities that discharge into an MS4. The program must ensure that controls are in place that would protect water quality and reduce the discharge of pollutants to the maximum extent practicable. The Village of Scotia will follow applicable guidance available from the NYSDEC or EPA.
- Consider smart growth principles, natural resource protection, impervious area reduction, riparian buffers, low impact development, better site design and green infrastructure practices to reduce the discharge of pollutants to the MEP.
- Develop, implement, and provide adequate resources for a program to inspect development and redevelopment sites and to enforce and penalize violators.

Methodology for Compliance with Permit Requirements

The Village of Scotia has adopted an ordinance that authorizes them to enforce a program that reduces pollutant runoff from newly developed and redeveloped sites. The Village of Scotia will be responsible for inspecting the sites for proper operation and maintenance and enforcing the permit requirements for properties that are not in compliance. In this manner, the Village of Scotia can ensure adequate long-term management practices for both public and private facilities.

Best Management Practices

Stormwater Ordinance

Description / Methodology

Adopt a stormwater management ordinance to establish minimum stormwater management requirements and controls to protect the general health, safety, and welfare of the public. Stormwater ordinance to address issues relating to:

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

Municipal Board

- Customize the fee structure and ordinance to incorporate municipality's requirements. Fee structure should be referenced in Local Law but not a part of it in order to allow for future updates to the fee structure without having to revise the Local Law.
- Adopt stormwater management ordinance.
- Provide notification to the local construction community on the adoption of the stormwater management ordinance.

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STORMWATER MANAGEMENT PLAN

Stormwater Management Officer & Planning Board

- Revise the fee structure, enforcement, penalties and ordinance as needed.
- Adjust the stormwater ordinance as necessary to maintain compliance with NYS Standards and Requirements.

Additional Information / Resources

NYSDEC Sample Stormwater Management Local Law.

Inspection Program for Newly Developed and Redeveloped Sites

Description / Methodology

- Develop an inspection program for newly developed and redeveloped sites for compliance with the post-construction regulations.
- Develop a list of items to incorporate in the inspection of project sites based on the final post-construction runoff control regulations including consideration of the following:
 - Construction of controls according to approved development plans and specifications.
 - Adherence to any legal commitment to operate or maintain permanent stormwater quality structures.
 - Conformance to open space and landscaping requirements.
 - Conformance to local development standards.
- Develop post-construction inspection forms and procedures. Develop internal tracking procedures for tracking development projects that are under construction and/or have been completed.
- A record of all stormwater management facilities installed from 2003 to current date is and shall be maintained.
- Train inspection personnel on local post-construction runoff regulations and final inspection procedures.
- Inspect qualifying project sites using adopted inspection forms and procedures to ensure conformance with local post-construction runoff regulations. Issue enforcement actions to owners or operators of local development projects that are not in compliance with local post-construction runoff regulations. Maintain records of development project site inspections, enforcement actions, and corrective actions performed by local development project owners.

Stormwater Management Officer

- Develop a list of projects that qualify for inspection under local post-construction runoff regulations.
- Inspect qualifying development project sites using adopted inspection forms and procedures to ensure conformance with local post-construction runoff regulations.
- Issue enforcement actions to owners or operators of local development projects that are not in compliance with local post-construction runoff regulations.

Additional Information / Resources

Refer to the Construction Permit Program in the Exhibits for inspection forms and procedures for project sites.

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Table of Stormwater Management Areas – within and tracked by the Village of Scotia

No.	Location	Type of Practice	Owner	Date Inspected	Date Maintained	Comments
1	Weathercrest Drive / Court	Infiltration Basin	(V) of Scotia			
2	Stoneridge Subdivision	Retention Basin 1	(V) of Scotia			
3	Stoneridge Subdivision	Retention Basin 2	(V) of Scotia			
4	Zoar Court	Subsurface Infiltration	(V) of Scotia			
	Private Systems					
1	Mohawk Avenue	Subsurface Infiltration	CVS			
2	Sacandaga Road Plaza	Oil/Water Separator	NYS DOT			
3	Mohawk Avenue		Tanski Apartments			
4	Sacandaga Road	Subsurface Infiltration	Mekeel School			
5	Sacandaga Road		Comfort Inn			

Procedures for Inspection and Maintenance Requirements of Post-Construction Stormwater Management Areas

The Village of Scotia has set the following procedures in place for the inspection and maintenance of post construction stormwater management areas. This section shall be modified and expanded as necessary. As new projects are approved, the Village will add the necessary information to the directory to keep it up to date.

Procedures for Receipt and Follow up on Stormwater Related Complaints

Village of Scotia set the following procedures for the Receipt and Follow up on Stormwater Related Complaints. This document shall be modified and expanded as necessary.

1. The website will include a number for the public to call to direct stormwater concerns located within the MS4.
2. The Building Department will document the complaint and investigate with a site visit if necessary.
3. The responsible party will be notified of the required corrective actions, if necessary.
4. A follow up visit will be conducted as necessary and the results will be recorded.

SECTION 6 – MCM 6: POLLUTION PREVENTION / GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

Description of Minimum Control Measure

The Pollution Prevention / Good Housekeeping minimum control measure consists of Best Management Practices (BMP's) that focus on training and on the prevention or reduction of pollutant runoff from municipal operations. The BMPs describe the training program for specific municipal operations that are impacted by the proposed operation and maintenance programs (BMPs); 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; procedures for the proper disposal of waste removed from the MS4 and municipal operations, including dredge spoil, accumulated sediments, floatables and other debris.

VILLAGE OF SCOTIA

STORMWATER MANAGEMENT PLAN

General Permit Requirements

An MS4 must, at a minimum:

Develop and implement an operation and maintenance program, as it pertains to their municipal operations, that is designed to reduce and prevent the discharge of pollutants to the maximum extent practicable from municipal activities, including but not limited to park and open space maintenance, fleet and building maintenance, new construction and land disturbances, stormwater system maintenance, roadway and right-of-way maintenance, marine operations, and hydrologic habitat modification. The operation and maintenance program must include a training component. Some MS4's may incorporate the majority, if not all of the BMP's listed based on their current operations while other MS4's may not. As an example, an MS4 that provides sanitary sewer service to all properties within the municipality will not need to develop a BMP for septic system maintenance.

Follow management practices identified in the New York State Standards and Specifications for Erosion and Sediment Control [aka The Blue Book], and the NYS Stormwater Design Manual or other equivalent guidance materials available from the EPA, New York State, or other organization. Examples of the *NYS Management Practices Catalogues* available include Roadway and Right-of-Way Maintenance, Marine Operations, and Hydrologic Habitat Modification.

Methodology for Compliance with Permit Requirements

The Village of Scotia will use currently available guidance documents that illustrate the BMP's to reduce and prevent discharge of pollutants to the maximum extent practicable from municipal activities. Also, the Village of Scotia will provide training to the municipal personnel. These personnel will be responsible for implementing the BMP's into their everyday activities.

Village properties are inventoried, mapped and Audited in their MS4 compliance. See the Municipal Self-Audits included in the SWMP, Exhibit E.

Self-Audits will be reviewed and updated a minimum of every three years. This will include recording, periodically assessing and modifying measurable goals, as needed. Pollution prevention and good housekeeping efforts will be prioritized based on geographical area, potential to improve water quality, facilities or operations most in need of modification or improvement and capabilities.

The Village shall conduct a self-assessment of all municipal operations and facilities.

The Village will 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.

Self-Audits will be reviewed and updated periodically.

Best Management Practices

Municipal Training Program

Description / Methodology

Develop a program that provides training to each member of the municipality whose work may potentially impact stormwater. This includes highway, water, buildings and grounds, sewer, parks, and recreation departments.

VILLAGE OF SCOTIA

STORMWATER MANAGEMENT PLAN

All DPW and Parks Department employees will be trained periodically in IDDE and Good Housekeeping practices.

In addition, all Village employees should be aware of the MS4 program and its requirements, including how to identify and report illicit discharges and practice good housekeeping procedures. If at all possible, training will be held in conjunction with neighboring municipalities and/or Schenectady County.

The Schenectady County Planning Department and Schenectady County Conservation District are good resources for training opportunities.

Training attendance records will be retained and included in the Annual Report. Administrative personnel including SMO/DPW Superintendent and Building Inspector should also receive additional training related to the administration of the MS4 program and contractor education.

Stormwater Management Officer & Department Heads

Identify which municipal employees will be trained.

Stormwater Management Officer

Ensure refresher training for new employees.

Additional Information / Resources

Refer to the Appendices for Guidance Documents and Inspection Checklists regarding Pollution Prevention/Good Housekeeping for Municipal Operations.

Landscaping and Lawn Care

Description / Methodology

Reduce the discharge of landscaping and lawn care waste from Village owned facilities through better mowing and landscaping maintenance practices. Develop an inventory of landscaping and lawn care areas that are owned by the Village.

Grass on Village property is mowed with mulching mowers (clippings are not bagged). Fertilizer will be used only in Collins Park and only in minimum quantities necessary considering the proximity to Collins Lake.

If possible, fluids will be stored with appropriate secondary containment. This includes indoor storage tanks for heating oil.

Evaluate current landscaping and lawn care activities in order to identify opportunities to reduce the discharge of the following:

- Fertilizers
- Leaf litter and tree trimmings
- Litter and floatable materials
- Equipment fluids

Ensure that proper litter collection is scheduled prior to any mowing activities. Use all herbicides, pesticides, and fertilizers in accordance with manufacturers' instructions for application rates and quantities.

Purchase only enough lawn care products necessary for one year, and store properly to avoid waste generation (spills, leaks).

VILLAGE OF SCOTIA

STORMWATER MANAGEMENT PLAN

- Use slow release or naturally derived (organic) fertilizers.
- Train employees in the proper application of lawn care products. Evaluate methods for containing and/or composting trimmings and grass clippings.
- Develop zero input/low input lawns.
- Consider alternative landscape techniques (i.e. naturescaping, xeriscaping).
- Plant trees away from sewer lines or other underground utilities.
- Use drip irrigation techniques for landscaping.
- Report annually on the activities conducted under this program.
- Pounds of phosphorus and nitrogen applied in chemical fertilizer.
- Acres of pesticides / herbicides used.

Department Heads- Highway (DPW) / Sewer Department / Parks

- Develop an inventory of all Village owned landscaping and lawn care areas.
- Establish monitoring program to identify problems during the early stages.
- Establish a maintenance program to accomplish the following:
 - Minimize/eliminate fertilizer application
 - Leaving grass clippings on lawn
 - Watering lawns no more than 1 inch per week
 - Mowing with sharpened blades set at or higher than 3 inches.
 - Watering plants before 10 AM.

Department Heads- Highway (DPW) / Sewer Department / Parks / Police / Fire

Review monitoring and maintenance program and revise as necessary.

Additional Information / Resources

Refer to the Exhibits for Guidance Documents and Inspection Checklists regarding Pollution Prevention/Good Housekeeping for Municipal Operations.

Vehicle/Equipment Maintenance

Description / Methodology

- Maintain municipal owned vehicles according to manufacturer's specifications and identify and eliminate vehicle fluid leaks.
- Develop and maintain an inventory of municipal owned vehicles. Conduct routine maintenance on all vehicles according to manufacturer's specifications.
- Conduct maintenance indoors whenever possible.
- For maintenance performed outside, guard against spillage of materials that could discharge to storm receivers.
- If possible, seal floor drains that discharge directly to the environment. If not possible, obtain wastewater discharge permits from regulatory agency.
- Initiate single purpose use of vehicle bays; dedicate one (or more) bays that have no (or sealed) floor drains for repairs/maintenance.
- Clean up spilled materials immediately, using "dry" methods.
- Install pretreatment systems (oil/water separators) where necessary in sewer lines to capture contaminants (oil, grit), and maintain as needed.

VILLAGE OF SCOTIA

STORMWATER MANAGEMENT PLAN

- Never leave vehicles unattended while refueling.
- Identify appropriate recycling/disposal options for wastes
- During routine maintenance of Village owned vehicles, inspect vehicles for the presence of fluid leaks.
- Schedule repairs for vehicles determined to have fluid leaks.
- Maintain vehicle maintenance records and document fluid leak repair activities. Require vehicle operators to conduct daily inspections of vehicles to check for fluid leaks.
- Review vehicle inspection and maintenance records on an annual basis to evaluate conformance to vehicle manufacturer service specifications.

DPW Superintendent

Develop and maintain an inventory of municipal owned vehicles.

- Conduct routine inspection on all municipal vehicles according to manufacturers' specifications, also inspecting vehicle for the presence of fluid leaks.
- Schedule repairs for vehicles determined to have fluid leaks.
- Require municipal vehicle operators to conduct daily inspections of vehicle to check for fluid leaks.
- Review vehicle inspection and maintenance records to evaluate conformance to vehicle manufacturer service specifications and local stormwater program requirements.

Additional Information / Resources

Refer to the Exhibits for Guidance Documents and Inspection Checklists regarding Pollution Prevention/Good Housekeeping for Municipal Operations.

Vehicle/Equipment Maintenance & Washing

Description / Methodology

- Wash and maintain municipal owned vehicles and equipment to prevent discharge of pollutants to the municipal storm sewer system or local waterbodies.
- Initiate single purpose use of vehicle bays; dedicate only one bay for washing (with floor drain system).
- Perform cleaning with pressurized cold water, without the use of soaps, if wastewaters will flow to a storm sewer system.
- Use minimal amounts of biodegradable soaps only if wastewaters will discharge to a sanitary sewer system.
- Rinse with hoses that are equipped with automatic shutoff devices and spray nozzles.
- Steam clean (without soap) where wastes can be captured for proper disposal (i.e. oil/water separator).

An inventory of Village vehicles by department will be updated yearly by department heads. The majority of Village vehicles are maintained at the DPW garage. Yearly inspections and select maintenance are handled by local garages. [Shared services agreements – County, towns].

Vehicle washing varies by department. If possible, vehicle washing takes place indoors where a sanitary sewer drain is present or on an asphalt pad that drain into lawn area.

Each DPW vehicle is equipped with a spill response kit for spills that may take place in the field. Any building where vehicles are stored indoors also has a spill kit.

Vehicles should be inspected daily for leaks. Any fluid leaks should be cleaned up promptly with appropriate materials. The leak should be reported so a repair can be scheduled.

VILLAGE OF SCOTIA

STORMWATER MANAGEMENT PLAN

DPW Superintendent

- Inspect floor drain systems regularly – use only those that discharge to a sanitary sewer or that are permitted by the regulatory agency. Identify the need for cleaning of catch basins, oil/water separators.
- Perform steam cleaning or pressure washing where wastes can be captured for proper disposal.

Additional Information / Resources

Refer to the Exhibits for Guidance Documents and Inspection Checklists regarding Pollution Prevention/Good Housekeeping for Municipal Operations.

Director of Parks

Building Maintenance

Description / Methodology

- Conduct building maintenance activities such that they do not impact the stormwater systems and local water bodies.
- Develop a list of the maintenance activities required inside and outside of each municipal building.
- Identify which activities have an impact on stormwater.
- Develop mitigation measures for each activity that impacts stormwater. Review the maintenance activity list on an annual basis to determine if any improvements are necessary.
- Implement the mitigation measures for each activity.
- Review the maintenance activity list and update as necessary.
- Review the mitigation measures for each activity and revise as necessary.

Additional Information / Resources

Refer to the Exhibits for Guidance Documents and Inspection Checklists regarding Pollution Prevention/Good Housekeeping for Municipal Operations.

Hazardous and Waste Materials Management

Description / Methodology

- Prevent the discharge of hazardous and waste materials from impacting municipal stormwater systems and local waterbodies.
- Ensure that all materials are stored in closed, labeled containers – if stored outside, drums should be placed on pallets, away from storm receivers –inside storage areas should be located away from floor drains.
- Eliminate floor drain systems that discharge to storm drains, if possible.
- Use a pretreatment system to remove contaminants prior to discharge.
- Reduce stock of materials “on hand” – use “first in/first out” management technique.
- Use the least toxic material (i.e. non-hazardous) to perform the work.
- Install/use secondary containment devices where appropriate.
- Eliminate wastes by reincorporating coating/solvent mixtures into the original coating material for reuse.
- Recycle materials if possible, or ensure proper disposal of wastes

VILLAGE OF SCOTIA

STORMWATER MANAGEMENT PLAN

DPW Superintendent

- Develop an inventory of existing hazardous and waste materials and their storage locations.
- Develop a plan for proper storage of hazardous and waste materials that are not currently stored properly.
- Inspect material storage areas (inside and outside).
- Inspect cleaning of oil/water separators by qualified contractor.
- Inspect stormwater discharge locations (for contaminants, soil staining, plugged discharge lines).
- Repair or replace any leaking/defective containers, and replace labels as necessary.
- Maintain caps and/or covers on containers.
- Maintain aisle space for inspection of products/wastes.

Additional Information / Resources

Refer to the Exhibits for Guidance Documents and Inspection Checklists regarding Pollution Prevention/Good Housekeeping for Municipal Operations.

Operational Byproducts/Wastes

Description / Methodology

Prevent the potential for leaching of toxic and biological contaminants from reaching the municipal stormwater system or local waterbodies.

- Post “no dumping” signs.
- Illuminate area if possible.
- Prevent access – erect barriers.
- Identify byproducts/wastes that should be recycled (i.e. paper, cardboard) or can be legally disposed of on municipal lands (i.e. deer carcasses) by referencing NYSDEC regulations (6NYCRR PART 360)

DPW Superintendent

Regularly schedule inspections - for maintenance concerns

Coordinate with police for unscheduled patrolling of dump areas

Additional Information / Resources

Refer to the Exhibits for Guidance Documents and Inspection Checklists regarding Pollution Prevention/Good Housekeeping for Municipal Operations.

Spill Response and Prevention

Description / Methodology

Comply with federal and state spill prevention control and counter measures plan regulations, and review spill response procedures to ensure stormwater quality protection measures are considered during spill response.

- Evaluate each Village owned facility and determine if Spill Prevention Control and Countermeasures Plans (SPCC) are required.
- Develop and/or maintain SPCC plans for Village-Owned facilities that require plans.

VILLAGE OF SCOTIA

STORMWATER MANAGEMENT PLAN

Comply with SPCC plan requirements at qualifying Village-Owned facilities, including consideration of the following:

- Conduct employee training.
- Maintain spill prevention equipment.
- Keep all materials properly stored in closed, labeled containment systems.
- Use secondary containment systems where appropriate.
- Obtain spill recovery materials for immediate response to a spill.
- Maintain SPCC records.
- Update and re-certify the SPCC plan according to SPCC regulations
- Annually report on the number of facilities with SPCC plans and the current status of each SPCC plan.

DPW Superintendent

- Inspect secondary containment systems and oil/water separators
- Inspect containers for leaks, areas near storm receiver inlets and outlets, floor drains for indication of spills.
- Pump out oil water separators as needed.
- Protect drains with oil absorbent materials
- Clean out receivers on regular schedule
- Remove spilled salt from salt loading area

Additional Information / Resources

Refer to the Exhibits for Guidance Documents and Inspection Checklists regarding Pollution Prevention/Good Housekeeping for Municipal Operations.

Roadway and Bridge Maintenance

Description / Methodology

Assess roadways and bridges maintenance activities and modify procedures to reduce stormwater quality impacts.

Assess current roadway maintenance activities to determine if modification to current practices would benefit stormwater quality.

Identify alternative practices that would reduce the discharge of road-materials during construction or maintenance activities.

Revise roadway maintenance specifications according to identified alternative practices.

Maintain records of road maintenance activities and the use of alternative maintenance practices.

Incorporate preventive maintenance and planning for regular operations & maintenance activities.

Pave in dry weather only.

Stage road operations and maintenance activity (patching, potholes) to reduce spillage. Cover catch basins and manholes during this activity. Clean up fluid leaks or spills from paving equipment/materials immediately.

Restrict the use of herbicides/pesticide application to roadside vegetation.

Sweep and vacuum paved roads and shoulders to remove debris and particulate matter.

VILLAGE OF SCOTIA

STORMWATER MANAGEMENT PLAN

Maintain roadside vegetation; select vegetation with a high tolerance to road salt.
Control particulate wastes from bridge sandblasting operations.
Clean out bridge scuppers and catch basins regularly.
Direct water from bridge scuppers to vegetated areas.
Mechanically remove (i.e. sweep) debris from bridge deck and structure prior to washing

Additional Information / Resources

Refer to the Appendices for Guidance Documents and Inspection Checklists regarding Pollution Prevention/Good Housekeeping for Municipal Operations.

Road Salt Storage and Application

Description / Methodology

Salt will be stored in a covered shed on the DPW property. No salt should be stored outside the shed and only as much salt should be stored so as not to exceed the shed's capacity.

The floor of the salt shed should be asphalt or concrete so salt does not enter the ground and the open side of the shed should be pitched away to prevent water from running into the shed and mixing with the salt.

For large storms where snow is falling at a fast rate, straight salt may be used on the roads to minimize snow accumulation and provide safe travel.

For smaller storms, a 50/50 mix of sand and salt is used to minimize the amount of salt distributed on roads.

The salt loading area will be scraped clean periodically to avoid salt accumulation from overspill while loading.

Salt spreaders will be calibrated as necessary.

Consider alternative deicing materials (i.e. calcium chloride, magnesium chloride).

DPW Superintendent

Educate and train operators on hazards of over-salting to roads and environment

- Inspect salt storage shed for leaks, other problems. Repair as needed.
- Inspect salt piles for proper coverage, tarps for leaks or tears. Replace tarps as needed.
- Inspect salt application equipment.
- Inspect salt regularly for lumping or water contamination.
- Inspect surface areas for evidence of runoff – salt stains on ground near and around the salt shelter, loading area, or downslope.
- Inspect for excessive amounts of salt on roads.
- Inspect equipment to verify proper operation. Service trucks and calibrate spreaders regularly to ensure accurate, efficient distribution of salt.

Additional Information / Resources

Refer to the Appendices for Guidance Documents and Inspection Checklists regarding Pollution Prevention/Good Housekeeping for Municipal Operations.

VILLAGE OF SCOTIA

STORMWATER MANAGEMENT PLAN

Catch Basin and Storm Drain System Cleaning

Description / Methodology

Sediment and floatable materials discharges are decreased by routinely cleaning municipal catch basins and stormwater inlet structures.

Catch basins are cleaned annually with a vacuum truck.

A cleaning log is maintained by the operator to track dates when basins are cleaned. The storm system map will be updated on the Schenectady County Information Management System. The SIMs lite is available to public access at <http://www.simgis.org/lite> . Hard Copies of the Village maps will also be utilized track basins cleaned. The cleaning log provides for reporting any illicit discharges along with documenting the condition of storm basins and pipes. Any repairs will be made as time, manpower, materials, and funding are secured. Basin debris is disposed of daily at several designated sites owned by the Town of Glenville.

The catch basin cleaning schedule is reevaluated on an annual basis.

Catch basins and floor drain systems inside of buildings should be either:

- Sealed to prevent discharge
- Permitted by NYSDEC
- Discharged to sanitary sewers
- Repair/replace storm drain receiver and catch basin receiver grates as necessary.

DPW Superintendent

Evaluate the catch basin cleaning program to identify improvements and/or modifications.

Additional Information / Resources

Refer to the Exhibits for Guidance Documents and Inspection Checklists regarding Pollution Prevention/Good Housekeeping for Municipal Operations.

New Construction and Land Disturbance

Description / Methodology

Comply with the requirements of the construction and post-construction minimum control measures listed previously.

Provide education material and training opportunities to the municipal work crews to inform them of the local, state, and/or federal regulations that will impact their projects.

Plan the construction and/or land clearing activities so that soil is not exposed for long periods of time

Minimize compaction of soils

Minimize impervious cover

Maximize opportunities for infiltration

Install sediment control devices before disturbing soil

Limit grading to small areas

Stabilize site to protect against sediment runoff

Protect against sediment flowing into storm drains

VILLAGE OF SCOTIA

STORMWATER MANAGEMENT PLAN

Maintain native vegetation (especially near waterways).
Install sediment barriers on slopes or divert stormwater.
Provide additional training as necessary to the municipal work crews.

Additional Information / Resources

Refer to the Exhibits for Guidance Documents and Inspection Checklists regarding Pollution Prevention/Good Housekeeping for Municipal Operations.

Hydrologic Habitat Modification

Description / Methodology

Develop requirements for the municipal work crews to abide by during hydrologic habitat modification such as stream and ditch cleaning, and wetland disturbance. Provide training to the local municipal work crews regarding the requirements associated with any habitat modification.

Identify any potential habitat modification to the NYSDEC and USACOE.

Comply with all requirements of the NYSDEC and USACOE permits for work within freshwater wetlands and streams permits.

Comply with the construction and post-construction requirements within the stormwater regulations.

Provide additional training as necessary to the municipal work crews.

Street Cleaning and Maintenance

Description / Methodology

Sweeping of streets and roadways is performed in order to reduce the amount of sediment and associated pollutants discharged to the MS4 from roadways.

Streets are swept regularly starting in the middle of spring (weather depending) and continuing through the middle of fall (weather depending).

A street sweeping log is maintained by the operator to track dates when streets are swept.

The operator should alert the SMO/DPW Supt. if any illicit discharges are discovered during normal street sweeping.

Record miles of road swept, acres of parking lot swept, number of catch basins cleaned, post construction stormwater control practices maintained.

Street debris is stored temporarily at the DPW garage and disposed of periodically at several designated sites owned by the Town of Glenville.

Other things to consider are:

- Perform operations such as paving in dry weather only.
- Prior to road reconstruction, consider/evaluate the use of “shouldered roads” instead of “curbed roads”.
- Maintain roadside vegetation; select plants/trees that can withstand the action of road salt. Direct runoff to these areas.

Director of Parks

Provide capital improvements as necessary to implement the selected BMP's.

Provide operation and maintenance for each selected BMP.

VILLAGE OF SCOTIA

STORMWATER MANAGEMENT PLAN

Additional Information / Resources

Refer to the Exhibits for Guidance Documents and Inspection Checklists regarding Pollution Prevention/Good Housekeeping for Municipal Operations.

Pest Control

Description / Methodology

Reduce the discharge of pesticides from Village owned facilities as they may harm aquatic life and may contaminate local water bodies and sediment. This may be accomplished by the following:

Develop an inventory of areas designated for herbicide and pesticide application including the following:

- Area of application
- Type of pesticide or herbicide applied
- Purpose of application
- Prepare a pesticide and herbicide application schedule.
- Comply with local, state, and federal regulations associated with pesticide and herbicide application, e.g. licensing regulations.

Purchase only enough pesticides necessary for one year – store properly to avoid waste generation (spills, leaks, product deterioration). Minimize/eliminate pesticide application, use lowest toxicity pesticides
Track the volume and type of pesticide or herbicide applied at each location.

Do not apply pesticides immediately prior to or during rain events

Ensure that employees are properly trained and certified in pesticide application techniques and safety

Develop zero input, low input lawns

Eliminate food, water, and shelter for pests

Adopt integrated pest management (IPM) techniques

Adopt alternatives to pesticides options (use physical, mechanical, or biological controls)

Septic System Management

Description / Methodology

Prevent or reduce the discharge of pollutants to stormwater system and natural streams from sanitary and septic waste. This management practice typically carries the potential to significantly reduce nutrients, bacteria and viruses, and oxygen demanding substances. In the Village of Scotia there are only two remaining septic field systems remaining. Located across the bridge on the Eastern side of Sunnyside Road.

Property owners with septic systems should be informed that the tank should be pumped out regularly (every 3 years) to maintain a healthy system. They should also be advised to learn where their tank and leach field are and to not drive over it nor build over it. Strong chemicals and materials that do not easily degrade should not be flushed down the toilet.

VILLAGE OF SCOTIA

STORMWATER MANAGEMENT PLAN

Procedures for Pollution Prevention and Good Housekeeping Personnel and Contractor Training

The Village of Scotia has set the following procedures for the Pollution Prevention and Good Housekeeping Personnel Training. This section shall be modified and expanded as necessary.

1. The Village will create a directory of all municipal personnel and identify employees to receive training. Members of the Planning and Zoning Boards as well as the Highway Department, Parks Department, and Water and Sewer Maintenance Department personnel shall receive training. Additional employees can be added to this list as needs are identified.
2. As employees receive training, the directory will note the training provided and the date of training.
3. Members of the Planning and Zoning Boards shall receive training at the Saratoga County Planning & Zoning Conference a minimum of once a year. If this training is unavailable in the future, an equivalent training conference shall be selected that includes training on stormwater issues.
4. Highway Department, Parks Department, and Water and Sewer Maintenance Department personnel shall receive training on Best Management Practices and Good Housekeeping a minimum of once a year. This training shall be obtained from Schenectady County Soil and Water presentations. If this training is unavailable through Schenectady County in the future, equivalent training shall be selected.
5. The Village will require that all contractors working on development projects within the Village are informed and knowledgeable of the SWPPP MS4 requirements and that each contractor sign the "Contractor's Certification Statement" acknowledging such.
6. The Village will require proof that contractors have obtained the 4-hour contractor Erosion and Sediment Control Training and are in possession of ID cards noting such training has been completed.
7. The Village will create an inventory of all contractors and construction projects in the Village and track that each has properly trained individuals.
8. The Village will send notification of training opportunities to the list of contractors as training classes become available from the State or County. The Village will also work with other cooperating MS4's in the County to hold training classes, if necessary, to ensure that contractors working in the Village have proper training.

Procedures for MS4 Annual Assessment

The Village of Scotia has set the following procedures for the MS4 Annual Assessment. This section shall be modified and expanded as necessary.

1. The Village annual assessment of the SWMP procedures and requirements will be reviewed once a year. This review will take place in March in conjunction with the draft MS4 Annual Report completion.
2. The Village stormwater personnel will evaluate MS4 record keeping, reporting, BMPs, progress toward measurable goals, progress toward reducing pollution discharges, and new permit requirements.
3. The SWMP will be updated with identified revisions

EXHIBIT A
MS4 PERMIT COVERAGE LETTER

**New York State Department of Environmental Conservation
Division of Water**

Bureau of Water Permits, 4th Floor

625 Broadway, Albany, New York 12233-3505

Phone: (518) 402-8111 • **FAX:** (518) 402-9029

Website: www.dec.state.ny.us



3/14/2003

VILLAGE OF SCOTIA
4 NORTH TEN BROECK STREET
SCOTIA NY 12302

**Re: ACKNOWLEDGEMENT of NOTICE of INTENT for
Coverage Under General SPDES Permit No. GP-02-02**

Dear Municipal Official:

This letter is to acknowledge receipt of the completed Notice of Intent (NOI) application for the Municipal Separate Stormwater Sewer System (MS4) located at:

MS4 NAME: SCOTIA
MS4 COUNTY: schenectady
NYSDEC REGION: 4
MS4 SPDES No: NYR20A023

Pursuant to Environmental Conservation Law (ECL) Article 17, Titles 7 and 8 and ECL Article 70, the MS4 NOI identified above is now authorized and covered under State Pollutant Discharge Elimination Systems General Permit GP-02-02.

As an authorized MS4, you are obligated to comply with limits, conditions, and all requirements contained in GP-02-02. In accordance with GP-02-02, please note the following for your records and all future correspondence:

- * **MS4 SPDES Registration Number:** NYR20A023
- * Your Storm Water Management Program (SWMP) must be fully implemented by: **January 8, 2008.**
- * First Municipal Compliance Certificate (MCC) and SWMP Annual Report (SWMPAR) must be submitted by: **June 1, 2004.**
- * Thereafter, subsequent MCCs and SWMPARs must be submitted by: **June 1st of each year.**

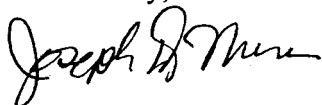
Failure to comply with these submittal dates are violations of GP-02-02 which may result in enforcement or penalties.

For all future correspondence and/or communications with the Department, be sure to include or reference the MS4 SPDES Registration Number, as this number is unique to the MS4 identified above.

Your NOI also serves as the documentation of your initial SWMP. You may be contacted by the Department's Regional Water Engineer regarding the content of the SWMP.

Should you have any questions regarding any aspect of the requirements specified in General Permit GP-02-02, please contact the undersigned at (518) 402-8117 or Kevin Malone at (518) 402-8235.

Sincerely,

A handwritten signature in black ink, appearing to read "Joseph DiMura". The signature is fluid and cursive, with the first name "Joseph" being more prominent.

Joseph DiMura, P.E.
Acting, Director
Bureau of Water Permits

cc: RWE - w/copy NOI
File - w/original NOI

EXHIBIT B
MS4 GENERAL PERMIT GP-0-24-001



Department of
Environmental
Conservation

FINAL
PERMIT
for
NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL
CONSERVATION
SPDES GENERAL PERMIT
for
STORMWATER DISCHARGES
from
MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)
Permit No. GP-0-24-001

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

Issuance Date: December 13, 2023

Effective Date: January 3, 2024

Expiration Date: January 2, 2029

Scott Sheeley

Chief Permit Administrator

DECEMBER 13, 2023

Authorized Signature

Date

Address: NYS DEC

Division of Environmental Permits

625 Broadway, 4th Floor

Albany, NY 12233

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NOTE

All italicized words within this *State Pollutant Discharge Elimination System (SPDES)* general permit are defined in Appendix A.

Part I. Permit Coverage and Limitations

A. Permit Authorization

This *SPDES* general permit authorizes the *discharge* of *stormwater* from small *MS4s*.

1. An *MS4 Operator* is eligible for coverage under this *SPDES* general permit if the *MS4* is *automatically* or *additionally designated* (*Appendix B*).

Only portions of the *MS4* which are located within the *automatically* or *additionally designated areas* are subject to, and authorized to *discharge* by, the requirements of this *SPDES* general permit (Part IV.C.).

2. This *SPDES* general permit contains terms and conditions specific for each of the following types of *MS4 Operators* that are authorized to *discharge* under this *SPDES* general permit, in accordance with Part I.A.1:

- a. *Traditional Land Use Control MS4 Operators*;
- b. *Traditional Non-land Use Control MS4 Operators*; and
- c. *Non-traditional MS4 Operators*.

The minimum control measures (MCMs) for *traditional land use MS4 Operators* are listed in Part VI. The MCMs for *traditional non-land use control MS4 Operators* and *non-traditional MS4 Operators* are listed in Part VII. Part III.B, Part VIII, and Part IX. list additional requirements for all *MS4 Operators' MS4s discharging* to impaired waters.

3. *Non-stormwater discharges* through outfalls listed in Part 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (NYCRR) 750-1.2(a)(29)(vi) and 40 CFR 122.34(b)(3)(ii), are authorized by this *SPDES* general permit provided they do not violate Environmental Conservation Law (ECL) Section 17-0501. If the *Department* or *MS4 Operator* determines that one or more of the *discharges* are in violation of ECL Section 17-0501, the identified *discharges* are illicit and the *MS4 Operator* must eliminate such *discharges* by following the *illicit discharge* MCM requirements found in Part VI.C. or Part VII.C, depending on the *MS4 Operator* type.

Discharges from firefighting activities are authorized only when the firefighting activities are emergencies/unplanned.

B. Exemption and Limitations on Coverage

1. The following *discharges* from *MS4 Operators* are exempt from the requirements of this *SPDES* general permit:
 - a. *Stormwater discharges* associated with an *industrial activity* provided the *discharges* are covered by the *SPDES* Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity, GP-0-23-001 (MSGP); and
 - b. Individual *SPDES* permitted *stormwater discharges* provided the *discharges* are in compliance with their individual *SPDES* permit limitations.
2. The following *discharges* from *MS4 Operators* are not authorized by this *SPDES* general permit:
 - a. *Stormwater discharges* that may adversely affect an endangered or threatened species, or its designated critical habitat, unless the *MS4 Operator* has obtained a permit issued pursuant to 6 NYCRR Part 182 or the *Department* has issued a letter of non-jurisdiction.
 - b. *Stormwater discharges* which adversely affect properties listed or eligible for listing in the National Register of Historic Places unless the covered entity is in compliance with requirements of the National Historic Preservation Act and has coordinated with the appropriate State Historic Preservation Office any activities necessary to avoid or minimize impacts.
 - c. *Stormwater discharges*, the permitting of which is prohibited under 40 CFR 122.4 and 6 NYCRR 750-1.3.
 - d. The *discharge* of vehicle and equipment washwater from *municipal facilities*, including tank cleaning operations.
3. All documentation necessary to demonstrate *discharge* eligibility (Part I.B.1. and Part I.B.2.) must be documented in the *Stormwater Management Program Plan (SWMP Plan)* (Part IV.B.).

Part II. Obtaining Permit Coverage

- A. *MS4 Operators*, meeting the eligibility requirements in Part I.A.1. of this *SPDES* general permit, must submit the notice of intent (NOI) electronically (eNOI) unless the *MS4 Operator* has obtained a waiver from the electronic submittal requirement (Part II.B.) in order to be authorized to *discharge* under this *SPDES* general permit. Access and directions for use, for electronic submission of the NOI, are located on the *Department's* website. *MS4 Operators* must submit the eNOI as indicated in Table 1 and in accordance with Part X.J.

Table 1. eNOI Submittal for Permit Coverage			
Type of permit coverage	Deadline to submit complete eNOI	Effective Date of Coverage (EDC)	Form to file with the Department
Newly designated <i>MS4 Operator</i>	180 days ¹ from written notification from the <i>Department</i>	The submission of the complete eNOI	eNOI
<i>MS4 Operators</i> continuing coverage from GP-0-15-003	Forty-five (45) days from the effective date of the permit (EDP)	EDP	eNOI

MS4 Operators continuing coverage from GP-0-15-003 are eligible for continued coverage under this SPDES general permit (GP-0-24-001) on an interim basis for up to sixty (60) calendar days from the EDP. During this interim period, an *MS4 Operator* must comply with the requirements of GP-0-15-003.

By submitting the complete eNOI, the *MS4 Operator* certifies that the *MS4 Operator* has read and agrees to comply with the terms and conditions of this SPDES general permit including the provisions to update the *SWMP Plan* (Part IV.B.) in accordance with the timeframes set forth in this SPDES general permit.

MS4 Operators must document the complete NOI in the *SWMP Plan* (Part IV.B.). As information in the completed NOI changes, within thirty (30) days, the *MS4 Operators* must update the information on the NOI and resubmit the completed NOI to the Department. The *MS4 Operator* must document information from the Department acknowledging previous coverage or designation in the *SWMP Plan* (Part IV.B.).

Where there is a permit condition to *develop*, newly designated *MS4 Operators* must create that permit requirement. Where there is a permit condition to *develop*, *MS4 Operators* continuing coverage must continue to implement their current *SWMP* and update the *SWMP* to comply with the permit requirement.

For newly designated *MS4 Operators*, timeframes for compliance begin on the effective date of coverage (EDC).

B. Electronic Submission Waiver

1. *MS4 Operators* must submit all NOIs electronically unless the *MS4 Operator* has received a waiver from the Department based on one of the following conditions:
 - a. If the *MS4 Operator* is physically located in a geographical area (i.e., zip code or census tract) that is identified as under-served for broadband internet

¹ In this SPDES general permit, days refer to calendar days.

- access in the most recent report from the Federal Communications Commission; or
- b. If the *MS4 Operator* has limitations regarding available computer access or computer capability.
- 2. If an *MS4 Operator* wishes to obtain a waiver from submitting an NOI electronically, the *MS4 Operator* must submit a request using the Application for Electronic Submittal Waiver to the *Department* at the following address:
 NYS DEC Bureau of Water Compliance
 MS4 NOTICE OF INTENT WAIVER
 625 Broadway, 4th Floor
 Albany, New York 12233-3505
- 3. A waiver may only be considered granted once the *MS4 Operator* receives written confirmation from the *Department*.
- 4. *MS4 Operators* must document the eNOI waiver in the *SWMP Plan* (Part IV.B.), if applicable.
- C. *MS4 Operators* who submit a complete NOI are authorized to *discharge stormwater* under the terms and conditions of this *SPDES* general permit.
 - 1. NOI Content
 The NOI shall include:
 - a. Legal name and address of the *MS4 Operator*;
 - b. Receiving waterbodies; and
 - c. *Municipal Separate Storm Sewer System (MS4)* NPDES Permit-Related Information of 40 CFR Part 127 Appendix A.

Part III. Special Conditions

A. Discharge Compliance with Water Quality Standards

- 1. The *MS4 Operator* must implement the required controls contained in Part III. through Part IX. of this *SPDES* general permit. The *Department* expects that compliance with the terms and conditions of this *SPDES* general permit will assure *MS4 discharges* meet applicable *water quality standards*.
- 2. It shall be a violation of the ECL for any *discharge* authorized by this *SPDES* general permit to either cause or contribute to a violation of *water quality standards* as contained in 6 NYCRR 700-705.
- 3. The *MS4 Operator* must take all necessary actions to ensure *discharges* comply with the terms and conditions of this *SPDES* general permit. If at any time an *MS4 Operator* becomes aware (e.g., through self-monitoring or by notification from the *Department*) that a *discharge* causes or contributes to the violation of an applicable *water quality standard*, the *MS4 Operator* must implement corrective

actions and the *MS4 Operator* must document these actions in the *SWMP Plan* (Part IV.B.).

4. Compliance with this *SPDES* general permit does not preclude, limit, or eliminate any enforcement activity as provided by Federal and/or State law. Additionally, if violations of applicable *water quality standards* occur, then coverage under this *SPDES* general permit may be terminated by the *Department* in accordance with 6 NYCRR 750-1.21(e), and the *Department* may require an application for an alternative *SPDES* general permit or an individual *SPDES* permit may be issued.

B. Water Quality Improvement Strategies for Impaired Waters

1. List of Impaired Waters (Appendix C)

Part VIII. requirements must be implemented in addition to the applicable requirements of the six (6) MCMs in Part VI. or Part VII, depending on the *MS4 Operator* type.

For *MS4 Operators* whose *MS4 outfalls* and *additionally designated area MS4 outfalls (ADA MS4 outfalls)* discharge to waters impaired for phosphorus, silt/sediment, pathogens, nitrogen, or floatables (Appendix C), the *MS4 Operator* must *develop* and implement the *pollutant specific best management practices (BMPs)*, listed in Part VIII, targeted towards the *pollutant of concern (POC)* causing the impairment.

For *MS4 Operators* discharging to waters within a *total maximum daily load (TMDL)* watershed that does not specify a *pollutant* load reduction necessary for *MS4s* and listed in Appendix C, the *MS4 Operator* must implement the enhanced *BMP* requirements of Part VIII. for the applicable *pollutant* of concern of the *TMDL*.

The enhanced *BMP* requirements in Part VIII. are written to address the *POCs* listed in Table 2.

Table 2. <i>Pollutant Specific BMPs for Impaired Waters listed in Appendix C</i>	
<i>POC</i>	Part VIII. Reference
Phosphorus	A
Silt/Sediment	B
Pathogens	C
Nitrogen	D
Floatables	E

2. Watershed Improvement Strategy Requirements for TMDL Implementation (Part IX.)

Part IX. requirements must be implemented in addition to the applicable requirements of the six (6) MCMs in Part VI. or Part VII, depending on the *MS4 Operator* type.

- a. *MS4 Operators discharging* to waters within the watersheds listed in Table 3 must implement additional *BMPs* and applicable *retrofit* plans as specified in Part IX. to achieve the *pollutant* load reductions specified in the referenced *TMDL* or respective implementation plan.

Table 3. Approved TMDL Watersheds with MS4 Contribution		
TMDL	POC	Part IX. Reference
Phase II Phosphorus TMDLs for Reservoirs in the NYC Watershed, June 2000	Phosphorus	A
Total Maximum Daily Load (TMDL) for Phosphorus in Lake Carmel, October 2016		
Total Maximum Daily Load (TMDL) for Phosphorus in Palmer Lake, March 2015		
Impaired Waters Restoration Plan for Greenwood Lake – Total Maximum Daily Load for Total Phosphorus, September 2005	Phosphorus	B
Updated Phosphorus Total Maximum Daily Load for Onondaga Lake, June 2012		
Total Maximum Daily Load (TMDL) for Phosphorus in Lake Oscawana, September 2008		
None	Pathogen	C
TMDL for Nitrogen in the Peconic Estuary Program Study Area, Including Waterbodies Currently Impaired Due to Low Dissolved Oxygen: the Lower Peconic River and Tidal Tributaries; Western Flanders Bay and Lower Sawmill Creek; and Meetinghouse Creek, Terry Creek and Tributaries, September 2007	Nitrogen	D

- b. Each *MS4 Operator* is responsible for a waste load reduction as specified in the applicable *TMDL* or *TMDL* implementation plan referenced in Part IX. *MS4 Operators* may form a *Regional Stormwater Entity (RSE)* to implement *stormwater retrofits* collectively where compliance with the *pollutant* reduction requirements would be achieved on a regional basis. The individual load reduction for each participating *MS4 Operator* is aggregated to create a *RSE* load reduction. The *RSE* then designs and installs *retrofits* where they are most feasible within the boundaries of the *RSE*. Each participating *MS4*

Operator of an *RSE* complies if the aggregated *RSE pollutant* load reduction is met.

3. Impaired waters with an approved *TMDL* and listed in Appendix C

Part VIII. and Part IX. requirements must be implemented in addition to the applicable requirements of the six (6) MCMs in Part VI. or Part VII, depending on the *MS4 Operator* type.

An *MS4 discharging* to a waterbody listed in Appendix C must meet the requirements of Part VIII. for the *POC(s)* listed in Appendix C.

An *MS4 discharging* to a waterbody listed in Table 3 must meet the requirements of Part IX. for the specific *POC* identified in the *TMDL*.

Part IV. Stormwater Management Program (*SWMP*) Requirements

MS4 Operators must *develop*, implement, and enforce a *SWMP*. The *SWMP* must be retained in written format, hardcopy or electronic. The written *SWMP* is referred to as the *SWMP Plan* (Part IV.B.). The *MS4 Operator* must use the *SWMP Plan* (Part IV.B.) to document *developed*, planned, and implemented elements of the *SWMP*.

A. Administrative

1. Alternative Implementation Options

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

- b. In the *SWMP Plan*, the *MS4 Operator* must *develop* and maintain an inventory of entities assisting in permit implementation that includes the following information:
 - i. Name of entity performing permit implementation; and
 - ii. Permit requirement being implemented performed by entity.
- c. Irrespective of any agreements, each party remains legally responsible for obtaining its own permit coverage, for filing the *NOI*, and satisfying all requirements of this *SPDES* general permit for its own *discharges*.
- d. Within thirty (30) days signing, alternative implementation agreements (Part IV.A.1.) must be documented in the *SWMP Plan* (Part IV.B.).
- e. Annually review and update any alternative implementation agreements in the *SWMP Plan*, as necessary.

2. Staffing plan/Organizational chart

Individual *SWMP* components may be *developed*, implemented, or enforced by different titles associated with the *MS4 Operator*, or other entities as described in Part IV.A.1. Within six (6) months of the EDC, the *MS4 Operator* must *develop* a written staffing plan/organizational chart which includes job titles and other entities as identified in Part IV.A.1, and the roles and responsibilities for each corresponding to the required elements of the *SWMP*. The staffing plan must describe how information will be communicated and coordinated among all those with identified responsibilities. All staffing plan/organization charts must be documented in the *SWMP Plan* (Part IV.B.).

B. *SWMP Plan*

The *SWMP Plan* must contain, at a minimum, all permit requirements implemented to meet the terms and conditions of this *SPDES* general permit, and documentation required by this *SPDES* general permit. The *SWMP Plan* may incorporate by reference any documents that meet the requirements of this *SPDES* general permit. If an *MS4 Operator* relies upon other documents to describe how the *MS4 Operator* will comply with the requirements of this *SPDES* general permit, the *MS4 Operator* must attach to the *SWMP Plan* a copy of these documents.

The *SWMP Plan* must identify if any requirements from Part VI. through Part IX. do not require updates and include the rationale behind the determination. The *SWMP Plan* must identify if any requirements from Part VI. through Part IX. are not applicable and include the rationale behind the determination.

1. Stormwater Program Coordinator

On the *NOI*, the *MS4 Operator* must designate a *Stormwater Program Coordinator* who must be knowledgeable in the principles and practices of *stormwater* management, the requirements of this *SPDES* general permit, and the *SWMP*. The *Stormwater Program Coordinator* oversees the *development*, implementation, and enforcement of the *SWMP*; coordinates all elements of the

SWMP to ensure compliance with this *SPDES* general permit; and *develops* and submits the Annual Report (Part V.B.2.). The name, title, and contact information of the *Stormwater* Program Coordinator must be documented in the *SWMP Plan*.

2. Availability of *SWMP Plan*

- a. Within six (6) months of the EDC, the *MS4 Operator* must make the current *SWMP Plan*, and documentation associated with the implementation of the *SWMP Plan*, available during normal business hours to the *MS4 Operator's* management and staff responsible for implementation as well as the *Department* and United States Environmental Protection Agency (USEPA) staff.² The completion of this permit requirement must be documented in the *SWMP Plan*.
- b. Within six (6) months of the EDC, the *MS4 Operator* must make a copy of the current *SWMP Plan* available for public inspection during normal business hours at a location that is accessible to the public or on a public website. The location of the *SWMP Plan* must be kept current. The completion of this permit requirement must be documented in the *SWMP Plan*.

3. Timeframes for *SWMP Plan* Development or Updates

MS4 Operators must *develop* and implement their *SWMP Plan* in accordance with the timeframes set forth in this *SPDES* general permit. Annually, after the end of the Reporting Year and by April 1, the *SWMP Plan* must be updated to ensure the permit requirements are implemented. More frequent updates to the *SWMP Plan* are noted throughout this *SPDES* general permit in specific permit requirements.

C. Minimum Control Measures (MCMs)

The MCMs for *traditional land use MS4 Operators* are listed in Part VI. while those for *traditional non-land use control MS4 Operators* and *non-traditional MS4 Operators* are listed in Part VII. Parts III.B, Part VIII, and Part IX. list additional requirements for all *MS4 Operators discharging* to impaired waters.

MS4 Operators subject to Part VI.

For *MS4 Operators* subject to Part VI. requirements, all MCMs must be implemented within the *automatically designated area* or an *additionally designated area* subject to Criterion 1 or 2 of the Additional Designation Criteria (Appendix B).

For *MS4 Operators* subject to Part VI. requirements, MCM 4 and MCM 5 must also be implemented within an *additionally designated area* subject to Criterion 3 of the Additional Designation Criteria (Appendix B).

MS4 Operators subject to Part VII.

For *MS4 Operators* subject to Part VII. requirements, all MCMs must be implemented within the *automatically designated area* or an *additionally designated area* subject to Criterion 1 or 2 of the Additional Designation Criteria (Appendix B).

² Part X.F. contains the duty for the *MS4 Operator* to provide information.

MS4 Operators subject to Part VIII.

Part VIII. requirements must be implemented in addition to the applicable requirements of the six (6) MCMs in Part VI. or Part VII, depending on the *MS4 Operator* type.

For all *MS4 Operators* subject to Part VIII. requirements, all MCMs must be implemented within the *automatically designated area*.

For *MS4 Operators* subject to Part VI. requirements and subject to Part VIII. requirements, MCM 4 and MCM 5 must also be implemented within an *additionally designated area* subject to Criterion 3 of the Additional Designation Criteria (Appendix B).

MS4 Operators subject to Part IX.

Part IX. requirements must be implemented in addition to the applicable requirements of the six (6) MCMs in Part VI. or Part VII, depending on the *MS4 Operator* type.

For all *MS4 Operators* subject to Part IX. requirements, all MCMs must be implemented within the *automatically designated area* or an *additionally designated area* subject to Criterion 1 of the Additional Designation Criteria (Appendix B).

D. Mapping

The *MS4 Operator* must *develop* and maintain comprehensive system mapping to include the mapping components within the *MS4 Operator's automatically designated area* or an *additionally designated area* subject to Criterion 1 or 2 of the Additional Designation Criteria (Appendix B), unless otherwise specified. The comprehensive system mapping must be documented in the *SWMP Plan*. The comprehensive system mapping must be in a readily accessible format, with scale and detail appropriate to provide a clear understanding of the *MS4*, to serve as a planning tool to allow for prioritization of efforts and facilitate management decisions by the *MS4 Operator*. Annually, after Phase I (Part IV.D.2.a.) completion, the *MS4 Operator* must update the comprehensive system mapping including updates to prioritization information of monitoring locations (Part VI.C.1.d. or Part VII.C.1.d, depending on the *MS4 Operator* type), construction sites (Part VI.D.5. or Part VII.D.5, depending on the *MS4 Operator* type), and *municipal facilities* (Part VI.F.2.c.i. or Part VII.F.2.c.i, depending on the *MS4 Operator* type).

1. Within six (6) months of the EDC, the comprehensive system mapping must include the following information:
 - a. *MS4 outfalls* (as required for *MS4 Operators* continuing coverage from previous iterations of this *SPDES* general permit);
 - b. *Interconnections* (as required for *MS4 Operators* continuing coverage from previous iterations of this *SPDES* general permit);
 - c. Preliminary *storm-sewershed* boundaries (as required for *MS4 Operators* continuing coverage from previous iterations of this *SPDES* general permit);

- d. *MS4* infrastructure (as required for *MS4 Operators* continuing coverage from previous iterations of this *SPDES* general permit that were subject to Part IX.A. or Part IX.D.), including:
 - i. Conveyance system
 - a) Type (closed pipe or open drainage);
 - b) Conveyance description for closed pipes (material, shape, dimensions);
 - c) Conveyance description for open drainage (channel/ditch lining material, shape, dimensions); and
 - d) Direction of flow;
 - ii. Culvert crossings (location and dimensions)
 - iii. Stormwater structures
 - a) Type (drop inlet, *catch basin*, or manhole); and
 - b) Number of connections to *catch basins*, and manholes;
 - e. Basemap information:
 - i. *Automatically*³ and *additionally designated areas* (based on criterion 3 of Additional Designation Criteria in Appendix B);⁴
 - ii. Names and location of all *surface waters of the State*, including:
 - a) Waterbody classification;⁵
 - b) Waterbody Inventory/Priority Waterbodies List (WI/PWL);⁶
 - i) Impairment status; and
 - ii) *POC*, if applicable;
 - c) *TMDL* watershed areas;⁷
 - iii. Land use, including:
 - a) Industrial;
 - b) Residential;
 - c) Commercial;
 - d) Open space; and
 - e) Institutional;
 - iv. Roads; and
 - v. Topography.⁸
2. The comprehensive system mapping must be updated with the data collected for each phase of mapping within the timeframe for each phase as outlined below:
- a. Phase I: Within three (3) years of the EDC, the comprehensive system mapping must include the following information:

³Utilizing the Stormwater Interactive Map on the Department's website or the NYS GIS Clearinghouse.

⁴Utilizing the Stormwater Interactive Map on the Department's website.

⁵Utilizing the Stormwater Interactive Map on the Department's website or the NYS GIS Clearinghouse.

⁶Utilizing the Stormwater Interactive Map on the Department's website or the NYS GIS Clearinghouse.

⁷Utilizing the Stormwater Interactive Map on the Department's website.

⁸ Utilizing USGS Quadrangle Map or finer.

- i. Monitoring locations, with associated prioritization (Part VI.C.1.d. or Part VII.C.1.d, depending on the *MS4 Operator* type);
 - ii. Preliminary *storm-sewershed* boundaries (for newly designated *MS4 Operators*);
 - iii. Focus areas (Part VI.A.1.a. or Part VII.A.1.a, depending on the *MS4 Operator* type);
 - iv. *Publicly owned/operated* post-construction *stormwater management practices (SMPs)* (Part VI.E.3. or Part VII.E.3, depending on the *MS4 Operator* type). The *publicly owned/operated* post-construction *SMPs* subject to this requirement are in the *automatically designated area* or an *additionally designated area* subject to Criterion 1, 2, or 3 of the Additional Designation Criteria (Appendix B); and
 - v. *Municipal facilities*, with associated prioritization (Part VI.F.2.c. or Part VII.F.2.c, depending on the *MS4 Operator* type).
- b. Phase II: Within five (5) years of the EDC, the comprehensive system mapping must include the following information:
- i. *MS4* infrastructure, including:
 - a) Conveyance system
 - i) Type (closed pipe or open drainage); and
 - ii) Direction of flow;⁹
 - b) *Stormwater* structures
 - i) Type (drop inlet, *catch basin*, or manhole); and
 - ii) Number of connections to and from drop inlets, *catch basins*, and manholes;
 - ii. *Privately owned/operated* post-construction *SMPs* which *discharge* to the *MS4* (Part VI.E.2.). The *privately owned/operated* post-construction *SMPs* subject to this requirement are in the *automatically designated area* or an *additionally designated area* subject to Criterion 1, 2, or 3 of the Additional Designation Criteria (Appendix B).
 - a) If the location of the privately-owned post-construction *SMPs* cannot be determined without accessing the private property, the *MS4 Operator* must map the location of the property that the post-construction *SMP* is located on using street address or tax parcel.

E. Legal Authority

For *MS4 Operators* continuing coverage from previous iterations of this *SPDES* general permit, adequate legal authority must be maintained in accordance with Part IV.E.1. or Part IV.E.2.

For a newly designated *MS4 Operator*, within three (3) years, the *MS4 Operator* must, to the extent allowable by State and local law, *develop* and implement

⁹ Direction of flow can be a written description or indicated as an arrow on the feature.

adequate legal authority to control *pollutant discharges* to implement this *SPDES* general permit. An *MS4 Operator* must either be in conformance with Part IV.E.1. or Part VI.E.2:

1. Adopt the following model local laws and include a copy of the resolution in their *SWMP Plan*:
 - a. The New York State Department of Environmental Conservation Model Local Law to Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer Systems, April 2006 (NYS DEC Model IDDE Local Law 2006); and
 - b. The New York State Department of Environmental Conservation Sample Local Law for Stormwater Management and Erosion & Sediment Control, March 2006 (NYS DEC Sample SM and E&SC Local Law 2006).
2. Enact a legal mechanism or ensure that written policies/procedures are in place with content equivalent to the model local law, with documentation in the *SWMP Plan* from the attorney representing the *MS4 Operator* of the equivalence. Equivalent legal mechanisms or written policies/procedures must include the following:
 - a. For *illicit discharges*:
 - i. A prohibition of:
 - a) *Illicit discharges*, spills or other release of *pollutants*;
 - b) Unauthorized connections into the *MS4*;
 - ii. A mechanism to:
 - a) Receive and collect information related to the introduction of *pollutants* into the *MS4*;
 - b) Require installation, implementation, and maintenance of post-construction *SMPs*;
 - c) Require compliance and take enforcement action; and,
 - d) Access property for inspection.
 - b. To be adequate the legal mechanism must also ensure:
 - i. Applicable *construction activities* are effectively controlled and include post-construction runoff controls for new development and redevelopment projects; and
 - ii. Post-construction *SMPs* are properly operated and maintained by requiring the following:
 - a) A stormwater pollution prevention plan (SWPPP) with erosion and sediment controls that meets or exceed the New York State, Standards and Specifications for Erosion & Sediment Control, November 2016 (NYS E&SC 2016) and requires post-construction *SMPs* for applicable *construction activity* described in Part VI.D.1 in conformance with the

SPDES General Permit for Stormwater from Construction Activities, GP-0-20-001 (CGP);

- b) Post-construction *SMPs* as required by CGP meet the *sizing criteria* specified in the New York State Stormwater Management Design Manual, January 2015 (NYS SWMDM 2015), and performance criteria, or equivalent, including Operation & Maintenance Plans for long term maintenance;
- c) Construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste, all of which may cause adverse impacts to water quality; and
- d) Receive and collect information related to compliance with the approved SWPPP including verification of maintenance of post-construction *SMPs* (if conducted by private entities).

F. Enforcement Measures & Tracking

1. Enforcement Response Plan

Within six (6) months, the *MS4 Operator* must *develop* and implement an enforcement response plan (ERP) which clearly describes the action(s) to be taken for violations that the *MS4 Operator* has enacted for illicit *discharge* (Part VI.C. or Part VII.C, depending on the MS4 Operator type), construction (Part VI.D. or Part VII.D, depending on the MS4 Operator type), and post-construction (Part VI.E. or Part VII.E, depending on the MS4 Operator type). The ERP must be documented in the *SWMP Plan*. The ERP must set forth a protocol to address repeat and continuing violations through progressively stricter responses (i.e., escalation of enforcement) as needed to achieve compliance with the terms and conditions of this *SPDES* general permit.

- a. The ERP must describe how the *MS4 Operator* will use the following types of enforcement responses or combination of responses:
 - i. Verbal warnings;
 - ii. Written notices;
 - iii. Citations (and associated fines);
 - iv. Stop work orders;
 - v. Withholding of plan approvals or other authorizations affecting the ability to *discharge* to the *MS4*; and
 - vi. Additional measures, supported in local legal authorities, such as collecting against the project's bond or directly billing the responsible party to pay for work and materials to correct violations.
- b. Enforcement responses are based on the type, magnitude, and duration of the violation, effect of the violation on the receiving water, compliance history of the operator, and good faith of the operator in compliance efforts.

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

2. Enforcement Tracking

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

- a. Name of the owner/operator of the facility or site of the violation (can be redacted from the publicly available SWMP Plan);
- b. Location of the *stormwater* source (e.g., construction project);
- c. Description of the violation;
- d. Schedule for returning to compliance;
- e. Description of enforcement response used, including escalated responses if repeat violations occur or violations are not resolved in a timely manner;
- f. Accompanying documentation of enforcement response (e.g., notices of noncompliance, notices of violations);
- g. Any referrals to different departments or agencies; and
- h. Date violation was resolved.

Part V. Recordkeeping, Reporting, and SWMP Evaluation

A. Recordkeeping

The *MS4 Operator* must keep records required by this *SPDES* general permit for five (5) years after they are generated. Records must be submitted to the *Department* within a reasonable specified time period of a written *Department* request for such information. Documents can be maintained in electronic format if the manner reasonably assures the integrity of the records, in accordance with NYCRR 750-2.5(e)(1). Records, including the NOI and the SWMP Plan, must be made available to the public at reasonable times during regular business hours.

B. Reporting

1. Report Submittal

- a. Reports must be submitted electronically to the *Department* using the forms located on the Department's website (<http://www.dec.ny.gov/>).
- b. Electronic Submission Waiver
 - ii. *MS4 Operators* must submit all reports electronically unless the *MS4 Operator* has received a waiver from the *Department* based on one of the following conditions:

- a) If the *MS4 Operator* is physically located in a geographical area (i.e., zip code or census tract) that is identified as under-served for broadband internet access in the most recent report from the Federal Communications Commission; or
- b) If the *MS4 Operator* has limitations regarding available computer access or computer capability.
- iii. If an *MS4 Operator* wishes to obtain a waiver from submitting a report electronically, the *MS4 Operator* must submit a request using the Application for Electronic Submittal Waiver to the *Department* at the following address:

NYS DEC Bureau of Water Compliance
MS4 NOTICE OF INTENT WAIVER
625 Broadway 4th Floor
Albany, New York 12233-3505
- iv. A waiver may only be considered granted once the *MS4 Operator* receives written confirmation from the *Department*.
- v. *MS4 Operators* must document the electronic submission waiver in the *SWMP Plan*, if applicable.

2. Annual Reports

- a. Annually, *MS4 Operators* must submit an Annual Report to the *Department* using the form provided by the *Department*. The completion of this permit requirement must be documented in the *SWMP Plan*.
- b. The reporting period for the Annual Report is January 3 of the current year to January 2 of the following year (Reporting Year).
- c. For *MS4 Operators* continuing coverage, the Annual Report must be submitted to the *Department* by April 1 of the year following the end of the Reporting Year.
- d. For newly designated *MS4 Operators*, if authorization to discharge is granted:
 - i. Before September 30, the first Annual Report must be submitted by April 1 of the year following the end of the Reporting Year; or
 - ii. After September 30, the first Annual Report must be submitted by April 1 following their first complete Reporting Year.

3. Interim Progress Certifications

- a. Twice a year, *MS4 Operators* must submit to the *Department* an Interim Progress Certification that verifies the activities included in this *SPDES* general permit have been completed by the date specified using the form provided by the *Department*. The completion of this permit requirement must be documented in the *SWMP Plan*.

- b. *MS4 Operators* located within the watersheds listed in Table 3 must include additional information to identify the activities that have been performed during the reporting period to demonstrate progress made by the *MS4 Operator* towards completion of the reduction requirements, prescribed in Part IX.
- c. An Interim Progress Certification for the period of January 3 through June 30 of the same year must be submitted to the *Department* by October 1 of the same year. An Interim Progress Certification for the period of July 1 through January 2 of the following year must be submitted to the *Department* by April 1 of the following year along with the Annual Report. Submission of the Annual Report is not a substitute for submission of the Interim Progress Certification.

4. Shared Annual Reporting

MS4 Operators working together to implement their *SWMPs* may complete and submit a shared Annual Report to satisfy the reporting requirements specified in Part V.B.2.

- a. The shared Annual Report must outline and explain group activities, but also include the tasks performed by each individual *MS4 Operator*.
- b. On or before the reporting deadline, April 1, each *MS4 Operator* within the group, must sign the certification section of the Annual Report to take responsibility for the information in the Annual Report, which includes specific endorsement or acceptance of both the shared Annual Report information and Annual Report information on behalf of the individual *MS4 Operator*.

5. Certification

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

6. Annual Report and Interim Progress Certification Content

The Annual Report and Interim Progress Certifications shall summarize the activities performed throughout the Reporting Year, including:

- a. The status of compliance with permit requirements;
- b. Information documented in the *SWMP Plan*, as specified throughout this *SPDES* general permit; and
- c. A certification statement in accordance with 40 CFR 122.22(d).

C. *SWMP* Evaluation

Once every five (5) years, the *MS4 Operator* must evaluate the *SWMP* for compliance with the terms and conditions of this *SPDES* general permit, including the effectiveness or deficiencies of components of the individual *SWMP Plan*, and

the status of achieving the requirements outlined in this *SPDES* general permit. The *SWMP* evaluation must be documented in the *SWMP Plan*.

Part VI. Minimum Control Measures (MCMs) for *Traditional Land Use Control MS4 Operators*

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

A. MCM1 – Public Education and Outreach Program

The *MS4 Operator* must *develop* and implement an education and outreach program to increase public awareness of *pollutant* generating activities and behaviors. This MCM is designed to inform the public about the impacts of *stormwater* on water quality, the general sources of *stormwater pollutants*, and the steps the general public can take to reduce *pollutants* in *stormwater* runoff.

1. Development

a. Focus Areas

Within three (3) years of the EDC, the *MS4 Operator* must identify and document the focus areas in the *SWMP Plan*. The focus areas to be considered are as follows:

- i. Areas *discharging* to waters with Class AA-S, A-S, AA, A, B, SA, or SB (mapped in accordance with Part IV.D.1.e.ii.a));
- ii. *Sewersheds* for impaired waters listed in Appendix C (subject to Part VIII. requirements; mapped in accordance with Part IV.D.1.c. for *MS4 Operators* continuing coverage and Part IV.D.2.a.ii. for newly designated *MS4 Operators*);
- iii. *TMDL* watersheds (subject to Part IX. requirements; mapped in accordance with Part IV.D.1.e.ii.c));
- iv. Areas with *construction activities*;
- v. Areas with on-site wastewater systems (subject to Part VIII. or Part IX. requirements);
- vi. Residential, commercial, and industrial areas (mapped in accordance with Part IV.D.1.e.iii.);
- vii. *Stormwater hotspots*; and
- viii. Areas with *illicit discharges*.

b. Target Audiences and Associated *Pollutant* Generating Activities

Within three (3) years of the EDC, the *MS4 Operator* must identify and document the applicable target audience(s) and associated *pollutant* generating activities that the outreach and education will address for each focus area identified by the *MS4 Operator* in Part VI.A.1.a. in the *SWMP Plan*. The target audiences are as follows:

- i. Residents;
- ii. Commercial:¹⁰ Business owners and staff;
- iii. Institutions:¹¹ Managers, staff, and students;
- iv. Construction: Developers, contractors, and design professionals;
- v. Industrial:¹² Owners and staff; and
- vi. *MS4 Operator's municipal* staff.

c. Education and Outreach Topics

Within three (3) years of the EDC, the *MS4 Operator* must identify and document in the *SWMP Plan* the education and outreach topics and how the education and outreach topics will reduce the potential for *pollutants* to be generated by the target audience(s) (Part VI.A.1.b.) for the focus area(s) (Part VI.A.1.a.).

d. *Illicit Discharge* Education

Within six (6) months of the EDC, the *MS4 Operator* must make information related to the prevention of *illicit discharges*, available to *municipal* employees, businesses, and the public and document the completion of this requirement in the *SWMP Plan*. The information related to the prevention of *illicit discharges* must include the following:

- i. What types of *discharges* are allowable (Part I.A.3.);
- ii. What is an *illicit discharge* and why is it prohibited (Part VI.C.);
- iii. The environmental hazards associated with *illicit discharges* and improper disposal of waste;
- iv. Proper handling and disposal practices for the most common behaviors within the community (e.g., septic care, car washing, household hazardous waste, swimming pool draining, or other activities resulting in *illicit discharges* to the *MS4*); and
- v. How to report *illicit discharges* they may observe (Part VI.C.1.a.).

2. Implementation and Frequency

a. Distribution Method of Educational Messages

Once every five (5) years, the *MS4 Operator* must identify and document in the *SWMP Plan* which of the following method(s) are used for the distribution of educational messages:

- i. Printed materials (e.g., mail inserts, brochures, and newsletters);
- ii. Electronic materials (e.g., websites, email listservs);

¹⁰ Business, retail stores, and restaurants.

¹¹ Hospitals, churches, colleges, and schools.

¹² Factories, recyclers, auto-salvage, and mines.

- iii. Mass media (e.g., newspapers, public service announcements on radio or cable);
- iv. Workshops or focus groups;
- v. Displays in public areas (e.g., town halls, library, parks); or
- vi. Social Media (e.g., Facebook, Twitter, blogs).

b. Frequency

Following the completion of Part VI.A.1.a, Part VI.A.1.b, and Part VI.A.1.c, within five (5) years of the EDC, and once every five (5) years, thereafter, the *MS4 Operator* must:

- i. Deliver an educational message to each target audience(s) (Part VI.A.1.b.) for each focus area(s) (Part VI.A.1.a.) based on the defined education and outreach topic(s) (Part VI.A.1.c.); and
- ii. Document the completion of this requirement in the *SWMP Plan*.

c. Updates to the Public Education and Outreach Program

Following the completion of Part VI.A.1.a, Part VI.A.1.b, and Part VI.A.1.c, annually, by April 1, the *MS4 Operator* must:

- i. Review and update the focus areas, target audiences, and/or education and outreach topics; and
- ii. Document the completion of this requirement in the *SWMP Plan*.

B. MCM 2 - Public Involvement/Participation

The *MS4 Operator* must provide opportunities to involve the public in the development, review, and implementation of the *SWMP*. This MCM is designed to give the public the opportunity to include their opinions in the implementation of this *SPDES* general permit.

1. Public Involvement/Participation

- a. Annually, the *MS4 Operator* must provide an opportunity for public involvement/participation in the development and implementation of the *SWMP*. The *MS4 Operator* must document the public involvement/participation opportunities in the *SWMP Plan*. The opportunities for public involvement/participation are as follows:
 - i. Citizen advisory group on *stormwater* management;
 - ii. Public hearings or meetings;
 - iii. Citizen volunteers to educate other individuals about the *SWMP*;
 - iv. Coordination with other pre-existing public involvement/participation opportunities;

- v. Reporting concerns about activities or behaviors observed; or
 - vi. Stewardship activities.
- b. Annually, the *MS4 Operator* must inform the public of the opportunity (Part VI.B.1.a.) for their involvement/participation in the development and implementation of the *SWMP* and how they can become involved. The *MS4 Operator* must document the method for distribution of this information in the *SWMP Plan*. The methods for distribution are as follows:
- i. Public notice;
 - ii. Printed materials (e.g., mail inserts, brochures and newsletters);
 - iii. Electronic materials (e.g., websites, email listservs);
 - iv. Mass media (e.g., newspapers, public service announcements on radio or cable);
 - v. Workshops or focus groups;
 - vi. Displays in public areas (e.g., town halls, library, parks); or
 - vii. Social Media (e.g., Facebook, Twitter, blogs).
- c. Within six (6) months of the EDC, the *MS4 Operator* must identify a local point of contact to receive and respond to public concerns regarding *stormwater* management and compliance with permit requirements. The name or title of this individual, with contact information, must be published on public outreach and public participation materials and documented in the *SWMP Plan*.

2. Public Notice and Input Requirements

a. Public Notice and Input Requirements for *SWMP Plan*

Annually, the *MS4 Operator* must provide an opportunity for the public to review and comment on the publicly available *SWMP Plan* (Part IV.B.2.b.). The public must have the ability to ask questions and submit comments on the *SWMP Plan*. The completion of this permit requirement must be documented in the *SWMP Plan*. This requirement may be satisfied by Part VI.B.1.

b. Public Notice and Input Requirements for Draft Annual Report

- i. Annually, the *MS4 Operator* must provide an opportunity for the public to review and comment on the draft Annual Report. The completion of this permit requirement must be documented in the *SWMP Plan*. This requirement may be satisfied by either:
 - a) Presentation of the draft Annual Report at a regular meeting of an existing board (e.g., administrative, planning, zoning) or a separate meeting specifically for *stormwater*, as designated by the *MS4* or if requested by the public. The public must have the ability to ask

questions about and make comments on the draft annual report during that presentation; or

- b) Posting of the draft Annual Report on a public website. The website must provide information on the timeframes and procedures to submit comments and/or request a meeting. However, if a public meeting is requested by two or more persons, the *MS4 Operator* must hold such a meeting.

c. **Consideration of Public Input**

- i. Annually, the *MS4 Operator* must include a summary of comments received on the *SWMP Plan* and draft Annual Report in the *SWMP Plan*.
- ii. Within thirty (30) days of when public input is received, the *MS4 Operator* must update the *SWMP Plan*, where appropriate, based on the public input received.

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

The *MS4 Operator* must *develop*, implement, and enforce a program which systematically detects, tracks down, and eliminates *illicit discharges* to the *MS4*. This MCM is designed to manage the *MS4* so it is not conveying *pollutants* associated with flows other than those directly attributable to *stormwater* runoff.

1. **Illicit Discharge Detection**

a. **Public Reporting of Illicit Discharges**

- i. Within six (6) months of the EDC, the *MS4 Operator* must establish and document in the *SWMP Plan* an email or phone number (with message recording capability) for the public to report *illicit discharges*.
- ii. Within thirty (30) days of an *illicit discharge*, the *MS4 Operator* must document each report of an *illicit discharge* in the *SWMP Plan* with the following information:
 - a) Date of the report;
 - b) Location of the *illicit discharge*;
 - c) Nature of the *illicit discharge*;
 - d) Follow up actions taken or needed (including response times); and
 - e) Inspection outcomes and any enforcement taken.

b. **Monitoring Locations**

The monitoring locations used to detect *illicit discharges* are identified as follows:

- i. *MS4 outfalls*;¹³

¹³ *MS4 outfalls* can be found at a *municipal facility*.

- ii. *Interconnections*;¹⁴ and
- iii. *Municipal facility intraconnections*.¹⁵

c. **Monitoring Locations Inventory**

- i. Within three (3) years of the EDC, the *MS4 Operator* must *develop* and maintain an inventory of the monitoring locations in the *SWMP Plan*. The following information must be included in the inventory:¹⁶
 - a) Inventory information for *MS4 outfalls*
 - i) ID;
 - ii) Prioritization (high or low) (Part VI.C.1.d.);
 - iii) Type of monitoring location (Part VI.C.1.b.);
 - iv) Name of *MS4 Operator's municipal facility*, if located at a *municipal facility*;¹⁷
 - v) Receiving waterbody name and class (mapped in accordance with Part IV.D.1.e.ii.a));
 - vi) Receiving waterbody WI/PWL Segment ID (mapped in accordance with Part IV.D.1.e.ii.b));
 - vii) Land use in drainage area;
 - viii) Type of conveyance (open drainage or closed pipe);
 - ix) Material;
 - x) Shape;
 - xi) Dimensions;
 - xii) Submerged in water; and
 - xiii) Submerged in sediment.
 - b) Inventory information for *interconnections*
 - i) ID;
 - ii) Prioritization (high or low) (Part VI.C.1.d.);
 - iii) Type of monitoring location (Part VI.C.1.b.);
 - iv) Name of *MS4 Operator* receiving *discharge* or private storm system;
 - v) Name of *MS4 Operator's municipal facility*, if located at a *municipal facility*; and
 - vi) Receiving waterbody name and class (mapped in accordance with Part IV.D.1.e.ii.a)).
 - c) Inventory information for *municipal facility intraconnections*
 - i) ID;
 - ii) Prioritization (high or low) (Part VI.C.1.d.);

¹⁴ *Interconnections* can be found at a *municipal facility*.

¹⁵ *Municipal facility intraconnections* can be found only at a *municipal facility*.

¹⁶ The information included in the inventory is collected during inspections on the Monitoring Locations Inspection and Sampling Field Sheet (Appendix D) unless otherwise specified by the permit conditions.

¹⁷ This information is collected as part of the *municipal facility* inventory.

- iii) Type of monitoring location (Part VI.C.1.b.);
- iv) Name of *MS4 Operator's municipal facility*; and
- v) Receiving waterbody name and class (mapped in accordance with Part IV.D.1.e.ii.a)).

- ii. Annually, the *MS4 Operator* must update the inventory if monitoring locations are created or discovered.

d. Monitoring Locations Prioritization

- i. Within three (3) years of the EDC, the *MS4 Operator* must prioritize monitoring locations which are included in the monitoring locations inventory (Part VI.C.1.c.) as follows:
 - a) High priority monitoring locations include monitoring locations:
 - i) At a high priority *municipal facility*, as defined in Part VI.F.2.c;
 - ii) *Discharging* to impaired waters (subject to Part VIII. requirements; mapped in accordance with Part IV.D.1.e.ii.b));
 - iii) *Discharging* within a TMDL watershed (subject to Part IX. requirements; mapped in accordance with Part IV.D.1.e.ii.c));
 - iv) *Discharging* to waters with Class AA-S, A-S, AA, A, B, SA, or SB (mapped in accordance with Part IV.D.1.e.ii.a)); and/or
 - v) Confirmed citizen complaints on three or more separate occasions in the last twelve (12) months.
 - b) All other monitoring locations are considered low priority.
- ii. Within thirty (30) days of when a monitoring location is constructed or the *MS4 Operator* discovers it, the *MS4 Operator* must prioritize those monitoring locations; and
- iii. Annually, after the initial prioritization (Part VI.C.1.d.i.), the *MS4 Operator* must update the monitoring location prioritization in the inventory (Part VI.C.1.c.) based on information gathered as part of the monitoring location inspection and sampling program (Part VI.C.1.e.). The completion of this permit requirement must be documented in the *SWMP Plan*.

e. Monitoring Locations Inspection and Sampling Program

Within two (2) years of the EDC, the *MS4 Operator* must *develop* and implement a monitoring locations inspection and sampling program. The monitoring locations inspection and sampling program must be documented in the *SWMP Plan* specifying:

- i. The monitoring locations inspection and sampling procedures including:

- a) During *dry weather*,¹⁸ one (1) inspection of each monitoring location identified in the inventory (Part VI.C.1.c.) every five (5) years following the most recent inspection;
- b) Documentation of all monitoring location inspections, including any sampling results, using the Monitoring Locations Inspection and Sampling Field Sheet (Appendix D) or an equivalent form containing the same information and include the completed monitoring location inspections and sampling results in the *SWMP Plan* (e.g., the completed Monitoring Locations Inspection and Sampling Field Sheets);
- c) Provisions to sample all monitoring locations which had inspections which resulted in a *suspect* or *obvious illicit discharge* characterization. The sampling requirement is based on the number and severity of *physical indicators present in the flow* to better inform track down procedures (Part VI.C.2.). If the source of the *illicit discharge* is clear and discernable (e.g., sewage), sampling is not necessary;
- d) Sampling may be done with field test kits or field instrumentation that are sufficiently sensitive to detect the parameter below the sampling action level used¹⁹ and are not subject to 40 CFR Part 136 requirements for approved methods and certified laboratories;
- e) Provisions to initiate, or cause to initiate,²⁰ track down procedures (Part VI.C.2.a.), in accordance with the timeframes specified in Part VI.C.2.a.iii, for monitoring locations with an overall characterization²¹ as *suspect illicit discharge* or *obvious illicit discharge* or that exceed any sampling action level used;
- f) Provisions to re-inspect the monitoring location within thirty (30) days of initial inspection if there is a *physical indicator not related to flow*, potentially indicative of *intermittent* or *transitory discharges*, utilizing techniques described in Chapter 12.6 of the Center for Watershed Protection Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assistance, October 2004 (CWP 2004) or equivalent.
- i) If those same physical indicators persist, the *MS4 Operator* must initiate *illicit discharge* track down procedures (Part VI.C.2.a.).

¹⁸ MS4 Operators can reference the Center for Watershed Protection Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assistance, October 2004 (CWP 2004) for other factors to consider when determining when to conduct monitoring location inspection and sampling.

¹⁹ Refer to Chapter 12 of the CWP 2004 for parameters, sampling action levels, and procedures.

²⁰ If track down is conducted by individuals or entities other than those conducting the monitoring locations inspections.

²¹ Reference to the Monitoring Locations Inspection and Sampling Field Sheet, adapted from CWP 2004, Section 6: Overall Monitoring Location Characterization based on the Relative Severity Index of physical indicators for flowing monitoring locations only.

- ii. The training provisions for the *MS4 Operator's* monitoring locations inspection and sampling procedures (Part VI.C.1.e.i.).
 - a) If new staff are added, training on the *MS4 Operator's* monitoring locations inspection and sampling procedures (Part VI.C.1.e.i.) must be given prior to conducting monitoring locations inspections and sampling procedures;
 - b) For existing staff, training on the *MS4 Operator's* monitoring locations inspection and sampling procedures (Part VI.C.1.e.i.) must be given prior to conducting monitoring locations inspections and sampling and once every five (5) years, thereafter; and
 - c) If the monitoring locations inspection and sampling procedures (Part VI.C.1.e.i.) are updated (Part VI.C.1.e.iv.), training on the updates must be given to all staff prior to conducting monitoring locations inspections and sampling.
- iii. The names, titles, and contact information for the individuals who have received monitoring locations inspection and sampling procedures training and update annually; and
- iv. Annually, by April 1, the *MS4 Operator* must:
 - a) Review and update the monitoring location inspection and sampling procedures (Part VI.C.1.e.i.) based on monitoring location inspection results (e.g., trends, patterns, areas with *illicit discharges*, and common problems); and
 - b) Document the completion of this requirement in the *SWMP Plan*.

2. *Illicit Discharge Track Down Program*

Within two (2) years of the EDC, the *MS4 Operator* must *develop* and implement an *illicit discharge* track down program to identify the source of *illicit discharges* and the responsible party. The *illicit discharge* track down program must be documented in the *SWMP Plan* specifying:

- a. The *illicit discharge* track down procedures including:
 - i. Procedures as described in Chapter 13 of CWP 2004 or equivalent;
 - ii. Steps taken for *illicit discharge* track down procedures;
 - iii. The following timeframes to initiate *illicit discharge* track down:
 - a) Within twenty-four (24) hours of discovery, the *MS4 Operator* must initiate track down procedures for flowing *MS4* monitoring locations with *obvious illicit discharges*;²²

²² Reference to the Monitoring Locations Inspection and Sampling Field Sheet, adapted from CWP 2004, Section 6: Overall Monitoring Location Characterization based on the Relative Severity Index of physical indicators for flowing monitoring locations only.

- b) Within two (2) hours of discovery, the *MS4 Operator* must initiate track down procedures for *obvious illicit discharges* of sanitary wastewater that would affect bathing areas during bathing season, shell fishing areas or public water intakes and report orally or electronically to the Regional Water Engineer and local health department; and
 - c) Within five (5) days of discovery, the *MS4 Operator* must initiate track down procedures for *suspect illicit discharges*.
- b. The training provisions for the *MS4 Operator's illicit discharge* track down procedures (Part VI.C.2.a.).
 - i. If new staff are added, training on the *MS4 Operator's illicit discharge* track down procedures (Part VI.C.2.a.) must be given prior to conducting *illicit discharge* track downs;
 - ii. For existing staff, training on the *MS4 Operator's illicit discharge* track down procedures (Part VI.C.2.a.) must be given prior to *conducting illicit discharge* track downs and once every five (5) years, thereafter; and
 - iii. If the *illicit discharge* track down procedures (Part VI.C.2.a.) are updated (Part VI.C.2.d.), training on the updates must be given to all staff prior to conducting *illicit discharge* track downs.
- c. The names, titles, and contact information for the individuals who have received *illicit discharge* track down procedures training and update annually; and
- d. Annually, by April 1, the *MS4 Operator* must:
 - i. Review and update the *illicit discharge* track down procedures (Part VI.C.2.a.); and
 - ii. Document the completion of this requirement in the *SWMP Plan*.

3. *Illicit Discharge Elimination Program*

Within two (2) years of the EDC, the *MS4 Operator* must *develop* and implement an *illicit discharge* elimination program. The *illicit discharge* elimination program must be documented in the *SWMP Plan* specifying:

- a. The *illicit discharge* elimination procedures including:
 - i. Provisions for escalating enforcement and tracking, both consistent with the ERP required in Part IV.F. of this *SPDES* general permit;
 - ii. Provisions to confirm the corrective actions have been taken;
 - iii. Steps taken for *illicit discharge* elimination procedures; and
 - iv. The following timeframes for *illicit discharge* elimination:
 - a) Within twenty-four (24) hours of identification of an *illicit discharge* that has a reasonable likelihood of adversely affecting human health or the environment, the *MS4 Operator* must eliminate the *illicit discharge*;

- b) Within five (5) days of identification of an *illicit discharge* that does not have a reasonable likelihood of adversely affecting human health or the environment, the *MS4 Operator* must eliminate the *illicit discharge*; and
 - c) Where elimination of an *illicit discharge* within the specified timeframes (Part VI.C.3.a.iv.) is not possible, the *MS4 Operator* must notify the Regional Water Engineer.
- b. The training provisions for the *MS4 Operator's illicit discharge* elimination procedures (Part VI.C.3.a.).
 - i. If new staff are added, training on the *MS4 Operator's illicit discharge* elimination procedures (Part VI.C.3.a.) must be given prior to conducting *illicit discharge* eliminations;
 - ii. For existing staff, training on the *MS4 Operator's illicit discharge* elimination procedures (Part VI.C.3.a.) must be given prior to conducting *illicit discharge* eliminations and once every five (5) years, thereafter; and
 - iii. If the *illicit discharge* elimination procedures (Part VI.C.3.a.) are updated (Part VI.C.3.d.), training on the updates must be given to all staff prior to conducting *illicit discharge* eliminations.
- c. The names, titles, and contact information for the individuals who have received *illicit discharge* elimination procedures training and update annually; and
- d. Annually, by April 1, the *MS4 Operator* must:
 - i. Review and update the *illicit discharge* elimination procedures (Part VI.C.3.a.); and
 - ii. Document the completion of this requirement in the *SWMP Plan*.

D. MCM 4 - Construction Site Stormwater Runoff Control

The *MS4 Operator* must *develop*, implement, and enforce a program to ensure construction sites are effectively controlled. This MCM is designed to prevent *pollutants* from construction related activities,²³ as well as promote the proper planning and installation of post-construction *SMPs*.

1. Applicable Construction Activities/Projects/Sites

- a. The construction site *stormwater* runoff control program must address *stormwater* runoff to the *MS4* from sites with *construction activities* that:
 - i. Result in a total land disturbance of greater than or equal to one acre; or

²³ Projects that comply with the terms and conditions of the CGP or an individual *SPDES* permit for *stormwater* for which they obtained coverage and local erosion and sediment control requirements are effectively controlled.

- ii. Disturb less than one acre if part of a larger common plan of development or sale.
- b. For *construction activities* where the *MS4 Operator* is listed as the owner/operator on the Notice of Intent for coverage under the CGP:
 - i. The *MS4 Operator* must ensure compliance with the CGP; and
 - ii. The additional requirements for construction oversight described in Part VI.D.6 through Part VI.D.9 are not required.

2. Public Reporting of Construction Site Complaints

- a. Within six (6) months of the EDC, the *MS4 Operator* must establish and document in the *SWMP Plan* an email or phone number (with message recording capability) for the public to report complaints related to construction *stormwater* activity.
- b. The *MS4 Operator* must document reports of construction site complaints in the *SWMP Plan* with the following information:
 - i. Date of the report;
 - ii. Location of the construction site;
 - iii. Nature of complaint;
 - iv. Follow up actions taken or needed; and
 - v. Inspection outcomes and any enforcement taken.

3. Construction Oversight Program

Within one (1) year of the EDC, the *MS4 Operator* must *develop* and implement a construction oversight program. The construction oversight program must be documented in the *SWMP Plan* specifying:

- a. The construction oversight procedures including:
 - i. When the construction site *stormwater* control program applies (Part VI.D.1.);
 - ii. What types of *construction activity* require a SWPPP;
 - iii. The procedures for submission of SWPPPs;
 - iv. SWPPP review requirements (Part VI.D.6.)
 - v. Pre-construction oversight requirements (Part VI.D.7.)
 - vi. Construction site inspection requirements (Part VI.D.8.);
 - vii. Construction site close-out requirements (Part VI.D.9.);
 - viii. Enforcement process/expectations for compliance; and
 - ix. Other procedures associated with the control of *stormwater* runoff from applicable *construction activities*.

- b. The training provisions for the *MS4 Operator's* construction oversight procedures (Part VI.D.3.a.).
 - i. If new staff are added, training on the *MS4 Operator's* construction oversight procedures (Part VI.D.3.a.) must be given prior to conducting any construction oversight activities;
 - ii. For existing staff, training on the *MS4 Operator's* construction oversight procedures (Part VI.D.3.a.) must be given prior to conducting any construction oversight activities and once every five (5) years, thereafter; and
 - iii. If the construction oversight procedures (Part VI.D.3.a.) are updated (Part VI.D.3.a.), training on the updates must be given to all staff prior to conducting construction oversight.
- c. The names, titles, and contact information for the individuals who have received construction oversight training and update annually;
- d. Procedures to ensure those involved in the *construction activity* itself (e.g., contractor, subcontractor, *qualified inspector*, SWPPP reviewers) have received four (4) hours of *Department* endorsed training in proper erosion and sediment control principles from a Soil & Water Conservation District, or other *Department* endorsed entity; and
- e. Annually, by April 1, the *MS4 Operator* must:
 - i. Review and update the construction oversight procedures (Part VI.D.3.a.); and
 - ii. Document the completion of this requirement in the *SWMP Plan*.

4. Construction Site Inventory & Inspection Tracking

- a. Within six (6) months of the EDC, the *MS4 Operator* must *develop* and maintain an inventory of all applicable construction sites (Part VI.D.1.a.) in the *SWMP Plan*. The following information must be included in the inventory:
 - i. Location of the construction site;
 - ii. Owner/operator contact information, if other than the *MS4 Operator*;
 - iii. Receiving waterbody name and class (mapped in accordance with Part IV.D.1.e.ii.a));
 - iv. Receiving waterbody WI/PWL Segment ID (mapped in accordance with Part IV.D.1.e.ii.b));
 - v. Prioritization (high or low) (Part VI.D.5.);
 - vi. Construction project *SPDES* identification number;
 - vii. SWPPP approval date;
 - viii. Inspection history, including dates and ratings (satisfactory, marginal, or unsatisfactory, when available); and

- ix. Current status of the construction site/project (i.e., active, temporarily shut down, complete²⁴).
- b. Annually, the *MS4 Operator* must update the inventory if construction projects are approved or completed.

5. Construction Site Prioritization

- a. Within one (1) year of the EDC, the *MS4 Operator* must prioritize all construction sites which are included in the construction site inventory (Part VI.D.4.) as follows:
 - i. High priority construction sites include construction sites:
 - a) With a direct conveyance (e.g., channel, ditch, storm sewer) to a *surface water of the State* that is:
 - i) Listed in Appendix C with silt/sediment, phosphorus, or nitrogen as the POC;
 - ii) Classified as AA-S, AA, or A (mapped in accordance with Part IV.D.1.e.ii.a)); or
 - iii) Classified with a trout (T) or trout spawning (TS) designation (mapped in accordance with Part IV.D.1.e.ii.a));
 - b) With greater than five (5) acres of disturbed earth at any one time;
 - c) With earth disturbance within one hundred (100) feet of any lake or pond (mapped in accordance with Part IV.D.1.e.ii.b)); and/or
 - d) Within fifty (50) feet of any rivers or streams (mapped in accordance with Part IV.D.1.e.ii.b));
 - ii. All other construction sites are considered low priority.
- b. Within thirty (30) days of when a construction site becomes active, the *MS4 Operator* must prioritize those construction sites; and
- c. Annually, after the initial prioritization (Part VI.D.5.a.), the *MS4 Operator* must update the construction site prioritization in the inventory (Part VI.D.4.a.) based on information gathered as part of the construction oversight program (Part VI.D.3.). The completion of this permit requirement must be documented in the *SWMP Plan*.
 - i. If the prioritization of the construction site changes priority based on information gathered as part of the construction oversight program, the *MS4 Operator* must comply with the requirements that apply to that prioritization.

²⁴ Construction projects listed on the inventory must be inspected and tracked as described in Part VI.D.8. until a final site inspection has been completed as specified in Part VI.D.9. and the construction site status changes to complete.

6. SWPPP Review

The *MS4 Operator* must:

- a. Ensure individual(s), responsible for reviewing SWPPPs for acceptance, receive:
 - i. Four (4) hours of *Department* endorsed training in proper erosion and sediment control principles from a Soil & Water Conservation District, or other *Department* endorsed entity. This training must be completed within three (3) years of the EDC and every three (3) years thereafter.
 - ii. Document the completion of this requirement in the *SWMP Plan*.
- b. Ensure SWPPP reviewers receive this training (Part VI.D.6.a.) prior to conducting SWPPP reviews for acceptance.
 - i. Individuals without these trainings cannot review SWPPPs for acceptance.
 - ii. Individuals who meet the definition of a *qualified professional* or *qualified inspector* are exempt from this requirement.
- c. Ensure individuals responsible for reviewing SWPPPs review all SWPPPs for applicable *construction activities* (Part VI.D.1.) and for conformance with the requirements of the CGP, including:
 - i. Erosion and sediment controls must be reviewed for conformance with the NYS E&SC 2016, or equivalent;
 - ii. Individuals responsible for review of post-construction *SMPs* must be *qualified professionals* or under the supervision of a *qualified professional*; and
 - iii. Post-construction *SMPs* must be reviewed for conformance with the NYS SWMDM 2015 or equivalent, including:
 - a) All post-construction *SMPs* must meet the *sizing criteria* contained in the CGP and NYS SWMDM 2015.
 - b) Deviations from the performance criteria of the NYS SWMDM 2015 must demonstrate that they are equivalent.
 - c) The SWPPP must include an O&M plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post-construction *SMP*. The SWPPP must identify the entity that will be responsible for the long-term operation and maintenance of each practice.
- d. In the *SWMP Plan*, document and update annually the names, titles, and contact information for the individuals who have received the trainings listed in Part VI.D.6.a.
- e. In the *SWMP Plan*, document the SWPPP review including the information found in Part III.B. of the CGP;
- f. Prioritize new *construction activities* (Part VI.D.5.a.); and

- g. Notify construction site owner/operators that their SWPPP has been accepted using the *MS4 SWPPP Acceptance Form*²⁵ created by the *Department* and required by the CGP, signed in accordance with Part X.J.

7. Pre-Construction Meeting

Prior to commencement of *construction activities*, the *MS4 Operator* must ensure a pre-construction meeting is conducted. The date and content of the pre-construction inspection/meeting must be documented in the *SWMP Plan*. The owner/operator listed on the CGP NOI (if different from the *MS4 Operator*), the *MS4 Operator*, contractor(s) responsible for implementing the SWPPP for the *construction activity*, and the *qualified inspector* (if required for the *construction activity* by Part IV.C. the CGP) must attend the meeting in order to:

- a. Confirm the approved project has received, or will receive²⁶, coverage under the CGP or an individual *SPDES* permit;
- b. Verify contractors and subcontractors selected by the owner/operator of the *construction activity* have identified at least one individual that has received four (4) hours of *Department* endorsed training in proper erosion and sediment control principles from a Soil & Water Conservation District or other endorsed entity as required by the CGP and Part VI.D.3.d; and
- c. Review the construction oversight program (Part VI.D.3.) and expectations for compliance.

8. Construction Site Inspections

The *MS4 Operator* must:

- a. Ensure individuals(s), responsible for construction site inspections, receive:
 - i. Four (4) hours of *Department* endorsed training in proper erosion and sediment control principles from a Soil & Water Conservation District, or other *Department* endorsed entity. This training must be complete, within three (3) years of the EDC and every three (3) years thereafter.
 - ii. Document the completion of this requirement in the *SWMP Plan*.
- b. Ensure all *MS4 Construction Site Inspectors* receive this training prior to conducting construction site inspections.
 - i. Individuals without these trainings cannot inspect construction sites.
 - ii. Individuals who meet the definition of a *qualified professional* or *qualified inspector* are exempt from this requirement.

²⁵ The *MS4 SWPPP Acceptance Form* can be found on the Department's website.

²⁶ Preconstruction meetings may occur prior to the issuance of the *MS4 SWPPP Acceptance Form*, however, the *MS4 Operator* must confirm coverage under the CGP will be applied for by the construction site owner/operator prior to commencement of construction of *construction activities*.

- c. Annually inspect all sites with *construction activity* identified in the inventory (Part VI.D.4.) during active construction after the pre-construction meeting (Part VI.D.7.), or sooner if deficiencies are noted that require attention.
 - i. Follow up to construction site inspections must confirm corrective actions are completed within timeframes established by the CGP and the *MS4 Operator's ERP* (Part IV.F.1.).
- d. In the *SWMP Plan*, document and update annually the names, titles, and contact information for the individuals who have received the trainings listed in Part VI.D.8.a.
- e. Document all inspections using the Construction Site Inspection Report Form (Appendix D) or an equivalent form containing the same information. The *MS4 Operator* must include the completed Construction Site Inspection Reports in the *SWMP Plan*.

9. Construction Site Close-out

- a. The *MS4 Operator* must ensure a final construction site inspection is conducted and documentation of the final construction site inspection must be maintained in the *SWMP Plan*. The final construction site inspection must be documented using the Construction Site Inspection Report Form (Appendix D), or an equivalent form containing the same information, or accept the construction site owner/operator's *qualified inspector* final inspection certification required by the CGP.
- b. The Notice of Termination (NOT)²⁷ must be signed by the *MS4 Operator* as required by the CGP for projects determined to be complete. The NOT must be signed in accordance with Part X.J.

E. MCM 5 – Post-Construction Stormwater Management

The *MS4 Operator* must *develop*, implement, and enforce a program to ensure proper operation and maintenance of post construction *SMPs* for new or redeveloped sites. This MCM is designed to promote the long-term performance of post-construction *SMPs* in removing *pollutants* from *stormwater* runoff.

1. Applicable Post-Construction SMPs

The post-construction *SMP* program must address *stormwater* runoff to the *MS4* from *publicly owned/operated* and *privately owned/operated* post-construction *SMPs* that meet the following:

- a. Post-construction *SMPs* that have been installed as part of any CGP covered construction site or individual *SPDES* permit (since March 10, 2003); and

²⁷ The NOT can be found on the Department's website.

- b. All new post-construction *SMPs* constructed as part of the construction site *stormwater* runoff control program (Part VI.D.).

2. Post-Construction *SMP* Inventory & Inspection Tracking²⁸

- a. The *MS4 Operators* continuing coverage must:
 - i. Maintain the inventory from previous iterations of this *SPDES* general permit for post-construction *SMPs* installed after March 10, 2003; and
 - ii. *Develop* the inventory for post-construction *SMPs* installed after March 10, 2003 including post-construction *SMPs*:
 - a) As they are approved or discovered; or
 - b) After the owner/operator of the *construction activity* has filed the NOT with the *Department* (Part VI.D.9.b.).
- b. The newly designated *MS4 Operators* must *develop* and maintain the inventory for post-construction *SMPs* installed after March 10, 2003 including post-construction *SMPs*:
 - i. As they are approved or discovered; or
 - ii. After the owner/operator of the *construction activity* has filed the NOT with the *Department* (Part VI.D.9.b.).
- c. Annually, the *MS4 Operator* must update the inventory of post-construction *SMPs* to include the post-construction *SMPs* in Part VI.E.2.a. and Part VI.E.2.b.
- d. Within five (5) years of the EDC, the following information must be included in the inventory either by using the *MS4 Operator* maintenance records or by verification of maintenance records provided by the owner of the post-construction *SMP*:
 - i. Street address or tax parcel;
 - ii. Type;²⁹
 - iii. Receiving waterbody name and class (mapped in accordance with Part IV.D.1.e.ii.a));
 - iv. Receiving waterbody WI/PWL Segment ID (mapped in accordance with Part IV.D.1.e.ii.b));
 - v. Date of installation (if available) or discovery;
 - vi. Ownership;
 - vii. Responsible party for maintenance;

²⁸ Post-construction *SMPs* can be found at a *municipal facility*.

²⁹ Post-construction *SMP* types are defined in the New York State Department of Environmental Conservation Maintenance Guidance: Stormwater Management Practices, March 31, 2017 (NYS DEC Maintenance Guidance 2017).

- viii. Contact information for party responsible for maintenance;
 - ix. Location of documentation depicting O&M requirements and legal agreements for post-construction *SMP*;
 - x. Frequency for inspection of post-construction *SMP*, as specified in the New York State Department of Environmental Conservation Maintenance Guidance: Stormwater Management Practices, March 31, 2017 (NYS DEC Maintenance Guidance 2017) or as specified in the O&M plan contained in the approved SWPPP (Part VI.D.6.);
 - xi. Reason for installation (e.g., new development, redevelopment, *retrofit*, flood control), if known;
 - xii. Date of last inspection;
 - xiii. Inspection results; and
 - xiv. Any corrective actions identified and completed.
- e. *MS4 Operators* must document the inventory of post-construction *SMPs* in the *SWMP Plan*.

3. SWPPP Review

For post-construction *SMP* SWPPP review requirements, see Part VI.D.6.

4. Post-Construction *SMP* Inspection & Maintenance Program

Within one (1) year of the EDC, the *MS4 Operator* must *develop* and implement a post-construction *SMP* inspection and maintenance program. The post-construction *SMP* inspection and maintenance program must be documented in the *SWMP Plan* specifying:

- a. The post-construction *SMP* inspection and maintenance procedures including:
 - i. Provisions to ensure that each post-construction *SMP* identified in the post-construction *SMP* inventory (Part VI.E.2.) is inspected at the frequency specified in the NYS DEC Maintenance Guidance 2017 or as specified in the O&M plan contained in the approved SWPPP (Part VI.D.6.), if available;
 - a) The *MS4 Operator* can only accept Level 1 inspections (NYS DEC Maintenance Guidance 2017) by private owners inspecting post-construction *SMPs*.
 - ii. Documentation of post-construction *SMP* inspections using the Post-Construction *SMP* Inspection Checklist³⁰ or an equivalent form containing the same information. The *MS4 Operator* must include the completed

³⁰ The *Department* developed checklist forms specific to each post-construction *SMP* designed to assist *MS4 Operators* in conducting inspections and maintenance activities of standard practices. The Post-Construction *SMP* Inspection Checklist, March 31, 2017, can be found on the Department's website.

- post-construction *SMP* inspections (i.e., the completed Post-Construction *SMP* Inspection Checklist) in the *SWMP Plan*;
- iii. Provisions to initiate follow-up actions (i.e., maintenance, repair, or higher-level inspection) within thirty (30) days of post-construction *SMP* inspection; and
 - iv. Provisions to initiate enforcement within sixty (60) days of the inspection if follow-up actions are not complete.
- b. The training provisions for the *MS4 Operator's* post-construction *SMP* inspection and maintenance procedures (Part VI.E.4.a.).
- i. If new staff are added, training on the *MS4 Operator's* post-construction *SMP* inspection and maintenance procedures (Part VI.E.4.a.) and procedures outlined in the *Department* endorsed program must be given prior to conducting any post-construction *SMP* inspection and maintenance;
 - ii. For existing staff, training on the *MS4 Operator's* post-construction *SMP* inspection and maintenance procedures (Part VI.E.4.a.) and procedures outlined in the *Department* endorsed program must be given prior to conducting any post-construction *SMP* inspection and maintenance and once every five (5) years, thereafter; and
 - iii. If the post-construction *SMP* inspection and maintenance procedures (Part VI.E.4.a.) are updated (Part VI.E.4.d.), training on the updates must be given to all staff prior to conducting post-construction *SMP* inspection and maintenance.
- c. The names, titles, and contact information for the individuals who have received post-construction *SMP* inspection and maintenance procedures training and update annually; and
- d. Annually, by April 1, the *MS4 Operator* must:
- i. Review and update the post-construction *SMP* inspection and maintenance procedures (Part VI.E.4.a.); and
 - ii. Document the completion of this requirement in the *SWMP Plan*.

F. MCM 6 – Pollution Prevention and Good Housekeeping

The *MS4 Operator* must *develop* and implement a pollution prevention and good housekeeping program for *municipal facilities* and *municipal operations* to minimize *pollutant discharges*. This MCM is designed to ensure the *MS4 Operator's* own activities do not contribute *pollutants* to *surface waters of the State*.

1. *Best Management Practices (BMPs) for Municipal Facilities & Operations*

Within three (3) years of the EDC, the *MS4 Operator* must incorporate *best management practices (BMPs)* into the *municipal facility* program and *municipal operations* program to minimize the *discharge* of *pollutants* associated with *municipal facilities* and *municipal operations*, respectively. The *BMPs* to be considered are as follows and must be documented in the *SWMP Plan*:

a. Minimize Exposure

- i. Exposure of materials to rain, snow, snowmelt, and runoff must be minimized, unless not technologically possible or not economically practicable and achievable in light of best industry practices, including areas used for loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations, with the following *BMPs*:
 - a) Locate materials and activities inside or protect them with storm resistant coverings;
 - b) Use grading, berming, or curbing to prevent runoff of contaminated flows and divert run-on away from these areas;
 - c) Locate materials, equipment, and activities so leaks and spills are contained in existing containment and diversion systems;
 - d) Clean up spills and leaks promptly using dry methods (e.g., absorbents) to prevent the *discharge* of *pollutants*;
 - e) Store leaky vehicles and equipment indoors or, if stored outdoors, use drip pans and absorbents;
 - f) Use spill/overflow protection equipment;
 - g) Perform all vehicle and/or equipment cleaning operations indoors, under cover, or in bermed areas that prevent runoff and run-on and also captures any overspray;
 - h) Drain fluids, indoors or under cover, from equipment and vehicles that will be decommissioned, and, for any equipment and vehicles that will remain unused for extended periods of time, inspect at least monthly for leaks; and/or
 - i) Minimize exposure of chemicals by replacing with a less toxic alternative (e.g., use non-hazardous cleaners).
- ii. *No Exposure Certification for High Priority Municipal Facilities*

- a) *Municipal facilities* may qualify for *No Exposure Certification* (Appendix D) when all activities and materials are completely sheltered from exposure to rain, snow, snowmelt and/or runoff.
- b) High priority *municipal facilities* (Part VI.F.2.c.i.a)) with uncovered parking areas for vehicles awaiting maintenance may be considered a low priority *municipal facility* (Part VI.F.2.c.i.c)) if only routine maintenance is performed inside and all other *no exposure* criteria are met.
- c) *Municipal facilities* accepting or repairing disabled vehicles and/or vehicles that have been involved in accidents are not eligible for the *No Exposure Certification*.
- d) *Municipal facilities* must maintain the *No Exposure Certification* and document in the *SWMP Plan*. The *No Exposure Certification* ceases to apply when activities or materials become exposed.

b. Follow a Preventive Maintenance Program

- i. Implement a preventative maintenance program that includes routine inspection, testing, maintenance, and repair of all fueling areas, vehicles and equipment and systems to prevent leaks, spills and other releases. This includes:
 - a) Performing inspections and preventive maintenance of *stormwater* drainage, source controls, treatment systems, and plant equipment and systems;
 - b) Maintaining non-structural *BMPs* (e.g., keep spill response supplies available, personnel appropriately trained, containment measures, covering fuel areas); and
 - c) Ensure vehicle washwater is not *discharged* to the *MS4* or to *surface waters of the State*. Wash equipment/vehicles in a designated and/or covered area where washwater is collected to be recycled or *discharged* to the sanitary sewer (Part I.B.2.d.).
- ii. Routine maintenance must be performed to ensure *BMPs* are operating properly.
- iii. When a *BMP* is not functioning to its designed effectiveness and needs repair or replacement:
 - a) Maintenance must be performed before the next anticipated storm event, or as necessary to maintain the continued effectiveness of *stormwater* controls. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable; and
 - b) Interim measures must be taken to prevent or minimize the *discharge* of *pollutants* until the final repair or replacement is implemented,

including cleaning up any contaminated surfaces so that the material will not be *discharged* during subsequent storm events.

c. **Spill Prevention and Response Procedures**

- i. Minimize the potential for leaks, spills and other releases that may be exposed to *stormwater* and *develop* plans for effective response to such spills if or when they occur. At a minimum, the *MS4 Operator* must:
 - a) Store materials in appropriate containers;
 - b) Label containers (e.g., “Used Oil,” “Spent Solvents,” “Fertilizers and Pesticides”) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur;
 - c) Implement procedures for material storage and handling, including the use of secondary containment and barriers between material storage and traffic areas, or a similarly effective means designed to prevent the *discharge of pollutants* from these areas;
 - d) *Develop* procedures for stopping, containing, and cleaning up leaks, spills, and other releases. As appropriate, execute such procedures as soon as possible;
 - e) Keep spill kits on-site, located near areas where spills may occur or where a rapid response can be made;
 - f) *Develop* procedures for notification of the appropriate facility personnel, emergency response agencies, and regulatory agencies when a leak, spill, or other release occurs. If possible, one of these individuals should be a member of the *stormwater* pollution prevention team (Part VI.F.2.d.i.a)). Any spills must be reported in accordance with 6 NYCRR 750-2.7; and
 - g) Following any spill or release, the *MS4 Operator* must evaluate the adequacy of the *BMPs* identified in the *municipal facility* specific SWPPP. If the *BMPs* are inadequate, the SWPPP must be updated to identify new *BMPs* that will prevent reoccurrence and improve the emergency response to such releases.
- ii. Measures for cleaning up spills or leaks must be consistent with applicable petroleum bulk storage, chemical bulk storage, or hazardous waste management regulations at 6 NYCRR Parts 596-599, 613 and 370-373.
- iii. This *SPDES* general permit does not relieve the *MS4 Operator* of any reporting or other requirements related to spills or other releases of petroleum or hazardous substances. Any spill of a hazardous substance must be reported in accordance with 6 NYCRR 597.4. Any spill of petroleum must be reported in accordance with 6 NYCRR 613.6 or 17 NYCRR 32.3.

d. Erosion and Sediment Controls³¹

- i. Stabilize exposed areas and control runoff using structural and/or non-structural controls to minimize onsite erosion and sedimentation.
- ii. The *MS4 Operator* must consider:
 - a) Structural and/or non-structural controls found in the NYS E&SC 2016;
 - b) Areas that, due to topography, land disturbance (e.g., construction), or other factors, have potential for significant soil erosion;
 - c) Whether structural, vegetative, and/or stabilization *BMPs* are needed to limit erosion;
 - d) Whether velocity dissipation devices (or equivalent measures) are needed at *discharge* locations and along the length of any channel to provide a non-erosive flow velocity from the structure to a water course; and
 - e) Address erosion or areas with poor vegetative cover, especially if the erosion is within fifty (50) feet of a *surface water of the State*.

e. Manage Vegetated Areas and Open Space on *Municipal Property*

- i. Maintain vegetated areas on *MS4 Operator* owned/operated property and right of ways:
 - a) Specify proper use, storage, and disposal of pesticides, herbicides, and fertilizers including minimizing the use of these products and using only in accordance manufacturer's instruction;
 - b) Use lawn maintenance and landscaping practices that are protective of water quality. Protective practices include: reduced mowing frequencies; proper disposal of lawn clippings; and use of alternative landscaping materials (e.g., drought resistant planting);
 - c) Place pet waste disposal containers and signage concerning the proper collection and disposal of pet waste at all parks and open space where pets are permitted; and
 - d) Address waterfowl congregation areas where needed to reduce waterfowl droppings from entering the *MS4*.

f. Salt³² Storage Piles or Pile Containing Salt

Enclose or cover storage piles of salt, or piles containing salt, used for deicing or maintenance of paved surfaces, except during loading, unloading, and handling. Implement appropriate measures (e.g., good housekeeping, routine sweeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile.

³¹ The use of the term "controls" in Part VI.F.1.d. aligns with the use of the term "controls" in the CGP.

³² For purposes of this *SPDES* general permit, salt means any chloride-containing material used to treat paved surfaces for deicing, including sodium chloride, calcium chloride, magnesium chloride, and brine solutions.

g. Waste, Garbage, and Floatable Debris

- i. Keep all dumpster lids closed when not in use. For dumpsters and roll off boxes that do not have lids and could leak, ensure that *discharges* have a control (e.g., secondary containment, treatment); and
- ii. Keep exposed areas free of waste, garbage, and debris or intercept them before they are *discharged*:
 - a) Manage trash containers at parks and open space (scheduled cleanings; sufficient number);
 - b) Pick up trash and debris on *MS4 Operator* owned/operated property and rights of way; and
 - c) Clean out *catch basins* within the appropriate timeframes (Part VI.F.3.c.iii.).

h. Alternative Implementation Options

When alternative implementation options (Part IV.A.1.) are utilized, require the parties performing *municipal operations* as contracted services, including but not limited to street sweeping, snow removal, and lawn/grounds care, to meet permit requirements as the requirements apply to the activity performed.

2. Municipal Facilities³³

a. Municipal Facility Program

Within three (3) years of the EDC, the *MS4 Operator* must *develop* and implement a *municipal facility* program. The *municipal facility* program must be documented in the *SWMP Plan* specifying:

- i. The *municipal facility* procedures including:
 - a) The *BMPs* (Part VI.F.1.) incorporated into the *municipal facility* program;
 - b) The high priority *municipal facility* requirements (Part VI.F.2.d.) as applied to the specific *municipal facility*; and
 - c) The low priority *municipal facility* requirements (Part VI.F.2.e.) as applied to the specific *municipal facility*.
- ii. The training provisions for the *MS4 Operator's municipal facility* procedures (Part VI.F.2.a.i.).
 - a) If new staff are added, training on the *MS4 Operator's municipal facility* procedures (Part VI.F.2.a.i.) must be given prior to conducting *municipal facility* procedures;
 - b) For existing staff, training on the *MS4 Operator's municipal facility* procedures (Part VI.F.2.a.i.) must be given prior to conducting

³³ *Municipal facilities* that have coverage under a separate *SPDES* permit (either individual or MSGP) must comply with the terms and conditions of that permit and the requirements set forth in this Part are not applicable.

municipal facility procedures and once every five (5) years, thereafter; and

- c) If the *municipal facility* procedures (Part VI.F.2.a.i.) are updated (Part VI.F.2.a.iv.), training on the updates must be given to all staff prior to conducting *municipal facility* procedures.
- iii. The names, titles, and contact information for the individuals who have received *municipal facility* training and update annually; and
- iv. Annually, by April 1, the *MS4 Operator* must:
 - a) Review and update the *municipal facility* procedures (Part VI.F.2.a.i.); and
 - b) Document the completion of this requirement in the *SWMP Plan*.

b. *Municipal Facility Inventory*

- i. Within two (2) years of the EDC, the *MS4 Operator* must *develop* and maintain an inventory of all *municipal* facilities in the *SWMP Plan*. The following information must be included in the inventory:
 - a) Name of *municipal facility*;
 - b) Street address;
 - c) Type of *municipal facility*;
 - d) Prioritization (high or low) (Part VI.F.2.c.);
 - e) Receiving waterbody name and class (mapped in accordance with Part IV.D.1.e.ii.a)) ;
 - f) Receiving waterbody WI/PWL Segment ID (mapped in accordance with Part IV.D.1.e.ii.b));
 - g) Contact information;
 - h) Responsible department;
 - i) Location of SWPPP (if high priority; when completed);
 - j) Type of activities present on site;
 - k) Size of facility (acres);
 - l) Date of last assessment;
 - m) *BMPs* identified; and
 - n) Projected date of next comprehensive site assessment (Part VI.F.2.d.ii.c) or Part VI.F.2.e.ii.c), depending on the *municipal facility* prioritization (Part VI.F.2.c.)).
- ii. Annually, the *MS4 Operator* must update the inventory if new *municipal* facilities are added.

c. *Municipal Facility Prioritization*

- i. Within three (3) years of the EDC, the *MS4 Operator* must prioritize all known *municipal* facilities as follows:
 - a) High priority *municipal facilities* include *municipal* facilities that have one or more of the following on site and exposed to *stormwater*:
 - i) Storage of chemicals, salt, petroleum, pesticides, fertilizers, anti-freeze, lead-acid batteries, tires, waste/debris;
 - ii) Fueling stations; and/or
 - iii) Vehicle or equipment maintenance/repair.
 - b) Low priority *municipal facilities* include any *municipal* facilities that do not meet the criteria for a high priority (Part VI.F.2.c.i.a)) *municipal facility*.
 - c) High priority *municipal facilities* (Part IV.F.2.c.i.a)) which qualify for a *No Exposure* Certification (Part VI.F.1.a.ii.) are low priority *municipal* facilities.
- ii. Within thirty (30) days of when a *municipal facility* is added to the inventory, the *MS4 Operator* must prioritize those *municipal* facilities; and
- iii. Annually, after the initial prioritization (Part VI.F.2.c.i.), the *MS4 Operator* must update the *municipal facility* prioritization in the inventory (Part VI.F.2.b.i.) based on information gathered as part of the *municipal facility* program (Part VI.F.2.a.), including cases where a *No Exposure* Certification (Part VI.F.1.a.ii.) ceases to apply. The completion of this permit requirement must be documented in the *SWMP Plan*.

d. High Priority *Municipal Facility* Requirements

i. *Municipal Facility Specific SWPPP*

Within five (5) years of the EDC, *MS4 Operators* must *develop* and implement a *municipal facility* specific SWPPP for each high priority *municipal facility* (Part VI.F.2.c.i.a)) and retain a copy of the *municipal facility* specific SWPPP on site of the respective *municipal facility*. The SWPPP must contain:

a) *Stormwater* Pollution Prevention Team

The *municipal facility* specific SWPPP must identify the individuals (by name and/or title) and their role/responsibilities in *developing*, implementing, maintaining, and revising the *municipal facility* specific SWPPP. The activities and responsibilities of the team must address all aspects of the *municipal facility* specific SWPPP.

b) General Site Description

A written description of the nature of the activities occurring at the *municipal facility* with a potential to *discharge pollutants*, type of

pollutants expected, and location of key features as detailed in the site map (Part VI.F.2.d.i.e)).

c) Summary of potential *pollutant* sources

The *municipal facility* specific SWPPP must identify each area at the *municipal facility* where materials or activities are exposed to *stormwater* or from which authorized non-*stormwater discharges* (Part I.A.3.) originate, including any potential *pollutant* sources for which the *municipal facility* has reporting requirements under the Emergency Planning and Community Right-To-Know Act (EPCRA), Section 313.

- i) Materials or activities include: machinery; raw materials; intermediate products; byproducts; final products or waste products; and, material handling activities which includes storage, loading and unloading, transportation or conveyance of any raw material, intermediate product, final product or waste product.
- ii) For each separate area identified, the description must include:
 - (a) Activities - A list of the activities occurring in the area (e.g., material storage, equipment fueling and cleaning);
 - (b) Pollutants - A list of the associated *pollutant(s)* for each activity. The *pollutant(s)* list must include all materials that are exposed to *stormwater*, and
 - (c) Potential for presence in *stormwater* - For each area of the *municipal facility* that generates *stormwater discharges*, a prediction of the direction of flow, and the likelihood of the activity to contaminate the *stormwater discharge*. Factors to consider include the toxicity of chemicals, quantity of chemicals used, produced or *discharged*, the likelihood of contact with *stormwater*, and history of leaks or spills of toxic or hazardous *pollutants*.

d) Spills and Releases

For areas that are exposed to precipitation or that otherwise drain to a *stormwater* conveyance to be covered under this *SPDES* general permit, the *municipal facility* specific SWPPP must include a list of spills or releases³⁴ of petroleum and hazardous substances or other *pollutants*, including unauthorized *non-stormwater discharges*, that may adversely affect water quality that occurred during the last three-year period. The list must be updated when spills or releases occur.

e) Site Map

³⁴ This may also include releases of petroleum or hazardous substances that are not in excess of reporting quantities but which may still cause or contribute to significant water quality impairment.

The *municipal facility* specific SWPPP must include a site map identifying the following, as applicable:

- i) Property boundaries and size in acres;
- ii) Location and extent of significant structures (including materials shelters), and impervious surfaces;
- iii) Monitoring locations (mapped in accordance with Part IV.D.2.a.i.) with its approximate *sewershed*. Each monitoring location must be labeled with the monitoring location identification;
- iv) Location of all post-construction *SMPs* (mapped in accordance with Part IV.D.2.a.iv.) and *MS4* infrastructure (mapped in accordance with Part IV.D.2.b.i.);
- v) Locations of *discharges* authorized under other *SPDES* permits;
- vi) Locations where potential spills or releases can contribute to *pollutants* in *stormwater discharges* and their accompanying drainage points;
- vii) Locations of haul and access roads;
- viii) Rail cars and tracks;
- ix) Arrows showing direction of *stormwater* flow;
- x) Location of all receiving waters in the immediate vicinity of the *municipal facility*, indicating if any of the waters are impaired and, if so, whether the waters have *TMDLs* established for them (mapped in accordance with Part IV.D.1.e.ii.);
- xi) Locations where *stormwater* flows have significant potential to cause erosion;
- xii) Location and source of run-on from adjacent property containing significant quantities of *pollutants* and/or volume of concern to the *municipal facility*; and
- xiii) Locations of the following areas where such areas are exposed to precipitation or *stormwater*:
 - (a) Fueling stations;
 - (b) Vehicle and equipment maintenance and/or cleaning areas;
 - (c) Loading/unloading areas;
 - (d) Locations used for the treatment, storage or disposal of wastes;
 - (e) Liquid storage tanks;
 - (f) Processing and storage areas;
 - (g) Locations where significant materials, fuel or chemicals are stored and transferred;
 - (h) Locations where vehicles and/or machinery are stored when not in use
 - (i) Transfer areas for substances in bulk;

- (j) Location and description of non-*stormwater discharges* (Part I.A.3.);
- (k) Locations where spills³⁵ or leaks have occurred; and
- (l) Locations of all existing structural *BMPs*.

f) *Stormwater Best Management Practices (BMPs)*

The *municipal facility* specific SWPPP must document the location and type of *BMPs* implemented at the *municipal facility* (Part VI.F.1.). The *municipal facility* specific SWPPP must describe how each *BMP* is being implemented for all the potential *pollutant* sources.

g) *Municipal facility* assessments

The *municipal facility* specific SWPPP must include a schedule for completing and recording results of routine and comprehensive site assessments (Part VI.F.2.d.ii.c)).

ii. *Municipal Facility Assessments*

a) Wet Weather Visual Monitoring

- i) Once every five (5) years, the *MS4 Operator* must conduct wet weather visual monitoring of the monitoring locations (Part VI.C.1.b.) and other sites of *stormwater* leaving the site that are *discharging stormwater* from fueling areas, storage areas, vehicle and equipment maintenance/fueling areas, material handling areas and similar potential *pollutant* generating areas (Part VI.F.2.d.i.e)xiii)).
- (a) All samples must be collected from *discharges* resulting from a *qualifying storm event*. The storm event must be documented using the Storm Event Data Form (Appendix D) and kept with the *municipal facility* specific SWPPP. The sample must be taken during the first thirty (30) minutes (or as soon as practical, but not to exceed one hour) of the *discharge* at the monitoring location.
- (b) No analytical tests are required to be performed on the samples for the purpose of meeting the visual monitoring requirements.
- (c) The visual examination must document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and any other obvious indicators of *stormwater* pollution.
- (d) The visual examination of the sample must be conducted in a well-lit area.

³⁵ A spill includes: any spill of a hazardous substance that must be reported in accordance with 6 NYCRR 597.4 and any spill of petroleum that must be reported in accordance with 6 NYCRR 613.6 or 17 NYCRR 32.3.

- (e) Where practicable, the same individual should carry out the collection and examination of *discharges* for the entire permit term for consistency.
- (f) The *MS4 Operator* must document the visual examination using the Visual Monitoring Form (Appendix D) and keep it with the *municipal facility* specific SWPPP to record:
 - (i) Monitoring location ID;
 - (ii) Examination date and time;
 - (iii) Personnel conducting the examination;
 - (iv) Nature of the *discharge* (runoff or snowmelt);
 - (v) Visual quality of the *stormwater discharge* including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of *stormwater* pollution; and
 - (vi) Probable sources of any observed *stormwater* contamination.
 - (vii) Corrective and follow up actions – If the visual examination indicates the presence of color, odor, floating solids, settled solids, suspended solids, foam, oil sheen, or other indicators of *stormwater* pollution, the *MS4 Operator* must, at minimum, complete and document the following actions:
 - (1) Evaluate the facility for potential sources;
 - (2) Remedy the problems identified;
 - (3) Revise the *municipal facility* specific SWPPP; and
 - (4) Perform an additional visual inspection during the first *qualifying storm event* following implementation of the corrective action. If the first *qualifying storm event* does not occur until the next visual monitoring period, this follow up action may be used as the next visual inspection.
- b) The monitoring locations inspection and sampling program must be implemented at the *municipal facility* (Part VI.C.1.e.).
- c) Comprehensive Site Assessments
 - i) Once every five (5) years following the most recent assessment, the *MS4 Operator* must complete a comprehensive site assessment for each high priority *municipal facility* as identified in the inventory (Part VI.F.2.b.) using the Municipal Facility Assessment Form (Appendix D) or an equivalent form containing

the same information, and document in the *municipal facility* specific SWPPP and *SWMP Plan* that:

- (a) The *municipal facility* is in compliance with the terms and conditions of this *SPDES* general permit;
- (b) Deficiencies were identified and all reasonable steps will be taken to minimize any *discharge* in violation of the permit, which has a reasonable likelihood of adversely affecting human health or the environment;
 - (i) Within twenty-four (24) hours, the *MS4 Operator* must prepare a schedule that includes corrective actions and specific interim milestones to be implemented until the corrective action is implemented; or
- (c) Deficiencies were identified and all reasonable steps will be taken to minimize any *discharge* in violation of the permit, which does not have a reasonable likelihood of adversely affecting human health or the environment;
 - (i) Within seven (7) days, the *MS4 Operator* must prepare a schedule that includes corrective actions and specific interim milestones to be implemented until the corrective action is implemented.

e. Low Priority *Municipal Facility* Requirements

- i. The *MS4 Operator* must identify procedures outlining *BMPs* for the types of activities that occur at the low priority *municipal* facilities as described in Part VI.F.1. A *municipal facility* specific SWPPP is not required.
- ii. *Municipal Facility* Assessments
 - a) Low priority *municipal* facilities are not required to conduct wet weather visual monitoring.
 - b) The monitoring locations inspection and sampling program must be implemented at the *municipal facility* (Part VI.C.1.e.).
 - c) Comprehensive Site Assessments
 - i) Once every five (5) years following the most recent assessment, the *MS4 Operator* must complete a comprehensive site assessment for each low priority *municipal facility* as identified in the inventory (Part VI.F.2.b.) using the Municipal Facility Assessment Form (Appendix D) or an equivalent form containing the same information, and document in the *SWMP Plan* that:
 - (a) The *municipal facility* is in compliance with the terms and conditions of this *SPDES* general permit;
 - (b) Deficiencies were identified and all reasonable steps will be taken to minimize any *discharge* in violation of the permit, which

has a reasonable likelihood of adversely affecting human health or the environment;

- (i) Within twenty-four (24) hours, the *MS4 Operator* must prepare a schedule that includes corrective actions and specific interim milestones to be implemented until the corrective action is implemented; or
- (c) Deficiencies were identified and all reasonable steps will be to minimize any *discharge* in violation of the permit, which does not have a reasonable likelihood of adversely affecting human health or the environment;
- (i) Within seven (7) days, the *MS4 Operator* must prepare a schedule that includes corrective actions and specific interim milestones to be implemented until the corrective action is implemented.

3. *Municipal Operations & Maintenance*

a. *Municipal Operations Program*

Municipal operations are: street and bridge maintenance; winter road maintenance; *MS4* maintenance; open space maintenance; solid waste management; new construction and land disturbances; right-of-way maintenance; marine operations; or hydrologic habitat modification.

Within three (3) years of the EDC, the *MS4 Operator* must *develop* and implement a *municipal operations* program. The *municipal operations* program must be documented in the *SWMP Plan* specifying:

- i. The *municipal operations* procedures including:
 - a) The *BMPs* (Part VI.F.1.) incorporated into the *municipal operations* program;
 - b) The *municipal operations* corrective actions requirements (Part VI.F.3.b.);
 - c) *Catch basin* inspection and maintenance requirements (Part VI.F.3.c.);
 - d) Roads, bridges, parking lots, and right of way maintenance requirements (Part VI.F.3.d.); and
 - e) All other *municipal operations* maintenance requirements.
- ii. The training provisions for the *MS4 Operator's municipal operations* procedures (Part VI.F.3.a.i.).
 - a) If new staff are added, training on the *MS4 Operator's municipal operations* procedures (Part VI.F.3.a.i.) must be given prior to conducting *municipal operations* procedures;

- b) For existing staff, training on the *MS4 Operator's municipal operations* procedures (Part VI.F.3.a.i.) must be given prior to conducting *municipal operations* procedures and once every five (5) years, thereafter; and
- c) If the *municipal operations* procedures (Part VI.F.3.a.i.) are updated (Part VI.F.3.a.iv.), training on the updates must be given to all staff prior to conducting *municipal operations* procedures.
- iii. The names, titles, and contact information for the individuals who have received *municipal operations* training and update annually; and
- iv. Annually, by April 1, the *MS4 Operator* must:
 - a) Review and update the *municipal operations* procedures (Part VI.F.3.a.i.); and
 - c) Document the completion of this requirement in the *SWMP Plan*.

b. *Municipal Operations Corrective Actions*

- i. For *municipal operations*, *MS4 Operators* must either:
 - a) Ensure compliance with the terms and conditions of this *SPDES* general permit; or
 - b) Implement corrective actions according to the following schedule and, after implementation, ensure the operations are in compliance with the terms and conditions of this *SPDES* general permit:
 - i) Within twenty-four (24) hours of discovery for situations that have a reasonable likelihood of adversely affecting human health or the environment;
 - ii) Initiated within seven (7) days of inspection and completed within thirty (30) days of inspection for situations that do not have a reasonable likelihood of adversely affecting human health or the environment; and
 - iii) For corrective actions that require special funding or construction that will take longer than thirty (30) days to complete, a schedule must be prepared that specifies interim milestones that will ensure compliance in the shortest reasonable time.

c. *Catch Basin Inspection and Maintenance*

Within three (3) years of the EDC, the *MS4 Operator* must:

- i. Identify when *catch basin* inspection is needed with consideration for:
 - a) Areas with *construction activities* (mapped in accordance with Part IV.D.2.a.iii.);
 - b) Residential, commercial, and industrial areas (mapped in accordance with Part IV.D.1.d.iii.);

- c) Recurring or history of issues; or
 - d) Confirmed citizen complaints on three or more separate occasions in the last twelve (12) months.
- ii. Inventory *catch basin* inspection information including:
 - a) Date of inspection;
 - b) Approximate level of trash, sediment, and/or debris captured at time of clean-out (no trash, sediment, and/or debris, <50% of the depth of the *sump*, >50% of the depth of the *sump*);
 - c) Depth of structure;
 - d) Depth of *sump*; and
 - e) Date of clean out, if applicable (Part VI.F.3.c.iii.).
- iii. Based on inspection results, clean out *catch basins* within the following timeframes:
 - a) Within six (6) months after the *catch basin* inspection, *catch basins* which had trash, sediment, and/or debris exceeding 50% of the depth of the *sump* as a result of a *catch basin* inspection must be cleaned out;
 - b) Within one (1) year after the *catch basin* inspection, *catch basins* which had trash, sediment, and/or debris at less than 50% of the depth of the *sump* as a result of a *catch basin* inspection must be cleaned out; and
 - c) MS4 Operators are not required to clean out *catch basins* if the *catch basins* are operating properly and:
 - i. There is no trash, sediment, and/or debris in the *catch basin*; or
 - ii. The *sump* depth of the *catch basin* is less than or equal to two (2) feet.
- iv. Properly manage (handling and disposal) materials removed from *catch basins* during clean out so that:
 - a) Water removed during the *catch basin* cleaning process will not reenter the *MS4* or *surface waters of the State*;
 - b) Material removed from *catch basins* is disposed of in accordance with any applicable environmental laws and regulations; and
 - c) Material removed during the *catch basin* cleaning process will not reenter the *MS4* or *surface waters of the State*.
- v. Determine if there are signs/evidence of *illicit discharges* and procedures for referral/follow-up if *illicit discharges* are encountered.

d. Roads, Bridges, Parking Lots, & Right of Way Maintenance

i. Sweeping

Within six (6) months of the EDC, the *MS4 Operator* must *develop* and implement procedures for sweeping and/or cleaning *municipal* streets, bridges, parking lots, and right of ways owned/operated by the *MS4 Operator*. The procedures and completion of permit requirements must be documented in the *SWMP Plan* specifying:

- a) All roads, bridges, parking lots, and right of ways must be swept and/or cleaned once every five (5) years in the spring (following winter activities such as sanding). This requirement is not applicable to:
 - i) Uncurbed roads with no *catch basins*;
 - ii) High-speed limited access highways; or
 - iii) Roads defined as interstates, freeways and expressways, or arterials by the United States Department of Transportation, Federal Highway Administration, Highway Functional Classification Concepts, Criteria and Procedures, 2013.
- b) Annually, from April 1 through October 31, roads in business and commercial areas must be swept. This requirement is not applicable to:
 - i) Uncurbed roads with no *catch basins*;
 - ii) High-speed limited access highways; or
 - iii) Roads defined as interstates, freeways and expressways, or arterials by the USDOT 2013.

ii. Maintenance

Within five (5) years of the EDC, in addition to the *BMPs* (Part VI.F.1.), the *MS4 Operator* must implement the following provisions:

- a) Pave, mark, and seal in dry conditions;
- b) Stage road operations and maintenance activity (e.g., patching, potholes) to reduce the potential discharge of pollutants to the *MS4* or *surface waters of the State*;
- c) Restrict the use of herbicides/pesticide application to roadside vegetation; and
- d) Contain *pollutants* associated with bridge maintenance activities (e.g., paint chips, dust, cleaning products, other debris).

iii. Winter Road Maintenance

Within five (5) years of the EDC, in addition to the *BMPs* (Part VI.F.1.), the *MS4 Operator* must implement the following provisions:

- a) Routinely calibrate equipment to control salt/sand application rates; and

- b) Ensure that routine snow disposal activities comply with the Division of Water Technical and Operation Guidance Series 5.1.11, Snow Disposal.³⁶

³⁶ The Division of Water Technical and Operation Guidance Series 5.1.11, Snow Disposal can be found on the Department's website.

Part VII. Minimum Control Measures (MCMs) for *Traditional Non-Land Use Control & Non-Traditional MS4 Operators*

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

- Employees (i.e., staff, faculty);
- User population/visitors;
- Students;
- Tenants; and
- Contractors & developers working for *MS4 Operator*.

A. MCM1 – Public Education and Outreach Program

The *MS4 Operator* must *develop* and implement an education and outreach program to increase public awareness of *pollutant* generating activities and behaviors. This MCM is designed to inform the public about the impacts of *stormwater* on water quality, the general sources of *stormwater pollutants*, and the steps the general public can take to reduce *pollutants* in *stormwater* runoff.

1. Development

a. Focus Areas

Within three (3) years of the EDC, the *MS4 Operator* must identify and document the focus areas in the *SWMP Plan*. The focus areas to be considered are as follows:

- i. Areas *discharging* to waters with Class AA-S, A-S, AA, A, B, SA, or SB (mapped in accordance with Part IV.D.1.e.ii.a));
- ii. *Sewersheds* for impaired waters listed in Appendix C (subject to Part VIII. requirements; mapped in accordance with Part IV.D.1.c. for *MS4 Operators* continuing coverage and Part IV.D.2.a.ii. for newly designated *MS4 Operators*);
- iii. *TMDL* watersheds (subject to Part IX. requirements; mapped in accordance with Part IV.D.1.e.ii.c));
- iv. Areas with *construction activities*;
- v. Areas with on-site wastewater systems (subject to Part VIII. or Part IX. requirements);
- vi. Residential, commercial, and industrial areas (mapped in accordance with Part IV.D.1.e.iii.);
- vii. *Stormwater hotspots*; and
- viii. Areas with *illicit discharges*.

b. Target Audiences and Associated *Pollutant* Generating Activities

Within three (3) years of the EDC, the *MS4 Operator* must identify and document the applicable target audience(s) and associated *pollutant* generating activities that the outreach and education will address for each focus area identified by the *MS4 Operator* in Part VII.A.1.a. in the *SWMP Plan*. The target audiences are as follows:

- i. Residents;
- ii. Commercial:³⁷ Business owners and staff;
- iii. Institutions:³⁸ Managers, staff, and students;
- iv. Construction: Developers, contractors, and design professionals;
- v. Industrial:³⁹ Owners and staff; and
- vi. *MS4 Operator's municipal* staff.

c. Education and Outreach Topics

Within three (3) years of the EDC, the *MS4 Operator* must identify and document in the *SWMP Plan* the education and outreach topics and how the education and outreach topics will reduce the potential for *pollutants* to be generated by the target audience(s) (Part VII.A.1.b.) for the focus area(s) (Part VII.A.1.a.).

e. *Illicit Discharge* Education

Within six (6) months of the EDC, the *MS4 Operator* must make information related to the prevention of *illicit discharges*, available to *municipal* employees, businesses, and the public and document the completion of this requirement in the *SWMP Plan*. The information related to the prevention of *illicit discharges* must include the following:

- i. What types of *discharges* are allowable (Part I.A.3.);
- ii. What is an *illicit discharge* and why is it prohibited (Part VII.C.);
- iii. The environmental hazards associated with *illicit discharges* and improper disposal of waste;
- iv. Proper handling and disposal practices for the most common behaviors within the community (e.g., septic care, car washing, household hazardous waste, swimming pool draining, or other activities resulting in *illicit discharges* to the *MS4*); and
- v. How to report *illicit discharges* they may observe (Part VII.C.1.a.).

³⁷ Business, retail stores, and restaurants.

³⁸ Hospitals, churches, colleges, and schools.

³⁹ Factories, recyclers, auto-salvage, and mines.

2. Implementation and Frequency

a. Distribution Method of Educational Messages

Once every five (5) years, the *MS4 Operator* must identify and document in the *SWMP Plan* which of the following method(s) are used for the distribution of educational messages:

- i. Printed materials (e.g., mail inserts, brochures, and newsletters);
- ii. Electronic materials (e.g., websites, email listservs);
- iii. Mass media (e.g., newspapers, public service announcements on radio or cable);
- iv. Workshops or focus groups;
- v. Displays in public areas (e.g., town halls, library, parks); or
- vi. Social Media (e.g., Facebook, Twitter, blogs).

b. Frequency

Following the completion of Part VII.A.1.a, Part VII.A.1.b, and Part VII.A.1.c, within five (5) years of the EDC, and once every five (5) years, thereafter, the *MS4 Operator* must:

- i. Deliver an educational message to each target audience(s) (Part VII.A.1.b.) for each focus area(s) (Part VII.A.1.a.) based on the defined education and outreach topic(s) (Part VII.A.1.c.); and
- ii. Document the completion of this requirement in the *SWMP Plan*.

c. Updates to the Public Education and Outreach Program

Following the completion of Part VII.A.1.a, Part VII.A.1.b, and Part VII.A.1.c, annually, by April 1, the *MS4 Operator* must:

- i. Review and update the focus areas, target audiences, and/or education and outreach topics; and
- ii. Document the completion of this requirement in the *SWMP Plan*.

B. MCM 2 - Public Involvement/Participation

The *MS4 Operator* must provide opportunities to involve the public in the development, review, and implementation of the *SWMP*. This MCM is designed to give the public the opportunity to include their opinions in the implementation of this *SPDES* general permit.

1. Public Involvement/Participation

- a. Annually, the *MS4 Operator* must provide an opportunity for public involvement/participation in the development and implementation of the *SWMP*. The *MS4 Operator* must document the public involvement/participation opportunities in the *SWMP Plan*. The opportunities for public involvement/participation are as follows:

- i. Citizen advisory group on *stormwater* management;
 - ii. Public hearings or meetings;
 - iii. Citizen volunteers to educate other individuals about the *SWMP*;
 - iv. Coordination with other pre-existing public involvement/participation opportunities;
 - v. Reporting concerns about activities or behaviors observed; or
 - vi. Stewardship activities.
- b. Annually, the *MS4 Operator* must inform the public of the opportunity (Part VII.B.1.a.) for their involvement/participation in the development and implementation of the *SWMP* and how they can become involved. The *MS4 Operator* must document the method for distribution of this information in the *SWMP Plan*. The methods for distribution are as follows:
- i. Public notice;
 - ii. Printed materials (e.g., mail inserts, brochures and newsletters);
 - iii. Electronic materials (e.g., websites, email listservs);
 - iv. Mass media (e.g., newspapers, public service announcements on radio or cable);
 - v. Workshops or focus groups;
 - vi. Displays in public areas (e.g., town halls, library, parks); or
 - vii. Social Media (e.g., Facebook, Twitter, blogs).
- c. Within six (6) months of the EDC, the *MS4 Operator* must identify a local point of contact to receive and respond to public concerns regarding *stormwater* management and compliance with permit requirements. The name or title of this individual, with contact information, must be published on public outreach and public participation materials and documented in the *SWMP Plan*.

2. Public Notice and Input Requirements

a. Public Notice and Input Requirements for *SWMP Plan*

Annually, the *MS4 Operator* must provide an opportunity for the public to review and comment on the publicly available *SWMP Plan* (Part IV.B.2.b.). The public must have the ability to ask questions and submit comments on the *SWMP Plan*. The completion of this permit requirement must be documented in the *SWMP Plan*. This requirement may be satisfied by Part VII.B.1.

b. Public Notice and Input Requirements for Draft Annual Report

- i. Annually, the *MS4 Operator* must provide an opportunity for the public to review and comment on the draft Annual Report. The completion of this permit requirement must be documented in the *SWMP Plan*. This requirement may be satisfied by either:
 - a) Presentation of the draft Annual Report at a regular meeting of an existing board (e.g., administrative, planning, zoning) or a separate meeting specifically for *stormwater*, as designated by the *MS4* or if requested by the public. The public must have the ability to ask questions about and make comments on the draft annual report during that presentation; or
 - b) Posting of the draft Annual Report on a public website. The website must provide information on the timeframes and procedures to submit comments and/or request a meeting. However, if a public meeting is requested by two or more persons, the *MS4 Operator* must hold such a meeting.

c. Consideration of Public Input

- i. Annually, the *MS4 Operator* must include a summary of comments received on the *SWMP Plan* and draft Annual Report in the *SWMP Plan*.
- ii. Within thirty (30) days of when public input is received, the *MS4 Operator* must update the *SWMP Plan*, where appropriate, based on the public input received.

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

The *MS4 Operator* must *develop*, implement, and enforce a program which systematically detects, tracks down, and eliminates *illicit discharges* to the *MS4*. This MCM is designed to manage the *MS4* so it is not conveying *pollutants* associated with flows other than those directly attributable to *stormwater* runoff.

1. *Illicit Discharge Detection*

a. Public Reporting of *Illicit Discharges*

- i. Within six (6) months of the EDC, the *MS4 Operator* must establish and document in the *SWMP Plan* an email or phone number (with message recording capability) for the public to report *illicit discharges*.
- ii. Within thirty (30) days of an *illicit discharge*, the *MS4 Operator* must document each report of an *illicit discharge* in the *SWMP Plan* with the following information:
 - a) Date of the report;
 - b) Location of the *illicit discharge*;
 - c) Nature of the *illicit discharge*;

- d) Follow up actions taken or needed (including response times); and
- e) Inspection outcomes and any enforcement taken.

b. Monitoring Locations

The monitoring locations used to detect *illicit discharges* are identified as follows:

- i. *MS4 outfalls*;⁴⁰
- ii. *Interconnections*;⁴¹ and
- iii. *Municipal facility intraconnections*.⁴²

c. Monitoring Locations Inventory

- i. Within three (3) years of the EDC, the *MS4 Operator* must *develop* and maintain an inventory of the monitoring locations in the *SWMP Plan*. The following information must be included in the inventory:⁴³

a) Inventory information for *MS4 outfalls*

- i) ID;
- ii) Prioritization (high or low) (Part VII.C.1.d.);
- iii) Type of monitoring location (Part VII.C.1.b.);
- iv) Name of *MS4 Operator's municipal facility*, if located at a *municipal facility*;⁴⁴
- v) Receiving waterbody name and class (mapped in accordance with Part IV.D.1.e.ii.a));
- vi) Receiving waterbody WI/PWL Segment ID (mapped in accordance with Part IV.D.1.e.ii.b));
- vii) Land use in drainage area;
- viii) Type of conveyance (open drainage or closed pipe);
- ix) Material;
- x) Shape;
- xi) Dimensions;
- xii) Submerged in water; and
- xiii) Submerged in sediment.

b) Inventory information for *interconnections*

- i) ID;
- ii) Prioritization (high or low) (Part VII.C.1.d.);
- iii) Type of monitoring location (Part VII.C.1.b.);
- iv) Name of *MS4 Operator* receiving *discharge* or private storm system;

⁴⁰ *MS4 outfalls* can be found at a *municipal facility*.

⁴¹ *Interconnections* can be found at a *municipal facility*.

⁴² *Municipal facility intraconnections* can be found only at a *municipal facility*.

⁴³ The information included in the inventory is collected during inspections on the Monitoring Locations Inspection and Sampling Field Sheet (Appendix D) unless otherwise specified by the permit conditions.

⁴⁴ This information is collected as part of the *municipal facility* inventory.

- v) Name of *MS4 Operator's municipal facility*, if located at a *municipal facility*; and
- vi) Receiving waterbody name and class (mapped in accordance with Part IV.D.1.e.ii.a)).

c) Inventory information for *municipal facility intraconnections*

- i) ID;
 - ii) Prioritization (high or low) (Part VII.C.1.d.);
 - iii) Type of monitoring location (Part VII.C.1.b.);
 - iv) Name of *MS4 Operator's municipal facility*; and
 - v) Receiving waterbody name and class (mapped in accordance with Part IV.D.1.e.ii.a)).
- ii. Annually, the *MS4 Operator* must update the inventory if monitoring locations are created or discovered.

d. Monitoring Locations Prioritization

- i. Within three (3) years of the EDC, the *MS4 Operator* must prioritize monitoring locations which are included in the monitoring locations inventory (Part VII.C.1.c.) as follows:
 - a) High priority monitoring locations include monitoring locations:
 - vi) At a high priority *municipal facility*, as defined in Part VII.F.2.c;
 - vii) *Discharging* to impaired waters (subject to Part VIII. requirements; mapped in accordance with Part IV.D.1.e.ii.b));
 - viii) *Discharging* within a TMDL watershed (subject to Part IX. requirements; mapped in accordance with Part IV.D.1.e.ii.c));
 - ix) *Discharging* to waters with Class AA-S, A-S, AA, A, B, SA, or SB (mapped in accordance with Part IV.D.1.e.ii.a)); and/or
 - x) Confirmed citizen complaints on three or more separate occasions in the last twelve (12) months.
 - b) All other monitoring locations are considered low priority.
- ii. Within thirty (30) days of when a monitoring location is constructed or the *MS4 Operator* discovers it, the *MS4 Operator* must prioritize those monitoring locations; and
- iii. Annually, after the initial prioritization (Part VII.C.1.d.i.), the *MS4 Operator* must update the monitoring location prioritization in the inventory (Part VII.C.1.c.) based on information gathered as part of the monitoring location inspection and sampling program (Part VII.C.1.e.). The completion of this permit requirement must be documented in the *SWMP Plan*.

e. Monitoring Locations Inspection and Sampling Program

Within two (2) years of the EDC, the *MS4 Operator* must *develop* and implement a monitoring locations inspection and sampling program. The monitoring locations inspection and sampling program must be documented in the *SWMP Plan* specifying:

- i. The monitoring locations inspection and sampling procedures including:
 - a) During *dry weather*,⁴⁵ one (1) inspection of each monitoring location identified in the inventory (Part VII.C.1.c.) every five (5) years following the most recent inspection;
 - b) Documentation of all monitoring location inspections, including any sampling results, using the Monitoring Locations Inspection and Sampling Field Sheet (Appendix D) or an equivalent form containing the same information and include the completed monitoring location inspections and sampling results in the *SWMP Plan* (e.g., the completed Monitoring Locations Inspection and Sampling Field Sheets);
 - c) Provisions to sample all monitoring locations which had inspections which resulted in a *suspect* or *obvious illicit discharge* characterization. The sampling requirement is based on the number and severity of *physical indicators present in the flow* to better inform track down procedures (Part VII.C.2.). If the source of the *illicit discharge* is clear and discernable (e.g., sewage), sampling is not necessary;
 - d) Sampling may be done with field test kits or field instrumentation that are sufficiently sensitive to detect the parameter below the sampling action level used⁴⁶ and are not subject to 40 CFR Part 136 requirements for approved methods and certified laboratories;
 - e) Provisions to initiate, or cause to initiate,⁴⁷ track down procedures (Part VII.C.2.a.), in accordance with the timeframes specified in Part VII.C.2.a.iii, for monitoring locations with an overall characterization⁴⁸ as *suspect illicit discharge* or *obvious illicit discharge* or that exceed any sampling action level used;
 - f) Provisions to re-inspect the monitoring location within thirty (30) days of initial inspection if there is a *physical indicator not related to flow*, potentially indicative of *intermittent* or *transitory discharges*, utilizing techniques described in Chapter 12.6 of the Center for Watershed

⁴⁵ MS4 Operators can reference the Center for Watershed Protection Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assistance, October 2004 (CWP 2004) for other factors to consider when determining when to conduct monitoring location inspection and sampling.

⁴⁶ Refer to Chapter 12 of the CWP 2004 for parameters, sampling action levels, and procedures.

⁴⁷ If track down is conducted by individuals or entities other than those conducting the monitoring locations inspections.

⁴⁸ Reference to the Monitoring Locations Inspection and Sampling Field Sheet, adapted from CWP 2004, Section 6: Overall Monitoring Location Characterization based on the Relative Severity Index of physical indicators for flowing monitoring locations only.

Protection Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assistance, October 2004 (CWP 2004) or equivalent.

- i) If those same physical indicators persist, the *MS4 Operator* must initiate *illicit discharge* track down procedures (Part VII.C.2.a.).
- ii. The training provisions for the *MS4 Operator's* monitoring locations inspection and sampling procedures (Part VII.C.1.e.i.).
 - a) If new staff are added, training on the *MS4 Operator's* monitoring locations inspection and sampling procedures (Part VII.C.1.e.i.) must be given prior to conducting monitoring locations inspections and sampling procedures;
 - b) For existing staff, training on the *MS4 Operator's* monitoring locations inspection and sampling procedures (Part VII.C.1.e.i.) must be given prior to conducting monitoring locations inspections and sampling and once every five (5) years, thereafter; and
 - c) If the monitoring locations inspection and sampling procedures (Part VII.C.1.e.i.) are updated (Part VII.C.1.e.iv.), training on the updates must be given to all staff prior to conducting monitoring locations inspections and sampling.
- iii. The names, titles, and contact information for the individuals who have received monitoring locations inspection and sampling procedures training and update annually; and
- iv. Annually, by April 1, the *MS4 Operator* must:
 - a) Review and update the monitoring location inspection and sampling procedures (Part VII.C.1.e.i.) based on monitoring location inspection results (e.g., trends, patterns, areas with *illicit discharges*, and common problems); and
 - b) Document the completion of this requirement in the *SWMP Plan*.

2. *Illicit Discharge Track Down Program*

Within two (2) years of the EDC, the *MS4 Operator* must *develop* and implement an *illicit discharge* track down program to identify the source of *illicit discharges* and the responsible party. The *illicit discharge* track down program must be documented in the *SWMP Plan* specifying:

- a. The *illicit discharge* track down procedures including:
 - i. Procedures as described in Chapter 13 of CWP 2004 or equivalent;
 - ii. Steps taken for *illicit discharge* track down procedures;
 - iii. The following timeframes to initiate *illicit discharge* track down:

- a) Within twenty-four (24) hours of discovery, the *MS4 Operator* must initiate track down procedures for flowing *MS4* monitoring locations with *obvious illicit discharges*;⁴⁹
 - b) Within two (2) hours of discovery, the *MS4 Operator* must initiate track down procedures for *obvious illicit discharges* of sanitary wastewater that would affect bathing areas during bathing season, shell fishing areas or public water intakes and report orally or electronically to the Regional Water Engineer and local health department; and
 - c) Within five (5) days of discovery, the *MS4 Operator* must initiate track down procedures for *suspect illicit discharges*.
- b. The training provisions for the *MS4 Operator's illicit discharge* track down procedures (Part VII.C.2.a.).
- i. If new staff are added, training on the *MS4 Operator's illicit discharge* track down procedures (Part VII.C.2.a.) must be given prior to conducting *illicit discharge* track downs;
 - ii. For existing staff, training on the *MS4 Operator's illicit discharge* track down procedures (Part VII.C.2.a.) must be given prior to *conducting illicit discharge* track downs and once every five (5) years, thereafter; and
 - iii. If the *illicit discharge* track down procedures (Part VII.C.2.a.) are updated (Part VII.C.2.d.), training on the updates must be given to all staff prior to conducting *illicit discharge* track downs.
- c. The names, titles, and contact information for the individuals who have received *illicit discharge* track down procedures training and update annually; and
- d. Annually, by April 1, the *MS4 Operator* must:
- i. Review and update the *illicit discharge* track down procedures (Part VII.C.2.a.); and
 - ii. Document the completion of this requirement in the *SWMP Plan*.

3. *Illicit Discharge Elimination Program*

Within two (2) years of the EDC, the *MS4 Operator* must *develop* and implement an *illicit discharge* elimination program. The *illicit discharge* elimination program must be documented in the *SWMP Plan* specifying:

- a. The *illicit discharge* elimination procedures including:
 - i. Provisions for escalating enforcement and tracking, both consistent with the ERP required in Part IV.F. of this *SPDES* general permit;
 - ii. Provisions to confirm the corrective actions have been taken;

⁴⁹ Reference to the Monitoring Locations Inspection and Sampling Field Sheet, adapted from CWP 2004, Section 6: Overall Monitoring Location Characterization based on the Relative Severity Index of physical indicators for flowing monitoring locations only.

- iii. Steps taken for *illicit discharge* elimination procedures; and
- iv. The following timeframes for *illicit discharge* elimination:
 - a) Within twenty-four (24) hours of identification of an *illicit discharge* that has a reasonable likelihood of adversely affecting human health or the environment, the *MS4 Operator* must eliminate the *illicit discharge*;
 - b) Within five (5) days of identification of an *illicit discharge* that does not have a reasonable likelihood of adversely affecting human health or the environment, the *MS4 Operator* must eliminate the *illicit discharge*; and
 - c) Where elimination of an *illicit discharge* within the specified timeframes (Part VII.C.3.a.iv.) is not possible, the *MS4 Operator* must notify the Regional Water Engineer.
- b. The training provisions for the *MS4 Operator's illicit discharge* elimination procedures (Part VII.C.3.a.).
 - i. If new staff are added, training on the *MS4 Operator's illicit discharge* elimination procedures (Part VII.C.3.a.) must be given prior to conducting *illicit discharge* eliminations;
 - ii. For existing staff, training on the *MS4 Operator's illicit discharge* elimination procedures (Part VII.C.3.a.) must be given prior to conducting *illicit discharge* eliminations and once every five (5) years, thereafter; and
 - iii. If the *illicit discharge* elimination procedures (Part VII.C.3.a.) are updated (Part VII.C.3.d.), training on the updates must be given to all staff prior to conducting *illicit discharge* eliminations.
- c. The names, titles, and contact information for the individuals who have received *illicit discharge* elimination procedures training and update annually; and
- d. Annually, by April 1, the *MS4 Operator* must:
 - i. Review and update the *illicit discharge* elimination procedures (Part VII.C.3.a.); and
 - ii. Document the completion of this requirement in the *SWMP Plan*.

D. MCM 4 - Construction Site Stormwater Runoff Control

The *MS4 Operator* must *develop*, implement, and enforce a program to ensure construction sites are effectively controlled. This MCM is designed to prevent *pollutants* from construction related activities,⁵⁰ as well as promote the proper planning and installation of post-construction *SMPs*.

⁵⁰ Projects that comply with the terms and conditions of the CGP or an individual *SPDES* permit for *stormwater* for which they obtained coverage and local erosion and sediment control requirements are effectively controlled.

1. Applicable Construction Activities/Projects/Sites

- a. The construction site *stormwater* runoff control program must address *stormwater* runoff to the *MS4* from sites with *construction activities* permitted, approved, funded, or owned/operated by the *MS4 Operator* that:
 - i. Result in a total land disturbance of greater than or equal to one acre; or,
 - ii. Disturb less than one acre if part of a larger common plan of development or sale.
- b. For *construction activities* where the *MS4 Operator* is listed as the owner/operator on the Notice of Intent for coverage under the CGP:
 - i. The *MS4 Operator* must ensure compliance with the CGP; and
 - ii. The additional requirements for construction oversight described in Part VII.D.6 through Part VII.D.9 are not required.

2. Public Reporting of Construction Site Complaints

- a. Within six (6) months of the EDC, the *MS4 Operator* must establish and document in the *SWMP Plan* an email or phone number (with message recording capability) for the public to report complaints related to construction *stormwater* activity.
- b. The *MS4 Operator* must document reports of construction site complaints in the *SWMP Plan* with the following information:
 - i. Date of the report;
 - ii. Location of the construction site;
 - iii. Nature of complaint;
 - iv. Follow up actions taken or needed; and
 - v. Inspection outcomes and any enforcement taken.

3. Construction Oversight Program

Within one (1) year of the EDC, the *MS4 Operator* must *develop* and implement a construction oversight program. The construction oversight program must be documented in the *SWMP Plan* specifying:

- a. The construction oversight procedures including:
 - i. When the construction site *stormwater* control program applies (Part VII.D.1.);
 - ii. What types of *construction activity* require a SWPPP;
 - iii. The procedures for submission of SWPPPs;
 - iv. SWPPP review requirements (Part VII.D.6.)
 - v. Pre-construction oversight requirements (Part VII.D.7.)

- vi. Construction site inspection requirements (Part VII.D.8.);
 - vii. Construction site close-out requirements (Part VII.D.9.);
 - viii. Enforcement process/expectations for compliance; and
 - ix. Other procedures associated with the control of *stormwater* runoff from applicable *construction activities*.
- b. The training provisions for the *MS4 Operator's* construction oversight procedures (Part VII.D.3.a.).
- i. If new staff are added, training on the *MS4 Operator's* construction oversight procedures (Part VII.D.3.a.) must be given prior to conducting any construction oversight activities;
 - ii. For existing staff, training on the *MS4 Operator's* construction oversight procedures (Part VII.D.3.a.) must be given prior to conducting any construction oversight activities and once every five (5) years, thereafter; and
 - iii. If the construction oversight procedures (Part VII.D.3.a.) are updated (Part VII.D.3.a.), training on the updates must be given to all staff prior to conducting construction oversight.
- c. The names, titles, and contact information for the individuals who have received construction oversight training and update annually;
- d. Procedures to ensure those involved in the *construction activity* itself (e.g., contractor, subcontractor, *qualified inspector*, SWPPP reviewers) have received four (4) hours of *Department* endorsed training in proper erosion and sediment control principles from a Soil & Water Conservation District, or other *Department* endorsed entity; and
- e. Annually, by April 1, the *MS4 Operator* must:
- i. Review and update the construction oversight procedures (Part VII.D.3.a.); and
 - ii. Document the completion of this requirement in the *SWMP Plan*.

4. Construction Site Inventory & Inspection Tracking

- a. Within six (6) months of the EDC, the *MS4 Operator* must *develop* and maintain an inventory of all applicable construction sites (Part VII.D.1.a.) in the *SWMP Plan*. The following information must be included in the inventory:
- i. Location of the construction site;
 - ii. Owner/operator contact information, if other than the *MS4 Operator*;
 - iii. Receiving waterbody name and class (mapped in accordance with Part IV.D.1.e.ii.a));
 - iv. Receiving waterbody WI/PWL Segment ID (mapped in accordance with Part IV.D.1.e.ii.b));

- v. Prioritization (high or low) (Part VII.D.5.);
 - vi. Construction project *SPDES* identification number;
 - vii. SWPPP approval date;
 - viii. Inspection history, including dates and ratings (satisfactory, marginal, or unsatisfactory, when available); and
 - ix. Current status of the construction site/project (i.e., active, temporarily shut down, complete⁵¹).
- b. Annually, the *MS4 Operator* must update the inventory if construction projects are approved or completed.

5. Construction Site Prioritization

- a. Within one (1) year of the EDC, the *MS4 Operator* must prioritize all construction sites which are included in the construction site inventory (Part VII.D.4.) as follows:
- i. High priority construction sites include construction sites:
 - a) With a direct conveyance (e.g., channel, ditch, storm sewer) to a *surface water of the State* that is:
 - i) Listed in Appendix C with silt/sediment, phosphorus, or nitrogen as the POC;
 - ii) Classified as AA-S, AA, or A (mapped in accordance with Part IV.D.1.e.ii.a)); or
 - iii) Classified with a trout (T) or trout spawning (TS) designation (mapped in accordance with Part IV.D.1.e.ii.a));
 - b) With greater than five (5) acres of disturbed earth at any one time;
 - c) With earth disturbance within one hundred (100) feet of any lake or pond (mapped in accordance with Part IV.D.1.e.ii.b)); and/or
 - d) Within fifty (50) feet of any rivers or streams (mapped in accordance with Part IV.D.1.e.ii.b));
 - ii. All other construction sites are considered low priority.
- b. Within thirty (30) days of when a construction site becomes active, the *MS4 Operator* must prioritize those construction sites; and
- c. Annually, after the initial prioritization (Part VII.D.5.a.), the *MS4 Operator* must update the construction site prioritization in the inventory (Part VII.D.4.a.) based on information gathered as part of the construction oversight program (Part VII.D.3.). The completion of this permit requirement must be documented in the *SWMP Plan*.

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Construction projects listed on the inventory must be inspected and tracked as described in Part VII.D.8. until a final site inspection has been completed as specified in Part VII.D.9. and the construction site status changes to complete.

- i. If the prioritization of the construction site changes priority based on information gathered as part of the construction oversight program, the *MS4 Operator* must comply with the requirements that apply to that prioritization.

6. SWPPP Review

The *MS4 Operator* must:

- a. Ensure individual(s), responsible for reviewing SWPPPs for acceptance, receive:
 - i. Four (4) hours of *Department* endorsed training in proper erosion and sediment control principles from a Soil & Water Conservation District, or other *Department* endorsed entity. This training must be completed within three (3) years of the EDC and every three (3) years thereafter.
 - ii. Document the completion of this requirement in the *SWMP Plan*.
- b. Ensure SWPPP reviewers receive this training (Part VII.D.6.a.) prior to conducting SWPPP reviews for acceptance.
 - i. Individuals without these trainings cannot review SWPPPs for acceptance.
 - ii. Individuals who meet the definition of a *qualified professional* or *qualified inspector* are exempt from this requirement.
- c. Ensure individuals responsible for reviewing SWPPPs review all SWPPPs for applicable *construction activities* (Part VII.D.1.) and for conformance with the requirements of the CGP, including:
 - i. Erosion and sediment controls must be reviewed for conformance with the NYS E&SC 2016, or equivalent;
 - ii. Individuals responsible for review of post-construction *SMPs* must be *qualified professionals* or under the supervision of a *qualified professional*; and
 - iii. Post-construction *SMPs* must be reviewed for conformance with the NYS SWMDM 2015 or equivalent, including:
 - a) All post-construction *SMPs* must meet the *sizing criteria* contained in the CGP and NYS SWMDM 2015.
 - b) Deviations from the performance criteria of the NYS SWMDM 2015 must demonstrate that they are equivalent.
 - c) The SWPPP must include an O&M plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post-construction *SMP*. The SWPPP must identify the entity that will be responsible for the long-term operation and maintenance of each practice.

- d. In the *SWMP Plan*, document and update annually the names, titles, and contact information for the individuals who have received the trainings listed in Part VII.D.6.a.
- e. In the *SWMP Plan*, document the SWPPP review including the information found in Part III.B. of the CGP;
- f. Prioritize new *construction activities* (Part VII.D.5.a.); and
- g. Notify construction site owner/operators that their SWPPP has been accepted using the *MS4 SWPPP Acceptance Form*⁵² created by the *Department* and required by the CGP, signed in accordance with Part X.J.

7. Pre-Construction Meeting

Prior to commencement of *construction activities*, the *MS4 Operator* must ensure a pre-construction meeting is conducted. The date and content of the pre-construction inspection/meeting must be documented in the *SWMP Plan*. The owner/operator listed on the CGP NOI (if different from the *MS4 Operator*), the *MS4 Operator*, contractor(s) responsible for implementing the SWPPP for the *construction activity*, and the *qualified inspector* (if required for the *construction activity* by Part IV.C. the CGP) must attend the meeting in order to:

- a. Confirm the approved project has received, or will receive⁵³, coverage under the CGP or an individual *SPDES* permit;
- b. Verify contractors and subcontractors selected by the owner/operator of the *construction activity* have identified at least one individual that has received four (4) hours of *Department* endorsed training in proper erosion and sediment control principles from a Soil & Water Conservation District or other endorsed entity as required by the CGP and Part VII.D.3.d; and
- c. Review the construction oversight program (Part VII.D.3.) and expectations for compliance.

8. Construction Site Inspections

The *MS4 Operator* must:

- a. Ensure individuals(s), responsible for construction site inspections, receive:
 - i. Four (4) hours of *Department* endorsed training in proper erosion and sediment control principles from a Soil & Water Conservation District, or other *Department* endorsed entity. This training must be complete, within three (3) years of the EDC and every three (3) years thereafter.
 - ii. Document the completion of this requirement in the *SWMP Plan*.

⁵² The *MS4 SWPPP Acceptance Form* can be found on the Department's website.

⁵³ Preconstruction meetings may occur prior to the issuance of the *MS4 SWPPP Acceptance Form*, however, the *MS4 Operator* must confirm coverage under the CGP will be applied for by the construction site owner/operator prior to commencement of construction of *construction activities*.

- b. Ensure all *MS4* Construction Site Inspectors receive this training prior to conducting construction site inspections.
 - i. Individuals without these trainings cannot inspect construction sites.
 - ii. Individuals who meet the definition of a *qualified professional* or *qualified inspector* are exempt from this requirement.
- c. Annually inspect all sites with *construction activity* identified in the inventory (Part VII.D.4.) during active construction after the pre-construction meeting (Part VII.D.7.), or sooner if deficiencies are noted that require attention.
 - i. Follow up to construction site inspections must confirm corrective actions are completed within timeframes established by the CGP and the *MS4 Operator's ERP* (Part IV.F.1.).
- d. In the *SWMP Plan*, document and update annually the names, titles, and contact information for the individuals who have received the trainings listed in Part VII.D.8.a.
- e. Document all inspections using the Construction Site Inspection Report Form (Appendix D) or an equivalent form containing the same information. The *MS4 Operator* must include the completed Construction Site Inspection Reports in the *SWMP Plan*.

9. Construction Site Close-out

- a. The *MS4 Operator* must ensure a final construction site inspection is conducted and documentation of the final construction site inspection must be maintained in the *SWMP Plan*. The final construction site inspection must be documented using the Construction Site Inspection Report Form (Appendix D), or an equivalent form containing the same information, or accept the construction site owner/operator's *qualified inspector* final inspection certification required by the CGP.
- b. The Notice of Termination (NOT)⁵⁴ must be signed by the *MS4 Operator* as required by the CGP for projects determined to be complete. The NOT must be signed in accordance with Part X.J.

E. MCM 5 – Post-Construction Stormwater Management

The *MS4 Operator* must *develop*, implement, and enforce a program to ensure proper operation and maintenance of post-construction *SMPs* for new or redeveloped sites. This MCM is designed to promote the long-term performance of post-construction *SMPs* in removing *pollutants* from *stormwater* runoff.

⁵⁴ The NOT can be found on the Department's website.

1. Applicable Post-Construction SMPs

The post-construction *SMP program* must address *stormwater* runoff to the *MS4* from *publicly owned/operated* post-construction *SMPs* that meet the following:

- a. Post-construction *SMPs* that have been installed as part of any CGP covered construction site or individual *SPDES* permit (since March 10, 2003); and
- b. All new post-construction *SMPs* constructed as part of the construction site *stormwater* runoff control program (Part VII.D.).

2. Post-Construction *SMP* Inventory & Inspection Tracking⁵⁵

- a. The *MS4 Operators* continuing coverage must:
 - i. Maintain the inventory from previous iterations of this *SPDES* general permit for post-construction *SMPs* installed after March 10, 2003; and
 - ii. *Develop* the inventory for post-construction *SMPs* installed after March 10, 2003 including post-construction *SMPs*:
 - a) As they are approved or discovered; or
 - b) After the owner/operator of the *construction activity* has filed the NOT with the *Department* (Part VII.D.9.b.).
- b. The newly designated *MS4 Operators* must *develop* and maintain the inventory for post-construction *SMPs* installed after March 10, 2003 including post-construction *SMPs*:
 - i. As they are approved or discovered; or
 - ii. After the owner/operator of the *construction activity* has filed the NOT with the *Department* (Part VII.D.9.b.).
- c. Annually, the *MS4 Operator* must update the inventory of post-construction *SMPs* to include the post-construction *SMPs* in Part VII.E.2.a. and Part VII.E.2.b.
- d. Within five (5) years of the EDC, the following information must be included in the inventory either by using the *MS4 Operator* maintenance records or by verification of maintenance records provided by the owner of the post-construction *SMP*:
 - i. Street address or tax parcel;
 - ii. Type;⁵⁶
 - iii. Receiving waterbody name and class (mapped in accordance with Part IV.D.1.e.ii.a));

⁵⁵ Post-construction *SMPs* can be found at a *municipal facility*.

⁵⁶ Post-construction *SMP* types are defined in the New York State Department of Environmental Conservation Maintenance Guidance: Stormwater Management Practices, March 31, 2017 (NYS DEC Maintenance Guidance 2017).

- iv. Receiving waterbody WI/PWL Segment ID (mapped in accordance with Part IV.D.1.e.ii.b));
 - v. Date of installation (if available) or discovery;
 - vi. Ownership;
 - vii. Responsible party for maintenance;
 - viii. Contact information for party responsible for maintenance;
 - ix. Location of documentation depicting O&M requirements and legal agreements for post-construction *SMP*;
 - x. Frequency for inspection of post-construction *SMP*, as specified in the New York State Department of Environmental Conservation Maintenance Guidance: Stormwater Management Practices, March 31, 2017 (NYS DEC Maintenance Guidance 2017) or as specified in the O&M plan contained in the approved SWPPP (Part VII.D.6.);
 - xi. Reason for installation (e.g., new development, redevelopment, *retrofit*, flood control), if known;
 - xii. Date of last inspection;
 - xiii. Inspection results; and
 - xiv. Any corrective actions identified and completed.
- e. *MS4 Operators* must document the inventory of post-construction *SMPs* in the *SWMP Plan*.

3. SWPPP Review

For post-construction *SMP* SWPPP review requirements, see Part VII.D.6.

4. Post-Construction *SMP* Inspection & Maintenance Program

Within one (1) year of the EDC, the *MS4 Operator* must *develop* and implement a post-construction *SMP* inspection and maintenance program. The post-construction *SMP* inspection and maintenance program must be documented in the *SWMP Plan* specifying:

- a. The post-construction *SMP* inspection and maintenance procedures including:
 - i. Provisions to ensure that each post-construction *SMP* identified in the post-construction *SMP* inventory (Part VII.E.2.) is inspected at the frequency specified in the NYS DEC Maintenance Guidance 2017 or as specified in the O&M plan contained in the approved SWPPP (Part VII.D.6.), if available;

- ii. Documentation of post-construction *SMP* inspections using the Post-Construction *SMP* Inspection Checklist⁵⁷ or an equivalent form containing the same information. The *MS4 Operator* must include the completed post-construction *SMP* inspections (i.e., the completed Post-Construction *SMP* Inspection Checklist) in the *SWMP Plan*;
 - iii. Provisions to initiate follow-up actions (i.e., maintenance, repair, or higher-level inspection) within thirty (30) days of post-construction *SMP* inspection; and
 - iv. Provisions to initiate enforcement within sixty (60) days of the inspection if follow-up actions are not complete.
- b. The training provisions for the *MS4 Operator's* post-construction *SMP* inspection and maintenance procedures (Part VII.E.4.a.).
 - i. If new staff are added, training on the *MS4 Operator's* post-construction *SMP* inspection and maintenance procedures (Part VII.E.4.a.) and procedures outlined in the *Department* endorsed program must be given prior to conducting any post-construction *SMP* inspection and maintenance;
 - ii. For existing staff, training on the *MS4 Operator's* post-construction *SMP* inspection and maintenance procedures (Part VII.E.4.a.) and procedures outlined in the *Department* endorsed program must be given prior to conducting any post-construction *SMP* inspection and maintenance and once every five (5) years, thereafter; and
 - iii. If the post-construction *SMP* inspection and maintenance procedures (Part VII.E.4.a.) are updated (Part VII.E.4.d.), training on the updates must be given to all staff prior to conducting post-construction *SMP* inspection and maintenance.
- c. The names, titles, and contact information for the individuals who have received post-construction *SMP* inspection and maintenance procedures training and update annually; and
- d. Annually, by April 1, the *MS4 Operator* must:
 - i. Review and update the post-construction *SMP* inspection and maintenance procedures (Part VII.E.4.a.); and
 - ii. Document the completion of this requirement in the *SWMP Plan*.

F. MCM 6 – Pollution Prevention and Good Housekeeping

The *MS4 Operator* must *develop* and implement a pollution prevention and good housekeeping program for *municipal facilities* and *municipal operations* to minimize

⁵⁷ The *Department* developed checklist forms specific to each post-construction *SMP* designed to assist *MS4 Operators* in conducting inspections and maintenance activities of standard practices. The Post-Construction *SMP* Inspection Checklist, March 31, 2017, can be found on the *Department's* website.

pollutant discharges. This MCM is designed to ensure the *MS4 Operator's* own activities do not contribute *pollutants* to *surface waters of the State*.

1. **Best Management Practices (BMPs) for Municipal Facilities & Operations**

Within three (3) years of the EDC, the *MS4 Operator* must incorporate *best management practices (BMPs)* into the *municipal facility* program and *municipal operations* program to minimize the *discharge* of *pollutants* associated with *municipal facilities* and *municipal operations*, respectively. The *BMPs* to be considered are as follows and must be documented in the *SWMP Plan*:

a. Minimize Exposure

- i. Exposure of materials to rain, snow, snowmelt, and runoff must be minimized, unless not technologically possible or not economically practicable and achievable in light of best industry practices, including areas used for loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations, with the following *BMPs*:
 - a) Locate materials and activities inside or protect them with storm resistant coverings;
 - b) Use grading, berming, or curbing to prevent runoff of contaminated flows and divert run-on away from these areas;
 - c) Locate materials, equipment, and activities so leaks and spills are contained in existing containment and diversion systems;
 - d) Clean up spills and leaks promptly using dry methods (e.g., absorbents) to prevent the *discharge* of *pollutants*;
 - e) Store leaky vehicles and equipment indoors or, if stored outdoors, use drip pans and absorbents;
 - f) Use spill/overflow protection equipment;
 - g) Perform all vehicle and/or equipment cleaning operations indoors, under cover, or in bermed areas that prevent runoff and run-on and also captures any overspray;
 - h) Drain fluids, indoors or under cover, from equipment and vehicles that will be decommissioned, and, for any equipment and vehicles that will remain unused for extended periods of time, inspect at least monthly for leaks; and/or
 - i) Minimize exposure of chemicals by replacing with a less toxic alternative (e.g., use non-hazardous cleaners).
- ii. *No Exposure* Certification for High Priority *Municipal Facilities*
 - a) *Municipal facilities* may qualify for *No Exposure* Certification (Appendix D) when all activities and materials are completely sheltered from exposure to rain, snow, snowmelt and/or runoff.

- b) High priority *municipal facilities* (Part VII.F.2.c.i.a)) with uncovered parking areas for vehicles awaiting maintenance may be considered a low priority *municipal facility* (Part VII.F.2.c.i.c)) if only routine maintenance is performed inside and all other no *exposure* criteria are met.
- c) *Municipal facilities* accepting or repairing disabled vehicles and/or vehicles that have been involved in accidents are not eligible for the *No Exposure Certification*.
- d) *Municipal facilities* must maintain the *No Exposure Certification* and document in the *SWMP Plan*. The *No Exposure Certification* ceases to apply when activities or materials become exposed.

b. Follow a Preventive Maintenance Program

- i. Implement a preventative maintenance program that includes routine inspection, testing, maintenance, and repair of all fueling areas, vehicles and equipment and systems to prevent leaks, spills and other releases. This includes:
 - a) Performing inspections and preventive maintenance of *stormwater* drainage, source controls, treatment systems, and plant equipment and systems;
 - b) Maintaining non-structural *BMPs* (e.g., keep spill response supplies available, personnel appropriately trained, containment measures, covering fuel areas); and
 - c) Ensure vehicle washwater is not *discharged* to the *MS4* or to *surface waters of the State*. Wash equipment/vehicles in a designated and/or covered area where washwater is collected to be recycled or *discharged* to the sanitary sewer (Part I.B.2.d.).
- ii. Routine maintenance must be performed to ensure *BMPs* are operating properly.
- iii. When a *BMP* is not functioning to its designed effectiveness and needs repair or replacement:
 - a) Maintenance must be performed before the next anticipated storm event, or as necessary to maintain the continued effectiveness of *stormwater* controls. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable; and
 - b) Interim measures must be taken to prevent or minimize the *discharge* of *pollutants* until the final repair or replacement is implemented, including cleaning up any contaminated surfaces so that the material will not be *discharged* during subsequent storm events.

c. Spill Prevention and Response Procedures

- i. Minimize the potential for leaks, spills and other releases that may be exposed to *stormwater* and *develop* plans for effective response to such spills if or when they occur. At a minimum, the *MS4 Operator* must:
 - a) Store materials in appropriate containers;
 - b) Label containers (e.g., “Used Oil,” “Spent Solvents,” “Fertilizers and Pesticides”) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur;
 - c) Implement procedures for material storage and handling, including the use of secondary containment and barriers between material storage and traffic areas, or a similarly effective means designed to prevent the *discharge* of *pollutants* from these areas;
 - d) *Develop* procedures for stopping, containing, and cleaning up leaks, spills, and other releases. As appropriate, execute such procedures as soon as possible;
 - e) Keep spill kits on-site, located near areas where spills may occur or where a rapid response can be made;
 - f) *Develop* procedures for notification of the appropriate facility personnel, emergency response agencies, and regulatory agencies when a leak, spill, or other release occurs. If possible, one of these individuals should be a member of the *stormwater* pollution prevention team (Part VII.F.2.d.i.a)). Any spills must be reported in accordance with 6 NYCRR 750-2.7; and
 - g) Following any spill or release, the *MS4 Operator* must evaluate the adequacy of the *BMPs* identified in the *municipal facility* specific SWPPP. If the *BMPs* are inadequate, the SWPPP must be updated to identify new *BMPs* that will prevent reoccurrence and improve the emergency response to such releases.
- ii. Measures for cleaning up spills or leaks must be consistent with applicable petroleum bulk storage, chemical bulk storage, or hazardous waste management regulations at 6 NYCRR Parts 596-599, 613 and 370-373.
- iii. This *SPDES* general permit does not relieve the *MS4 Operator* of any reporting or other requirements related to spills or other releases of petroleum or hazardous substances. Any spill of a hazardous substance must be reported in accordance with 6 NYCRR 597.4. Any spill of petroleum must be reported in accordance with 6 NYCRR 613.6 or 17 NYCRR 32.3.

d. Erosion and Sediment Controls⁵⁸

- i. Stabilize exposed areas and control runoff using structural and/or non-structural controls to minimize onsite erosion and sedimentation.

⁵⁸ The use of the term “controls” in Part VII.F.1.d. aligns with the use of the term “controls” in the CGP.

- ii. The *MS4 Operator* must consider:
 - a) Structural and/or non-structural controls found in the NYS E&SC 2016;
 - b) Areas that, due to topography, land disturbance (e.g., construction), or other factors, have potential for significant soil erosion;
 - c) Whether structural, vegetative, and/or stabilization *BMPs* are needed to limit erosion;
 - d) Whether velocity dissipation devices (or equivalent measures) are needed at *discharge* locations and along the length of any channel to provide a non-erosive flow velocity from the structure to a water course; and
 - e) Address erosion or areas with poor vegetative cover, especially if the erosion is within fifty (50) feet of a *surface water of the State*.

e. Manage Vegetated Areas and Open Space on *Municipal Property*

- i. Maintain vegetated areas on *MS4 Operator* owned/operated property and right of ways:
 - a) Specify proper use, storage, and disposal of pesticides, herbicides, and fertilizers including minimizing the use of these products and using only in accordance manufacturer's instruction;
 - b) Use lawn maintenance and landscaping practices that are protective of water quality. Protective practices include: reduced mowing frequencies; proper disposal of lawn clippings; and use of alternative landscaping materials (e.g., drought resistant planting);
 - c) Place pet waste disposal containers and signage concerning the proper collection and disposal of pet waste at all parks and open space where pets are permitted; and
 - d) Address waterfowl congregation areas where needed to reduce waterfowl droppings from entering the *MS4*.

f. Salt⁵⁹ Storage Piles or Pile Containing Salt

Enclose or cover storage piles of salt, or piles containing salt, used for deicing or maintenance of paved surfaces, except during loading, unloading, and handling. Implement appropriate measures (e.g., good housekeeping, routine sweeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile.

g. Waste, Garbage, and Floatable Debris

- i. Keep all dumpster lids closed when not in use. For dumpsters and roll off boxes that do not have lids and could leak, ensure that *discharges* have a control (e.g., secondary containment, treatment); and

⁵⁹ For purposes of this *SPDES* general permit, salt means any chloride-containing material used to treat paved surfaces for deicing, including sodium chloride, calcium chloride, magnesium chloride, and brine solutions.

- ii. Keep exposed areas free of waste, garbage, and debris or intercept them before they are *discharged*:
 - a) Manage trash containers at parks and open space (scheduled cleanings; sufficient number);
 - b) Pick up trash and debris on *MS4 Operator* owned/operated property and rights of way; and
 - c) Clean out *catch basins* within the appropriate timeframes (Part VII.F.3.c.iii.).

h. Alternative Implementation Options

When alternative implementation options (Part IV.A.1.) are utilized, require the parties performing *municipal operations* as contracted services, including but not limited to street sweeping, snow removal, and lawn/grounds care, to meet permit requirements as the requirements apply to the activity performed.

2. *Municipal Facilities*⁶⁰

a. *Municipal Facility Program*

Within three (3) years of the EDC, the *MS4 Operator* must *develop* and implement a *municipal facility* program. The *municipal facility* program must be documented in the *SWMP Plan* specifying:

- i. The *municipal facility* procedures including:
 - a) The *BMPs* (Part VII.F.1.) incorporated into the *municipal facility* program;
 - b) The high priority *municipal facility* requirements (Part VII.F.2.d.) as applied to the specific *municipal facility*; and
 - c) The low priority *municipal facility* requirements (Part VII.F.2.e.) as applied to the specific *municipal facility*.
- ii. The training provisions for the *MS4 Operator's municipal facility* procedures (Part VII.F.2.a.i.).
 - a) If new staff are added, training on the *MS4 Operator's municipal facility* procedures (Part VII.F.2.a.i.) must be given prior to conducting *municipal facility* procedures;
 - b) For existing staff, training on the *MS4 Operator's municipal facility* procedures (Part VII.F.2.a.i.) must be given prior to conducting *municipal facility* procedures and once every five (5) years, thereafter; and

⁶⁰ *Municipal facilities* that have coverage under a separate *SPDES* permit (either individual or MSGP) must comply with the terms and conditions of that permit and the requirements set forth in this Part are not applicable.

- c) If the *municipal facility* procedures (Part VII.F.2.a.i.) are updated (Part VII.F.2.a.iv.), training on the updates must be given to all staff prior to conducting *municipal facility* procedures.
- iii. The names, titles, and contact information for the individuals who have received *municipal facility* training and update annually; and
- iv. Annually, by April 1, the *MS4 Operator* must:
 - a) Review and update the *municipal facility* procedures (Part VII.F.2.a.i.); and
 - b) Document the completion of this requirement in the *SWMP Plan*.

b. *Municipal Facility Inventory*

- i. Within two (2) years of the EDC, the *MS4 Operator* must *develop* and maintain an inventory of all *municipal* facilities in the *SWMP Plan*. The following information must be included in the inventory:
 - a) Name of *municipal facility*;
 - b) Street address;
 - c) Type of *municipal facility*;
 - d) Prioritization (high or low) (Part VII.F.2.c.);
 - e) Receiving waterbody name and class (mapped in accordance with Part IV.D.1.e.ii.a));
 - f) Receiving waterbody WI/PWL Segment ID (mapped in accordance with Part IV.D.1.e.ii.b));
 - g) Contact information;
 - h) Responsible department;
 - i) Location of SWPPP (if high priority; when completed);
 - j) Type of activities present on site;
 - k) Size of facility (acres);
 - l) Date of last assessment;
 - m) *BMPs* identified; and
 - n) Projected date of next comprehensive site assessment (Part VII.F.2.d.ii.c) or Part VII.F.2.e.ii.c), depending on the *municipal facility* prioritization (Part VII.F.2.c.)).
- ii. Annually, the *MS4 Operator* must update the inventory if new *municipal* facilities are added.

c. *Municipal Facility Prioritization*

- i. Within three (3) years of the EDC, the *MS4 Operator* must prioritize all known *municipal* facilities as follows:

- a) High priority *municipal* facilities include *municipal* facilities that have one or more of the following on site and exposed to *stormwater*:
 - i) Storage of chemicals, salt, petroleum, pesticides, fertilizers, anti-freeze, lead-acid batteries, tires, waste/debris;
 - ii) Fueling stations; and/or
 - iii) Vehicle or equipment maintenance/repair.
- b) Low priority *municipal* facilities include any *municipal* facilities that do not meet the criteria for a high priority (Part VII.F.2.c.i.a)) *municipal facility*.
- c) High priority *municipal* facilities (Part IV.F.2.c.i.a)) which qualify for a *No Exposure* Certification (Part VII.F.1.a.ii.) are low priority *municipal* facilities.
- ii. Within thirty (30) days of when a *municipal facility* is added to the inventory, the *MS4 Operator* must prioritize those *municipal* facilities; and
- iii. Annually, after the initial prioritization (Part VII.F.2.c.i.), the *MS4 Operator* must update the *municipal facility* prioritization in the inventory (Part VII.F.2.b.i.) based on information gathered as part of the *municipal facility* program (Part VII.F.2.a.), including cases where a *No Exposure* Certification (Part VII.F.1.a.ii.) ceases to apply. The completion of this permit requirement must be documented in the *SWMP Plan*.

d. High Priority *Municipal Facility* Requirements

i. *Municipal Facility Specific SWPPP*

Within five (5) years of the EDC, *MS4 Operators* must *develop* and implement a *municipal facility* specific SWPPP for each high priority *municipal facility* (Part VII.F.2.c.i.a)) and retain a copy of the *municipal facility* specific SWPPP on site of the respective *municipal facility*. The SWPPP must contain:

a) *Stormwater* Pollution Prevention Team

The *municipal facility* specific SWPPP must identify the individuals (by name and/or title) and their role/responsibilities in *developing*, implementing, maintaining, and revising the *municipal facility* specific SWPPP. The activities and responsibilities of the team must address all aspects of the *municipal facility* specific SWPPP.

b) General Site Description

A written description of the nature of the activities occurring at the *municipal facility* with a potential to *discharge pollutants*, type of *pollutants* expected, and location of key features as detailed in the site map (Part VII.F.2.d.i.e)).

c) Summary of potential *pollutant* sources

The *municipal facility* specific SWPPP must identify each area at the *municipal facility* where materials or activities are exposed to *stormwater* or from which authorized non-*stormwater discharges* (Part I.A.3.) originate, including any potential *pollutant* sources for which the *municipal facility* has reporting requirements under the Emergency Planning and Community Right-To-Know Act (EPCRA), Section 313.

- i) Materials or activities include: machinery; raw materials; intermediate products; byproducts; final products or waste products; and material handling activities which includes storage, loading and unloading, transportation or conveyance of any raw material, intermediate product, final product or waste product.
- ii) For each separate area identified, the description must include:
 - (a) Activities - A list of the activities occurring in the area (e.g., material storage, equipment fueling and cleaning);
 - (b) Pollutants - A list of the associated *pollutant(s)* for each activity. The *pollutant(s)* list must include all materials that are exposed to *stormwater*, and
 - (c) Potential for presence in *stormwater* - For each area of the *municipal facility* that generates *stormwater discharges*, a prediction of the direction of flow, and the likelihood of the activity to contaminate the *stormwater discharge*. Factors to consider include the toxicity of chemicals, quantity of chemicals used, produced or *discharged*, the likelihood of contact with *stormwater*, and history of leaks or spills of toxic or hazardous *pollutants*.

d) Spills and Releases

For areas that are exposed to precipitation or that otherwise drain to a *stormwater* conveyance to be covered under this *SPDES* general permit, the *municipal facility* specific SWPPP must include a list of spills or releases⁶¹ of petroleum and hazardous substances or other *pollutants*, including unauthorized *non-stormwater discharges*, that may adversely affect water quality that occurred during the last three-year period. The list must be updated when spills or releases occur.

e) Site Map

The *municipal facility* specific SWPPP must include a site map identifying the following, as applicable:

- i) Property boundaries and size in acres;

⁶¹ This may also include releases of petroleum or hazardous substances that are not in excess of reporting quantities but which may still cause or contribute to significant water quality impairment.

- ii) Location and extent of significant structures (including materials shelters), and impervious surfaces;
- iii) Monitoring locations (mapped in accordance with Part IV.D.2.a.i.) with its approximate *sewershed*. Each monitoring location must be labeled with the monitoring location identification;
- iv) Location of all post-construction *SMPs* (mapped in accordance with Part IV.D.2.a.iv.) and *MS4* infrastructure (mapped in accordance with Part IV.D.2.b.i.);
- v) Locations of *discharges* authorized under other *SPDES* permits;
- vi) Locations where potential spills or releases can contribute to *pollutants* in *stormwater discharges* and their accompanying drainage points;
- vii) Locations of haul and access roads;
- viii) Rail cars and tracks;
- ix) Arrows showing direction of *stormwater* flow;
- x) Location of all receiving waters in the immediate vicinity of the *municipal facility*, indicating if any of the waters are impaired and, if so, whether the waters have *TMDLs* established for them (mapped in accordance with Part IV.D.1.e.ii.);
- xi) Locations where *stormwater* flows have significant potential to cause erosion;
- xii) Location and source of run-on from adjacent property containing significant quantities of *pollutants* and/or volume of concern to the *municipal facility*; and
- xiii) Locations of the following areas where such areas are exposed to precipitation or *stormwater*:
 - (a) Fueling stations;
 - (b) Vehicle and equipment maintenance and/or cleaning areas;
 - (c) Loading/unloading areas;
 - (d) Locations used for the treatment, storage or disposal of wastes;
 - (e) Liquid storage tanks;
 - (f) Processing and storage areas;
 - (g) Locations where significant materials, fuel or chemicals are stored and transferred;
 - (h) Locations where vehicles and/or machinery are stored when not in use
 - (i) Transfer areas for substances in bulk;
 - (j) Location and description of non-*stormwater discharges* (Part I.A.3.);

- (k) Locations where spills⁶² or leaks have occurred; and
- (l) Locations of all existing structural *BMPs*.

f) *Stormwater Best Management Practices (BMPs)*

The *municipal facility* specific SWPPP must document the location and type of *BMPs* implemented at the *municipal facility* (Part VII.F.1). The *municipal facility* specific SWPPP must describe how each *BMP* is being implemented for all the potential *pollutant* sources.

g) *Municipal facility* assessments

The *municipal facility* specific SWPPP must include a schedule for completing and recording results of routine and comprehensive site assessments (Part VII.F.2.d.ii.c)).

ii. *Municipal Facility Assessments*

a) Wet Weather Visual Monitoring

- i) Once every five (5) years, the *MS4 Operator* must conduct wet weather visual monitoring of the monitoring locations (Part VII.C.1.b.) and other sites of *stormwater* leaving the site that are *discharging stormwater* from fueling areas, storage areas, vehicle and equipment maintenance/fueling areas, material handling areas and similar potential *pollutant* generating areas (Part VII.F.2.d.i.e)xiii)).

- (a) All samples must be collected from *discharges* resulting from a *qualifying storm event*. The storm event must be documented using the Storm Event Data Form (Appendix D) and kept with the *municipal facility* specific SWPPP. The sample must be taken during the first thirty (30) minutes (or as soon as practical, but not to exceed one hour) of the *discharge* at the monitoring location.
- (b) No analytical tests are required to be performed on the samples for the purpose of meeting the visual monitoring requirements.
- (c) The visual examination must document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and any other obvious indicators of *stormwater* pollution.
- (d) The visual examination of the sample must be conducted in a well-lit area.
- (e) Where practicable, the same individual should carry out the collection and examination of *discharges* for the entire permit term for consistency.

⁶² A spill includes: any spill of a hazardous substance that must be reported in accordance with 6 NYCRR 597.4 and any spill of petroleum that must be reported in accordance with 6 NYCRR 613.6 or 17 NYCRR 32.3.

- (f) The *MS4 Operator* must document the visual examination using the Visual Monitoring Form (Appendix D) and keep it with the *municipal facility* specific SWPPP to record:
 - (i) Monitoring location ID;
 - (ii) Examination date and time;
 - (iii) Personnel conducting the examination;
 - (iv) Nature of the *discharge* (runoff or snowmelt);
 - (v) Visual quality of the *stormwater discharge* including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of *stormwater* pollution; and
 - (vi) Probable sources of any observed *stormwater* contamination.
 - (vii) Corrective and follow up actions – If the visual examination indicates the presence of color, odor, floating solids, settled solids, suspended solids, foam, oil sheen, or other indicators of *stormwater* pollution, the *MS4 Operator* must, at minimum, complete and document the following actions:
 - (1) Evaluate the facility for potential sources;
 - (2) Remedy the problems identified;
 - (3) Revise the *municipal facility* specific SWPPP; and
 - (4) Perform an additional visual inspection during the first *qualifying storm event* following implementation of the corrective action. If the first *qualifying storm event* does not occur until the next visual monitoring period, this follow up action may be used as the next visual inspection.
- b) The monitoring locations inspection and sampling program must be implemented at the *municipal facility* (Part VII.C.1.e.).
- c) Comprehensive Site Assessments
 - i) Once every five (5) years following the most recent assessment, the *MS4 Operator* must complete a comprehensive site assessment for each high priority *municipal facility* as identified in the inventory (Part VII.F.2.b.) using the Municipal Facility Assessment Form (Appendix D) or an equivalent form containing the same information, and document in the *municipal facility* specific SWPPP and *SWMP Plan* that:

- (a) The *municipal facility* is in compliance with the terms and conditions of this *SPDES* general permit;
- (b) Deficiencies were identified and all reasonable steps will be taken to minimize any *discharge* in violation of the permit, which has a reasonable likelihood of adversely affecting human health or the environment;
 - (i) Within twenty-four (24) hours, the *MS4 Operator* must prepare a schedule that includes corrective actions and specific interim milestones to be implemented until the corrective action is implemented; or
- (c) Deficiencies were identified and all reasonable steps will be taken to minimize any *discharge* in violation of the permit, which does not have a reasonable likelihood of adversely affecting human health or the environment;
 - (i) Within seven (7) days, the *MS4 Operator* must prepare a schedule that includes corrective actions and specific interim milestones to be implemented until the corrective action is implemented.

e. Low Priority *Municipal Facility* Requirements

- i. The *MS4 Operator* must identify procedures outlining *BMPs* for the types of activities that occur at the low priority *municipal facilities* as described in Part VII.F.1. A *municipal facility* specific SWPPP is not required.
- ii. *Municipal Facility* Assessments
 - a) Low priority *municipal facilities* are not required to conduct wet weather visual monitoring.
 - b) The monitoring locations inspection and sampling program must be implemented at the *municipal facility* (Part VII.C.1.e.).
 - c) Comprehensive Site Assessments
 - i) Once every five (5) years following the most recent assessment, the *MS4 Operator* must complete a comprehensive site assessment for each low priority *municipal facility* as identified in the inventory (Part VII.F.2.b.) using the Municipal Facility Assessment Form (Appendix D) or an equivalent form containing the same information, and document in the *SWMP Plan* that:
 - (a) The *municipal facility* is in compliance with the terms and conditions of this *SPDES* general permit;
 - (b) Deficiencies were identified and all reasonable steps will be taken to minimize any *discharge* in violation of the permit, which has a reasonable likelihood of adversely affecting human health or the environment;

- (i) Within twenty-four (24) hours, the *MS4 Operator* must prepare a schedule that includes corrective actions and specific interim milestones to be implemented until the corrective action is implemented; or
- (c) Deficiencies were identified and all reasonable steps will be to minimize any *discharge* in violation of the permit, which does not have a reasonable likelihood of adversely affecting human health or the environment;
- (i) Within seven (7) days, the *MS4 Operator* must prepare a schedule that includes corrective actions and specific interim milestones to be implemented until the corrective action is implemented.

3. *Municipal Operations & Maintenance*

a. *Municipal Operations Program*

Municipal operations are: street and bridge maintenance; winter road maintenance; *MS4* maintenance; open space maintenance; solid waste management; new construction and land disturbances; right-of-way maintenance; marine operations; or hydrologic habitat modification.

Within three (3) years of the EDC, the *MS4 Operator* must *develop* and implement a *municipal operations* program. The *municipal operations* program must be documented in the *SWMP Plan* specifying:

- i. The *municipal operations* procedures including:
 - a) The *BMPs* (Part VII.F.1.) incorporated into the *municipal operations* program;
 - b) The *municipal operations* corrective actions requirements (Part VII.F.3.b.);
 - c) *Catch basin* inspection and maintenance requirements (Part VII.F.3.c.);
 - d) Roads, bridges, parking lots, and right of way maintenance requirements (Part VII.F.3.d.); and
 - e) All other *municipal operations* maintenance requirements.
- ii. The training provisions for the *MS4 Operator's municipal operations* procedures (Part VII.F.3.a.i.).
 - a) If new staff are added, training on the *MS4 Operator's municipal operations* procedures (Part VII.F.3.a.i.) must be given prior to conducting *municipal operations* procedures;
 - b) For existing staff, training on the *MS4 Operator's municipal operations* procedures (Part VII.F.3.a.i.) must be given prior to conducting

municipal operations procedures and once every five (5) years, thereafter; and

- c) If the *municipal operations* procedures (Part VII.F.3.a.i.) are updated (Part VII.F.3.a.iv.), training on the updates must be given to all staff prior to conducting *municipal operations* procedures.
- iii. The names, titles, and contact information for the individuals who have received *municipal operations* training and update annually; and
- iv. Annually, by April 1, the *MS4 Operator* must:
 - a) Review and update the *municipal operations* procedures (Part VII.F.3.a.i.); and
 - b) Document the completion of this requirement in the *SWMP Plan*.

b. *Municipal Operations Corrective Actions*

- i. For *municipal operations*, *MS4 Operators* must either:
 - a) Ensure compliance with the terms and conditions of this *SPDES* general permit; or
 - b) Implement corrective actions according to the following schedule and, after implementation, ensure the operations are in compliance with the terms and conditions of this *SPDES* general permit:
 - i) Within twenty-four (24) hours of discovery for situations that have a reasonable likelihood of adversely affecting human health or the environment;
 - ii) Initiated within seven (7) days of inspection and completed within thirty (30) days of inspection for situations that do not have a reasonable likelihood of adversely affecting human health or the environment; and
 - iii) For corrective actions that require special funding or construction that will take longer than thirty (30) days to complete, a schedule must be prepared that specifies interim milestones that will ensure compliance in the shortest reasonable time.

c. *Catch Basin Inspection and Maintenance*

Within three (3) years of the EDC, the *MS4 Operator* must:

- i. Identify when *catch basin* inspection is needed with consideration for:
 - a) Areas with *construction activities* (mapped in accordance with Part IV.D.2.a.iii.);
 - b) Residential, commercial, and industrial areas (mapped in accordance with Part IV.D.1.d.iii.);
 - c) Recurring or history of issues; or

- d) Confirmed citizen complaints on three or more separate occasions in the last twelve (12) months.
- ii. Inventory *catch basin* inspection information including:
 - a) Date of inspection;
 - b) Approximate level of trash, sediment, and/or debris captured at time of clean-out (no trash, sediment, and/or debris, <50% of the depth of the *sump*, >50% of the depth of the *sump*);
 - c) Depth of structure;
 - d) Depth of *sump*; and
 - e) Date of clean out, if applicable (Part VII.F.3.c.iii.).
- iii. Based on inspection results, clean out *catch basins* within the following timeframes:
 - a) Within six (6) months after the *catch basin* inspection, *catch basins* which had trash, sediment, and/or debris exceeding 50% of the depth of the *sump* as a result of a *catch basin* inspection must be cleaned out;
 - b) Within one (1) year after the *catch basin* inspection, *catch basins* which had trash, sediment, and/or debris at less than 50% of the depth of the *sump* as a result of a *catch basin* inspection must be cleaned out; and
 - c) MS4 Operators are not required to clean out *catch basins* if the *catch basins* are operating properly and:
 - i. There is no trash, sediment, and/or debris in the *catch basin*; or
 - ii. The *sump* depth of the *catch basin* is less than or equal to two (2) feet.
- iv. Properly manage (handling and disposal) materials removed from *catch basins* during clean out so that:
 - a) Water removed during the *catch basin* cleaning process will not reenter the *MS4* or *surface waters of the State*;
 - b) Material removed from *catch basins* is disposed of in accordance with any applicable environmental laws and regulations; and
 - c) Material removed during the *catch basin* cleaning process will not reenter the *MS4* or *surface waters of the State*.
- v. Determine if there are signs/evidence of *illicit discharges* and procedures for referral/follow-up if *illicit discharges* are encountered.

d. Roads, Bridges, Parking Lots, & Right of Way Maintenance

i. Sweeping

Within six (6) months of the EDC, the *MS4 Operator* must *develop* and implement procedures for sweeping and/or cleaning *municipal* streets, bridges, parking lots, and right of ways owned/operated by the *MS4 Operator*. The procedures and completion of permit requirements must be documented in the *SWMP Plan* specifying:

- a) All roads, bridges, parking lots, and right of ways must be swept and/or cleaned once every five (5) years in the spring (following winter activities such as sanding). This requirement is not applicable to:
 - i) Uncurbed roads with no *catch basins*;
 - ii) High-speed limited access highways; or
 - iii) Roads defined as interstates, freeways and expressways, or arterials by the United States Department of Transportation, Federal Highway Administration, Highway Functional Classification Concepts, Criteria and Procedures, 2013.
- b) Annually, from April 1 through October 31, roads in business and commercial areas must be swept. This requirement is not applicable to:
 - i) Uncurbed roads with no *catch basins*;
 - ii) High-speed limited access highways; or
 - iii) Roads defined as interstates, freeways and expressways, or arterials by the USDOT 2013.

ii. Maintenance

Within five (5) years of the EDC, in addition to the *BMPs* (Part VII.F.1.), the *MS4 Operator* must implement the following provisions:

- a) Pave, mark, and seal in dry conditions;
- b) Stage road operations and maintenance activity (e.g., patching, potholes) to reduce the potential discharge of pollutants to the *MS4* or *surface waters of the State*;
- c) Restrict the use of herbicides/pesticide application to roadside vegetation; and
- d) Contain *pollutants* associated with bridge maintenance activities (e.g., paint chips, dust, cleaning products, other debris).

iii. Winter Road Maintenance

Within five (5) years of the EDC, in addition to the *BMPs* (Part VII.F.1.), the *MS4 Operator* must implement the following provisions:

- a) Routinely calibrate equipment to control salt/sand application rates; and

- b) Ensure that routine snow disposal activities comply with the Division of Water Technical and Operation Guidance Series 5.1.11, Snow Disposal.⁶³

⁶³ The Division of Water Technical and Operation Guidance Series 5.1.11, Snow Disposal can be found on the Department's website.

Part VIII. Enhanced Requirements for Impaired Waters

Part VIII. requirements must be implemented in addition to the applicable requirements of the six (6) MCMs in Part VI. or Part VII, depending on the *MS4 Operator* type. Part VIII. requirements apply in the *sewersheds* which *discharge* to waters impaired for phosphorus, silt/sediment, pathogens, nitrogen, or floatables (Appendix C). *MS4 outfalls* are in the *automatically designated area*. *ADA MS4 outfalls* are in the *additionally designated area* subject to Criterion 3 of the Additional Designation Criteria (Appendix B).

MS4 Operator's subject to Part VIII. that implement pollutant specific *BMPs* after the EDC but prior to *MS4* infrastructure and *sewershed* mapping can use those *BMPs* to satisfy the permit requirements in this section.

The Part VIII. requirements, applicable to the *POC*, must be incorporated in the *MS4 Operator's SWMP* and *SWMP Plan*.

A. Pollutant Specific BMPs for Phosphorus

Part VIII.A. must be implemented for all phosphorus impaired waters listed in Appendix C.

1. Mapping

In accordance with the timeframes listed below, the *MS4 Operator* must update, in geographic information system (GIS) format with a scale of 1:24,000 or finer, the comprehensive system mapping (Part IV.D.) to include:

- a. Within three (3) years of the EDC, *MS4* infrastructure mapping requirements (Part IV.D.2.b.i.) and *sewersheds* for each:
 - i. *MS4 outfall*; and
 - ii. *ADA MS4 outfall*.
- b. Within three (3) years of the EDC, the following information for each *MS4 outfall*:
 - i. Retail and wholesale plant nurseries (including big box stores);
 - ii. Commercial lawn care facilities; and
 - iii. Golf courses.
- c. Within three (3) years of the EDC, *ADA MS4 outfalls*.

2. Public Education and Outreach

- a. Within six (6) months of the EDC, the *MS4 Operator* must make available information on how the impairment is being addressed by implementation of the *MS4 Operator's* local law or legal mechanism with content equivalent to the model local law (Part IV.E.1 and Part IV.E.2.). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

- b. Following the completion of Part VIII.A.1, twice a year, once from March to August and once from September to February, the *MS4 Operator* must provide educational messages with information specific to phosphorus to the applicable target audiences within the *sewersheds* for impaired waters listed in Appendix C focus area, identified in Part VI.A.1.b. or Part VII.A.1.b, depending on the *MS4 Operator* type. The *SWMP Plan* must be updated with changes made to public education and outreach program (Part VI.A or Part VII.A, depending on the *MS4 Operator* type). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

3. Public Involvement/Participation

No additional requirements.

4. Illicit Discharge Detection and Elimination

Following the completion of Part VIII.A.1, within five (5) years of the EDC, the *MS4 Operator* must include on the *MS4 outfall* inventory (Part VI.C.1.c. or Part VII.C.1.c, depending on the *MS4 Operator* type) the number of each item identified in Part VIII.A.1.b. for each associated *MS4 outfall*.

5. Construction Site Stormwater Runoff Control

For Following the completion of Part VIII.A.1, high priority construction sites must be inspected during active construction after the pre-construction meeting (Part VI.D.7. or Part VII.D.7, depending on the *MS4 Operator* type).

- a. If the *MS4 Operator* is completing the inspection, the construction site must be inspected every ninety (90) days; or
- b. If the *MS4 Operator* utilizes the *qualified inspector's* weekly inspection reports, as required by the CGP, to satisfy this requirement, the *MS4 Operator* must inspect the construction site once every six (6) months, or sooner if any deficiencies are noted that require attention.

MS4 Operators must document the construction site inspections in the *SWMP Plan*.

6. Post-Construction Stormwater Management

No additional requirements.

7. Pollution Prevention and Good Housekeeping

Following the completion of Part VIII.A.1:

- a. Annually, from April 1 through October 31, all streets located in *sewersheds discharging* to phosphorus impaired segments must be swept. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*. This requirement is not applicable to:
 - i. Uncurbed roads with no *catch basins*;

- ii. High-speed limited access highways; or
 - iii. Roads defined as interstates, freeways and expressways, or arterials by the United States Department of Transportation, Federal Highway Administration, Highway Functional Classification Concepts, Criteria and Procedures, 2013.
- b. Within six (6) months of *MS4 outfall* inspection, the *MS4 Operator* must initiate actions to repair all *MS4 outfall* protection and/or bank stability problems identified during the inspection. Repairs must be completed in accordance with the NYS E&SC 2016. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

8. Planned Upgrades to *Municipal Facilities in Sewersheds to Impaired Waters*

Incorporate, where feasible,⁶⁴ cost-effective runoff reduction techniques⁶⁵ during planned *municipal* upgrades including *municipal* right of ways (e.g., bioswales, green streets, porous pavement, replacement of closed drainage with grass swales, replacement of the existing islands in the parking lots with bioretention or curb cuts to route the flow through below-grade infiltration areas or other low-cost improvements that provide runoff treatment or reduction).

B. Pollutant Specific BMPs for Silt/Sediment

Part VIII.B. must be implemented for all silt/sediment impaired waters listed in Appendix C.

1. Mapping

In accordance with the timeframes listed below, the *MS4 Operator* must update, in geographic information system (GIS) format with a scale of 1:24,000 or finer, the comprehensive system mapping (Part IV.D.) to include:

- a. Within three (3) years of the EDC, *MS4* infrastructure mapping requirements (Part IV.D.2.b.i.) and *sewerheds* for each:
 - i. *MS4 outfall*; and
 - ii. *ADA MS4 outfall*.
- b. Within three (3) years of the EDC, facilities with *SPDES* permit coverage under the MSGP with *stormwater discharges* applicable under Sector C, E, L, or J with facility contact.
- c. Within three (3) years of the EDC, *ADA MS4 outfalls*.

⁶⁴ Consideration of feasibility should include type of land use or *municipal operation*, suitability of soils, presence of utilities, potential for exacerbating existing contamination problems, safety issues, maintenance requirements, and expected lifespans of available technologies.

⁶⁵ Runoff reduction techniques can be found in Chapters 4 and 5 of the NYS SWMDM 2015.

2. Public Education and Outreach

- a. Within six (6) months of the EDC, the *MS4 Operator* must make available information on how the impairment is being addressed by implementation of the MS4 Operator's local law or legal mechanism with content equivalent to the model local law (Part IV.E.1 and Part IV.E.2.). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.
- b. Following the completion of Part VIII.B.1, each year of active construction, the *MS4 Operator* must educate individuals involved in *construction activity* (e.g., contractor, subcontractor, qualified inspector, SWPPP reviewers) within the *sewershed* boundary on the use of post-construction *SMPs* that are intended to collect and separate silt and sediment debris from *stormwater* before *discharging* to waters of the State (e.g., sediment forebays) as detailed in the NYS SWMDM 2015. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

3. Public Involvement/Participation

No additional requirements.

4. Illicit Discharge Detection and Elimination

Following the completion of Part VIII.B.1, within five (5) years of the EDC, the MS4 Operator must include on the *MS4 outfall* inventory (Part VI.C.1.c. or Part VII.C.1.c, depending on the MS4 Operator type) the number of each item identified in Part VIII.B.1.b. for each associated *MS4 outfall*.

5. Construction Site Stormwater Runoff Control

Following the completion of Part VIII.B.1, high priority construction sites must be inspected during active construction after the pre-construction meeting (Part VI.D.7. or Part VII.D.7, depending on the *MS4 Operator* type).

- a. If the *MS4 Operator* is completing the inspection, the construction site must be inspected every ninety (90) days; or
- b. If the *MS4 Operator* utilizes the *qualified inspector's* weekly inspection reports, as required by the CGP, to satisfy this requirement, the *MS4 Operator* must inspect the construction site once every six (6) months, or sooner if any deficiencies are noted that require attention.

MS4 Operators must document the construction site inspections in the *SWMP Plan*.

6. Post-Construction Stormwater Management

No additional requirements.

7. Pollution Prevention and Good Housekeeping

Following the completion of Part VIII.B.1:

- a. Annually, from April 1 through October 31, all streets located in *sewersheds discharging* to silt/sediment impaired segments must be swept. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*. This requirement is not applicable to:
 - i. Uncurbed roads with no *catch basins*;
 - ii. High-speed limited access highways; or
 - iii. Roads defined as interstates, freeways and expressways, or arterials by the United States Department of Transportation, Federal Highway Administration, Highway Functional Classification Concepts, Criteria and Procedures, 2013.
- b. For areas within the *sewershed* that are compacted, poorly drained, contain areas of exposed soil, or nutrient deficient, the *MS4 Operator* must:
 - i. Refer to Section 4 of the NYS E&SC 2016 for Soil Stabilization practices, and follow BMP procedures; and
 - ii. *Develop* and implement procedures for watering and maintenance of implemented BMPs appropriate to establish root and vegetative cover, utilizing products which provide critical support to vegetation and soil stabilization.

MS4 Operators must document the completion of this requirement in the *SWMP Plan*.
- c. Within six (6) months of *MS4 outfall* inspection, the *MS4 Operator* must initiate actions to repair all *MS4 outfall* protection and/or bank stability problems identified during the inspection. Repairs must be completed in accordance with the NYS E&SC 2016. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

8. Planned Upgrades to *Municipal Facilities in Sewersheds to Impaired Waters*

Incorporate, where feasible,⁶⁶ cost-effective runoff reduction techniques⁶⁷ during planned *municipal* upgrades including *municipal* right of ways (e.g., bioswales, green streets, porous pavement, replacement of closed drainage with grass swales, replacement of the existing islands in the parking lots with bioretention or curb cuts to route the flow through below-grade infiltration areas or other low-cost improvements that provide runoff treatment or reduction).

⁶⁶ Consideration of feasibility should include type of land use or *municipal operation*, suitability of soils, presence of utilities, potential for exacerbating existing contamination problems, safety issues, maintenance requirements, and expected lifespans of available technologies.

⁶⁷ Runoff reduction techniques can be found in Chapters 4 and 5 of the NYS SWMDM 2015.

C. Pollutant Specific BMPs for Pathogens

Part VIII.C. must be implemented for all pathogen impaired waters listed in Appendix C.

1. Mapping

In accordance with the timeframes listed below, the *MS4 Operator* must update, in geographic information system (GIS) format with a scale of 1:24,000 or finer, the comprehensive system mapping (Part IV.D.) to include:

- a. Within three (3) years of the EDC, *MS4* infrastructure mapping requirements (Part IV.D.2.b.i.) and *sewersheds* for each:
 - i. *MS4 outfall*; and
 - ii. *ADA MS4 outfall*.
- b. Within three (3) years of the EDC, the following information for each *MS4 outfall*:
 - i. Areas with a history of sanitary sewer overflows;
 - ii. Waterfowl congregation areas on *municipal* property or right of way;
 - iii. Areas where pets/domestic animals may frequent (i.e., public trails, dog parks, and zoos); and
 - iv. Waste disposal areas (e.g., active landfills, transfer stations).
- c. Within three (3) years of the EDC, *ADA MS4 outfalls*.

2. Public Education and Outreach

- a. Within six (6) months of the EDC, the *MS4 Operator* must make available information on any how the impairment is being addressed by implementation of the *MS4 Operator's* local law or legal mechanism with content equivalent to the model local law (Part IV.E.1 and Part IV.E.2.). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.
- b. Following the completion of Part VIII.C.1, twice a year, once from March to August and once from September to February, the *MS4 Operator* must provide educational messages with information specific to pathogens to the applicable target audiences within the *sewersheds* for impaired waters listed in Appendix C focus area, identified in Part VI.A.1.b. or Part VII.A.1.b, depending on the *MS4 Operator* type. The *SWMP Plan* must be updated with changes made to public education and outreach program (Part VI.A. or Part VII.A, depending on the *MS4 Operator* type). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

3. Public Involvement/Participation

No additional requirements.

4. *Illicit Discharge Detection and Elimination*

Following the completion of Part VIII.C.1, within five (5) years of the EDC, the MS4 Operator must include on the *MS4 outfall* inventory (Part VI.C.1.c. or Part VII.C.1.c, depending on the MS4 Operator type) the number of each item identified in Part VIII.C.1.b. for each associated *MS4 outfall*.

5. *Construction Site Stormwater Runoff Control*

No additional requirements.

6. *Post-Construction Stormwater Management*

No additional requirements.

7. *Pollution Prevention and Good Housekeeping*

Following the completion of Part VIII.C.1:

a. *Infrastructure Maintenance*

- i. Annually, from April 1 through October 31, all streets located in *sewersheds discharging* to pathogen impaired segments must be swept. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*. This requirement is not applicable to:
 - a) Uncurbed roads with no *catch basins*;
 - b) High-speed limited access highways; or
 - c) Roads defined as interstates, freeways and expressways, or arterials by the United States Department of Transportation, Federal Highway Administration, Highway Functional Classification Concepts, Criteria and Procedures, 2013.
- ii. Within six (6) months of *MS4 outfall* inspection, the *MS4 Operator* must initiate actions to repair all *MS4 outfall* protection and/or bank stability problems identified during the inspection. Repairs must be completed in accordance with the NYS E&SC 2016. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

b. *Wildlife Control*

- i. Within six (6) months of the EDC, the *MS4 Operator* must identify *municipal facilities* with nuisance bird populations that have the potential to contribute pathogens (e.g., Canada Geese) and document those *municipal facilities* in the *SWMP Plan*.
- ii. Within six (6) months of the EDC, signage must be available at these municipal facilities, instructing the public not to feed wildlife. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.
- iii. Within six (6) months of the EDC, the *MS4 Operator* must remove accumulated trash and debris from *municipal* facilities when necessary to

eliminate potential food sources for wildlife. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

- iv. Within one (1) year of the EDC, *MS4 Operators* must evaluate the effectiveness of deterrents, population controls, and other measures that may reduce bird related pathogen contributions and document the results of the evaluation in the *SWMP Plan*.

c. *Animal Waste Control*

Within one (1) year of the EDC, the *MS4 Operator* must make dog waste receptacles available in areas where pets/domestic animals may frequent (e.g., public trails, dog parks). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

8. *Planned Upgrades to Municipal Facilities in Sewersheds to Impaired Waters*

Incorporate, where feasible,⁶⁸ cost-effective runoff reduction techniques⁶⁹ during planned *municipal* upgrades including *municipal* right of ways (e.g., bioswales, green streets, porous pavement, replacement of closed drainage with grass swales, replacement of the existing islands in the parking lots with bioretention or curb cuts to route the flow through below-grade infiltration areas or other low-cost improvements that provide runoff treatment or reduction).

D. *Pollutant Specific BMPs for Nitrogen*

Part VIII.D. must be implemented for all nitrogen impaired waters listed in Appendix C.

1. *Mapping*

In accordance with the timeframes listed below, the *MS4 Operator* must update, in geographic information system (GIS) format with a scale of 1:24,000 or finer, the comprehensive system mapping (Part IV.D.) to include:

- a. Within three (3) years of the EDC, *MS4* infrastructure mapping requirements (Part IV.D.2.b.i.) and *sewerheds* for each:
 - i. *MS4 outfall*; and
 - ii. *ADA MS4 outfall*.
- b. Within three (3) years of the EDC, the following information for each *MS4 outfall*:
 - i. Retail and wholesale plant nurseries (including big box stores);
 - ii. Commercial lawn care facilities; and

⁶⁸ Consideration of feasibility should include type of land use or *municipal operation*, suitability of soils, presence of utilities, potential for exacerbating existing contamination problems, safety issues, maintenance requirements, and expected lifespans of available technologies.

⁶⁹ Runoff reduction techniques can be found in Chapters 4 and 5 of the NYS SWMDM 2015.

- iii. Golf courses.
- c. Within three (3) years of the EDC, *ADA MS4 outfalls*.

2. Public Education and Outreach

- a. Within six (6) months of the EDC, the *MS4 Operator* must make available information on any how the impairment is being addressed by implementation of the MS4 Operator's local law or legal mechanism with content equivalent to the model local law (Part IV.E.1 and Part IV.E.2.). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.
- b. Following the completion of Part VIII.D.1, twice a year, once from March to August and once from September to February, the *MS4 Operator* must provide educational messages with information specific to nitrogen to the applicable target audiences within the *sewersheds* for impaired waters listed in Appendix C focus area, identified in Part VI.A.1.b. or Part VII.A.1.b, depending on the MS4 Operator type. The *SWMP Plan* must be updated with changes made to public education and outreach program (Part VI.A or Part VII.A, depending on the *MS4 Operator* type). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

3. Public Involvement/Participation

No additional requirements.

4. Illicit Discharge Detection and Elimination

Following the completion of Part VIII.D.1, within five (5) years of the EDC, the MS4 Operator must include on the *MS4 outfall* inventory (Part VI.C.1.c. or Part VII.C.1.c, depending on the MS4 Operator type) the number of each item identified in Part VIII.D.1.b for each associated *MS4 outfall*.

5. Construction Site Stormwater Runoff Control

Following the completion of Part VIII.D.1, high priority construction sites must be inspected during active construction after the pre-construction meeting (Part VI.D.7. or Part VII.D.7, depending on the *MS4 Operator* type).

- a. If the *MS4 Operator* is completing the inspection, the construction site must be inspected every ninety (90) days; or
- b. If the *MS4 Operator* utilizes the *qualified inspector's* weekly inspection reports, as required by the CGP, to satisfy this requirement, the *MS4 Operator* must inspect the construction site once every six (6) months, or sooner if any deficiencies are noted that require attention.

MS4 Operators must document the construction site inspections in the *SWMP Plan*.

6. Post-Construction Stormwater Management

No additional requirements.

7. Pollution Prevention and Good Housekeeping

Following the completion of Part VIII.D.1:

- a. Annually, from April 1 through October 31, all streets located in *sewersheds discharging* to nitrogen impaired segments must be swept. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*. This requirement is not applicable to:
 - i. Uncurbed roads with no *catch basins*;
 - ii. High-speed limited access highways; or
 - iii. Roads defined as interstates, freeways and expressways, or arterials by the United States Department of Transportation, Federal Highway Administration, Highway Functional Classification Concepts, Criteria and Procedures, 2013.
- b. Within six (6) months of *MS4 outfall* inspection, the *MS4 Operator* must initiate actions to repair all *MS4 outfall* protection and/or bank stability problems identified during the inspection. Repairs must be completed in accordance with the NYS E&SC 2016. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

8. Planned Upgrades to *Municipal Facilities in Sewersheds to Impaired Waters*

Incorporate, where feasible,⁷⁰ cost-effective runoff reduction techniques⁷¹ during planned *municipal* upgrades including *municipal* right of ways (e.g., bioswales, green streets, porous pavement, replacement of closed drainage with grass swales, replacement of the existing islands in the parking lots with bioretention or curb cuts to route the flow through below-grade infiltration areas or other low-cost improvements that provide runoff treatment or reduction).

E. Pollutant Specific BMPs for Floatables

Part VIII.E. must be implemented for all floatable impaired waters listed in Appendix C.

1. Mapping

In accordance with the timeframes listed below, the *MS4 Operator* must update, in geographic information system (GIS) format with a scale of 1:24,000 or finer, the comprehensive system mapping (Part IV.D.) to include:

- a. Within three (3) years of the EDC, *MS4* infrastructure mapping requirements (Part IV.D.2.b.i.) and *sewersheds* for each:

⁷⁰ Consideration of feasibility should include type of land use or *municipal operation*, suitability of soils, presence of utilities, potential for exacerbating existing contamination problems, safety issues, maintenance requirements, and expected lifespans of available technologies.

⁷¹ Runoff reduction techniques can be found in Chapters 4 and 5 of the NYS SWMDM 2015.

- i. *MS4 outfall*; and
 - ii. *ADA MS4 outfall*.
- b. Within three (3) years of the EDC, *ADA MS4 outfalls*.

2. Public Education and Outreach

- a. Within six (6) months of the EDC, the *MS4 Operator* must make available information on any how the impairment is being addressed by implementation of the MS4 Operator's local law or legal mechanism with content equivalent to the model local law (Part IV.E.1 and Part IV.E.2.). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.
- b. Following the completion of Part VIII.E.1, twice a year, once from March to August and once from September to February, the *MS4 Operator* must provide educational messages with information specific to floatables to the applicable target audiences within the *sewersheds* for impaired waters listed in Appendix C focus area, identified in Part VI.A.1.b. or Part VII.A.1.b, depending on the MS4 Operator type. The *SWMP Plan* must be updated with changes made to public education and outreach program (Part VI.A or Part VII.A, depending on the *MS4 Operator* type). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

3. Public Involvement/Participation

No additional requirements.

4. Illicit Discharge Detection and Elimination

No additional requirements.

5. Construction Site Stormwater Runoff Control

No additional requirements.

6. Post-Construction Stormwater Management

No additional requirements.

7. Pollution Prevention and Good Housekeeping

Following completion of Part VIII.E.1:

- a. Annually, from April 1 through October 31, all streets located in *sewersheds discharging* to floatables impaired segments must be swept. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*. This requirement is not applicable to:
 - i. Uncurbed roads with no *catch basins*;
 - ii. High-speed limited access highways; or

- iii. Roads defined as interstates, freeways and expressways, or arterials by the United States Department of Transportation, Federal Highway Administration, Highway Functional Classification Concepts, Criteria and Procedures, 2013.
- b. Within six (6) months of *MS4 outfall* inspection, the *MS4 Operator* must initiate actions to repair all *MS4 outfall* protection and/or bank stability problems identified during the inspection. Repairs must be completed in accordance with the NYS E&SC 2016. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

8. Planned Upgrades to *Municipal Facilities in Sewersheds to Impaired Waters*

Incorporate, where feasible,⁷² cost-effective runoff reduction techniques⁷³ during planned *municipal* upgrades including *municipal* right of ways (e.g., bioswales, green streets, porous pavement, replacement of closed drainage with grass swales, replacement of the existing islands in the parking lots with bioretention or curb cuts to route the flow through below-grade infiltration areas or other low-cost improvements that provide runoff treatment or reduction).

⁷² Consideration of feasibility should include type of land use or *municipal operation*, suitability of soils, presence of utilities, potential for exacerbating existing contamination problems, safety issues, maintenance requirements, and expected lifespans of available technologies.

⁷³ Runoff reduction techniques can be found in Chapters 4 and 5 of the NYS SWMDM 2015.

Part IX. Watershed Improvement Strategy Requirements for TMDL Implementation

Part IX. requirements must be implemented in addition to the applicable requirements of the six (6) MCMs in Part VI. or Part VII, depending on the *MS4 Operator* type. Part IX. requirements apply in the watersheds where the *Department* developed implementation plans for which USEPA has approved a TMDL (Table 3). Finalized TMDL implementation plans referenced in this Part are incorporated into and enforceable under this *SPDES* general permit.

MS4 Operator's subject to Part IX. that implement TMDL specific *BMPs* after the EDC but prior to *MS4* infrastructure and *sewershed* mapping can use those *BMPs* to satisfy the permit requirements in this section.

The Part IX. requirements must be incorporated in the *MS4 Operator's SWMP* and *SWMP Plan*.

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

Table 4. Phosphorus Impaired Watershed(s)			
Areas where requirements apply	New York City East of Hudson (EOH)		
EPA Approved TMDL	Phase II Phosphorus TMDLs for Reservoirs in the NYC Watershed, June 2000	Total Maximum Daily Load (TMDL) for Phosphorus in Lake Carmel, October 2016	Total Maximum Daily Load (TMDL) for Phosphorus in Palmer Lake, ² March 2015
Implementation Plan	Croton Watershed Phase II TMDL Implementation Plan (January 2009)		
POC	Phosphorus		
Area where requirements Apply	NYC EOH Watershed		
Achievement of Pollutant Load Reduction	Continued <i>retrofit</i> implementation to achieve the pollutant load reduction specified in that Phase II Implementation Plan		

MS4 Operators located within the watersheds listed in Table 4 must *develop* and implement the following phosphorus-specific *BMPs* in addition to the Croton Watershed Phase II TMDL Implementation Plan (January 2009) and the applicable requirements in Part VI. or Part VII, depending on the *MS4 Operator* type.

1. Mapping

In accordance with the timeframes listed below, the *MS4 Operator* must update, in geographic information system (GIS) format with a scale of 1:24,000 or finer, the comprehensive system mapping (Part IV.D.) to include:

- a. Within three (3) years of the EDC, areas with potential to contribute phosphorus to the TMDL waterbody, which include:
 - i. Retail and wholesale plant nurseries (including big box stores);
 - ii. Commercial lawn care facilities;
 - iii. Golf courses;
 - iv. Commercial or industrial yard waste storage areas (e.g., yard waste composting and disposal areas); and
 - v. *MS4* infrastructure with a history of issues (e.g., clogged infrastructure, infiltration and inflow (I/I)).
- b. Within three (3) years of the EDC, the following information for all post-construction *SMPs* as identified in the post-construction *SMP* inventory (Part VI.E.2. or Part VII.E.2, depending on the *MS4 Operator* type):
 - i. Type;⁷⁴ and
 - ii. Ownership.

2. Public Education and Outreach on Stormwater Impacts

- a. Within six (6) months of the EDC, the *MS4 Operator* must make available information on how the impairment is being addressed by implementation of the *MS4 Operator's* local law or legal mechanism with content equivalent to the model local law (Part IV.E.1 and Part IV.E.2.). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.
- b. Following the completion of Part IX.A.1, twice a year, once from March to August and once from September to February, the *MS4 Operator* must provide educational messages with information specific to phosphorus to the applicable target audiences within the TMDL watershed focus area, identified in Part VI.A.1.b. or Part VII.A.1.b, depending on the *MS4 Operator* type. The *SWMP Plan* must be updated with changes made to public education and outreach program (Part VI.A. or Part VII.A, depending on the *MS4 Operator* type). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

3. Public Involvement/Participation

No additional requirements.

⁷⁴ Post-construction *SMP* types are defined in the New York State Department of Environmental Conservation Maintenance Guidance: Stormwater Management Practices, March 31, 2017 (NYS DEC Maintenance Guidance 2017).

4. *Illicit Discharge Detection and Elimination*

a. *Inventory of Potential Phosphorus Sources*

Following the completion of Part IX.A.1, within five (5) years of the EDC, the MS4 Operator must include on the *MS4 outfall* inventory (Part VI.C.1.c. or Part VII.C.1.c, depending on the MS4 Operator type) the number of each item identified in Part IX.A.1.a. for each associated *MS4 outfall*.

b. *On-site wastewater systems*

The *MS4 Operator* must *develop*, implement, and enforce a program that ensures on-site wastewater systems (i.e., septic tanks, cesspools, absorption fields or distribution systems) are properly operated and do not contribute *pollutants* to the *MS4*. To ensure this, the *MS4 Operator* must:

- i. Once every five (5) years, ensure that residential septic tanks/cesspools are pumped out and system components (i.e., septic tanks, cesspools and installed absorption field) are inspected;
- ii. Ensure the following information is collected and document the completion of this requirement in the *SWMP Plan*:
 - a) Individual performing inspection;
 - b) Inspection date;
 - c) Address;
 - d) Location of system on property; and
 - e) Evidence of failed systems.
- iii. Refer failures to the appropriate agency to ensure corrective actions are taken; and
- iv. Eliminate *illicit discharges* from on-site wastewater systems to the *MS4* in accordance with the time frames specified in Part VI.C.3. or Part VII.C.3, depending on the *MS4 Operator* type.

5. *Construction Site Stormwater Runoff Control*

- a. The *MS4 Operator* must include construction projects that disturb between 5000 square feet (sf) and one (1) acre in the construction site runoff control program as described in Part VI.D. or Part VII.D, depending on the *MS4 Operator* type. Construction projects meeting this threshold are low priority construction sites.
- b. The legal authority used to satisfy Part IV.E.2.b. must include the following language:

“Land activity is defined as *construction activity* including clearing, grading, excavating, soil disturbance or placement of fill that results in land disturbance of equal to or greater than 5000 sf and activities disturbing less

than 5000 sf of total land area that are part of a *larger common plan of development or sale* and will occur under one plan.”

- c. High priority construction sites must be inspected during active construction after the pre-construction meeting (Part VI.D.7. or Part VII.D.7, depending on the *MS4 Operator* type).
 - i. If the *MS4 Operator* is completing the inspection, the construction site must be inspected every ninety (90) days; or
 - ii. If the *MS4 Operator* utilizes the *qualified inspector’s* weekly inspection reports, as required by the CGP, to satisfy this requirement, the *MS4 Operator* must inspect the construction site once every six (6) months, or sooner if any deficiencies are noted that require attention.

MS4 Operators must document the construction site inspections in the *SWMP Plan*.

6. Post-Construction Stormwater Management

- a. The *MS4 Operator* must require the use of the Enhanced Phosphorus Removal design standards contained in Chapter 10 of the NYS SWMDM 2015 for all new development and redevelopment projects that disturb greater than or equal to one (1) acre and construction projects less than one acre that are part of a larger common plan of development or sale.
- b. The legal authority used to satisfy Part IV.E. must also meet the following provisions:

Land development activities requiring water quantity and quality controls (post-construction *stormwater* runoff controls) must include: “Single-family home construction located in the NYC East of Hudson watershed” and “Single-family residential subdivisions located in the NYC East of Hudson watershed.”
- c. Requirements for SWPPPs that include post-construction *stormwater* controls must include: “Post-construction *SMPs* in the SWPPP must be designed in conformance with Chapter 10 of the NYS SWMDM 2015 for Enhanced Phosphorus Removal Design Standards.”
- d. Performance Standards must include the following enhanced stabilization requirements: “For construction sites located in the NYC East of Hudson watershed, where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. The soil stabilization measures selected must be in conformance with the NYS E&SC 2016.”
- e. Inspections of land development activities during construction must include requirements for a *qualified inspector* to conduct two (2) site inspections every seven (7) calendar days for single-family homes, and single-family residential, subdivisions within the NYC East of Hudson watersheds.

f. *Retrofit* program

- i. All *MS4 Operators* identified within the Croton Watershed Phase II TMDL Implementation Plan, January 2009, must continue to implement the *retrofit* program according to the following schedule:
 - a) Within one (1) year of the EDC, the *MS4 Operator* must submit to the *Department* a *retrofit* plan that identifies the following:
 - i) Project name;
 - ii) Location;
 - iii) Proposed *retrofit* type;
 - iv) Anticipated date for construction;
 - v) Estimated phosphorus reduction (using the criteria in the Croton Watershed Phase II TMDL Implementation Plan, January 2009); and
 - vi) Estimated total phosphorus reduction for all projects demonstrating they will meet the reduction specified in the Croton Watershed Phase II TMDL Implementation Plan, January 2009.
 - b) Within five (5) years of the EDC, all *retrofit* projects must be constructed to achieve the five (5) year phosphorus reduction assigned to the *MS4 Operator*, as required by the Croton Watershed Phase II TMDL Implementation Plan, January 2009.
- ii. Annually, by December 31, *MS4 Operators* (or *RSE* representing *MS4 Operators* as described in Part III.B.2.b.) must submit to the *Department* any changes made to the *retrofit* plan including the information in Part IX.A.6.e.i.
- iii. *MS4 Operators* must document the retrofit program in the *SWMP Plan* specifying:
 - a) Progress on *retrofit* projects already commenced; and
 - b) Identification of *retrofit* projects for the upcoming construction season; and
 - c) Certification that completed retrofit projects have been constructed in accordance with the *retrofit* plans.

7. Pollution Prevention/Good Housekeeping

- a. Twice a year, once from March to August and once from September to February, all *catch basins* located in the TMDL watershed(s) must be inspected (Part VI.F.3.c. or Part VII.F.3.c, depending on the *MS4 Operator* type). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

- b. Following the completion of Part IX.A.1, annually, from April 1 through October 31, all streets located in the TMDL watershed(s) must be swept. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*. This requirement is not applicable to:
 - i. Uncurbed roads with no *catch basins*;
 - ii. High-speed limited access highways;
 - iii. Roads defined as interstates, freeways and expressways, or arterials by the United States Department of Transportation, Federal Highway Administration, Highway Functional Classification Concepts, Criteria and Procedures, 2013.
- c. Within six (6) months of *MS4 outfall* inspection, the *MS4 Operator* must initiate actions to repair all *MS4 outfall* protection and/or bank stability problems identified during the inspection. Repairs must be completed in accordance with the NYS E&SC 2016. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*. Within thirty (30) days of inspection, the *MS4 Operator* must initiate all necessary maintenance and repair activities discovered for *municipally* owned or operated post-construction *SMPs*. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

8. Planned Upgrades to *Municipal Facilities* in Watersheds to Impaired Waters

Incorporate, where feasible,⁷⁵ cost-effective runoff reduction techniques⁷⁶ during planned *municipal* upgrades including *municipal* right of ways (e.g., bioswales, green streets, porous pavement, replacement of closed drainage with grass swales, replacement of the existing islands in the parking lots with bioretention or curb cuts to route the flow through below-grade infiltration areas or other low-cost improvements that provide runoff treatment or reduction).

⁷⁵ Consideration of feasibility should include type of land use or *municipal operation*, suitability of soils, presence of utilities, potential for exacerbating existing contamination problems, safety issues, maintenance requirements, and expected lifespans of available technologies.

⁷⁶ Runoff reduction techniques can be found in Chapters 4 and 5 of the NYS SWMDM 2015.

B. Other Phosphorus Impaired Watershed *MS4s*

Table 5. Other Phosphorus Impaired Watersheds			
Area where Requirements Apply	Greenwood Lake	Onondaga Lake	Oscawana Lake
EPA Approved TMDL	<i>Impaired Waters Restoration Plan for Greenwood Lake – Total Maximum Daily Load for Total Phosphorus, Sept 2005</i>	<i>Updated Phosphorus Total Maximum Daily Load for Onondaga Lake, June 2012</i>	<i>Total Maximum Daily Load (TMDL) for Phosphorus in Lake Oscawana, September 2008</i>
Implementation Plan	Greenwood Lake Watershed Phosphorus TMDL Implementation Plan, October 2019	None	None
<i>POC</i>	Phosphorus		
Achievement of <i>Pollutant</i> Load Reduction	In accordance with Implementation Plan	In accordance with approved TMDL	In accordance with approved TMDL

MS4 Operators located in the watersheds listed in Table 5 must *develop* and implement the following phosphorus-specific *BMPs* in addition to the applicable Implementation Plan and applicable requirements in Part VI. or Part VII, depending on the *MS4 Operator* type:

1. Mapping

In accordance with the timeframes listed below, the *MS4 Operator* must update, in geographic information system (GIS) format with a scale of 1:24,000 or finer, the comprehensive system mapping (Part IV.D.) to include:

- a. Within three (3) years of the EDC, include areas with potential to contribute phosphorus to the TMDL waterbody, which include:
 - i. Retail and wholesale plant nurseries (including big box stores);
 - ii. Commercial lawn care facilities;
 - iii. Golf courses; and
 - iv. Commercial or industrial yard waste storage areas (e.g., yard waste composting and disposal areas).
- b. Within three (3) years of the EDC, include the following information for all post-construction *SMPs* as identified in the post-construction *SMP* inventory (Part VI.E.2. or Part VII.E.2, depending on the *MS4 Operator* type):

- i. Type⁷⁷; and
- ii. Ownership.

2. Public Education and Outreach on Stormwater Impacts

- a. Within six (6) months of the EDC, the *MS4 Operator* must make available information on any how the impairment is being addressed by implementation of the MS4 Operator's local law or legal mechanism with content equivalent to the model local law (Part IV.E.1 and Part IV.E.2.). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.
- b. Following the completion of Part IX.B.1, twice a year, once from March to August and once from September to February, the *MS4 Operator* must provide educational messages with information specific to phosphorus to the applicable target audiences within the TMDL watershed focus area, identified in Part VI.A.1.b. or Part VII.A.1.b, depending on the MS4 Operator type. The *SWMP Plan* must be updated with changes made to public education and outreach program (Part VI.A. or Part VII.A, depending on the *MS4 Operator* type). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.
- c. Twice a permit term, separated by a minimum of one (1) year, the *MS4 Operator* must educate residential on-site wastewater system users on the on-site wastewater inspection program described in Part IX.B.4.c and proper maintenance practices. The *SWMP Plan* must be updated with changes made to public education and outreach program (Part VI.A or Part VII.A, depending on the *MS4 Operator* type). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

3. Public Involvement/Participation

No additional requirements.

4. Illicit Discharge Detection and Elimination

a. Inventory of Potential Phosphorus Sources

Following the completion of Part IX.B.1, within five (5) years of the EDC, the MS4 Operator must include on the *MS4 outfall* inventory (Part VI.C.1.c. or Part VII.C.1.c, depending on the MS4 Operator type) the number of each item identified in Part VIII.B.1.a. for each associated MS4 outfall.

b. On-site wastewater systems

The *MS4 Operator* (with the exclusion of *MS4 Operators* located in the Onondaga Lake watershed) must *develop*, implement, and enforce a program that ensures residential on-site wastewater systems (i.e., septic tanks,

⁷⁷ Post-construction *SMP* types are defined in the New York State Department of Environmental Conservation Maintenance Guidance: Stormwater Management Practices, March 31, 2017 (NYS DEC Maintenance Guidance 2017).

cesspools, absorption fields or distribution systems) are properly operated and do not contribute *pollutants* to the *MS4*. The *MS4 Operator* must:

- i. Once every five (5) years, ensure that residential septic tanks/cesspools are pumped out and system components (i.e., septic tanks, cesspools and installed absorption field) are inspected;
- ii. Ensure the following information is collected and document the completion of this requirement in the *SWMP Plan*:
 - a) Individual performing inspection;
 - b) Inspection date;
 - c) Address;
 - d) Location of system on property;
 - e) Inspection rating (pass/fail);
 - f) Evidence of failed systems;
- iii. Refer failures to the appropriate agency to ensure corrective actions are taken; and
- iv. Eliminate *illicit discharges* from on-site wastewater systems to the *MS4* in accordance with the time frames specified in Part VI.C.3. or Part VII.C.3, depending on the *MS4 Operator* type.

5. Construction Site Stormwater Runoff Control

High priority construction sites must be inspected during active construction after the pre-construction meeting (Part VI.D.7. or Part VII.D.7, depending on the *MS4 Operator* type).

- a. If the *MS4 Operator* is completing the inspection, the construction site must be inspected every ninety (90) days; or
- b. If the *MS4 Operator* utilizes the *qualified inspector's* weekly inspection reports, as required by the CGP, to satisfy this requirement, the *MS4 Operator* must inspect the construction site once every six (6) months, or sooner if any deficiencies are noted that require attention.

MS4 Operators must document the construction site inspections in the *SWMP Plan*.

6. Post Construction Stormwater Management

- a. The *MS4 Operator* must require the use of the Enhanced Phosphorus Removal design standards contained in Chapter 10 of the NYS SWMDM 2015 for all new development and redevelopment projects within the listed watersheds.
- b. The legal authority used to satisfy Part IV.E.2.b. must also include the following language requiring the use of the Enhanced Phosphorus Removal

Design Standards in accordance with the NYS SWMDM 2015 for the applicable watershed:

“Land development activities requiring water quantity and quality controls (post-construction *stormwater* runoff controls) must include: “Single-family home construction located in the <insert watershed name> watershed” and “Single-family residential subdivisions located in the <insert watershed name> watershed.”

- c. Requirements for SWPPPs that include post-construction *stormwater* controls must include: “Post-construction *SMPs* in the SWPPP must be designed in conformance with the Enhanced Phosphorus Removal Design Standards in the NYS SWMDM 2015.”
- d. Performance Standards must include the following enhanced stabilization requirements: “Where soil disturbance activity has temporarily or permanently ceased, the construction site is located in the <*insert watershed name*> watershed, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. The soil stabilization measures selected must be in conformance with the Erosion Control Manual.”
- e. Inspections of land development activities during construction must include requirements for a *qualified inspector* to conduct two (2) site inspections every seven (7) calendar days for single-family homes and subdivisions within the <*insert watershed name*> watersheds.
- f. *Retrofit* program
 - i. All *MS4 Operators* identified within the Greenwood Lake Watershed Phosphorus TMDL Implementation Plan, October 2019, must continue to implement the *retrofit* program according to the following schedule:
 - a) Within one (1) year of the EDC, the *MS4 Operator* must submit to the *Department* a *retrofit* plan that identifies the following:
 - i) Project name;
 - ii) Location;
 - iii) Proposed *retrofit* type;
 - iv) Anticipated date for construction;
 - v) Estimated phosphorus reduction (using the criteria in the Greenwood Lake Watershed Phosphorus TMDL Implementation Plan, October 2019); and
 - vi) Estimated total phosphorus reduction for all projects demonstrating they will meet the reduction specified in the Greenwood Lake Watershed Phosphorus TMDL Implementation Plan, October 2019.
 - b) Within five (5) years of the EDC, all *retrofit* projects must be constructed to achieve the five (5) year phosphorus reduction assigned

to the *MS4 Operator*, as required by the Greenwood Lake Watershed Phosphorus TMDL Implementation Plan, October 2019.

- ii. Annually, by December 31, *MS4 Operators* (or *RSE* representing *MS4 Operators* as described in Part III.B.2.b.) must submit to the *Department* any changes made to the *retrofit* plan including the information in Part IX.A.6.e.i.
- iii. *MS4 Operators* must document the retrofit program in the *SWMP Plan* specifying:
 - a) Progress on *retrofit* projects already commenced; and
 - b) Identification of *retrofit* projects for the upcoming construction season; and
 - c) Certification that completed retrofit projects have been constructed in accordance with the *retrofit* plans.

7. Pollution Prevention/Good Housekeeping

Following the completion of Part IX.B.1:

- a. Annually, from April 1 through October 31, all streets located in the TMDL watershed(s) must be swept. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*. This requirement is not applicable to:
 - i. Uncurbed roads with no *catch basins*;
 - ii. High-speed limited access highways; or
 - iii. Roads defined as interstates, freeways and expressways, or arterials by the United States Department of Transportation, Federal Highway Administration, Highway Functional Classification Concepts, Criteria and Procedures, 2013.
- b. Within six (6) months of *MS4 outfall* inspection, the *MS4 Operator* must initiate actions to repair all *MS4 outfall* protection and/or bank stability problems identified during the inspection. Repairs must be completed in accordance with the NYS E&SC 2016. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.
- c. Within thirty (30) days of inspection, the *MS4 Operator* must initiate all necessary maintenance and repair activities discovered for *municipally* owned or operated post-construction *SMPs*. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

8. Planned Upgrades to *Municipal Facilities in Watersheds to Impaired Waters*

Incorporate, where feasible,⁷⁸ cost-effective runoff reduction techniques⁷⁹ during planned *municipal* upgrades including *municipal* right of ways (e.g., bioswales, green streets, porous pavement, replacement of closed drainage with grass swales, replacement of the existing islands in the parking lots with bioretention or curb cuts to route the flow through below-grade infiltration areas or other low-cost improvements that provide runoff treatment or reduction).

C. Pathogen Impaired Watersheds *MS4s*

No Pathogen TMDL requirements.

D. Nitrogen Impaired Watershed *MS4s*

Table 6. Nitrogen Impaired Watershed(s)	
Area where Requirements Apply	Peconic
EPA Approved TMDL	<i>TMDL for Nitrogen in the Peconic Estuary Program Study Area, Including Waterbodies Currently Impaired Due to Low Dissolved Oxygen: the Lower Peconic River and Tidal Tributaries; Western Flanders Bay and Lower Sawmill Creek; and Meetinghouse Creek, Terry Creek and Tributaries (September 2007)</i>
Implementation Plan	<i>TMDL for Nitrogen in the Peconic Estuary Program Study Area, Including Waterbodies Currently Impaired Due to Low Dissolved Oxygen: the Lower Peconic River and Tidal Tributaries; Western Flanders Bay and Lower Sawmill Creek; and Meetinghouse Creek, Terry Creek and Tributaries (September 2007)</i>
<i>POC</i>	Nitrogen
<i>Pollutant Load Reduction</i>	In accordance with approved TMDL
Waterbodies	Terrys Creek & Tributaries
	Meetinghouse Creek
	Western Flanders Bay & Lower Sawmill Creek
	Lower Peconic River and tidal tributaries

⁷⁸ Consideration of feasibility should include type of land use or *municipal operation*, suitability of soils, presence of utilities, potential for exacerbating existing contamination problems, safety issues, maintenance requirements, and expected lifespans of available technologies.

⁷⁹ Runoff reduction techniques can be found in Chapters 4 and 5 of the NYS SWMDM 2015.

MS4 Operators located in the watersheds listed in Table 6 must *develop* and implement the following nitrogen-specific *BMPs* in addition to the applicable Implementation Plan and applicable requirements in Part VI. or Part VII, depending on the *MS4 Operator* type:

1. Mapping

Within three (3) years of the EDC, the *MS4 Operator* must update, in geographic information system (GIS) format with a scale of 1:24000 or finer, the comprehensive system mapping (Part IV.D.) to include:

- a. Areas with potential to contribute nitrogen to the *TMDL* waterbody, which include:
 - i. Retail and wholesale plant nurseries (including big box stores);
 - ii. Commercial lawn care facilities;
 - iii. Golf courses; and
 - iv. Commercial or Industrial yard waste storage areas (e.g., yard waste composting and disposal areas).
- b. Information for all post-construction *SMPs* as identified in the post-construction *SMP* inventory (Part VI.E.2. or Part VII.E.2, depending on the *MS4 Operator* type):
 - i. Type;⁸⁰ and
 - ii. Ownership of *SMP*.

2. Public Education and Outreach on Stormwater Impacts

- a. Within six (6) months of the EDC, the *MS4 Operator* must make available information on any how the impairment is being addressed by implementation of the *MS4 Operator's* local law or legal mechanism with content equivalent to the model local law (Part IV.E.1 and Part IV.E.2.). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.
- b. Following the completion of Part IX.D.1, twice a year, once from March to August and once from September to February, the *MS4 Operator* must provide educational messages with information specific to nitrogen to the applicable target audiences within the *TMDL* watershed focus area, identified in Part VI.A.1.b. or Part VII.A.1.b, depending on the *MS4 Operator* type. The *SWMP Plan* must be updated with changes made to public education and outreach program (Part VI.A. or Part VII.A, depending on the *MS4 Operator* type). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

⁸⁰ Post-construction *SMP* types are defined in the New York State Department of Environmental Conservation Maintenance Guidance: Stormwater Management Practices, March 31, 2017 (NYS DEC Maintenance Guidance 2017).

3. Public Involvement/Participation

No additional requirements.

4. Illicit Discharge Detection and Elimination

Following the completion of Part IX.D.1, within five (5) years of the EDC, the MS4 Operator must include on the *MS4 outfall* inventory (Part VI.C.1.c. or Part VII.C.1.c, depending on the MS4 Operator type) the number of each item identified in Part VIII.D.1.a. for each associated MS4 outfall.

5. Construction Site Stormwater Runoff Control

High priority construction sites must be inspected during active construction after the pre-construction meeting (Part VI.D.7. or Part VII.D.7, depending on the *MS4 Operator* type).

- a. If the *MS4 Operator* is completing the inspection, the construction site must be inspected every ninety (90) days; or
- b. If the *MS4 Operator* utilizes the *qualified inspector's* weekly inspection reports, as required by the CGP, to satisfy this requirement, the *MS4 Operator* must inspect the construction site once every six (6) months, or sooner if any deficiencies are noted that require attention.

MS4 Operators must document the construction site inspections in the *SWMP Plan*.

6. Post-Construction Stormwater Management

The *MS4 Operator* must ensure on-site retention of the 1-year storm or greater from new development or redevelopment projects using runoff reduction techniques⁸¹ selected from the NYS SWMDM 2015.

7. Pollution Prevention/Good Housekeeping

Following the completion of Part IX.D.1:

- a. Annually, from April 1 through October 31, all streets located in the TMDL watershed(s) must be swept. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*. This requirement is not applicable to:
 - i. Uncurbed roads with no *catch basins*;
 - ii. High-speed limited access highways; or
 - iii. Roads defined as interstates, freeways and expressways, or arterials by the United States Department of Transportation, Federal Highway Administration, Highway Functional Classification Concepts, Criteria and Procedures, 2013.

⁸¹ Runoff reduction techniques can be found in Chapters 4 and 5 of the NYS SWMDM 2015.

- b. Within six (6) months of *MS4 outfall* inspection, the *MS4 Operator* must initiate actions to repair all *MS4 outfall* protection and/or bank stability problems identified during the inspection. Repairs must be completed in accordance with the NYS E&SC 2016. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.
- c. Within thirty (30) days of inspection, the *MS4 Operator* must initiate all necessary maintenance and repair activities discovered for *municipally* owned or operated post-construction *SMPs*. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

8. Planned Upgrades to *Municipal Facilities* in Watersheds to Impaired Waters

Incorporate, where feasible,⁸² cost-effective runoff reduction techniques⁶⁸ during planned *municipal* upgrades including *municipal* right of ways (e.g., bioswales, green streets, porous pavement, replacement of closed drainage with grass swales, replacement of the existing islands in the parking lots with bioretention or curb cuts to route the flow through below-grade infiltration areas or other low-cost improvements that provide runoff treatment or reduction).

⁸² Consideration of feasibility should include type of land use or *municipal operation*, suitability of soils, presence of utilities, potential for exacerbating existing contamination problems, safety issues, maintenance requirements, and expected lifespans of available technologies.

Part X. Standard Permit Conditions

For the purposes of this *SPDES* general permit, examples of contractors and subcontractors include:

A. Duty to Comply

The owner/operator, and all contractors or subcontractors, must comply with all terms and conditions of this *SPDES* general permit. Any non-compliance with the terms and conditions of this *SPDES* general permit constitutes a violation of the New York State Environmental Conservation Law, and its implementing regulations, and is grounds for enforcement action. Filing of a request for transfer or termination of coverage under this *SPDES* general permit, or a notification of planned changes or anticipated non-compliance, does not limit, diminish or stay compliance with any terms and conditions of this *SPDES* general permit.

B. Need to Halt or Reduce Activity is Not a Defense

The necessity to halt or reduce the activity regulated by this *SPDES* general permit, in order to maintain compliance with the conditions of this *SPDES* general permit, shall not be a defense in an enforcement action.

C. Penalties

There are substantial criminal, civil, and administrative penalties associated with violating the terms and conditions of this *SPDES* general 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. False Statements

Any person who knowingly makes any false material statement, representation, or certification in any application, record, report or other document filed or required to be maintained under this *SPDES* general permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished in accordance with New York State Environmental Conservation Law §71-1933 and or New York State Penal Law Articles 175 and 210.

E. Reopener Clause

Upon issuance of this *SPDES* general permit, a determination has been made on the basis of a submitted Notice of Intent, plans, or other available information, that compliance with the specified general permit terms and conditions will reasonably protect classified water use and assure compliance with applicable *water quality standards*. Satisfaction of the conditions of this *SPDES* general permit notwithstanding, if operation pursuant to this *SPDES* general permit causes or contributes to a condition in contravention of State *water quality standards* or guidance values, or if the *Department* determines that a modification is necessary to prevent impairment of the best use of the waters or to assure maintenance of *water*

quality standards or compliance with other provisions of New York State Environmental Conservation Law Article 17 or the Clean Water Act, or any regulations adopted pursuant thereto, the *Department* may require such modification and the Commissioner may require abatement action to be taken by the owner/operator and may also prohibit such operation until the modification has been implemented.

F. Duty to Mitigate

The owner/operator, and its contractors and subcontractors, 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.

G. Requiring Another General Permit or Individual *SPDES* Permit

The *Department* may require any discharger authorized to *discharge* in accordance with this *SPDES* general permit to apply for and obtain an individual *SPDES* permit or apply for authorization to *discharge* in accordance with another general permit.

- (1) Cases where an individual *SPDES* permit or authorization to *discharge* in accordance with another general permit may be required include, but is not limited to the following:
 - (i) the discharger is not in compliance with the conditions of this *SPDES* general permit or does not meet the criteria for coverage under this *SPDES* general permit;
 - (ii) a change has occurred in the availability of demonstrated technology or practices for the control or abatement of *pollutants* applicable to the point source;
 - (iii) new effluent limitation guidelines or new source performance standards are promulgated that are applicable to point sources authorized to *discharge* in accordance with this *SPDES* general permit;
 - (iv) existing effluent limitation guidelines or new source performance standards that are applicable to point sources authorized to *discharge* in accordance with this *SPDES* general permit are modified;
 - (v) a water quality management plan containing requirements applicable to such point sources is approved by the *Department*;
 - (vi) circumstances have changed since the time of the request to be covered so that the discharger is no longer appropriately controlled under this *SPDES* general permit, or either a temporary or permanent reduction or elimination of the authorized *discharge* is necessary;
 - (vii) the *discharge* is in violation of section 17-0501 of the New York State Environmental Conservation Law;
 - (viii) the *discharge(s)* is a significant contributor of *pollutants*. In making this determination, the *Department* may consider the following factors:

- (a) the location of the *discharge(s)* with respect to waters of New York State;
 - (b) the size of the *discharge(s)*;
 - (c) the quantity and nature of the *pollutants discharged* to waters of New York State; and
 - (d) other relevant factors including compliance with other provisions of New York State Environmental Conservation Law Article 17, or the Clean Water Act.
- (1) When the *Department* requires any discharger authorized by this *SPDES* general permit to apply for an individual *SPDES* permit as provided for in this subdivision, it shall notify the discharger in writing that a permit application is required. This notice shall include a brief statement of the reasons for this decision, an application form, a statement setting a time for the owner/operator to file the application for an individual *SPDES* permit, and a deadline, not sooner than 180 days from the owner/operator's receipt of the notification letter, whereby the authorization to discharge under this *SPDES* general permit shall be terminated. The *Department* may grant additional time upon demonstration, to the satisfaction of the Regional Water Engineer, that additional time to apply for an alternative authorization is necessary or where the *Department* has not provided a permit determination in accordance with 6 NYCRR Part 621.
- (2) When an individual *SPDES* permit is issued to a discharger authorized to *discharge* under this *SPDES* general permit for the same *discharge(s)*, this *SPDES* general permit authorization for outfalls authorized under the individual *SPDES* permit is automatically terminated on the effective date of the individual *SPDES* permit unless termination is earlier in accordance with 6 NYCRR Part 750.

H. Duty to Provide Information

The owner/operator shall furnish to the *Department*, within five (5) business days, unless otherwise set forth by the *Department*, any information that the *Department* may request to determine whether cause exists to determine compliance with this *SPDES* general permit or to determine whether cause exists for requiring an individual *SPDES* permit in accordance with 6 NYCRR 750-1.21I (see G. Requiring Another General Permit or Individual Permit). The owner/operator shall make available to the *Department*, for inspection and copying, or furnish to the *Department* within 25 business days of receipt of a *Department* request for such information, any information retained in accordance with this *SPDES* general permit. Where the owner/operator becomes aware that it failed to submit any relevant facts on the Notice of Intent, or submitted incorrect information in a Notice of Intent or in any report to the *Department*, the owner/operator shall promptly submit such facts or corrected information to the *Department*.

I. Extension

In the event a new *SPDES* general permit is not issued prior to the expiration of this *SPDES* general permit, and this *SPDES* general permit is extended pursuant to the State Administrative Procedure Act and 6 NYCRR Part 621, then the owner/operator

with coverage under this *SPDES* general permit may continue to operate and *discharge* in accordance with the terms and conditions of this *SPDES* general permit until a new *SPDES* general permit is issued.

J. Signatories and Certification

The Notice of Intent, Notice of Termination and reports required by this *SPDES* general permit shall be signed as provided in 40 CFR §122.22

(a) All Notices of Intent and Notices of Termination shall be signed as follows:

- (1) For a corporation. By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or
 - (ii) The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for Notice of Intent or Notice of Termination requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

Note: The *Department* does not require specific assignments or delegations of authority to responsible corporate officers identified in 40 CFR §122.22(a)(1)(i). The *Department* will presume that these responsible corporate officers have the requisite authority to sign the Notice of Intent or Notice of Termination unless the corporation has notified the *Department* to the contrary. Corporate procedures governing authority to sign a Notice of Intent or Notice of Termination may provide for assignment or delegation to applicable corporate positions under 40 CFR §122.22(a)(1)(ii) rather than to specific individuals.

- (2) For a partnership or sole proprietorship. By a general partner or the proprietor, respectively; or
- (3) For a *municipality*, State, Federal, or other public agency. By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
 - (i) The chief executive officer of the agency, or
 - (ii) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

- (b) All reports required by this *SPDES* general permit, and other information requested by the *Department* shall be signed by a person described in paragraph (a) of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- (1) The authorization is made in writing by a person described in (a);
 - (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company (A duly authorized representative may thus be either a named individual or any individual occupying a named position.), and
 - (3) The written authorization is submitted to the *Department*.
- (c) Changes to authorization. If an authorization under (b) is no longer accurate because a different individual or position has responsibility for the overall operation of the facility or activity, a new authorization satisfying the requirements of (b) must be submitted to the *Department* prior to or together with any reports, information, or applications to be signed by an authorized representative.
- (d) Certification. Any person signing a document under (a) or (b) 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 gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*
- (e) Electronic reporting. If documents described in (a) or (b) are submitted electronically by or on behalf of the activity with coverage under this *SPDES* general permit, any person providing the electronic signature for such documents shall meet all relevant requirements of this section, and shall ensure that all of the relevant requirements of 40 CFR Part 3 (including, in all cases, subpart D to Part 3) (Cross-Media Electronic Reporting) and 40 CFR Part 127 (NPDES Electronic Reporting Requirements) are met for that submission.

K. Inspection & Entry

The owner/operator shall allow the *Department*, the USEPA Regional Administrator, the applicable county health department, or any authorized representatives of those entities, upon the presentation of credentials and other documents as may be required by law, to:

- (a) enter upon the owner/operator's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this *SPDES* general permit;
- (b) have access to and copy, at reasonable times, any records that must be kept under the conditions of this *SPDES* general permit, including records required to be maintained for purposes of operation and maintenance;
- (c) inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this *SPDES* general permit;
- (d) sample or monitor at reasonable times, for the purposes of assuring *SPDES* general permit compliance or as otherwise authorized by the Clean Water Act or New York State Environmental Conservation Law, any substances or parameters at any location; and
- (e) enter upon the property of any contributor to the regulated facility or activity under authority of the owner/operator.

L. Confidentiality of Information

The following shall not be held confidential: this *SPDES* general permit, the fact sheet for this *SPDES* general permit, the name and address of any owner/operator, effluent data, the Notice of Intent, and information regarding the need to obtain an individual permit or an alternative general permit. This includes information submitted on forms themselves and any attachments used to supply information required by the forms (except information submitted on usage of substances). Upon the request of the owner/operator, the *Department* shall make determinations of confidentiality in accordance with 6 NYCRR Part 616, except as set forth in the previous sentence. Any information accorded confidential status shall be disclosed to the Regional Administrator upon his or her written request. Prior to disclosing such information to the Regional Administrator, the *Department* will notify the Regional Administrator of the confidential status of such information.

M. Other Permits May Be Required

Nothing in this *SPDES* general permit relieves the owner/operator from a requirement to obtain any other permits required by law.

N. Property Rights

Coverage under this *SPDES* general permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations, nor does it obviate the necessity of obtaining the assent of any other jurisdiction as required by law for the *discharge* authorized.

O. Compliance with Interstate Standards

If the activity covered by this *SPDES* general permit originates within the jurisdiction of an interstate water pollution control agency, then the activity must also comply

with any applicable effluent standards or *water quality standards* promulgated by that interstate agency and as set forth in this *SPDES* general permit for such activities.

P. Oil & Hazardous Substance Liability

Coverage under this *SPDES* general permit does not affect the imposition of responsibilities upon, or the institution of any legal action against, the owner or operator under section 311 of the Clean Water Act, which shall be in conformance with regulations promulgated pursuant to section 311 governing the applicability of section 311 of the Clean Water Act to *discharges* from facilities with NPDES permits, nor shall such issuance preclude the institution of any legal action or relieve the owner or operator from any responsibilities, liabilities, or penalties to which the owner or operator is or may be subject pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. section 9601 et seq. (CERCLA).

Q. Severability

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

Appendix A. Acronyms and Definitions

Acronym List

BMP – Best Management Practice
CFR – Code of Federal Regulations
CGP – SPDES General Permit for Stormwater from Construction Activities, GP-0-20-001
CWA – Clean Water Act
ECL – Environmental Conservation Law
EDC – Effective Date of Coverage
EDP – Effective Date of the Permit
eNOI – Electronic Notice of Intent
EPCRA - Emergency Planning and Community Right-To-Know Act
ERP – Enforcement Response Plan
IDDE – Illicit Discharge Detection and Elimination
MCM – Minimum Control Measure
MS4 – Municipal Separate Storm Sewer System
MS4 GP – SPDES General Permit for Stormwater Discharges from the Municipal Separate Storm Sewer Systems, GP-0-24-001
MSGP – SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity, GP-0-23-001
NOI – Notice of Intent
NPDES – National Pollutant Discharge Elimination System
NYCRR – New York Codes, Rules and Regulations
NYS DEC – New York State Department of Environmental Conservation
O&M – Operations and Maintenance
ORI – Outfall Reconnaissance Inventory
POC – Pollutant of Concern
RSE – Regional Stormwater Entity
SPDES – State Pollutant Discharge Elimination System
SMP – Stormwater Management Practice
SWMP – Stormwater Management Program
SWMP Plan – Stormwater Management Program Plan

SWPPP – Stormwater Pollution Prevention Plan

TMDL – Total Maximum Daily Load

USEPA – United States Environmental Protection Agency

Definitions

All definitions in this section are solely for the purposes of this permit. If a word is not defined below, use it how it is commonly defined.

Additionally Designated Areas – those areas that meet the additional designation criteria, Designation Criteria for Identifying Regulated Municipal Separate Storm Sewer Systems (*MS4s*), January 2010, revised January 2023 and found in Appendix B.

Additionally Designated Area MS4 Outfall (ADA MS4 outfall) – any point of *stormwater discharge* from pipes, ditches, and swales, as well as other points of concentrated flow, to impaired waters listed in Appendix C from an *MS4 Operator's MS4*. Areas of *sheet flow* which drain to impaired waters listed in Appendix C are not considered *ADA MS4 outfalls*.

Automatically Designated Areas – those areas served by *MS4s* that meet the automatic designation criteria, Designation Criteria for Identifying Regulated Municipal Separate Storm Sewer Systems (*MS4s*), January 2010, revised January 2023 and found in Appendix B.

Best Management Practice (BMP) – schedules of activities, practices, and prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the state. BMPs also include treatment requirements, operating procedures, and practices to control runoff, spillage and leaks, sludge or waste disposal, or drainage from areas that could contribute pollutants to *stormwater discharges*.

Catch Basin(s) – a cistern, vault, chamber, or well that is part of the *MS4* and designed to capture trash, sediment, and/or debris in its *sump*.

Construction Activity(ies) – any clearing, grading, excavation, demolition or stockpiling activity that results in soil disturbance. Clearing activities can include but are not limited to logging equipment operation, the cutting and skidding of trees, stump removal and/or brush root removal. *Construction activity* does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

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

Develop (Developed) – for *MS4 Operators* continuing coverage, *develop* means to continue to implement their current SWMP and update the SWMP to comply with the permit requirement; for newly designated *MS4 Operators*, *develop* means to create that permit requirement.

Discharge (Discharging) – any addition of any pollutant to *surface waters of the State* through an outlet or point source (6 NYCRR 750-1.2(a)(28)).

Dry Weather – prolonged dry periods (at least 48 hours after the last runoff event).

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

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

Industrial Activity – the eleven (11) categories of industrial activities included in the definition of “*stormwater discharges* associated with industrial activity,” as defined in 40 CFR 122.26(b)(14)(i)-(ix) and (xi).

Interconnection – any point of *stormwater discharge* from pipes, ditches, and swales, as well as other points of concentrated flow, where the *MS4 Operator's MS4* is *discharging* to another *MS4* or private storm sewer system. Areas of *sheet flow* which drain to another *MS4* or private storm sewer system are not considered *interconnections*.

Intermittent Discharge – a *discharge* which occurs over a shorter period of time (e.g., a few hours per day or a few days per year) (CWP 2004).

Larger Common Plan of Development or Sale – 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.

MS4 Operator – the person, persons, or legal entity that obtains coverage and is responsible for the *MS4*.

MS4 Outfall – any point of *stormwater discharge* from pipes, ditches, and swales, as well as other points of concentrated flow, to *surface waters of the State* from an *MS4 Operator's MS4*. Areas of *sheet flow* which drain to *surface waters of the State* are not considered *MS4 outfalls*.

Municipal (Municipally) – a county, town, city, village, district corporation, special improvement district, sewer authority or agency thereof. Examples of other public entities that are included in this program include State University Campuses, federal and State prisons, State and federal hospitals, Dormitory Authorities, public housing authorities, school and other special districts.

Municipal Facility – an *MS4 Operator* owned and/or operated facility with the potential to *discharge* pollutants to the *MS4* and/or *surface water of the State* of the State.

Municipal Facility Intraconnection – any point where stormwater is conveyed from the *MS4 Operator*'s municipal facility to the *MS4 Operator*'s own *MS4*. This is the most down-drainage end of the *MS4* infrastructure located on the municipal facility prior to discharge to the *MS4*.

Municipal Operations (Operations) – activities conducted by the *MS4 Operator* with the potential to discharge pollutants to the *MS4* and/or *surface water of the State*.

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

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

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

No Exposure – all industrial materials or activities are protected by a storm-resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff.

Non-traditional MS4 Operators– state, federal, county and other publicly owned properties such as state university campuses, prisons, office complexes, hospitals, military installations public housing authorities, school and other special districts.

Obvious Illicit Discharge –an *illicit discharge* from a flowing *MS4 outfall* that does not require sample collection for confirmation; this references the Monitoring Locations Inspection and Sampling Field Sheet, adapted from CWP 2004, Section 6: Overall Outfall Characterization.

Physical Indicator Present in the Flow – a sensory indicator present in the *discharge* from *monitoring location* including odor, color, turbidity and floatables; this references the Monitoring Locations Inspection and Sampling Field Sheet, adapted from CWP 2004, Section 4: Physical Indicators for Flowing Monitoring Locations Only.

Physical Indicator not Related to Flow – an indicator of past *discharges*, potentially *intermittent* or *transitory discharge*, including *monitoring location* damage, *monitoring location* deposits or stains, abnormal vegetation growth, poor pool quality or pipe benthic growth; this references the Monitoring Locations Inspection and Sampling Field Sheet, adapted from CWP 2004, Section 5: Physical Indicators for Both Flowing and Non-Flowing Monitoring Locations. These physical indicators can be present at both flowing and non-flowing monitoring locations.

Pollutant – dredged spoil, filter backwash, solid waste, incinerator residue, 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 or guidance values adopted as provided in Parts 700 et seq of this Title. For the purposes of this *SPDES* general permit, relevant pollutants include, but are not limited to, nitrogen, phosphorus, chloride, silt and sediment, pathogens, herbicides/pesticides, floatables, petroleum hydrocarbons, heavy metals, and polycyclic aromatic hydrocarbons (PAHs).

Pollutant of Concern (POC) – a pollutant causing the impairment of an impaired water segment with an approved TMDL and/or listed in Appendix C, including phosphorus, silt/sediment, pathogens, nitrogen, and floatables.

Privately Owned/Operated – not owned/operated by the *MS4 Operator* or another *MS4 Operator*.

Publicly Owned/Operated – owned/operated by the *MS4 Operator*.

Qualified Inspector – a person who is knowledgeable in the principles and practices of erosion and sediment control, such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, or other *Department* endorsed individual(s).

It can also mean someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided that person has training in the principles and practices of erosion and sediment control. Training in the principles and practices of erosion and sediment control means that the individual working under the direct

supervision of the licensed Professional Engineer or Registered Landscape Architect has received four (4) hours of *Department* endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other *Department* endorsed entity. After receiving the initial training, the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect must receive four (4) hours of training every three (3) years.

It can also mean a person that meets the *qualified professional* qualifications in addition to the *qualified inspector* qualifications.

Note: Inspections of any post-construction *SMPs* that include structural components, such as a dam for an impoundment, must be performed by a licensed Professional Engineer.

Qualified Professional – a person who 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 *SMP* 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), must be prepared by, or under the direct supervision of, a professional engineer licensed to practice in the State of New York.

Qualifying Storm Event – a storm event with at least 0.1 inch of precipitation, providing the interval from the preceding measurable storm is at least 72 hours. The 72-hour storm interval is waived if the preceding measurable storm did not result in a *stormwater discharge* (e.g., a storm events in excess of 0.1 inches may not result in a *stormwater discharge* at some facilities), or if the *MS4 Operator* is able to document that less than a 72-hour interval is representative for local storm events during the sampling period.

Regional Stormwater Entity (RSE) – an organization made up of multiple cooperating regulated and/or nonregulated entities located in the same geographical region of the State who share resources to improve overall *stormwater* management in their area.

Retrofit – to modify or add to existing *stormwater* infrastructure for the purpose of reducing pollutant loadings.

Sheet Flow – *stormwater* runoff flowing in a thin layer over the ground surface.

Sizing Criteria – the criteria included in the CGP that are used to size post-construction *stormwater* management control practices. The criteria include; Water Quality Volume (WQv), Runoff Reduction Volume (RRv), Channel Protection Volume (Cpv), Overbank Flood (Qp), and Extreme Flood (Qf).

State Pollutant Discharge Elimination System (SPDES) – 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 – 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 Hotspots - 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. For further detail, see Section 4.11 of the NYS SWMDM 2015.

Stormwater Management Practices (SMPs) – measures, either structural or nonstructural, that are constructed as part of new development or redevelopment projects and are intended to capture, treat, reduce and/or retain *stormwater* runoff.

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

Stormwater Management Program Plan (SWMP Plan) – is used by the *MS4 Operator* to document and detail the activities and measures that will be implemented to meet the terms and conditions of this *SPDES* general permit. The *SWMP Plan* must be updated during the permit term as the *MS4 Operator's* activities are modified to meet permit conditions. The *SWMP Plan* can be hardcopy or digital.

Storm-sewershed (sewershed) – the catchment that drains to a waterbody based on the *MS4* and surface topography. Adjacent catchment areas that drain to the same waterbody are not separate storm-sewersheds.

Sump – the part of the *catch basin* between the bottom interior of the *catch basin* and the invert of the deepest outlet of the *catch basin*.

Surface Water(s) of the State – must 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 must be regulated as a *discharge* at the point where the storm sewer *discharges* to waters of the state.

Suspect Illicit Discharge – an *illicit discharge* from flowing monitoring locations with high severity (score of 3) on one or more physical indicators based on the relative severity index of physical indicators for flowing *MS4 outfalls* only; this references the Monitoring Locations Inspection and Sampling Field Sheet, adapted from CWP 2004, Section 6: Overall Outfall Characterization.

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

Traditional Land Use Control *MS4 Operators* – a city, town, or village with land use control authority.

Traditional Non-land Use Control *MS4 Operators* – any county agency without land use control.

Transitory Discharge – a *discharge* which occurs rarely, usually in response to a singular event such as an industrial spill, ruptured tank, sewer break, transport accident or illegal dumping episode (CWP 2004).

Water Quality Standard – 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.

Appendix B. Designation Criteria for Identifying Regulated Municipal Separate Storm Sewer Systems (MS4s), January 2010, revised January 2023

The universe of small *municipal* separate storm sewer systems (MS4s) is quite large. However, only a sub-set of small MS4s, referred to as “regulated” small MS4s, are covered by the Federal *stormwater* regulations. A small MS4 can be designated as a regulated MS4 through *automatic designation* by the USEPA or by meeting designation criteria developed by the NPDES permitting authority, the New York State Department of Environmental Conservation (*Department*) in New York State.

Automatic Designation Criteria Required by USEPA

The USEPA's automatic designation criteria are based strictly on population and density. An area is *automatically designated* if the population is at least 50,000 and has an overall population density of at least 1,000 people per square mile based on the 2000 and 2010 censuses.

Additional Designation Criteria

The USEPA requires the *Department* to develop a set of criteria for *additionally designated areas*. The following criteria, using a combination of population and environmental factors, have been adopted to designate additional MS4s in NYS.

Criterion 1: MS4s *discharging* to waters for which an USEPA-approved Total Maximum Daily Load (TMDL) requires reduction of a *pollutant of concern* beyond what can be achieved with existing programs (and the area is not already covered under automatic designation).

Criterion 2: MS4s, contiguous to *automatically designated areas* (municipal 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 areas* are extended to town, village, or city boundaries, but only for town, village or city implementation of minimum control measure 4 construction site stormwater runoff control and minimum control measure 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).

Appendix C. List of Impaired Waters

NOTES FOR THE TABLE BELOW:

1. *MS4 Operators* must implement Part VIII.A. Pollutant Specific BMPs for Phosphorus for waterbodies with the pollutant listed as "phosphorus."
2. *MS4 Operators* must implement Part VIII.B. Pollutant Specific BMPs for Silt/Sediment for waterbodies with the pollutant listed as "silt/sediment."
3. *MS4 Operators* must implement Part VIII.C. Pollutant Specific BMPs for Pathogens for waterbodies with the pollutant listed as "pathogens" or "fecal coliform."
4. *MS4 Operators* must implement Part VIII.D. Pollutant Specific BMPs for Nitrogen for waterbodies with the pollutant listed as "nitrogen" or "ammonia."
5. *MS4 Operators* must implement Part VIII.E. Pollutant Specific BMPs for Floatables for waterbodies with the pollutant listed as "garbage & refuse," "oil/grease," or "oil & floating substances."

County	Waterbody Inventory/Priority Waterbody List Name (WI/PWL Number)	Pollutant
Albany	Ann Lee (Shakers) Pond, Stump Pond (1201-0096)	Phosphorus
Bronx	Bronx River, Lower (1702-0006) 18	Fecal Coliform
Bronx	Bronx River, Lower (1702-0006) 18	Garbage & Refuse
Bronx	Bronx River, Middle, and tribs (1702-0106) 18	Fecal Coliform
Bronx	Bronx River, Middle, and tribs (1702-0106) 18	Garbage & Refuse
Bronx	Hutchinson River, Lower, and tribs (1702 0003) 18	Garbage & Refuse
Bronx	Long Island Sound, Western Portion (1702-0027)	Nitrogen
Bronx	Van Cortlandt Lake (1702-0008)	Phosphorus
Bronx	Westchester Creek (1702-0012) 18	Garbage & Refuse
Broome	Minor Tribs to Lower Susquehanna (0603-0044)	Phosphorus
Chautauqua	Chadakoin River and tribs (0202-0018)	Phosphorus
Chautauqua	Lake Erie (Main Lake, South) (0105-0033)	Fecal Coliform
Chautauqua	Lake Erie, Dunkirk Harbor (0105-0009)	Fecal Coliform
Dutchess	Fallkill Creek (1301-0087)	Phosphorus
Dutchess	Wappingers Lake (1305-0001)	Phosphorus
Dutchess	Wappingers Lake (1305-0001)	Silt/Sediment
Erie	Delaware Park Pond (0101-0026)	Phosphorus
Erie	Ellicott Creek, Lower, and tribs (0102-0018)	Phosphorus
Erie	Ellicott Creek, Lower, and tribs (0102-0018)	Silt/Sediment

Erie	Green Lake (0101-0038)	Phosphorus
Erie	Lake Erie (Main Lake, North) (0104-0037)	Fecal Coliform
Erie	Lake Erie (Northeast Shoreline) (0104-0036)	Fecal Coliform
Erie	Rush Creek and tribs (0104-0018)	Fecal Coliform
Erie	Rush Creek and tribs (0104-0018)	Phosphorus
Erie	Scajaquada Creek, Lower, and tribs (0101-0023)	Fecal Coliform
Erie	Scajaquada Creek, Lower, and tribs (0101-0023)	Oils & Floating Sub.
Erie	Scajaquada Creek, Lower, and tribs (0101-0023)	Phosphorus
Erie	Scajaquada Creek, Middle, and tribs (0101-0033)	Fecal Coliform
Erie	Scajaquada Creek, Middle, and tribs (0101-0033)	Oils & Floating Sub.
Erie	Scajaquada Creek, Middle, and tribs (0101-0033)	Phosphorus
Erie	Scajaquada Creek, Upper, and tribs (0101-0034)	Fecal Coliform
Erie	Scajaquada Creek, Upper, and tribs (0101-0034)	Phosphorus
Erie	South Branch Smoke Cr, Lower, and tribs (0101-0036)	Phosphorus
Erie	South Branch Smoke Cr, Lower, and tribs (0101-0036)	Silt/Sediment
Genesee	Tonawanda Cr, Middle, Main Stem (0102-0002)	Phosphorus
Genesee	Tonawanda Cr, Middle, Main Stem (0102-0006)	Fecal Coliform
Herkimer	Mohawk River, Main Stem (1201-0093)	Fecal Coliform
Herkimer	Mohawk River, Main Stem (1201-0093)	Oils & Floating Sub.
Kings	Coney Island Creek (1701-0008) 18	Fecal Coliform
Kings	Coney Island Creek (1701-0008) 18	Garbage & Refuse
Kings	Gowanus Canal (1701 0011) 18	Garbage & Refuse
Kings	Hendrix Creek (1701-0006) 18	Fecal Coliform
Kings	Hendrix Creek (1701-0006) 18	Garbage & Refuse
Kings	Hendrix Creek (1701-0006) 18	Nitrogen
Kings	Mill Basin and tidal tribs (1701 0178) 18	Garbage & Refuse
Kings	Paerdegat Basin (1701-0363) 18	Garbage & Refuse
Kings	Prospect Park Lake (1701-0196)	Phosphorus
Monroe	Buck Pond (0301-0017)	Phosphorus
Monroe	Cranberry Pond (0301-0016)	Phosphorus

Monroe	Long Pond (0301-0015)	Phosphorus
Monroe	Minor Tribs to Irondequoit Bay (0302-0038)	Fecal Coliform
Monroe	Minor Tribs to Irondequoit Bay (0302-0038)	Phosphorus
Monroe	Rochester E–bayment - East (0302-0002)	Fecal Coliform
Monroe	Rochester E–bayment - West (0301-0068)	Fecal Coliform
Monroe	Thomas Creek/White Brook and tribs (0302-0023)	Phosphorus
Nassau	Beaver Lake (1702-0152)	Phosphorus
Nassau	Camaans Pond (1701-0052)	Phosphorus
Nassau	Cold Spring Harbor, and tidal tribs (1702-0018)	Pathogens
Nassau	Dosoris Pond (1702-0024)	Fecal Coliform
Nassau	East Bay (1701-0202)	Fecal Coliform
Nassau	East Meadow Brook, Upper, and tribs (1701-0211)	Silt/Sediment
Nassau	East Rockaway Inlet (1701-0217)	Fecal Coliform
Nassau	Glen Cove Creek, Lower, and tribs (1702-0146)	Fecal Coliform
Nassau	Glen Cove Creek, Lower, and tribs (1702-0146)	Silt/Sediment
Nassau	Grant Park Pond (1701-0054)	Phosphorus
Nassau	Hempstead Bay (1701-0032)	Fecal Coliform
Nassau	Hempstead Harbor, north, and tidal tribs (1702-0022)	Pathogens
Nassau	Hempstead Harbor, south, & tidal tribs (1702-0263)	Fecal Coliform
Nassau	Hempstead Lake (1701-0015)	Phosphorus
Nassau	Long Island Sound, Nassau County Waters (1702-0028)	Fecal Coliform
Nassau	Long Island Sound, Nassau County Waters (1702-0028)	Nitrogen
Nassau	Manhasset Bay, and tidal tribs (1702-0021)	Fecal Coliform
Nassau	Manhasset Bay, and tidal tribs (1702-0141)	Fecal Coliform
Nassau	Massapequa Creek, Upper, and tribs (1701-0174)	Fecal Coliform
Nassau	Massapequa Creek, Upper, and tribs (1701-0174)	Phosphorus
Nassau	Middle Bay (1701-0208)	Fecal Coliform
Nassau	Milburn/Parsonage Creeks, Upp, and tribs (1701-0212)	Phosphorus
Nassau	Mill Neck Creek and tidal tribs (1702-0151)	Pathogens
Nassau	Oyster Bay Harbor (1702-0016)	Pathogens
Nassau	Reynolds Channel, east (1701-0215)	Fecal Coliform

Nassau	Seafords/Seamans Creeks, Upper, and tribs (1701-0201)	Fecal Coliform
Nassau	Shell Creek and Barnums Channel (1701-0213386)	Fecal Coliform
Nassau	South Oyster Bay (1701-0041)	Fecal Coliform
Nassau	Tidal Tribs to Hempstead Bay (1701-0218)	Fecal Coliform
Nassau	Tidal Tribs to Hempstead Bay (1701-0218)	Nitrogen
Nassau	Tidal Tribs to South Oyster Bay (1701-0200)	Fecal Coliform
Nassau	Tribs (fresh) to East Bay (1701-0204)	Fecal Coliform
Nassau	Tribs (fresh) to East Bay (1701-0204)	Phosphorus
Nassau	Tribs (fresh) to East Bay (1701-0204)	Silt/Sediment
Nassau	Tribs to Smith Pond/Halls Pond (1701-0221)	Phosphorus
Nassau	Woodmere Channel (1701-0219)	Fecal Coliform
Nassau	Woodmere Channel (1701-0219)	Nitrogen
New York	East River, Lower (1702-0011) 18	Garbage & Refuse
New York	Harlem River (1702-0004) 18	Garbage & Refuse
New York	Harlem Meer (1702-0103)	Phosphorus
New York	The Lake in Central Park (1702-0105)	Phosphorus
Niagara	Bergholtz Creek and tribs (0101-0004)	Fecal Coliform
Niagara	Bergholtz Creek and tribs (0101-0004)	Phosphorus
Niagara	Hyde Park Lake (0101-0030)	Phosphorus
Oneida	Ballou, Nail Creeks (1201-0203)	Phosphorus
Oneida	Mohawk River, Main Stem (1201-0010)	Fecal Coliform
Oneida	Mohawk River, Main Stem (1201-0094)	Fecal Coliform
Oneida	Utica Harbor (1201-0228)	Fecal Coliform
Onondaga	Bloody Brook and tribs (0702 0006) 10	Fecal Coliform
Onondaga	Ley Creek and tribs (0702 0001) 10	Fecal Coliform
Onondaga	Ley Creek and tribs (0702-0001) 10	Ammonia (NH3)
Onondaga	Ley Creek and tribs (0702-0001) 10	Phosphorus
Onondaga	Minor Tribs to Onondaga Lake (0702-0022) 10	Nitrogen (NH3, NO2)
Onondaga	Minor Tribs to Onondaga Lake (0702-0022) 10	Phosphorus
Onondaga	Minor Tribs to Onondaga Lake (0702-0022) 10	Fecal Coliform
Onondaga	Onondaga Creek, Lower (0702-0023) 10	Ammonia (NH3)
Onondaga	Onondaga Creek, Lower (0702-0023) 10	Fecal Coliform

Onondaga	Onondaga Creek, Lower (0702-0023) 10	Phosphorus
Onondaga	Onondaga Creek, Middle, and tribs (0702-0004) 10	Fecal Coliform
Onondaga	Onondaga Lake, Southern End (0702-0021) [10]	Fecal Coliform
Ontario	Great Brook and minor tribs (0704-0034)	Phosphorus 2
Ontario	Great Brook and minor tribs (0704-0034)	Silt/Sediment
Orange	Greenwood Lake (1501-0001)	Phosphorus
Orange	Monhagen Brook and tribs (1306-0074)	Phosphorus
Orange	Orange Lake (1301-0008) [16]	Phosphorus
Oswego	Lake Neatahwanta (0701-0018)	Phosphorus
Putnam	Bog Brook Reservoir (1302-0041)	Phosphorus
Putnam	Boyd Corners Reservoir (1302-0045)	Phosphorus
Putnam	Croton Falls Reservoir (1302-0026)	Phosphorus
Putnam	Diverting Reservoir (1302-0046)	Phosphorus
Putnam	East Branch Reservoir (1302-0040)	Phosphorus
Putnam	Middle Branch Reservoir (1302-0009)	Phosphorus
Putnam	Oscawana Lake (1301-0035)	Phosphorus
Putnam	Palmer Lake (1302-0103)	Phosphorus
Putnam	West Branch Reservoir (1302-0022)	Phosphorus
Queens	Alley Creek/Little Neck Bay Trib (1702-0009) 18	Fecal Coliform
Queens	Atlantic Ocean Coastline (1701-0014)	Fecal Coliform
Queens	Bergen Basin (1701-0009) 18	Fecal Coliform
Queens	Bergen Basin (1701-0009) 18	Garbage & Refuse
Queens	Bergen Basin (1701-0009) 18	Nitrogen
Queens	East River, Upper (1702-0010) 18	Garbage & Refuse
Queens	East River, Upper (1702-0032) 18	Garbage & Refuse
Queens	Flushing Creek/Bay (1702 0005) 18	Garbage & Refuse
Queens	Flushing Creek/Bay (1702-0005)	Nitrogen
Queens	Flushing Creek/Bay (1702-0005) 18	Fecal Coliform
Queens	Jamaica Bay, Eastern, and tribs, Queens (1701-0005) 18	Fecal Coliform
Queens	Jamaica Bay, Eastern, and tribs, Queens (1701-0005) 18	Garbage & Refuse
Queens	Jamaica Bay, Eastern, and tribs, Queens (1701-0005) 18	Nitrogen

Queens	Kissena Lake (1702-0258)	Phosphorus
Queens	Little Neck Bay (1702-0029)	Fecal Coliform
Queens	Meadow Lake (1702-0030)	Phosphorus
Queens	Newtown Creek and tidal tribs (1702 0002) 18	Garbage & Refuse
Queens	Newtown Creek and tidal tribs (1702-0002) 18	Fecal Coliform
Queens	Shellbank Basin (1701-0001) 18	Nitrogen
Queens	Spring Creek and tribs (1701-0361) 18	Garbage & Refuse
Queens	Thurston Basin (1701-0152) 18	Fecal Coliform
Queens	Thurston Basin (1701-0152) 18	Garbage & Refuse
Queens	Willow Lake (1702-0031)	Phosphorus
Rensselaer	Nassau Lake (1310-0001)	Phosphorus
Richmond	Arthur Kill, Class I, and minor tribs (1701 0010) 18	Garbage & Refuse
Richmond	Arthur Kill, Class SD, and minor tribs (1701-0182) 18	Garbage & Refuse
Richmond	Grassmere Lake/Bradys Pond (1701-0357)	Phosphorus
Richmond	Kill Van Kull (1701 0184) 18	Garbage & Refuse
Richmond	Newark Bay (1701 0183) 18	Garbage & Refuse
Richmond	Raritan Bay, Class SA (1701-0002)	Fecal Coliform
Rockland	Congers Lake, Swartout Lake (1501-0019)	Phosphorus
Rockland	Rockland Lake (1501-0021)	Phosphorus
Rockland	Sparkill Creek, Lower (1301-0088)	Fecal Coliform
Saratoga	Ballston Lake (1101-0036)	Phosphorus
Saratoga	Dwaas Kill and tribs (1101-0007)	Phosphorus
Saratoga	Dwaas Kill and tribs (1101-0007)	Silt/Sediment
Saratoga	Lake Lonely (1101-0034)	Phosphorus
Saratoga	Tribs to Lake Lonely (1101-0001)	Fecal Coliform
Saratoga	Tribs to Lake Lonely (1101-0001)	Phosphorus
Schenectady	Collins Lake (1201-0077)	Phosphorus
Schenectady	Duane Lake (1311-0006)	Phosphorus
Schenectady	Mariaville Lake (1201-0113)	Phosphorus
Suffolk	Acabonack Harbor (1701-0047)	Pathogens
Suffolk	Agawam Lake (1701-0117)	Phosphorus
Suffolk	Beaverdam Creek and tribs (1701-0104)	Ammonia
Suffolk	Bellport Bay (1701-0320)	Pathogens

Suffolk	Big/Little Fresh Ponds (1701-0125)	Phosphorus
Suffolk	Canaan Lake (1701-0018)	Phosphorus
Suffolk	Canaan Lake (1701-0018)	Silt/Sediment
Suffolk	Centerport Harbor (1702-0229)	Pathogens
Suffolk	Conscience Bay and tidal tribs (1702-0091)	Pathogens
Suffolk	Flanders Bay, East/Center, and tribs (1701-0030)	Pathogens
Suffolk	Flanders Bay, West/Lower Sawmill Creek (1701-0254)	Nitrogen
Suffolk	Flanders Bay, West/Lower Sawmill Creek (1701-0254)	Pathogens
Suffolk	Flax Pond (1702-0240)	Fecal Coliform
Suffolk	Forge River, Lower and Cove (1701-0316)	Fecal Coliform
Suffolk	Fresh Pond (1701-0241)	Phosphorus
Suffolk	Goldsmith Inlet (1702-0026)	Pathogens
Suffolk	Goose Creek (1701-0236)	Pathogens
Suffolk	Great Cove (1701-0376)	Fecal Coliform
Suffolk	Great South Bay, East (1701-0039)	Nitrogen
Suffolk	Great South Bay, Middle (1701-0040)	Nitrogen
Suffolk	Great South Bay, West (1701-0173)	Nitrogen
Suffolk	Hashamomuck Pond (1701-0162)	Pathogens
Suffolk	Heady and Taylor Creeks and tribs (1701-0294)	Pathogens
Suffolk	Huntington Harbor (1702-0228)	Pathogens
Suffolk	Lake Montauk (1701-0031)	Pathogens
Suffolk	Lake Ronkonkoma (1701-0020)	Fecal Coliform
Suffolk	Lake Ronkonkoma (1701-0020)	Phosphorus
Suffolk	Little Sebonac Creek (1701-0253)	Pathogens
Suffolk	Long Island Sound, Suffolk Co, Central (1702-0265)	Fecal Coliform
Suffolk	Mattituck Inlet/Cr, Low, and tidal tribs (1702-0020)	Pathogens
Suffolk	Meetinghouse/Terrys Creeks and tribs (1701-0256)	Pathogens
Suffolk	Mill and Seven Ponds (1701-0113)	Phosphorus
Suffolk	Millers Pond (1702-0013)	Phosphorus
Suffolk	Moriches Bay, East (1701-0305)	Nitrogen
Suffolk	Moriches Bay, West (1701-0038)	Nitrogen
Suffolk	Mt Sinai Harbor and tidal tribs (1702-0019)	Pathogens

Suffolk	Mud Creek, Upper, and tribs (1701-0101)	Fecal Coliform
Suffolk	Narrow Bay (1701-0318)	Pathogens
Suffolk	Nicoll Bay (1701-0375)	Fecal Coliform
Suffolk	North Sea Harbor and tribs (1701-0037)	Pathogens
Suffolk	Northport Harbor (1702-0230)	Pathogens
Suffolk	Northwest Creek and tidal tribs (1701-0046)	Pathogens
Suffolk	Noyack Creek and tidal tribs (1701-0237)	Pathogens
Suffolk	Ogden Pond (1701-0302)	Pathogens
Suffolk	Patchogue Bay (1701-0326)	Pathogens
Suffolk	Peconic River, Lower, and tidal tribs (1701-0259)	Nitrogen
Suffolk	Peconic River, Lower, and tidal tribs (1701-0259)	Pathogens
Suffolk	Penniman Creek and tidal tribs (1701-0300)	Pathogens
Suffolk	Penny Pond, Wells and Smith Creeks (1701-0298)	Pathogens
Suffolk	Phillips Creek, Lower, and tidal tribs (1701-0299)	Fecal Coliform
Suffolk	Port Jefferson Harbor, North, and tribs (1702-0015)	Pathogens
Suffolk	Quantuck Bay (1701-0042)	Pathogens
Suffolk	Quantuck Bay (1701-0042)	Nitrogen
Suffolk	Quantuck Canal/Moneybogue Bay (1701-0371)	Pathogens
Suffolk	Quogue Canal (1701-0301)	Fecal Coliform
Suffolk	Reeves Bay and tidal tribs (1701-0272)	Pathogens
Suffolk	Richmond Creek and tidal tribs (1701-0245)	Pathogens
Suffolk	Sag Harbor and Sag Harbor Cove (1701-0035)	Pathogens
Suffolk	Sebonac Cr/Bullhead Bay and tidal tribs (1701-0051)	Pathogens
Suffolk	Setauket Harbor (1702-0242)	Pathogens
Suffolk	Shinnecock Bay and Inlet (1701 0033)	Nitrogen
Suffolk	Stirling Creek and Basin (1701-0049)	Pathogens
Suffolk	Stony Brook Harbor and West Meadow Creek (1702-0047)	Pathogens
Suffolk	Tidal Tribs to Gr Peconic Bay, Northshr (1701-0247)	Pathogens
Suffolk	Tidal Tribs to West Moriches Bay (1701-0312)	Fecal Coliform
Suffolk	Tidal Tribs to West Moriches Bay (1701-0312)	Nitrogen
Suffolk	Town/Jockey Creeks and tidal tribs (1701-0235)	Pathogens
Suffolk	Tuthill, Harts, Seatuck Coves (1701-0309)	Pathogens
Suffolk	Weesuck Creek and tidal tribs (1701-0111)	Pathogens

Suffolk	West Creek and tidal tribs (1701-0246)	Fecal Coliform
Suffolk	Wooley Pond (1701-0048)	Pathogens
Tompkins	Cayuga Lake, Southern End (0705-0040)	Phosphorus
Tompkins	Cayuga Lake, Southern End (0705-0040)	Silt/Sediment
Warren	Hague Brook and tribs (1006-0006)	Silt/Sediment
Warren	Huddle/Finkle Brooks and tribs (1006-0003)	Silt/Sediment
Warren	Indian Brook and tribs (1006-0002)	Silt/Sediment
Warren	Lake George (1006-0016) and tribs	Silt/Sediment
Warren	Tribs to Lake George, East Shore (1006-0020)	Silt/Sediment
Warren	Tribs to Lake George, Lk. George Village (1006-0008)	Silt/Sediment
Wayne	Lake Ontario Shoreline, Central (0302-0044)	Fecal Coliform
Westchester	Amawalk Reservoir (1302-0044)	Phosphorus
Westchester	Bronx River, Upper, and tribs (1702-0107)	Fecal Coliform
Westchester	Cross River Reservoir (1302-0005)	Phosphorus
Westchester	Hutchinson River, Middle, and tribs (1702-0074)	Fecal Coliform
Westchester	Hutchinson River, Middle, and tribs (1702-0074)	Oil/Grease
Westchester	Lake Katonah (1302-0136)	Phosphorus
Westchester	Lake Lincolndale (1302-0089)	Phosphorus
Westchester	Lake Meahagh (1301-0053)	Phosphorus
Westchester	Lake Mohegan (1301-0149)	Phosphorus
Westchester	Lake Shenorock (1302-0083)	Phosphorus
Westchester	Larchmont Harbor (1702-0116)	Fecal Coliform
Westchester	Long Island Sound, Westchester Co Waters (1702-0001)	Fecal Coliform
Westchester	Long Island Sound, Westchester Co Waters (1702-0001)	Nitrogen
Westchester	Mamaroneck Harbor (1702-0125)	Fecal Coliform
Westchester	Mamaroneck River, Lower (1702-0071)	Silt/Sediment
Westchester	Mamaroneck River, Upp, & minor tribs (1702-0123)	Silt/Sediment
Westchester	Milton Harbor/Lower Blind Brook (1702-0063)	Fecal Coliform
Westchester	Muscoot/Upper New Croton Reservoir (1302-0042)	Phosphorus
Westchester	New Croton Reservoir (1302-0010)	Phosphorus
Westchester	New Rochelle Harbor (1702-0259)	Fecal Coliform
Westchester	Port Chester Harbor/Lower Byram River (1702-0260)	Fecal Coliform

Westchester	Reservoir No.1/Lake Isle (1702-0075)	Phosphorus
Westchester	Saw Mill River (1301-0007)	Fecal Coliform
Westchester	Saw Mill River (1301-0007)	Phosphorus
Westchester	Saw Mill River, Middle, and tribs (1301-0100)	Fecal Coliform
Westchester	Saw Mill River, Middle, and tribs (1301-0100)	Phosphorus
Westchester	Sheldrake River (1702-0069)	Phosphorus
Westchester	Sheldrake River (1702-0069)	Silt/Sediment
Westchester	Silver Lake (1702-0040)	Phosphorus
Westchester	Teatown Lake (1302-0150)	Phosphorus
Westchester	Titicus Reservoir (1302-0035)	Phosphorus
Westchester	Truesdale Lake (1302-0054)	Phosphorus
Westchester	Wallace Pond (1301-0140)	Phosphorus

Appendix D. Forms

Included in this section are the following documents, in order:

- Monitoring Locations Inspection and Sampling Field Sheet
- Construction Site Inspection Report Form
- No Exposure Certification
- Municipal Facility Assessment Form
- Storm Event Data Form
- Visual Monitoring Form

Monitoring Locations Inspection and Sampling Field Sheet

Section 1: Background Data

Subwatershed:		Monitoring Location ID:	
Today's date:		Time (Military):	
Investigators:		Form completed by:	
Temperature (°F):	Rainfall (in.):	Last 24 hours:	Last 48 hours:
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
☐ Industrial ☐ Ultra-Urban Residential ☐ Suburban Residential ☐ Commercial		☐ Open Space ☐ Institutional Other: _____ Known Industries: _____	
Notes (e.g., origin, if known):			

Section 2: Monitoring Location Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
☐ Closed Pipe	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Single ☐ Elliptical ☐ Double ☐ Box ☐ Triple ☐ Other: _____ ☐ 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 <i>If No, Skip to Section 5</i>			
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial			

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING MONITORING LOCATIONS				
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	Stopwatch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Monitoring Locations Inspection and Sampling Field Sheet

Section 4: Physical Indicators for Flowing Monitoring Locations 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 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 Monitoring Locations

Are physical indicators that are not related to flow present? ☐ Yes ☐ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Monitoring Location 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 Monitoring Location 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)?



**NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF WATER**



New York State Department of Environmental Conservation Construction Site Inspection Report for SPDES MS4 General Permit GP-0-24-001			
Project Name:		Date:	
Project Location:		Weather:	
Permit # (if any): NYR	Contacted: ☐ Yes ☐ No	Entry Time:	Exit Time:
Name of SPDES Permittee:		Inspection Type:	☐ NOT ☐ Complaint
Phone Number(s):			☐ Compliance ☐ Referral
On-site Representative(s) and Company(s):		MS4 Operator Name:	
		MS4 Permit ID: NYR20A	

SPDES Authority

Yes No N/A

1. ☐ ☐ ☐ Does the project have permit coverage?
2. ☐ ☐ ☐ Is a copy of the NOI and Acknowledgment Letter available on site and accessible for viewing?
3. ☐ ☐ ☐ Is a copy of the MS4 SWPPP Acceptance Form available on site and accessible for viewing?
4. ☐ ☐ ☐ Is an up-to-date copy of the signed SWPPP retained at the construction site?
5. ☐ ☐ ☐ Is a copy of the SPDES General Permit retained at the construction site?
6. ☐ ☐ ☐ Does the NOI accurately report the number of acres to be disturbed?

Citation

GP-0-20-001: I.A & II. B
 GP-0-20-001: II.D.2
 GP-0-20-001: II.D.2
 GP-0-20-001: II.D.2. & III.A.4
 GP-0-20-001: II.D.2
 GP-0-20-001: II.B.4

SWPPP Content

Yes No N/A

7. ☐ ☐ ☐ Does the SWPPP describe and identify the erosion and sediment control measures to be employed?
8. ☐ ☐ ☐ Does the SWPPP provide an inspection schedule and maintenance requirements for the E&SC measures?
9. ☐ ☐ ☐ Does the SWPPP describe and identify the stormwater management practices to be employed?
10. ☐ ☐ ☐ Does the SWPPP identify the contractor(s) and subcontractor(s) responsible for each measure?
11. ☐ ☐ ☐ Does the SWPPP identify at least one trained individual from each contractor(s) and subcontractor(s) companies?
12. ☐ ☐ ☐ Does the SWPPP include all the necessary Contractor Certification Statements and signatures?
13. ☐ ☐ ☐ Is the SWPPP signed by the permittee?
14. ☐ ☐ ☐ Is the SWPPP prepared by a qualified professional (if post-construction stormwater management required)?
15. ☐ ☐ ☐ Do the SMPs conform to the Enhanced Phosphorus Removal Standards (projects in TMDL watersheds)?

Citation

GP-0-20-001: III.B.1.e
 GP-0-20-001: III.B.1.i
 GP-0-20-001: III.B.2
 GP-0-20-001: III.A.6
 GP-0-20-001: III.A.6
 GP-0-20-001: VII.H.2
 GP-0-20-001: III.A.3
 GP-0-20-001: III.B.3

Recordkeeping

Yes No N/A

16. ☐ ☐ ☐ Are self-inspections performed as required by the permit (weekly, or twice weekly for >5 acres disturbed)?
17. ☐ ☐ ☐ Are the self-inspections performed and signed by a qualified inspector and retained on site?
18. ☐ ☐ ☐ Do the qualified inspector's reports include the minimum reporting requirements?
19. ☐ ☐ ☐ Do inspection reports identify corrective measures that have not been implemented or are recurring?

Citation

GP-0-20-001: IV.C.2.a. & b
 GP-0-20-001: II.C.2., IV.C.6 & VII.H.3
 GP-0-20-001: IV.C.4
 GP-0-20-001: IV.C.5



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Visual Observations

Yes No N/A				Citation	
20.	☐	☐	☐	Are all erosion and sediment control measures installed properly?	GP-0-20-001: VII.L
21.	☐	☐	☐	Are all erosion and sediment control measures being maintained properly?	GP-0-20-001: IV.A.1
22.	☐	☐	☐	Was written authorization issued for any disturbance greater than 5 acres?	GP-0-20-001: II.D.3
23.	☐	☐	☐	Have stabilization measures been implemented in inactive areas per Permit (>5acres) or ESC Standard?	GP-0-20-001: II.D.3.b & III.B.1.f
24.	☐	☐	☐	Are post-construction stormwater management practices constructed/installed correctly?	GP-0-20-001: III.B.2
25.	☐	☐	☐	Has final site stabilization been achieved and temporary E&SC measures removed prior to NOT submittal?	GP-0-20-001: V.A.2
26.	☐	☐	☐	Was there a discharge from the site on the day of inspection?	
27.	☐	☐	☐	Is there evidence that a discharge caused or contributed to a violation of water quality standards?	ECL 17-0501, 6 NYCRR 703.2 & GP-0-20-001: I.D

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:



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Additional Comments:

☐ Photographs attached

Overall Inspection Rating: ☐ Satisfactory ☐ Marginal ☐ Unsatisfactory	
Name/Agency of Lead Inspector:	Signature of Lead Inspector:
Names/Agencies of Other Inspectors:	



**Department of
Environmental
Conservation**

NO EXPOSURE CERTIFICATION

**For High Priority Municipal Facilities
in SPDES MS4 General Permit, GP-0-24-001**

The completed No Exposure Certification must be documented in the SWMP Plan.
Please do not submit this form to the Department unless requested.

I. Owner/Facility Information

Owner/Operator Name:

Mailing Address:

City/State/Zip:

Contact Name:

Phone No.:

Facility Name:

Street Address:

City/State/Zip:

County:

Latitude:

Longitude:

II. Exposure Checklist

Are any of the following materials or activities exposed to precipitation, now or in the foreseeable future? (Please check either "Yes" or "No" in the appropriate box.) If you answer "Yes" to any of these questions (1) through (11), you are not eligible for no exposure.

YES

NO

1 Using, storing or cleaning machinery or equipment, and areas where residuals from using, storing or cleaning machinery or equipment remain and are exposed to stormwater

2 Materials or residuals on the ground or in stormwater inlets from spills/leaks

4 Material handling equipment (except adequately maintained vehicles)

5 Materials or products during loading/unloading or transporting activities

6 Materials or products stored outdoors (except final products intended for outside use [e.g., new cars] where exposure to stormwater does not result in the discharge of pollutants)

7 Materials contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers

8 Materials or products handled/stored on roads or railways owned or maintained by the discharger

9 Waste material (except waste in covered, non-leaking containers [e.g., dumpster])

III. Certification

I certify under penalty of law that I have read and understand the eligibility requirements for claiming a condition of "no exposure" and obtaining an exclusion from SPDES stormwater permitting. I certify under penalty of law that there are no discharges of storm water contaminated by exposure to industrial activities or materials from the industrial facility or site identified in this document (except as allowed under 40 CFR 122.26(g)(2)). I understand that I am obligated to submit a no exposure certification form upon request to the NPDES permitting authority or to the operator of the local municipal separate storm sewer system (MS4) into which the facility discharges (where applicable). I understand that I must allow the SPDES permitting authority, or MS4 Operator where the discharge is into the local MS4, to perform inspections to confirm the condition of no exposure and to make such inspection reports publicly available upon request.

Printed Name:

Title/Position:

Signature:

Date:



**Department of
Environmental
Conservation**

**Municipal Facility Assessment Form
For SPDES MS4 General Permit,
GP-0-24-001**

Assessments 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-0-24-001).

MS4 Permit ID:

MS4 Operator Name:

Facility Name:

Facility Type:

Date:

Weather Conditions:

Is stormwater runoff present during this assessment? ☐ Yes ☐ No

Comments:

General

Yes

No

1	Is this a high priority municipal facility?	☐	☐
2	If this is a high priority municipal facility, does the facility qualify for a No Exposure Certification?	☐	☐
3	If this is a high priority municipal facility, is there a completed SWPPP available?	☐	☐
4	Does the facility have any MS4 outfalls?	☐	☐
5	Does the facility have any interconnections?	☐	☐
6	Does the facility have any municipal facility intraconnections?	☐	☐

Comments:

Good Housekeeping

Yes

No

7	Are paved surfaces free of trash, sediment, and/or debris?	☐	☐
8	Date the paved area was last swept or vacuumed.	☐	☐
9	Do outdoor waste receptacles have covers?	☐	☐
10	Are the waste receptacles emptied on a regular basis?	☐	☐
11	Are there signs of leaks, contaminants or overfilling at the waste receptacle area?	☐	☐
12	Are the following facility areas free of accumulated trash, sediment, debris, contaminants, and spills:	☐	☐
	- Salt storage areas	☐	☐
	- Container storage areas	☐	☐
	- Maintenance areas	☐	☐

	- Staging areas	☐	☐
	- Material stockpile areas	☐	☐
Comments:			
<u>Vehicle and Equipment Areas</u>		☐ <u>N/A</u>	
13	Are vehicle/equipment parked indoors or under a roof?	☐	☐
14	Are vehicles/equipment washed in only designated areas?	☐	☐
15	Are vehicles washed regularly to remove contamination and prevent them from polluting stormwater?	☐	☐
16	Is all wash water treated in an oil water separator prior to discharge?	☐	☐
17	Is all wash water managed so it does not enter the MS4?	☐	☐
Comments			
<u>Vehicle/Equipment Maintenance</u>		☐ <u>N/A</u>	
18	Is equipment stored under shelter or elevated and covered?	☐	☐
19	Are fluids drained over a drip pan or pad?	☐	☐
20	Are funnels or pumps used when transferring fluids?	☐	☐
21	Are waste rags and used absorbent pads disposed of properly?	☐	☐
22	Are any vehicles and/or equipment leaking fluids?	☐	☐
23	Are drip pans immediately placed under leaks?	☐	☐
24	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)?	☐	☐
25	Are vehicles inspected daily for leaks?		
Comments:			
<u>Fueling areas</u>		☐ <u>N/A</u>	
26	Is fueling performed under a canopy or roof?	☐	☐
27	Are spill cleanup materials available at the fueling area?	☐	☐
28	Are breakaway valves used on fueling hoses?	☐	☐
29	Is the fueling handle lock disconnected so the operator must attend the fueling?	☐	☐
30	Is stormwater runoff from fueling area treated in an oil/water separator?	☐	☐
31	Is the fueling automatic stop inspected regularly to ensure it is working properly?	☐	☐
32	Are all fuel deliveries monitored?	☐	☐
Comments:			

<u>Salt Storage Piles or Pile Containing Salt</u>				☐ <u>N/A</u>	Yes	No
33	Is salt stored in a salt storage building or under a roof?				☐	☐
34	Are controls in place to minimize spills while adding or removing material from the pile?				☐	☐
35	Are salt spills cleaned up promptly?				☐	☐
36	Is overflow and tracked salt removed promptly from loading areas?				☐	☐
37	Is stormwater draining away from the salt pile directed to a vegetated filter area				☐	☐
Comments:						
<u>Fluids Management</u>				☐ <u>N/A</u>	Yes	No
38	Are all drums and containers of fluids stored with proper cover and containment?				☐	☐
39	Are fluids stored in appropriate containers and/or storage cabinets?				☐	☐
40	Are all fluids kept in original containers or labeled in a manner that describes the contents adequately?				☐	☐
41	Are Material Safety Data Sheets (MSDS/SDS) readily available?				☐	☐
42	Are all containers that are stored free of leaks or deposits?				☐	☐
43	Are containers of product inspected regularly?				☐	☐
44	Is used oil and antifreeze stored indoors and/or on spill containment pallets?				☐	☐
45	Is used oil and antifreeze properly disposed of or recycled?				☐	☐
Comments:						
<u>Lead Acid Batteries</u>				☐ <u>N/A</u>	Yes	No
46	Are lead-acid batteries stored indoors on spill containment pallets or in bins?				☐	☐
47	Are intact batteries stored on an acid-resistant rack or tub?				☐	☐
48	Are cracked or leaking batteries stored in labeled, closed, leak-proof containers?				☐	☐
49	Is the date each battery was placed in storage recorded?				☐	☐
50	Are batteries stacked more than 5 high?				☐	☐
51	Are batteries inspected regularly for leaks?				☐	☐
Comments:						
<u>Spill Prevention and Response Procedures</u>				☐ <u>N/A</u>	Yes	No
52	Are vehicles inspected daily for leaks?				☐	☐

53	Is spill control equipment and absorbents readily available?	☐	☐
54	Are emergency phone numbers posted in conspicuous areas?	☐	☐
55	Are spills contained and cleaned up immediately?	☐	☐
Comments:			
<u>General Material Storage Areas</u>		☐ <u>N/A</u>	
56	Are leaking or damaged materials stored inside a building or another type of storm resistance shelter?	☐	☐
57	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?	☐	☐
58	Are used fuel tanks and other scrap metal and parts drained of fluids and stored under cover?	☐	☐
59	Are outdoor containers covered?	☐	☐
60	Are piles of spoils, asphalt, debris, etc. stored under a roof or cover?	☐	☐
61	Are spills of material or debris cleaned up promptly?	☐	☐
62	Are used tire storage piles placed away from storm drains or conveyances?	☐	☐
63	Are tires recycled frequently to keep the number of stored tires manageable?	☐	☐
Comments:			
<u>Stormwater Management</u>		Yes	No
64	Are employees trained on the municipal facility procedures?	☐	☐
66	Are BMPs and treatment structures working as designed?	☐	☐
67	Are BMPs and treatment structures free from debris buildup or overgrown vegetation that may impair function?	☐	☐
68	Catch basins should be cleaned in accordance with the timeframes listed in Part VI.F.3.c.iii. / Part VII.F.3.c.iii, depending on the MS4 Operator type. Based on this, do any catch basins need to be cleaned?	☐	☐
69	Are berms, curbing or other methods used to divert and direct discharges adequate and in good condition?	☐	☐
70	Are rooftop drains directed to areas away from pavement?	☐	☐
Comments:			
<u>Erosion and Sediment Controls</u>		Yes	No
71	Are soil stabilization measures (e.g., seed and mulch, rolled erosion control products) considered in areas that have the potential for significant soil erosion?	☐	☐
72	Are natural buffers maintained around surface waters?	☐	☐
73	Are flow velocity dissipation devices in place at monitoring locations and channel outlets (rock riprap, stone check dams, concrete baffles)?	☐	☐
74	Do controls conform to the NYS Standards and Specifications for Erosion and Sediment Control (2016), or equivalent?	☐	☐

Comments:

Corrective Actions and Comment

Describe Inspection findings and if necessary, the corrective actions taken

Inspector Signature

Date:



Department of
Environmental
Conservation

Storm Event Data Form
for SPDES MS4 General Permit,
GP-0-24-001

Do not submit this form to the Department; keep this form with the municipal facility's SWPPP and in the MS4 Operator's SWMP Plan.

Permit Number:

N Y R 2 0 A

Facility Name:

Contact First Name:

Contact Last Name:

Contact Phone:

Contact Email:

Storm Event Date:

Storm Duration (in hours):

Rainfall Measurement from Storm Event (in inches):

Date of Last Measurable Storm Event:

Duration Between Storm Event Sampled and End of Previous Measurable Storm (in hours):

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 gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility Operator First Name (please print or type)

/ /

Date

Facility Operator Last Name (please print or type)

Signature



If yes, describe

5. Is there something floating on the surface of the sample? ☐ Yes ☐ No

If yes, describe

6. Is there something suspended in the water column of the sample? ☐ Yes ☐ No

If yes, describe

7. Is there something settled on the bottom of the sample?..... ☐ Yes ☐ No

If yes, describe

8. Is there foam or material forming on the top of the sample surface?..... ☐ Yes ☐ No

If yes, describe

Detail any concerns, corrective actions taken and any other indicators of pollution present in the sample:

Works Cited

Center for Watershed Protection, Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assistance, October 2004 (CWP 2004)

New York State Department of Environmental Conservation, Maintenance Guidance: Stormwater Management Practices, March 31, 2017 (NYS DEC Maintenance Guidance 2017)

New York State Department of Environmental Conservation, Model Local Law to Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer Systems, April 2006 (NYS DEC Model IDDE Local Law 2006)

New York State Department of Environmental Conservation, Sample Local Law for Stormwater Management and Erosion & Sediment Control, March 2006 (NYS DEC Sample SM and E&SC Local Law 2006)

New York State, Standards and Specifications for Erosion & Sediment Control, November 2016 (NYS E&SC 2016)

New York State, Stormwater Management Design Manual, January 2015 (NYS SWMDM 2015)

SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity, GP-0-23-001 (MSGP)

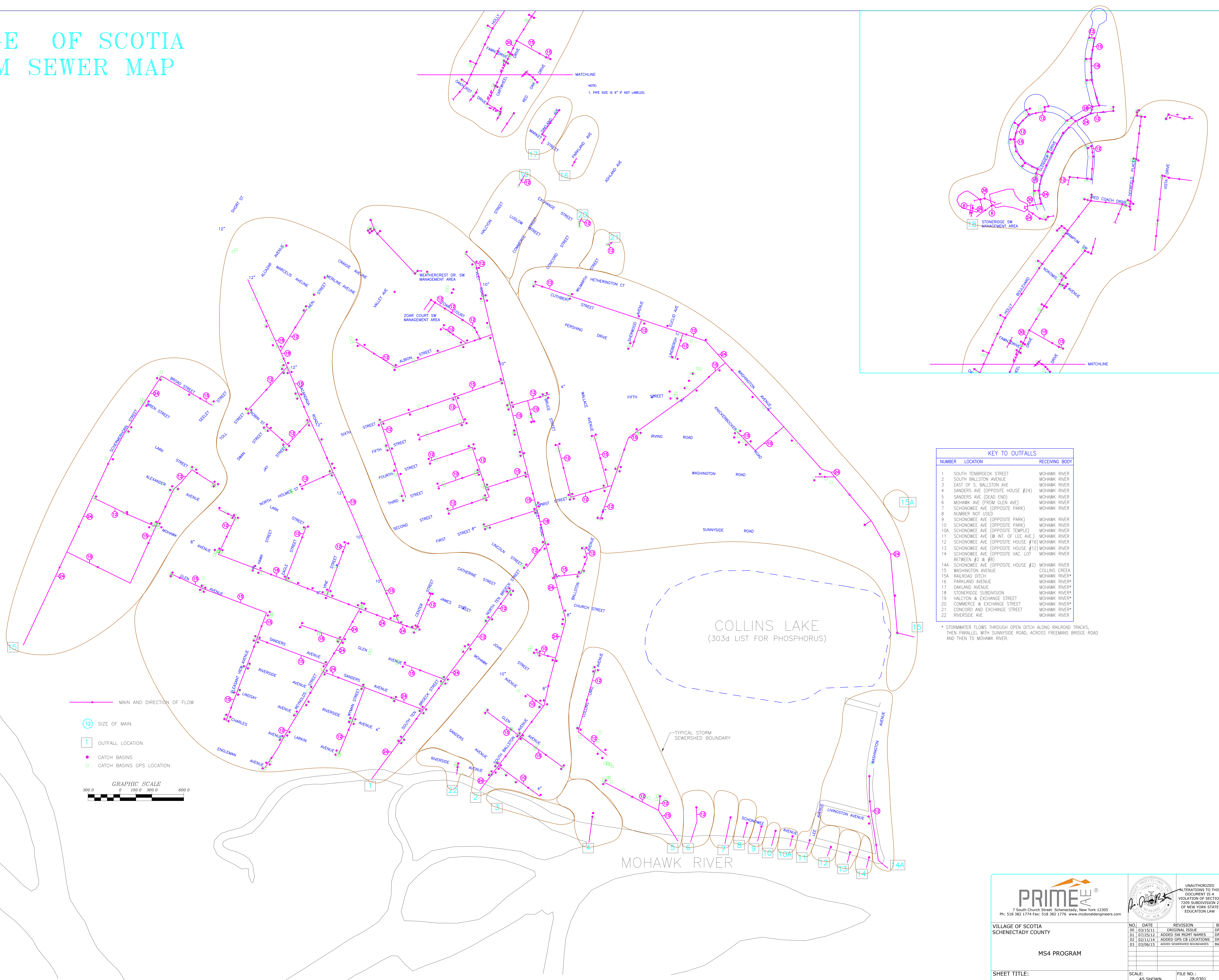
SPDES General Permit for Stormwater from Construction Activities, GP-0-20-001 (CGP)

SPDES General Permit for Stormwater Discharges from the Municipal Separate Storm Sewer Systems, GP-0-24-001 (MS4 GP)

United States Department of Transportation Federal Highway Administration, Highway Functional Classification Concepts, Criteria and Procedures, 2013 (USDOT 2013)

EXHIBIT C
VILLAGE STORM SEWER MAP

VILLAGE OF SCOTIA
STORM SEWER MAP



KEY TO OUTFALLS		
NUMBER	LOCATION	RECEIVING BODY
1	SOUTH TENBROECK STREET	MOHAWK RIVER
2	SOUTH BALLSTON AVENUE	MOHAWK RIVER
3	EAST OF S. BALLSTON AVE	MOHAWK RIVER
4	SANDERS AVE (OPPOSITE HOUSE #24)	MOHAWK RIVER
5	SANDERS AVE (DEAD END)	MOHAWK RIVER
6	MOHAWK AVE (FROM GLEN AVE)	MOHAWK RIVER
7	SCHONWEE AVE (OPPOSITE PARK)	MOHAWK RIVER
8	NUMBER NOT USED	
9	SCHONWEE AVE (OPPOSITE PARK)	MOHAWK RIVER
10	SCHONWEE AVE (OPPOSITE PARK)	MOHAWK RIVER
10A	SCHONWEE AVE (OPPOSITE TEMPLE)	MOHAWK RIVER
11	SCHONWEE AVE (0 INT. OF LEE AVE.)	MOHAWK RIVER
12	SCHONWEE AVE (OPPOSITE HOUSE #18)	MOHAWK RIVER
13	SCHONWEE AVE (OPPOSITE HOUSE #12)	MOHAWK RIVER
14	SCHONWEE AVE (OPPOSITE VAC. LOT BETWEEN #2 & #8)	MOHAWK RIVER
14A	SCHONWEE AVE (OPPOSITE HOUSE #2)	MOHAWK RIVER
15	WASHINGTON AVENUE	COLLINS CREEK
15A	RAILROAD DITCH	MOHAWK RIVER*
16	PARKLAND AVENUE	MOHAWK RIVER*
17	OKLAND AVENUE	MOHAWK RIVER*
18	STONERIDGE SUBDIVISION	MOHAWK RIVER*
19	HALCYON & EXCHANGE STREET	MOHAWK RIVER*
20	COMMERCE & EXCHANGE STREET	MOHAWK RIVER*
21	CONCORD AND EXCHANGE STREET	MOHAWK RIVER*
22	RIVERSIDE AVE	MOHAWK RIVER

* STORMWATER FLOWS THROUGH OPEN DITCH ALONG RAILROAD TRACKS, THEN PARALLEL WITH SUNNYSIDE ROAD, ACROSS FREEMANS BRIDGE ROAD AND THEN TO MOHAWK RIVER.



VILLAGE OF SCOTIA
SCHENECTADY COUNTY

MS4 PROGRAM

SHEET TITLE:
STORM SEWER SYSTEM

NO.		DATE	REVISION	BY
01	03/15/11		ORIGINAL ISSUE	DPC
02	07/25/12		ADDED SW RIGHT NAMES	DPC
03	02/11/14		ADDED GPS CB LOCATIONS	DPC
04	03/06/15		ADDED SEWERSHED BOUNDARIES	HAL
SCALE:		FILE NO.:		
AS SHOWN		28-0301		
PROJ. ENGR.:		DATE:		
DPC		FEBRUARY 2019		
DRAWN BY:		SHEET NO.:		
DPC		A1		
CHECKED BY:				
ATS				

EXHIBIT D
MS4 ORGANIZATIONAL CHART

Village of Scotia Stormwater Management / MS4 Permit Compliance Organizational Chart

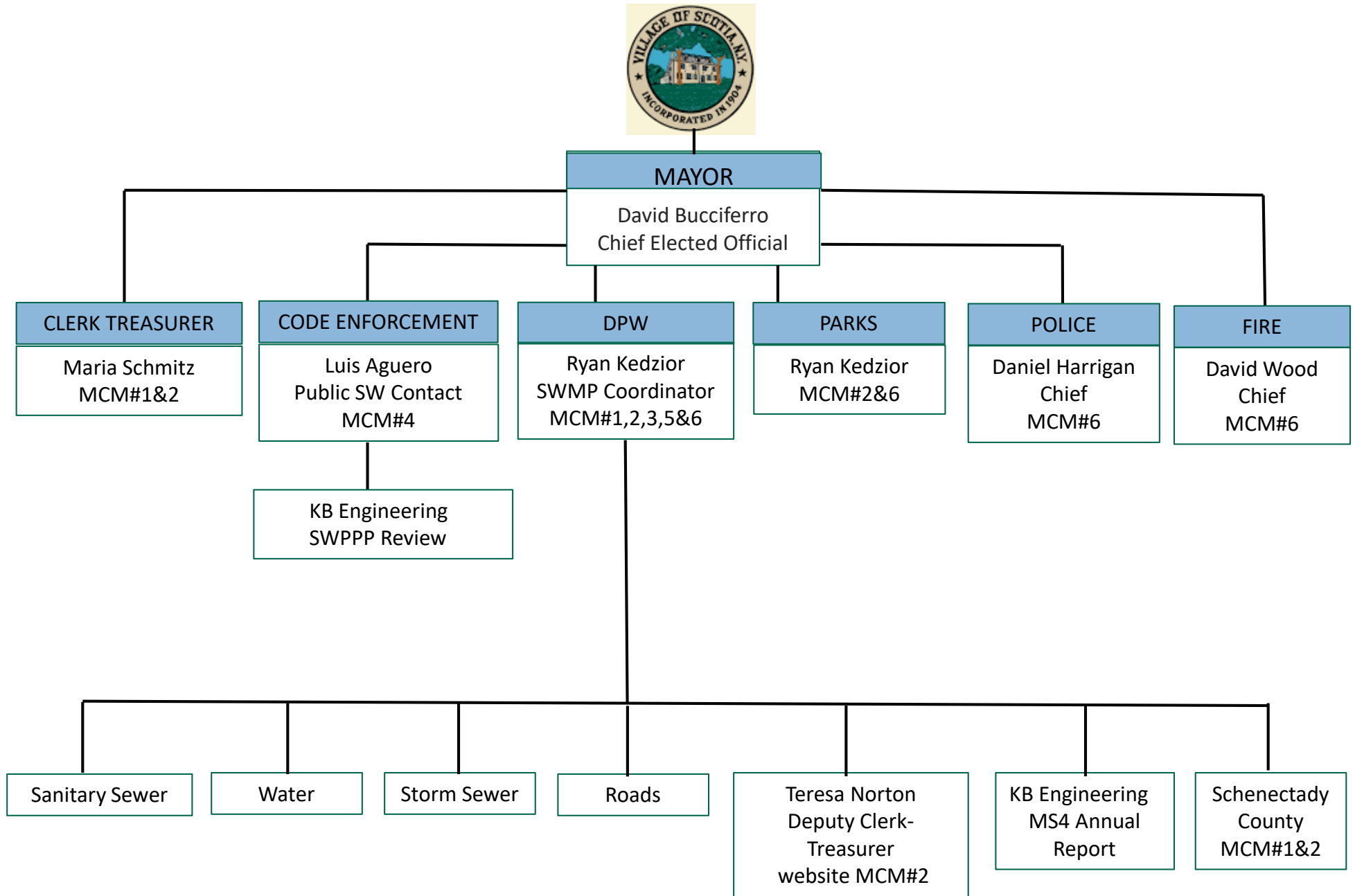


EXHIBIT E
MS4 SELF AUDIT FORMS

Stormwater Pollution Prevention Facility Self Audit

Review each question and check the appropriate box to determine if your facility is incorporating stormwater pollution prevention in daily operations. This checklist may be used to identify opportunities for improvement in pollution prevention as well as to document practices that the facility uses to prevent stormwater pollution.

Facility Operation

	Yes	No	Not Applicable	Can't Determine
Are vehicles parked indoors or under a roof when not in use?				
Are operations such as vehicle washing, vehicle maintenance, draining of fluids, storage of fluids and waste performed under a roof or inside?				
Are vehicles washed regularly to remove contamination and prevent it from polluting stormwater?				
Is wash water treated in an oil-water separator prior to discharge?				
Is process water diverted to a trench drain system to collect contaminated run-off inside work areas?				
Is process water from the trench drain system treated in an oil-water separator prior to discharge?				
Are solids cleaned out of the oil-water separator and trench drain system regularly?				
When working outdoors, is contaminated process water and sediment collected to prevent it from mingling with and contaminating stormwater?				
Are drains inside the facility connected to a sanitary sewer?				

Fluids Management

	Yes	No	Not Applicable	Can't Determine
Are fluids in tanks or drums stored with an appropriate amount of secondary containment?				
Are drum-top pads used for leaks and spills that occur during transfer of fluids?				
Are fluids drained over a drip pan or pad?				
Are funnels or pumps used when transferring fluids?				
Are drip pans placed under leaks?				
Are containers maintained in good condition, closed, covered and away from equipment that can cause them to tip over?				
Are containers stored inside or under a roof?				
Are containers inspected regularly?				
Are all containers labeled in a manner that describes the contents adequately?				
Are absorbent pads used on drum tops to catch spills?				
Is a closed-loop parts washer system used (contains solvent)?				
Is the parts-washer lid kept closed when not in use?				
Is a contract in place with a parts washer service company to change out spent solvent?				
Has the possibility of using an aqueous-based parts washer been explored?				
Are fluids stored in appropriate containers and/or storage cabinets?				

	Yes	No	Not Applicable	Can't Determine
Are storage areas kept clean and well organized?				
Are storage areas labeled clearly?				

Leak and Spill Prevention and Control

	Yes	No	Not Applicable	Can't Determine
Are vehicles inspected daily for leaks?				
Is spill control equipment and absorbents readily available?				
Are emergency phone numbers posted in the area?				
Are material safety data sheets (MSDS's) readily available?				
Are spills cleaned up immediately?				
Are employees trained annually on spill prevention?				

Oil Management

	Yes	No	Not Applicable	Can't Determine
Is oil changed indoors over concrete, sloped to a drain or curbed surface?				
Is oil changed over a drip pan or pad?				
Are funnels or pumps used when transferring oil?				

	Yes	No	Not Applicable	Can't Determine
Are drip pans placed immediately under any oil leak?				
Is waste oil stored indoors when possible and with secondary containment?				
Are waste oil containers in good condition, closed, labeled and inspected regularly?				
Is anything else mixed with waste oil?				
Is waste oil recycled?				

Antifreeze

	Yes	No	Not Applicable	Can't Determine
Is antifreeze changed indoors over concrete that is sloped to drain or curbed surface?				
Is antifreeze drained over a drip pan or pad?				
Are funnels or pumps used when transferring antifreeze?				
Are drip pans placed immediately under any leak?				
Is waste antifreeze stored indoors when possible with secondary containment?				
Are containers kept in good condition, closed, labeled and inspected regularly?				
Is antifreeze mixed with any other wastes?				
Is waste antifreeze recycled?				

Lead-Acid Batteries

	Yes	No	Not Applicable	Can't Determine
Are lead-acid batteries stored indoors over a curbed impermeable surface?				
Are intact batteries stored on an acid resistant rack or tub?				
Are cracked or leaking batteries stored in closed leak-proof and labeled containers?				
Is the date each battery was placed into storage recorded?				
Are batteries stacked more than 5 high?				
Are batteries inspected regularly for leaks?				
Are acid neutralizing agents, such as baking soda, available in case of leaks?				
Are batteries recycled?				
Are batteries stored longer than 6 months before recycling?				
Are lead cable ends left on the batteries to be recycled?				

Tires

	Yes	No	Not Applicable	Can't Determine
Are tires stored indoors?				
If tires are stored outdoors, is the tire pile covered?				
Are tires recycled frequently to keep the number of tires stored on site low?				

Fueling Areas

	Yes	No	Not Applicable	Can't Determine
Is fueling performed under a canopy?				
Are spill cleanup materials available at the fueling area?				
Is the fueling handle lock disconnected so the person fueling must attend the fueling process?				
Are breakaway valves used on fueling hoses?				
Is fueling area stormwater runoff treated in an oil-water separator?				
Are all fuel deliveries monitored?				
Is the fueling automatic stop inspected regularly to ensure proper function?				

Rags, Oil-Absorbing Pads, Towels and Clothing

	Yes	No	Not Applicable	Can't Determine
Are oil rags and absorbent pads stored in appropriate containers and disposed of properly?				
Are reusable oily materials such as towels and clothing maintained through a commercial laundering service or an in-house washing machine that discharges to a sanitary system through an oil-water separator?				

Salt Storage

	Yes	No	Not Applicable	Can't Determine
Are salt piles stored in a salt storage building or under a roof?				

	Yes	No	Not Applicable	Can't Determine
Are salt spills at a facility cleaned up promptly?				
Does stormwater drain away from the salt pile?				

Miscellaneous Storage Piles

	Yes	No	Not Applicable	Can't Determine
Are piles of spoils, asphalt, street cuts, etc. stored at the facility under a roof or cover?				
Are spills of miscellaneous debris on facility grounds cleaned up promptly?				

Facility Stormwater Runoff

	Yes	No	Not Applicable	Can't Determine
Is uncontaminated stormwater prevented from mixing with process areas?				

Comments/Action Items

Inspected by: _____

Date: _____

SAMPLE

Facility Self Audit
DPW Garage / Salt Shed
OLD

Stormwater Pollution Prevention Facility Self Audit

Review each question and check the appropriate box to determine if your facility is incorporating stormwater pollution prevention in daily operations. This checklist may be used to identify opportunities for improvement in pollution prevention as well as to document practices that the facility uses to prevent stormwater pollution.

DPW Garage / Salt Shed (4 Zoar Court)

Facility Operation

	Yes	No	Not Applicable	Can't Determine
Are vehicles parked indoors or under a roof when not in use?	X			
Are operations such as vehicle washing, vehicle maintenance, draining of fluids, storage of fluids and waste performed under a roof or inside?	X			
Are vehicles washed regularly to remove contamination and prevent it from polluting stormwater?	X			
Is wash water treated in an oil-water separator prior to discharge?		X		
Is process water diverted to a trench drain system to collect contaminated run-off inside work areas?			X	
Is process water from the trench drain system treated in an oil-water separator prior to discharge?			X	
Are solids cleaned out of the oil-water separator and trench drain system regularly?			X	
When working outdoors, is contaminated process water and sediment collected to prevent it from mingling with and contaminating stormwater?			X	
Are drains inside the facility connected to a sanitary sewer?	X			

Fluids Management

	Yes	No	Not Applicable	Can't Determine
Are fluids in tanks or drums stored with an appropriate amount of secondary containment?		X		
Are drum-top pads used for leaks and spills that occur during transfer of fluids?	X			
Are fluids drained over a drip pan or pad?	X			
Are funnels or pumps used when transferring fluids?	X			
Are drip pans placed under leaks?	X			
Are containers maintained in good condition, closed, covered and away from equipment that can cause them to tip over?	X			
Are containers stored inside or under a roof?	X			
Are containers inspected regularly?	X			
Are all containers labeled in a manner that describes the contents adequately?	X			
Are absorbent pads used on drum tops to catch spills?	X			
Is a closed-loop parts washer system used (contains solvent)?	X			
Is the parts-washer lid kept closed when not in use?	X			
Is a contract in place with a parts washer service company to change out spent solvent?		X		
Has the possibility of using an aqueous-based parts washer been explored?		X		
Are fluids stored in appropriate containers and/or storage cabinets?	X			

	Yes	No	Not Applicable	Can't Determine
Are storage areas kept clean and well organized?	X			
Are storage areas labeled clearly?	X			

Leak and Spill Prevention and Control

	Yes	No	Not Applicable	Can't Determine
Are vehicles inspected daily for leaks?	X			
Is spill control equipment and absorbents readily available?	X			
Are emergency phone numbers posted in the area?		X		
Are material safety data sheets (MSDS's) readily available?	X			
Are spills cleaned up immediately?	X			
Are employees trained annually on spill prevention?	X			

Oil Management

	Yes	No	Not Applicable	Can't Determine
Is oil changed indoors over concrete, sloped to a drain or curbed surface?	X			
Is oil changed over a drip pan or pad?	X			
Are funnels or pumps used when transferring oil?	X			

	Yes	No	Not Applicable	Can't Determine
Are drip pans placed immediately under any oil leak?	X			
Is waste oil stored indoors when possible and with secondary containment?		X		
Are waste oil containers in good condition, closed, labeled and inspected regularly?	X			
Is anything else mixed with waste oil?		X		
Is waste oil recycled?	X			

Antifreeze

	Yes	No	Not Applicable	Can't Determine
Is antifreeze changed indoors over concrete that is sloped to drain or curbed surface?	X			
Is antifreeze drained over a drip pan or pad?	X			
Are funnels or pumps used when transferring antifreeze?	X			
Are drip pans placed immediately under any leak?	X			
Is waste antifreeze stored indoors when possible with secondary containment?		X		
Are containers kept in good condition, closed, labeled and inspected regularly?	X			
Is antifreeze mixed with any other wastes?		X		
Is waste antifreeze recycled?	X			

Lead-Acid Batteries

	Yes	No	Not Applicable	Can't Determine
Are lead-acid batteries stored indoors over a curbed impermeable surface?			X	
Are intact batteries stored on an acid resistant rack or tub?			X	
Are cracked or leaking batteries stored in closed leak-proof and labeled containers?			X	
Is the date each battery was placed into storage recorded?			X	
Are batteries stacked more than 5 high?			X	
Are batteries inspected regularly for leaks?			X	
Are acid neutralizing agents, such as baking soda, available in case of leaks?			X	
Are batteries recycled?	X			
Are batteries stored longer than 6 months before recycling?			X	
Are lead cable ends left on the batteries to be recycled?			X	

Tires

	Yes	No	Not Applicable	Can't Determine
Are tires stored indoors?	X			
If tires are stored outdoors, is the tire pile covered?			X	
Are tires recycled frequently to keep the number of tires stored on site low?			X	

Fueling Areas

	Yes	No	Not Applicable	Can't Determine
Is fueling performed under a canopy?			X	
Are spill cleanup materials available at the fueling area?			X	
Is the fueling handle lock disconnected so the person fueling must attend the fueling process?			X	
Are breakaway valves used on fueling hoses?			X	
Is fueling area stormwater runoff treated in an oil-water separator?			X	
Are all fuel deliveries monitored?			X	
Is the fueling automatic stop inspected regularly to ensure proper function?			X	

Rags, Oil-Absorbing Pads, Towels and Clothing

	Yes	No	Not Applicable	Can't Determine
Are oil rags and absorbent pads stored in appropriate containers and disposed of properly?	X			
Are reusable oily materials such as towels and clothing maintained through a commercial laundering service or an in-house washing machine that discharges to a sanitary system through and oil-water separator?			X	

Salt Storage

	Yes	No	Not Applicable	Can't Determine
Are salt piles stored in a salt storage building or under a roof?	X			

	Yes	No	Not Applicable	Can't Determine
Are salt spills at a facility cleaned up promptly?	X			
Does stormwater drain away from the salt pile?	X			

Miscellaneous Storage Piles

	Yes	No	Not Applicable	Can't Determine
Are piles of spoils, asphalt, street cuts, etc. stored at the facility under a roof or cover?		X		
Are spills of miscellaneous debris on facility grounds cleaned up promptly?	X			

Facility Stormwater Runoff

	Yes	No	Not Applicable	Can't Determine
Is uncontaminated stormwater prevented from mixing with process areas?			X	

Comments/Action Items

Secondary containment issues will be addressed as needed and as funding allows.

Labeling and display of appropriate phone numbers will be maintained and added

to when necessary.

Inspected by: Andrew Kohout, DPW Superintendent

Date: 2-6-13

Stormwater Pollution Prevention Facility Self Audit

Review each question and check the appropriate box to determine if your facility is incorporating stormwater pollution prevention in daily operations. This checklist may be used to identify opportunities for improvement in pollution prevention as well as to document practices that the facility uses to prevent stormwater pollution.

Water Pumping Station (589 Vley Road)

Facility Operation

	Yes	No	Not Applicable	Can't Determine
Are vehicles parked indoors or under a roof when not in use?		X		
Are operations such as vehicle washing, vehicle maintenance, draining of fluids, storage of fluids and waste performed under a roof or inside?			X	
Are vehicles washed regularly to remove contamination and prevent it from polluting stormwater?	X			
Is wash water treated in an oil-water separator prior to discharge?		X		
Is process water diverted to a trench drain system to collect contaminated run-off inside work areas?			X	
Is process water from the trench drain system treated in an oil-water separator prior to discharge?			X	
Are solids cleaned out of the oil-water separator and trench drain system regularly?			X	
When working outdoors, is contaminated process water and sediment collected to prevent it from mingling with and contaminating stormwater?			X	
Are drains inside the facility connected to a sanitary sewer?			X	

Fluids Management

	Yes	No	Not Applicable	Can't Determine
Are fluids in tanks or drums stored with an appropriate amount of secondary containment?	X			
Are drum-top pads used for leaks and spills that occur during transfer of fluids?			X	
Are fluids drained over a drip pan or pad?			X	
Are funnels or pumps used when transferring fluids?			X	
Are drip pans placed under leaks?			X	
Are containers maintained in good condition, closed, covered and away from equipment that can cause them to tip over?	X			
Are containers stored inside or under a roof?	X			
Are containers inspected regularly?	X			
Are all containers labeled in a manner that describes the contents adequately?	X			
Are absorbent pads used on drum tops to catch spills?			X	
Is a closed-loop parts washer system used (contains solvent)?			X	
Is the parts-washer lid kept closed when not in use?			X	
Is a contract in place with a parts washer service company to change out spent solvent?			X	
Has the possibility of using an aqueous-based parts washer been explored?			X	
Are fluids stored in appropriate containers and/or storage cabinets?	X			

	Yes	No	Not Applicable	Can't Determine
Are storage areas kept clean and well organized?	X			
Are storage areas labeled clearly?		X		

Leak and Spill Prevention and Control

	Yes	No	Not Applicable	Can't Determine
Are vehicles inspected daily for leaks?	X			
Is spill control equipment and absorbents readily available?		X		
Are emergency phone numbers posted in the area?		X		
Are material safety data sheets (MSDS's) readily available?	X			
Are spills cleaned up immediately?	X			
Are employees trained annually on spill prevention?	X			

Oil Management

	Yes	No	Not Applicable	Can't Determine
Is oil changed indoors over concrete, sloped to a drain or curbed surface?		X		
Is oil changed over a drip pan or pad?	X			
Are funnels or pumps used when transferring oil?	X			

	Yes	No	Not Applicable	Can't Determine
Are drip pans placed immediately under any oil leak?	X			
Is waste oil stored indoors when possible and with secondary containment?			X	
Are waste oil containers in good condition, closed, labeled and inspected regularly?	X			
Is anything else mixed with waste oil?		X		
Is waste oil recycled?	X			

Antifreeze

	Yes	No	Not Applicable	Can't Determine
Is antifreeze changed indoors over concrete that is sloped to drain or curbed surface?			X	
Is antifreeze drained over a drip pan or pad?			X	
Are funnels or pumps used when transferring antifreeze?			X	
Are drip pans placed immediately under any leak?			X	
Is waste antifreeze stored indoors when possible with secondary containment?			X	
Are containers kept in good condition, closed, labeled and inspected regularly?			X	
Is antifreeze mixed with any other wastes?			X	
Is waste antifreeze recycled?			X	

Lead-Acid Batteries

	Yes	No	Not Applicable	Can't Determine
Are lead-acid batteries stored indoors over a curbed impermeable surface?			X	
Are intact batteries stored on an acid resistant rack or tub?			X	
Are cracked or leaking batteries stored in closed leak-proof and labeled containers?			X	
Is the date each battery was placed into storage recorded?			X	
Are batteries stacked more than 5 high?			X	
Are batteries inspected regularly for leaks?			X	
Are acid neutralizing agents, such as baking soda, available in case of leaks?			X	
Are batteries recycled?			X	
Are batteries stored longer than 6 months before recycling?			X	
Are lead cable ends left on the batteries to be recycled?			X	

Tires

	Yes	No	Not Applicable	Can't Determine
Are tires stored indoors?	X			
If tires are stored outdoors, is the tire pile covered?			X	
Are tires recycled frequently to keep the number of tires stored on site low?			X	

Fueling Areas

	Yes	No	Not Applicable	Can't Determine
Is fueling performed under a canopy?			X	
Are spill cleanup materials available at the fueling area?			X	
Is the fueling handle lock disconnected so the person fueling must attend the fueling process?			X	
Are breakaway valves used on fueling hoses?			X	
Is fueling area stormwater runoff treated in an oil-water separator?			X	
Are all fuel deliveries monitored?			X	
Is the fueling automatic stop inspected regularly to ensure proper function?			X	

Rags, Oil-Absorbing Pads, Towels and Clothing

	Yes	No	Not Applicable	Can't Determine
Are oil rags and absorbent pads stored in appropriate containers and disposed of properly?			X	
Are reusable oily materials such as towels and clothing maintained through a commercial laundering service or an in-house washing machine that discharges to a sanitary system through an oil-water separator?			X	

Salt Storage

	Yes	No	Not Applicable	Can't Determine
Are salt piles stored in a salt storage building or under a roof?			X	

	Yes	No	Not Applicable	Can't Determine
Are salt spills at a facility cleaned up promptly?			X	
Does stormwater drain away from the salt pile?			X	

Miscellaneous Storage Piles

	Yes	No	Not Applicable	Can't Determine
Are piles of spoils, asphalt, street cuts, etc. stored at the facility under a roof or cover?			X	
Are spills of miscellaneous debris on facility grounds cleaned up promptly?			X	

Facility Stormwater Runoff

	Yes	No	Not Applicable	Can't Determine
Is uncontaminated stormwater prevented from mixing with process areas?			X	

Comments/Action Items

Very little maintenance and storage of equipment takes place at the Water Pumping Station. The building is heated by an oil-fired boiler with a 275 gallon oil storage tank in the basement.

Inspected by: Andrew Kohout, DPW Superintendent

Date: 2-6-13

EXHIBIT F
GOOD HOUSEKEEPING GUIDANCE

Village of Scotia Storm Water Management Plan

Appendix F

Guidance Document for Pollution Prevention / Good Housekeeping for Municipal Operations (adapted from USEPA Website)

Municipal Employee Training and Education

Train municipal employees about potential sources of stormwater contamination and ways to minimize the water quality impact of municipal activities, such as park and open space maintenance, fleet and building maintenance, construction and land disturbances, and storm drain system maintenance. Training programs should include a general stormwater awareness message, pollution prevention/good housekeeping measures, spill response & prevention, and information about the operation and maintenance of structural BMPs. Training programs also should include information on stormwater pollution prevention plans (SWPPPs) for municipal facilities and BMPs recommended for use in the field to prevent contaminated discharges. Finally, municipal field staff should be trained to recognize, track, and report illicit discharges.

Municipal employees who are directly involved in potentially polluting activities should receive both general stormwater and targeted BMP training tailored to their activities. This will increase the likelihood that receiving waters and the storm drain system will be protected from inadvertent discharges and spills. It is important to train all municipal staff, however, regardless of field responsibilities, about general stormwater awareness and the detection of illicit discharges. Very often, municipal staff are residents as well, and improving the awareness of municipal employees may reduce residential impacts and increase reporting of illicit discharges, dumping, and spills. Also, because municipalities expect residents and business owners to practice pollution prevention and good housekeeping, municipal employees should set an example for the rest of the community to follow.

Municipal employees can be educated about stormwater issues in a number of ways: in-house training programs, on-the-job reinforcement, general awareness and educational materials, and workshops or conferences.

After training, it is helpful for managers to periodically check employees' work practices to ensure BMPs are implemented properly. Periodic unscheduled inspections of facilities and maintenance activities will allow managers to gauge what has been learned. Posting reminders, such as markers above drains prohibiting discharges of vehicle fluids and wastes, or signs above faucets reminding employees not to use water to clean up spills will remind employees of proper procedures. Stickers that list important information and contact numbers for reporting illicit discharges, dumping, or spills can be adhered to all municipal vehicles. Stenciling or marking all storm drains at municipal facilities will prompt employees to be conscious of discharges. Facility SWPPPs and BMP guidance documents should be available to all employees as a reference to use after training.

Municipal Landscaping

Lawn and garden activities can contaminate stormwater with pesticide, soil, and fertilizer runoff. Proper landscape management, however, can effectively reduce water use and contaminant runoff, and enhance a property's aesthetics. Environmentally friendly landscape management protects the environment through careful planning and design, routine soil analysis, appropriate plant selection, use of practical turf areas and mulches, efficient water use, and appropriate maintenance.

Other activities that benefit water resources include maintaining healthy plants and lawns, and composting lawn wastes. Healthy plants better resist diseases and insects. Therefore, they require fewer pest control measures. To promote healthy plants, it is often beneficial to till composted material into the soil. Recycling of garden wastes by composting is also effective at reducing waste, although compost bins and piles should not be located next to waterways or storm drains because leachate from compost materials can cause contamination.

There are several benefits to environmentally friendly landscape design. First, proper site planning can reduce maintenance requirements by selecting native species and locating plants in areas where conditions are optimal for growth requirements. Soil analysis can prevent overapplication of fertilizers by eliminating uncertainty regarding existing soil fertility. Careful selection of turf can minimize watering and fertilizer requirements by choosing grasses that thrive in a particular climate. Minimizing turf area by replacing it with ground cover, shrubs, and trees reduces mowing requirements, which subsequently reduces air, water, and noise pollution. Efficient watering practices reduce pollutant transport and erosion from runoff of wasted water. Mulches stabilize exposed soils, prevent growth of nuisance vegetation, and improve soil fertility through the slow release of nutrients from decomposition. Finally, the reduction or judicious application of pesticides and fertilizers reduces the probability of contamination, while ensuring that the maintenance requirements of vegetation are being met.

It is important for municipalities to set a good example for residents. The Village Parks Department already uses the minimum amount of fertilizer in its parks, especially Collins Park as it drains to the 303d listed Collins Lake.

Municipalities can use environmentally friendly lawn and garden practices on their properties, and they can encourage residents to use the same practices in their yards. Such practices include landscape planning, integrated pest management, planting indigenous species, soil testing, and the reduction, elimination or judicious use of fertilizers and pesticides. Planting drought-resistant plants can be especially useful in areas of low rainfall. Areas of high rainfall experience more erosion, so protecting exposed soils with vegetation and mulches is of particular importance in these areas.

General Programs. An effective public education campaign can help landowners understand the value of good yard practices..

Planning and Design. It is important that property owners develop a landscape plan that recognizes the property's natural conditions. For example, a landscape plan should recognize regional and climatic conditions. It should consider the site's topography and existing vegetation, and group plants together according to their water needs. The site's intended use should be considered. A thoughtful landscape plan will promote natural vegetation growth and minimize water loss and contamination. Residents and municipal crews can partner with local nurseries and irrigation and lawn services to determine appropriate landscape designs for a specific site.

Soil Analysis and Improvements. Residents and municipal crews should be encouraged to test soils every 3 to 4 years to determine the amount of nutrients necessary to maintain a healthy lawn. Municipalities can encourage home and garden centers to market and sell soil test kits so that property owners can perform such tests on their own. A local extension service can also perform soil analyses,

and their representatives can then provide suggestions for improving a site's ability to retain water and to support specific vegetation.

Appropriate Plant Selection. Encourage property owners and municipal crews to choose local or regional plants when developing an environmentally friendly landscape. Indigenous plant species are generally more water efficient and disease resistant. Furthermore, exotic plants can potentially invade local waterways. Local nurseries can assist in choosing appropriate regional plant species.

Practical Turf Areas. Property owners and municipal crews should be encouraged to plant non-turf areas where possible, because lawns require more water and maintenance than wildflowers, shrubs, and trees. If turf is used, it is important to select a type of grass that can withstand drought and that becomes dormant in hot, dry seasons. Local nurseries can assist property owners and municipal crews with selecting grass types. In addition, when maintaining lawns, the grass should not be cut shorter than 3 to 4 inches in height. Mulched clippings should be left on the lawn as a natural fertilizer.

Efficient Irrigation. Much of the water that is applied to lawns and gardens is not absorbed by the vegetation. When water is applied too quickly, it is lost as runoff along with the top layers of soil. To prevent this, it is important to encourage the use of low-volume watering approaches such as drip-type or sprinkler systems. In addition, encourage property owners and municipal crews to water plants only when needed to enhance plant root growth and avoid runoff problems.

Use of Mulches. Mulches help retain water, reduce weed growth, prevent erosion, and improve the soil for plant growth. Mulches usually contain wood bark chips, wood grindings, pine straws, nut shells, small gravel, or shredded landscape clippings. Property owners should be encouraged to use mulches and should be informed of the benefits of these materials. Additionally, municipalities can start a program to collect plant materials from municipal maintenance activities as well as yard waste from property owners. These materials can be converted to mulch and used at municipal properties or redistributed to property owners.

Fertilizers. Property owners and municipal crews should be discouraged from using fertilizers, or if they are used, from over-applying them. Municipalities can recommend less-toxic alternatives to commercial fertilizers, such as composted organic material.

Municipalities can also recommend practices to reduce the amount of fertilizer entering runoff. For example, slow-release organic fertilizers are less likely to enter stormwater. Application techniques, such as tilling fertilizers into moist soil to move the chemicals directly into the root zone, reduce the likelihood that the chemicals will be mobilized in stormwater. Timing is also important: Warm season grasses should be fertilized in the summer, in frequent and small doses, while cool season grasses should be fertilized in the fall. Also, fertilizer should not be applied on a windy day or immediately before a heavy rain. Municipalities can recommend that property owners apply fertilizer at rates at or below those recommended on the packaging or should apply fertilizer based on the needs of the soil (as determined by a soil test). Safe disposal of excess fertilizer and containers should be encouraged.

Pesticides. Like fertilizers, pesticides should be used on lawns and gardens only when necessary. Pesticide use can be avoided by selecting hearty plants that are native to the area and by keeping them healthy. It is important to identify any potential pests to determine if they are truly harmful to the plant. The pests should always be removed by hand when possible; chemical pest control should be used only when other approaches fail. If it is necessary to use chemical pesticides, the least toxic pesticide that targets the specific pest in question should be chosen (i.e., boric acid, garlic, insects, etc). If a pesticide is labeled with the word "caution," it is less toxic than one labeled "warning," which is, in turn, less toxic than one that is labeled "danger/poison."

It is important to follow the label directions on the pesticide. Property owners and municipal crews must

wear the appropriate protective equipment listed on the label when working with organophosphate insecticides or concentrated sprays or dusts. Read and follow all safety precautions listed on pesticide labels and wash hands and face before smoking or eating. Tools or equipment that were used to apply or incorporate pesticides should always be rinsed in a bucket and the rinse water applied as if it were full-strength pesticide. Any unused pesticide can be saved and disposed of at a household hazardous waste collection location.

Municipal Vehicle Fueling

Fueling fleets of municipal vehicles can generate spills and leaks of fuel (gasoline and diesel fuel) and heavy metals - disproportionately toxic compounds that if washed into the storm drain system by stormwater runoff can seriously impair the water quality of nearby waterbodies. To prevent such discharges, municipal officials can employ a variety of BMPs. They frequently have municipal vehicles refueled at offsite facilities, and then only in designated areas. They store fuel in enclosed, covered tanks. They implement spill controls and train employees and subcontractors in proper fueling procedures.

Municipal activities require the use of a variety of vehicles and equipment, such as transit buses, fire trucks, police cruisers, school buses, and public works and maintenance vehicles. These vehicles may refuel at facilities located at numerous municipal facilities. The BMPs suggested in this fact sheet apply to fueling operations regardless of location.

Designated fueling areas should be designed to prevent stormwater runoff and spills. It is recommended that fuel-dispensing areas be paved with cement, concrete, or an equivalent impervious surface, with a two to four percent slope to prevent ponding, and separated from the rest of the site by a grade break or berm that prevents run-on of stormwater.

Fuel dispensing areas should be covered, and the cover's minimum dimensions must be equal to or greater than the area within the grade break or the fuel dispensing area. The cover should not drain onto the fuel dispensing area. Use a perimeter drain or slope the pavement inward so that runoff drains to a blind sump. It might be necessary to install and maintain an oil control device in catch basins that might receive runoff from the fueling area.

For facilities where equipment is being fueled with a mobile fuel truck, consider establishing a designated fueling area. Place temporary "caps" over nearby catch basins or manhole covers so that if a spill occurs it is prevented from entering the storm drain. A form of secondary containment should be used when transferring fuel from the tank truck to the fuel tank. Storm drains in the vicinity should also be covered. Install vapor recovery nozzles to help control drips as well as reduce air pollution.

All facilities with fueling areas should have a spill prevention plan and necessary spill kits located nearby. A spill prevention plan specifies material handling procedures and storage requirements, and identifies spill cleanup procedures for areas and processes in which spills may potentially occur. The plan standardizes operating procedures and employee training in an effort to minimize accidental pollutant releases that could contaminate stormwater.

Fuel-dispensing areas should be inspected regularly. Inspectors should:

- Check for external corrosion and structural failure in aboveground tanks.
- Check for spills and overfills due to operator error.
- Check for failure of any piping systems.
- Check for leaks or spills during pumping of liquids or gases from a truck or rail car to a storage facility or vice versa.

Visually inspect new tank or container installations for loose fittings, poor welds, and improper or poorly fitted gaskets.

Inspect tank foundations, connections, coatings, tank walls, and piping systems. Look for corrosion, leaks, cracks, scratches, and other physical damage that may weaken the tank or container system. Above-ground tanks should be tested periodically for integrity by a qualified professional.

Dry cleanup methods should be employed when cleaning up fuel-dispensing areas. Such methods include sweeping to remove litter and debris and using rags and adsorbents for leaks and spills. Water should not be used to wash these areas. During routine cleaning, use a damp cloth on the pumps and a damp mop on the pavement, rather than spraying with a hose. Fuel dispensing nozzles should be fitted with "hold-open latches" (automatic shutoff) except where prohibited by local fire departments. Signs can be posted at the fuel dispenser or island warning vehicle owners/operators against "topping off" vehicle fuel tanks.

Municipal Vehicle and Equipment Maintenance

Common activities at municipal maintenance shops include parts cleaning, vehicle fluid replacement, and equipment replacement and repair. Automotive maintenance facilities are considered to be stormwater "hot spots." Hotspots are areas that generate significant loads of hydrocarbons, trace metals, and other pollutants that can affect the quality of stormwater. Some of the wastes generated at automobile maintenance facilities include:

- Solvents (degreasers, paint thinners, etc.)
- Antifreeze
- Brake fluid and brake pad dust
- Battery acid
- Motor oil
- Fuel (gasoline, diesel, kerosene)
- Lubricating grease

Fluid spills and improper disposal of materials result in pollutants, heavy metals, and toxic materials entering ground and surface water supplies, which can create public health and environmental risks. Municipal facilities that properly store automotive fluids and thoroughly clean up spills can help reduce the effects of automotive maintenance practices on stormwater runoff and, consequently, local water supplies.

Municipal activities require the use of various vehicles and equipment, such as public works operation and maintenance vehicles, police cars, fire trucks, and school and public transit buses. Maintenance facilities may be located at several municipal facilities.

The most effective way to minimize wastes generated by automotive maintenance activities is to prevent their production in the first place. Pollution prevention programs trying to reduce polluted liquid discharges from automotive maintenance facilities to storm drains should stress "dry shop" techniques. Among suggestions for creating a dry operation:

- All maintenance activities should be performed inside or under cover.
- Spills should be cleaned up immediately, without water whenever possible and clean up materials disposed of properly.
- Floor drains should be sealed.
- A solvent service can be hired to supply parts and cleaning materials and to collect spent solvent.

Facilities that discharge to the sanitary sewer system may be required to treat their wastewater prior to its release from the site. Some municipalities require the use of structural treatment devices to pretreat wastes before they are discharged to sewage treatment plants. These devices prevent oils and grease from entering the sewer system, often by separating the oil and solids from the water through settling or filtration.

Other methods can also help prevent or reduce pollutant discharges from vehicle maintenance facilities. The following suggestions can reduce vehicle maintenance and repair impacts. Many of these practices apply both to business owners and to residents who maintain their own vehicles. These practices also apply to the maintenance of school buses, public works, fire, police, parks, and other types of municipal fleets. The following list is not comprehensive. Many other suggestions for reducing impacts are available to those responsible for managing stormwater from maintenance facilities.

Waste Reduction

Keep the number of solvents used to a minimum. It makes recycling easier and it reduces hazardous waste management cost.

Do all liquid cleaning at a centralized station to ensure that solvents and residues stay in one area. Locate drip pans and draining boards to direct solvents back into a solvent sink or holding tank for reuse.

Use of Safer Alternatives

Use non-hazardous cleaners when possible.

Replace chlorinated organic solvents with nonchlorinated ones like kerosene or mineral spirits.

Purchase recycled products, such as engines, oil, transmission fluid, antifreeze, and hydraulic fluid, to help support the recycled products market.

Spill Containment and Cleanup

Install berms or other measures to contain spills and prevent work surface runoff from entering storm drains.

Use as little water as possible to clean spills, leaks, and drips.

Follow the spill prevention plan.

Good Housekeeping

Reinforce employee training and public outreach to reinforce proper disposal practices.

Conduct maintenance work such as fluid changes indoors.

Update facility schematics to accurately reflect all plumbing connections.

Closely monitor parked vehicles for leaks and place pans under any leaks to collect the fluids for proper disposal or recycling.

Promptly transfer used fluids to recycling drums or hazardous waste containers.

Dispose of liquid waste properly.

In the event of a spill, cover drains with drain mats.

Store cracked batteries in leakproof secondary containers.

Parts Cleaning

Use detergent-based or water-based cleaning systems instead of organic solvent degreasers.

Steam clean or pressure wash parts instead of using solvents. Water discharged into the sanitary sewer may require treatment prior to release. You should check with the sewer authority to determine if treatment is required. The wastewater generated from steam cleaning can be discharged to the on-site oil/water separator, but remember that such separators must be periodically maintained to ensure their effectiveness.

Outdoor areas, especially parking areas for vehicles awaiting repair, should be inspected regularly for drips, spills and improperly stored materials (unlabeled containers, auto parts that might contain grease or fluids, etc.). Good housekeeping is an important step in reducing stormwater pollution in these hotspot settings.

The proper functioning of structural BMPs is an important maintenance consideration for facilities responsible for pretreating their wastewater prior to discharging.. To maintain their effectiveness,

the devices require routine cleanout of oil and grease, usually at least once a month. During periods of heavy rainfall, cleanout is required more often to ensure that pollutants are not washed through the trap. Sediment removal is also required on a regular basis to keep the device working efficiently.

Municipal Vehicle and Equipment Washing

Municipal vehicle washing can generate dry weather runoff contaminated with detergents, oils, grease, and heavy metals. Vehicle washing BMPs can eliminate contaminated wash water discharges to the sanitary sewer system. Such BMPs include installing wash racks that discharge wash water to the sanitary sewer, and contracting the services of commercial car washes, which are permitted to discharge wash water to the sanitary sewer system. Finally, employees and subcontractors should be trained in the municipality's vehicle washing procedures to avoid illicit discharges.

Municipalities typically operate a fleet of vehicles, including public works trucks, fire trucks, ambulances, police cars, school buses, and other types of vehicles. Municipalities with a large fleet of vehicles might consider building municipal-operated vehicle washing facilities. Municipalities with small fleets might consider contracting with a commercial car wash. .

The following good housekeeping practices can minimize the risk of contamination from vehicle wash water discharges at municipal facilities :

Wash all vehicles in areas designed to collect and hold wash water before its discharge to the sanitary sewer system. Normally, wastewater treatment regulations require wash water to be pretreated prior to its discharge to the treatment plant. Contact your sewer authority to ensure that all requirements are met before designing, building, and operating the wash rack.

Avoid detergents whenever possible. If detergents are necessary, a phosphate-free, non-toxic, biodegradable soap is recommended. Detergents should be avoided if an oil/water separator is used for pretreatment prior to discharge to the sanitary sewer.

Municipal facilities that store vehicles should stencil their storm drains to remind employees to wash vehicles within the designated wash area. Signage can also be posted with this message.

Mount spill kits with absorbent containment materials and instructions near wash racks.

Immediately contain and treat all spills.

Commercial Car Washes

Municipalities can negotiate with commercial car washes and steam cleaning businesses to handle their fleet vehicle washing. This option eliminates the cost of building and the liability of operating a wash facility. This option may be limited to smaller sized vehicles, however, since many car washes do not have bays large enough to handle buses, fire trucks, ambulances, and other large vehicles.

Other BMPs

If a vehicle must be washed outside of a facility plumbed to the sanitary sewer, take precautions to avoid wash water discharges to the storm drain system. For small jobs, berm the area surrounding the vehicle and use a wet/dry vacuum to capture the wash water for discharge to the sanitary sewer. For larger jobs, use a combination of berms and a vacuum truck, such as those used to clean storm and sanitary sewer systems, to capture and safely dispose of wash water. If detergents are used, clean the pavement to prevent this material from being carried to the storm

drain during the next rainstorm.

A wash area's paved surfaces and sump should be inspected and cleaned periodically to remove buildups of particulate matter or other pollutants. Plumbing, recycling, and pretreatment systems also require periodic inspection and maintenance. The area surrounding the wash rack should be visually inspected for leaks, overspray, or other signs of ineffective containment due to faulty design or physical damage to berms. Any defects should be corrected.

Parking Lot and Street Cleaning

Streets, roads, highways and parking lots accumulate significant amounts of pollutants that contribute to stormwater pollutant runoff to surface waters. Pollutants, including sediment, debris, trash, road salt, and trace metals can be minimized by street sweeping. Street sweeping can also improve the aesthetics of municipal roadways, control dust and decrease the accumulation of pollutants in catch basins. An effective municipal street sweeping program can meet regulatory requirements, assess street sweeping effectiveness, and minimize pollutants in roadways.

Municipalities can choose between the three different types of street sweepers (mechanical, regenerative air and vacuum filter) keeping in mind the targeted pollutants, pollutant type (large debris to particles less than 10 microns in diameter (PM10)), types of surfaces, travel distances, noise ordinances, and costs. Municipals often find it useful to have a complement of each type of street sweeper in their fleet.

Each type of street sweeper has its advantages and disadvantages concerning pollutant removal effectiveness, traveling speed, and noise generated by the street sweeper. With the different types of modern street sweepers capable of removing PM10 particles, price and personal preference are the primary selection criteria for most users. No definitive independent studies have yet been staged to determine "the best" sweeping system. Anecdotal data has also been inconclusive.

Street sweeping is practiced in the Village of Scotia as an aesthetic practice to remove trash, sediment buildup, and large debris from curb gutters. Effective street sweeping programs can remove several tons of debris a year from city streets minimizing pollutants in stormwater runoff. In colder climates, street sweeping can be used during the spring snowmelt to reduce pollutants in stormwater runoff from road salt, sand and grit.

An effective municipal street sweeping program should address at a minimum the following components:

Street Sweeping Schedule: Designing and maintaining a street sweeping schedule can increase the efficiency of a program. A successful program will need to be flexible to accommodate climate conditions and areas of concern. Areas of concern should be based on traffic volume, land use, field observations of sediment and trash accumulation and proximity to surface waters. Street sweeping in these areas may need to be increased and the schedule amended. It is recommended that schedules include minimum street sweeping frequencies of at least once a year. As the Village is in a cold climate prone to snowfall it is recommended that street sweeping begin as soon as possible after the snow melts. Removal of the accumulated sand,

grit, and debris from roads after the snow melts reduces the amount of pollutants entering surface waters.

To evaluate the effectiveness of a street sweeping program, municipalities should maintain accurate logs of the number of curb-miles swept and the amount of waste collected . Monthly or yearly intakes (per ton) can be measured per district, road, season, or mile. This information can be used to develop a written plan, schedule, and periodic re-evaluation for street sweeping that would target the following:

Those roadways with contributing land uses (high level of imperviousness, high level of industrial activity) that would be expected to show high pollutant concentrations and those roadways that have consistently accumulated proportionately greater amounts of materials (pounds per mile swept) between currently scheduled sweeps.

Street Sweepings Storage and Disposal: Street sweeping material often includes sand, salt, leaves, and debris removed from roads. Often the collected sweepings contain pollutants and must be tested prior to disposal to determine if the material is hazardous. Municipals should adhere to all federal and state regulations that apply to the disposal and reuse of sweepings.

Municipalities are encouraged to develop comprehensive management plans for the handling of sweepings. A critical aspect of a management plan is selecting a location for storing and processing street sweepings. Storage locations should be equipped with secondary containment and possibly overhead coverage to prevent stormwater runoff from contacting the piles of sweepings. It is also recommended to cover the piles of sweepings with tarps to prevent the generation of excessive dust. Storage locations should be sized accordingly to completely contain the volume of the disposed sweepings.

Parking Policy: The Village has an established parking policy whereby no one is allowed to park on the street from 3 AM to 6 Am, thus increasing the effectiveness of its street sweeping program.

Operation and Maintenance Program: A municipality should dedicate time for daily and weekly equipment maintenance. Regular maintenance and daily start up inspections insures that street sweepers are kept in good working condition. It is vital for municipals to inventory and properly stock parts to prevent downtime and decrease productivity. Old sweepers should be replaced with new technologically- advanced sweepers, preferably modern sweepers that maximize pollutant removal.

Road Salt Application and Storage

The application and storage of deicing materials, most commonly salts such as sodium chloride, can lead to water quality problems for surrounding areas. Salts, gravel, sand, and other materials are applied to highways and roads to reduce the amount of ice during winter storm events. Salts lower the melting point of ice, allowing roadways to stay free of ice buildup during cold winters. Sand and gravel increase traction on the road, making travel safer.

This practice occurs in areas that receive snowfall in winter months and require deicing materials. Municipalities in these areas must ensure proper storage and application for equipment and materials.

Many of the problems associated with contamination of local waterways stem from the improper storage of deicing materials. Salts are very soluble when they come into contact with stormwater. They can migrate into ground water used for public water supplies and also contaminate surface waters.

Road salt is the least expensive material for deicing operations; however, once the full social costs are taken into account, alternative products and better management and application of salts become increasingly attractive options.

The Village has covered road salt storage to prevent the salt from lumping together, which makes it easier to load and apply. In addition, covering salt storage piles reduces salt loss from stormwater runoff and potential contamination to streams, aquifers, and estuarine areas.

If used during road salt application, certain best management practices can produce significant environmental benefits. The amount of road salt applied should be regulated to prevent oversalting of roadways and increasing runoff concentrations. The amount of salt applied should be varied to reflect site-specific characteristics, such as road width and design, traffic concentration, and proximity to surface waters. Calibration devices mounted in the cabs of spreader-trucks help maintenance workers apply the proper amount of road salt. Alternative materials, such as sand or gravel, should be used in especially sensitive areas.

Roadway and Bridge Maintenance

This practice uses pollution prevention techniques to reduce or eliminate pollutant loadings from existing road surfaces as part of an operation and maintenance program. Daily roadway and bridge use, along with scheduled repairs, generate substantial amounts of sediment and pollutants. These pollutants contain heavy metals, hydrocarbons, and debris, which can threaten local water quality. Table 1 lists some of the constituents found in highway runoff and their primary sources.

Table 1 also demonstrates, numerous pollutants deposited on roadways and bridges affect the water quality of stormwater runoff. Routine maintenance activities such as sweeping, vegetation maintenance, and cleaning of runoff control structures can help alleviate the effects of these pollutants. Modifying roadway resurfacing practices, along with how salt and other deicers are applied, also help reduce pollutant loads to stormwater runoff, protecting the quality of receiving waters.

Roadway systems comprise a large part of the urban infrastructure across the country. Because of traffic use and climatic conditions, they require regular repairs and maintenance. The amount of pollutants found on roads and bridges vary, and can be affected by a number of factors other than traffic volume and climate. These other factors include surrounding land use, the bridge or roadway's design, the presence of roadside vegetation, insecticide use, and the frequency of hazardous chemical-inducing vehicle accidents and spills. In colder climates, deicer applied to roadways can also influence pollutant levels in road runoff, and thereby affect local water quality.

Table 1. Highway runoff constituents and their primary sources (Source: USEPA, 1993)

Constituent	Primary Sources
Particulates	Pavement wear, vehicles, atmosphere
Nitrogen, Phosphorus	Atmosphere, roadside fertilizer application
Lead	Tire wear, auto exhaust
Zinc	Tire wear, motor oil, grease
Iron	Auto body rust, steel highway structures, moving engine parts
Copper	Metal plating, brake lining wear, moving engine parts, bearing and bushing wear, fungicides and insecticides
Cadmium	Tire Wear, insecticides
Chromium	Metal plating, moving engine parts, brake lining wear
Nickel	Diesel fuel and gasoline, lubricating oil, metal plating, brake lining wear, asphalt paving
Manganese	Moving engine parts
Cyanide	Anticake compound used to keep deicing salt granular
Sodium, Calcium, Chloride	Deicing salts
Sulphate	Roadway beds, fuel, deicing salts
Petroleum	Spills, leaks or blow-by of motor lubricants, antifreeze and hydraulic fluids, asphalt surface leachate

Proper planning for road and bridge resurfacing operations is a simple but effective pollution control method. Many techniques can be used to control the side-effects of road maintenance procedures. First, to prevent runoff contamination, paving operations should be performed only in dry weather, using concrete, asphalt or other sealers. Second, proper staging techniques should be used to reduce the spillage of paving materials during the repair of potholes and worn pavement. These techniques can include covering storm drain inlets and manholes during paving operations, using erosion and sediment controls to decrease runoff from repair sites, and using drip pans, absorbent materials and other pollution prevention materials to limit leaks of paving materials and fluids from paving machines.

Good cleaning practices can help diminish the effects of stormwater runoff. Sweeping and vacuuming of heavily traveled roadways to remove sediment and debris can reduce the amount of pollutants in runoff. Street sweeping as a pollution source control is discussed more extensively in the Parking Lot and Street Sweeping section. Regular cleaning of runoff control structures, such as catch basins, can help reduce sediment loads in runoff that will end up in local waterways.

Proper application of road salt or other deicers also reduces stormwater pollution. By routinely calibrating spreaders, a program manager can prevent the over-application of deicing materials. Besides reducing the effects of these materials on the aquatic environment, cost savings may be realized due to reductions in the purchase of deicing materials. Training for transportation employees in proper deicer application techniques, the timing of deicer applications, and what type of deicer to apply will also determine the impacts on water quality and aquatic habitat.

Maintenance practices for roadside vegetation also help determine the stormwater quality of road runoff. Restrictions on the use of herbicides and pesticides on roadside vegetation, and training to ensure that employees understand the proper handling and application of pesticides and other chemicals, can help prevent contamination of runoff. Selection of roadside vegetation with higher salt tolerances will also help to maintain runoff-filtering vegetated swales and biofilters.

Controlling bridge runoff may require additional maintenance measures to eliminate stormwater runoff. Besides the roadway practices listed above, improved bridge siting and design can help reduce water quality effects. Avoiding scupper drains in new bridges and routine cleaning of existing ones to prevent sediment and debris buildup can help. Scupper drains can cause direct discharges of stormwater containing relatively high pollutant concentrations to surface waters. Program managers should consider advocating retrofits of scupper drains with catch basins or otherwise redirecting water from these drains to vegetated areas to provide treatment. Other techniques to help reduce discharges to receiving waters include using suspended tarps, booms and vacuums to capture paint, solvents, rust, paint chips and other pollutants generated by bridge maintenance. Additionally, unlike common road salt, deicers like glycol, urea, or calcium magnesium acetate (CMA) reduce the corrosion of metal bridge supports.

Storm Drain System Cleaning

Storm drain systems need to be cleaned regularly. Routine cleaning reduces the amount of pollutants, trash, and debris both in the storm drain system and in receiving waters. Clogged drains and storm drain inlets can cause the drains to overflow, leading to increased erosion. Cleaning increases dissolved oxygen, reduces levels of bacteria, and supports in-stream habitat. Areas with relatively flat grades or low flows should be given special attention because they rarely achieve high enough flows to flush themselves.

Some common pollutants found in storm drains include:

- trash and debris
- sediments
- oil and grease
- antifreeze
- paints
- cleaners and solvents
- pesticides
- fertilizers
- animal waste
- detergents

Hazardous Materials Storage

Failure to properly store hazardous materials dramatically increases the probability that they will end up in local waterways. Many people have hazardous materials stored throughout their homes, especially in garages and storage sheds. Practices such as covering hazardous materials or storing them properly can have dramatic impacts.

Hazardous material storage is relevant to both urban and rural settings and all geographic regions. The effects of hazardous material leakage may be more pronounced in areas with heavier rainfall, due to the greater volume of runoff.

EPA (1992) has outlined some management considerations for hazardous materials. They are as follows:

Ensuring sufficient aisle space to provide access for inspections and to improve the ease of material transport.

Storing materials away from high-traffic areas to reduce the likelihood of accidents that might cause spills or damage to drums, bags, or containers.

Stacking containers in accordance with the manufacturers' directions to avoid damaging the container or the product itself.

Storing containers on pallets or equivalent structures. This facilitates inspection for leaks and prevents the containers from coming into contact with wet floors, which can cause corrosion. This consideration also reduces the incidence of damage by pests (insects, rodents, etc.).

Delegating the responsibility for management of hazardous materials to personnel trained and experienced in hazardous substance management.

Covering hazardous materials and areas where such materials are handled reduces potential contact with stormwater and wind. Storage areas, outdoor material deposits, loading and unloading areas, and raw materials should all be covered or enclosed. Priority should be given to locations of the most hazardous materials (USEPA 1992).

Residents waiting to dispose of their household hazardous materials should store them properly until their hazardous waste collection day sponsored by Schenectady County. An example storage technique includes a plastic container with a lid (e.g., a 5-gallon bucket). The container should be filled halfway with (unused) kitty litter. Then the hazardous material, in its own, original container, can be put into the bucket. The bucket lid must be fastened and the container clearly marked. It should be stored away from children and anyone else who might ingest the hazardous material stored inside. To reduce the potential for corrosion, the container should be stored off the ground.

Materials Management

Responsible management of common chemicals, such as fertilizers, solvents, paints, cleaners, and automotive products, can significantly reduce polluted runoff. Such products must be handled properly in all stages of development, use, and disposal. Materials management entails the selection of the individual product, the correct use and storage of the product, and the responsible disposal of associated waste(s).

Some simple practices for managing materials are improving maintenance of machinery, establishing material storage and inventory controls, improving routine cleaning and inspection of facilities where materials are stored or processed, maintaining organized workplaces, and educating employees about the benefits of the above practices.

Maintenance associated with materials management should be designed to minimize the amounts of materials used and the wastes generated by industrial processes. Procedures for operation and maintenance can be easily integrated into an industry's management plan. Simple processes, such as routine cleaning of work spaces, proper collection and disposal of wastes, maintenance of machinery, regular inspections of equipment and facilities, and training employees to respond to spills or leaks, have significant effects on reducing the potential to pollute stormwater runoff.

Another consideration is regular material inventories. Such inventories reduce the occurrence of overstocking hazardous materials, increase knowledge about what hazardous materials are present and how they are stored, and provide documentation of proper handling of hazardous materials. An inventory of hazardous materials present at a particular facility consists of three major steps:

Identify all hazardous and nonhazardous substances present at a facility. This can be accomplished by reviewing all purchase orders for the facility and walking through the facility itself. Compile a list of all chemicals present at a facility and obtain a Material Safety Data Sheet (MSDS) for each one. Label all containers with the name of the chemical, unit number, expiration date, handling instructions, and health or environmental hazards. Much of this information will be found on the MSDS. Often, insufficient labeling leads to improper handling or disposal of hazardous substances. Make special note on the inventory of hazardous chemicals that require special handling, storage, or disposal.

Spill Response and Prevention

Spill response and prevention plans should clearly state how to stop the source of the spill, how to contain and clean up the spill, how to dispose of contaminated materials, and how to train personnel to prevent and control future spills.

Construction sites that use or store hazardous materials should have a spill prevention and control plan. Hazardous materials include pesticides, paints, cleaners, petroleum products, fertilizers, and solvents.

Identify potential spill or source areas, such as loading and unloading, storage and processing areas, places that generate dust or particulate matter, and areas designated for waste disposal. Also, spill potential should be evaluated for stationary facilities, including manufacturing areas, warehouses, service stations, parking lots, and access roads.

Material handling procedures and storage requirements should be defined and actions should be taken to reduce spill potential and impacts on stormwater quality. This can be achieved by:

Recycling, reclaiming, or reusing process materials, thereby reducing the amount of process materials that are brought into the facility.

Installing leak detection devices, overflow controls, and diversion berms.

Disconnecting drains from processing areas that lead to the storm sewer.

Performing preventative maintenance on storm tanks, valves, pumps, pipes, and other equipment.

Using material transfer or filling procedures that minimize spills from tanks and other equipment.

Replacing toxic materials with less or non-toxic products.

Provide documentation of spill response equipment and procedures to be used, ensuring that procedures are clear and concise. Give step-by-step instructions for spill response at a particular facility. This spill response plan can be presented as a procedural handbook or a sign.

The spill response plan should:

- Identify individuals responsible for implementing the plan.

- Describe safety measures to take with each kind of waste.

- Specify how to notify appropriate authorities, such as police and fire departments, hospitals, or publicly-owned treatment works for assistance.

- State procedures for containing, diverting, isolating, and cleaning up the spill.

- Describe spill response equipment to be used, including safety and cleanup equipment.

Education is essential for reducing spills. By informing people of actions they can take to reduce spill potential, spills will be reduced or prevented. Some municipalities have set up 1-800 numbers for citizens to call in the event of spills. This helps ensure that spills are cleaned up in a safe, proper, and timely manner.

A spill prevention and control plan must be well planned and clearly defined. A well conceived plan reduces the likelihood of accidental spills and helps speed an effective response if they occur. Training might be necessary to ensure that all workers can follow procedures. Equipment and materials for cleanup must be readily accessible and clearly marked for workers to be able to follow procedures.

Update the spill prevention and control plan to accommodate any changes in the site or procedures. Regularly inspect areas where spills might occur to ensure that procedures are posted and cleanup equipment is readily available.

EXHIBIT G
EROSION & SEDIMENT CONTROL PLAN
REVIEW CHECKLIST

APPENDIX G

EROSION AND SEDIMENT CONTROL

PLAN REVIEW CHECKLIST

Project Name _____ Site Location _____

Applicant's Name & Address _____

General

A narrative statement shall be provided that describes the proposed project nature and purpose; the existing site conditions including topography, vegetation and drainage; adjacent and off-site areas affected by the project; description of the soils on the site and key properties; notations of critical areas such as steep slopes, channels or wetlands; the overall phasing, sequencing and stabilization plan; total disturbed area and those not to be disturbed.

I. Construction Drawings

Are the following items shown on the construction drawings:	<u>Yes</u>	<u>No</u>
1. Vicinity Map with scale and north arrow	_____	_____
2. Legend, scales, N arrow on plan view	_____	_____
3. Existing and proposed topography shown with contours labeled with spots elevations in critical areas	_____	_____
4. Scope of the plan noted in the Title Block	_____	_____
5. Limits of clearing and grading shown	_____	_____
6. Existing vegetation delineated	_____	_____
7. Soil boundaries shown on the plan view	_____	_____
8. Existing drainage patterns, 100 year floodplain and sub-areas shown	_____	_____
9. Existing and proposed development facilities/improvements shown	_____	_____
10. Location of Erosion and Sediment control practices as phased with construction	_____	_____
11. Phasing plan with 5 acre threshold limits shown	_____	_____
12. Stockpile locations, staging areas and access points clearly defined	_____	_____
13. Street profiles, utility locations, property boundaries and, easement delineations shown	_____	_____

II.	<u>Construction Notes & Details</u>	<u>Yes</u>	<u>No</u>
1.	Specific sequence of operation given for each phase	_____	_____
2.	Inspection and maintenance schedule shown for the specific practices	_____	_____
3.	Design details show all dimensions and installation details necessary for construction	_____	_____
4.	Implementation schedule for E&S practices is provided with removal criteria stated	_____	_____
5.	Construction waste management plan incorporated in the notes	_____	_____
6.	Site Inspections during construction are noted on the drawings and is in accordance with the General Permit for Stormwater Discharges from Construction Activities	_____	_____

III. Erosion & Sediment Control Practices

A.	<u>General</u>	<u>Yes</u>	<u>No</u>
1.	Practice meets purpose and design criteria	_____	_____
2.	Standard details and construction notes are provided	_____	_____
3.	Special timing of practice noted if applicable	_____	_____
4.	Provisions for traffic crossings shown on the drawings where necessary	_____	_____
B.	<u>Practices Controlling Runoff</u>	<u>Yes</u>	<u>No</u>
1.	Positive drainage is maintained with contributing drainage area shown	_____	_____
2.	Flow grades properly stabilized	_____	_____
3.	Adequate outlet or discharge condition stabilized	_____	_____
4.	Necessary dimensions, gradations, calculations, and materials shown	_____	_____
C.	<u>Practices Stabilizing Soil</u>	<u>Yes</u>	<u>No</u>
1.	Seeding rates and areas properly shown on the drawings	_____	_____
2.	Mulch materials and rates specified on the drawings	_____	_____
3.	Sequencing and timing provisions limit soil exposure to 14 days	_____	_____

C.	Practices Stabilizing Soil (cont'd)	<u>Yes</u>	<u>No</u>
	4. Rolled Erosion Control Products (RECP's) used are specified to location and appropriate weight/tie down	_____	_____
	5. All soil seed bed preparation and amendments are specified on the drawings or in the specifications	_____	_____
	6. The seeding dates are specified to cover the entire year for both temporary and permanent seedings	_____	_____
	7. Maximum created slope is no steeper than 2 foot horizontal to 1 foot vertical with Cut and Fill slopes shown	_____	_____
D.	Practices Controlling Sediment	<u>Yes</u>	<u>No</u>
	1. Sediment traps/basins are sized in accordance with criteria	_____	_____
	2. The contributing drainage area is shown on the grading plan	_____	_____
	3. All scaled dimensions and volumes are shown on the plan	_____	_____
	4. Maintenance requirements and clean out elevations established for all sediment control practices (50% capacity)	_____	_____
	5. All access points of the project are shown to be stabilized	_____	_____
	6. Storm drain inlets adequately protected	_____	_____
	7. Silt fences are shown on the contour lines with no more than one quarter acre per 100 foot drainage to it	_____	_____
	8. Temporary sediment traps being used at locations of future stormwater infiltration facilities	_____	_____

Additional Comments

Plan Reviewed By: _____ Date: _____

EXHIBIT H
CONSTRUCTION SITE LOG BOOK
AND INSPECTION FORMS

APPENDIX H

STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM FOR CONSTRUCTION ACTIVITIES CONSTRUCTION SITE LOG BOOK

Table of Contents

- I. Pre-Construction Meeting Documents
 - a. Preamble to Site Assessment and Inspections
 - b. Operator's Certification
 - c. Qualified Professional's Credentials & Certification
 - d. Pre-Construction Site Assessment Checklist
- II. Construction Duration Inspections
 - a. Directions
 - b. Modification to the SWPPP
- III. Monthly Summary Reports
- IV. Monitoring, Reporting, and Three-Month Status Reports
 - a. Operator's Compliance Response Form

Properly completing forms such as those contained in Appendix H meet the inspection requirement of NYS-DEC SPDES GP for Construction Activities. Completed forms shall be kept on site at all times and made available to authorities upon request.

I. PRE-CONSTRUCTION MEETING DOCUMENTS

Project Name _____
Permit No. _____ **Date of Authorization** _____
Name of Operator _____
Prime Contractor _____

a. Preamble to Site Assessment and Inspections

The Following Information To Be Read By All Person's Involved in The Construction of Stormwater Related Activities:

The Operator agrees to have a qualified professional¹ conduct an assessment of the site prior to the commencement of construction² and certify in this inspection report that the appropriate erosion and sediment controls described in the SWPPP have been adequately installed or implemented to ensure overall preparedness of the site for the commencement of construction.

Prior to the commencement of construction, the Operator shall certify in this site logbook that the SWPPP has been prepared in accordance with the State's standards and meets all Federal, State and local erosion and sediment control requirements.

When construction starts, site inspections shall be conducted by the qualified professional at least every 7 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater (Construction Duration Inspections). The Operator shall maintain a record of all inspection reports in this site logbook. The site logbook shall be maintained on site and be made available to the permitting authorities upon request. The Operator shall post at the site, in a publicly accessible location, a summary of the site inspection activities on a monthly basis (Monthly Summary Report).

The operator shall also prepare a written summary of compliance with this general permit at a minimum frequency of every three months (Operator's Compliance Response Form), while coverage exists. The summary should address the status of achieving each component of the SWPPP.

Prior to filing the Notice of Termination or the end of permit term, the Operator shall have a qualified professional perform a final site inspection. The qualified professional shall certify that the site has undergone final stabilization³ using either vegetative or structural stabilization methods and that all temporary erosion and sediment controls (such as silt fencing) not needed for long-term erosion control have been removed. In addition, the Operator must identify and certify that all permanent structures described in the SWPPP have been constructed and provide the owner(s) with an operation and maintenance plan that ensures the structure(s) continuously functions as designed.

1 "Qualified Professional means a person knowledgeable in the principles and practice of erosion and sediment controls, such as a Certified Professional in Erosion and Sediment Control (CPESC), soil scientist, licensed engineer or someone working under the direction and supervision of a licensed engineer (person must have experience in the principles and practices of erosion and sediment control).

2 "Commencement of construction" means the initial removal of vegetation and disturbance of soils associated with clearing, grading or excavating activities or other construction activities.

3 "Final stabilization" means that all soil-disturbing activities at the site have been completed and a uniform, perennial vegetative cover with a density of eighty (80) percent has been established or equivalent stabilization measures (such as the use of mulches or geotextiles) have been employed on all unpaved areas and areas not covered by permanent structures.

b. Operators 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 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. Further, I hereby certify that the SWPPP meets all Federal, State, and local erosion and sediment control requirements. I am aware that false statements made herein are punishable as a class A misdemeanor pursuant to Section 210.45 of the Penal Law.

Name (please print): _____

Title _____ **Date:** _____

Address: _____

Phone: _____ **Email:** _____

Signature: _____

c. Qualified Professional's Credentials & Certification

"I hereby certify that I meet the criteria set forth in the General Permit to conduct site inspections for this project and that the appropriate erosion and sediment controls described in the SWPPP and as described in the following Pre-construction Site Assessment Checklist have been adequately installed or implemented, ensuring the overall preparedness of this site for the commencement of construction."

Name (please print): _____

Title _____ **Date:** _____

Address: _____

Phone: _____ **Email:** _____

Signature: _____

d. Pre-construction Site Assessment Checklist

(NOTE: Provide comments below as necessary)

1. Notice of Intent, SWPPP, and Contractors Certification:

Yes No NA

- ☐ ☐ ☐ Has a Notice of Intent been filed with the NYS Department of Conservation?
- ☐ ☐ ☐ Is the SWPPP on-site? Where? _____
- ☐ ☐ ☐ Is the Plan current? What is the latest revision date? _____
- ☐ ☐ ☐ Is a copy of the NOI (with brief description) onsite? Where? _____
- ☐ ☐ ☐ Have all contractors involved with stormwater related activities signed a contractor's certification?

2. Resource Protection

Yes No NA

- ☐ ☐ ☐ Are construction limits clearly flagged or fenced?
- ☐ ☐ ☐ Important trees and associated rooting zones, on-site septic system absorption fields, existing vegetated areas suitable for filter strips, especially in perimeter areas, have been flagged for protection.
- ☐ ☐ ☐ Creek crossings installed prior to land-disturbing activity, including clearing and blasting.

3. Surface Water Protection

Yes No NA

- ☐ ☐ ☐ Clean stormwater runoff has been diverted from areas to be disturbed.
- ☐ ☐ ☐ Bodies of water located either on site or in the vicinity of the site have been identified and protected.
- ☐ ☐ ☐ Appropriate practices to protect on-site or downstream surface water are installed.
- ☐ ☐ ☐ Are clearing and grading operations divided into areas <5 acres?

4. Stabilized Construction Entrance

Yes No NA

- ☐ ☐ ☐ A temporary construction entrance to capture mud and debris from construction vehicles before they enter the public highway has been installed.
- ☐ ☐ ☐ Other access areas (entrances, construction routes, equipment parking areas) are stabilized immediately as work takes place with gravel or other cover.
- ☐ ☐ ☐ Sediment tracked onto public streets is removed or cleaned on a regular basis.

5. Perimeter Sediment Controls

Yes No NA

- ☐ ☐ ☐ Silt fence material and installation comply with the standard drawing and specifications.
- ☐ ☐ ☐ Silt fences are installed at appropriate spacing intervals
- ☐ ☐ ☐ Sediment/detention basin was installed as first land disturbing activity.
- ☐ ☐ ☐ Sediment traps and barriers are installed.

6. Pollution Prevention for Waste and Hazardous Materials

Yes No NA

- ☐ ☐ ☐ The Operator or designated representative has been assigned to implement the spill prevention avoidance and response plan.
- ☐ ☐ ☐ The plan is contained in the SWPPP on page _____
- ☐ ☐ ☐ Appropriate materials to control spills are onsite. Where? _____

II. CONSTRUCTION DURATION INSPECTIONS

a. Directions:

Inspection Forms will be filled out during the entire construction phase of the project.

Required Elements:

- (1) On a site map, indicate the extent of all disturbed site areas and drainage pathways. Indicate site areas that are expected to undergo initial disturbance or significant site work within the next 14-day period;
- (2) Indicate on a site map all areas of the site that have undergone temporary or permanent stabilization;
- (3) Indicate all disturbed site areas that have not undergone active site work during the previous 14-day period;
- (4) Inspect all sediment control practices and record the approximate degree of sediment accumulation as a percentage of sediment storage volume (for example, 10 percent, 20 percent, 50 percent);
- (5) Inspect all erosion and sediment control practices and record all maintenance requirements such as verifying the integrity of barrier or diversion systems (earthen berms or silt fencing) and containment systems (sediment basins and sediment traps). Identify any evidence of rill or gully erosion occurring on slopes and any loss of stabilizing vegetation or seeding/mulching. Document any excessive deposition of sediment or ponding water along barrier or diversion systems. Record the depth of sediment within containment structures, any erosion near outlet and overflow structures, and verify the ability of rock filters around perforated riser pipes to pass water; and
- (6) Immediately report to the Operator any deficiencies that are identified with the implementation of the SWPPP.

SITE PLAN/SKETCH

Inspector (print name)

Date of Inspection

Qualified Professional (print name)

Qualified Professional Signature

The above signed acknowledges that, to the best of his/her knowledge, all information provided on the forms is accurate and complete.

Maintaining Water Quality**Yes No NA**

- ☐ ☐ ☐ Is there an increase in turbidity causing a substantial visible contrast to natural conditions?
- ☐ ☐ ☐ Is there residue from oil and floating substances, visible oil film, or globules or grease?
- ☐ ☐ ☐ All disturbance is within the limits of the approved plans.
- ☐ ☐ ☐ Have receiving lake/bay, stream, and/or wetland been impacted by silt from project?

Housekeeping

1. General Site Conditions

Yes No NA

- ☐ ☐ ☐ Is construction site litter and debris appropriately managed?
- ☐ ☐ ☐ Are facilities and equipment necessary for implementation of erosion and sediment control in working order and/or properly maintained?
- ☐ ☐ ☐ Is construction impacting the adjacent property?
- ☐ ☐ ☐ Is dust adequately controlled?

2. Temporary Stream Crossing

Yes No NA

- ☐ ☐ ☐ Maximum diameter pipes necessary to span creek without dredging are installed.
- ☐ ☐ ☐ Installed non-woven geotextile fabric beneath approaches.
- ☐ ☐ ☐ Is fill composed of aggregate (no earth or soil)?
- ☐ ☐ ☐ Rock on approaches is clean enough to remove mud from vehicles & prevent sediment from entering stream during high flow.

Runoff Control Practices

1. Excavation Dewatering

Yes No NA

- ☐ ☐ ☐ Upstream and downstream berms (sandbags, inflatable dams, etc.) are installed per plan.
- ☐ ☐ ☐ Clean water from upstream pool is being pumped to the downstream pool.
- ☐ ☐ ☐ Sediment laden water from work area is being discharged to a silt-trapping device.
- ☐ ☐ ☐ Constructed upstream berm with one-foot minimum freeboard.

2. Level Spreader

Yes No NA

- ☐ ☐ ☐ Installed per plan.
- ☐ ☐ ☐ Constructed on undisturbed soil, not on fill, receiving only clear, non-sediment laden flow.
- ☐ ☐ ☐ Flow sheets out of level spreader without erosion on downstream edge.

3. Interceptor Dikes and Swales

Yes No NA

- ☐ ☐ ☐ Installed per plan with minimum side slopes 2H:1V or flatter.
- ☐ ☐ ☐ Stabilized by geotextile fabric, seed, or mulch with no erosion occurring.
- ☐ ☐ ☐ Sediment-laden runoff directed to sediment trapping structure

CONSTRUCTION DURATION INSPECTIONS
Runoff Control Practices (continued)

Page 3 of _____

4. Stone Check Dam

Yes No NA

- ☐ ☐ ☐ Is channel stable? (flow is not eroding soil underneath or around the structure).
☐ ☐ ☐ Check is in good condition (rocks in place and no permanent pools behind the structure).
☐ ☐ ☐ Has accumulated sediment been removed?.

5. Rock Outlet Protection

Yes No NA

- ☐ ☐ ☐ Installed per plan.
☐ ☐ ☐ Installed concurrently with pipe installation.

Soil Stabilization

1. Topsoil and Spoil Stockpiles

Yes No NA

- ☐ ☐ ☐ Stockpiles are stabilized with vegetation and/or mulch.
☐ ☐ ☐ Sediment control is installed at the toe of the slope.

2. Revegetation

Yes No NA

- ☐ ☐ ☐ Temporary seedings and mulch have been applied to idle areas.
☐ ☐ ☐ 4 inches minimum of topsoil has been applied under permanent seedings

Sediment Control Practices

1. Stabilized Construction Entrance

Yes No NA

- ☐ ☐ ☐ Stone is clean enough to effectively remove mud from vehicles.
☐ ☐ ☐ Installed per standards and specifications?
☐ ☐ ☐ Does all traffic use the stabilized entrance to enter and leave site?
☐ ☐ ☐ Is adequate drainage provided to prevent ponding at entrance?

2. Silt Fence

Yes No NA

- ☐ ☐ ☐ Installed on Contour, 10 feet from toe of slope (not across conveyance channels).
☐ ☐ ☐ Joints constructed by wrapping the two ends together for continuous support.
☐ ☐ ☐ Fabric buried 6 inches minimum.
☐ ☐ ☐ Posts are stable, fabric is tight and without rips or frayed areas.
Sediment accumulation is ____% of design capacity.

Sediment Control Practices (continued)**3. Storm Drain Inlet Protection (Use for Stone & Block; Filter Fabric; Curb; or, Excavated practices)****Yes No NA**

- ☐ ☐ ☐ Installed concrete blocks lengthwise so open ends face outward, not upward.
- ☐ ☐ ☐ Placed wire screen between No. 3 crushed stone and concrete blocks.
- ☐ ☐ ☐ Drainage area is 1acre or less.
- ☐ ☐ ☐ Excavated area is 900 cubic feet.
- ☐ ☐ ☐ Excavated side slopes should be 2:1.
- ☐ ☐ ☐ 2" x 4" frame is constructed and structurally sound.
- ☐ ☐ ☐ Posts 3-foot maximum spacing between posts.
- ☐ ☐ ☐ Fabric is embedded 1 to 1.5 feet below ground and secured to frame/posts with staples at max 8-inch spacing.
- ☐ ☐ ☐ Posts are stable, fabric is tight and without rips or frayed areas.
- Sediment accumulation ____% of design capacity.

4. Temporary Sediment Trap**Yes No NA**

- ☐ ☐ ☐ Outlet structure is constructed per the approved plan or drawing.
- ☐ ☐ ☐ Geotextile fabric has been placed beneath rock fill.
- Sediment accumulation is ____% of design capacity.

5. Temporary Sediment Basin**Yes No NA**

- ☐ ☐ ☐ Basin and outlet structure constructed per the approved plan.
- ☐ ☐ ☐ Basin side slopes are stabilized with seed/mulch.
- ☐ ☐ ☐ Drainage structure flushed and basin surface restored upon removal of sediment basin facility.
- Sediment accumulation is ____% of design capacity.

Note: Not all erosion and sediment control practices are included in this listing. Add additional pages to this list as required by site specific design.

Construction inspection checklists for post-development stormwater management practices can be found in Appendix F of the New York Stormwater Management Design Manual.

CONSTRUCTION DURATION INSPECTIONS

b. Modifications to the SWPPP (To be completed as described below)

The Operator shall amend the SWPPP whenever:

1. There is a significant change in design, construction, operation, or maintenance which may have a significant effect on the potential for the discharge of pollutants to the waters of the United States and which has not otherwise been addressed in the SWPPP; or
2. The SWPPP proves to be ineffective in:
 - a. Eliminating or significantly minimizing pollutants from sources identified in the SWPPP and as required by this permit; or
 - b. Achieving the general objectives of controlling pollutants in stormwater discharges from permitted construction activity; and
3. Additionally, the SWPPP shall be amended to identify any new contractor or subcontractor that will implement any measure of the SWPPP.

Modification & Reason:This image shows a full page of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

III. Monthly Summary of Site Inspection Activities

Name of Permitted Facility:	Today's Date:	Reporting Month:
Location:	Permit Identification #:	
Name and Telephone Number of Site Inspector:		

Date of Inspection	Regular / Rainfall based Inspection	Name of Inspector	Items of Concern

Owner/Operator 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 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 false statements made herein are punishable as a class A misdemeanor pursuant to Section 210.45 of the Penal Law."

Signature of Permittee or Duly Authorized Representative

Name of Permittee or Duly Authorized Representative

Date

Duly authorized representatives must have written authorization, submitted to DEC, to sign any permit documents.

EXHIBIT I
SWPPP ACCEPTANCE FORM



Department of
Environmental
Conservation

NYS Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505

MS4 Stormwater Pollution Prevention Plan (SWPPP) Acceptance Form

for

Construction Activities Seeking Authorization Under SPDES General Permit

*(NOTE: Attach Completed Form to Notice Of Intent and Submit to Address Above)

I. Project Owner/Operator Information

1. Owner/Operator Name:

2. Contact Person:

3. Street Address:

4. City/State/Zip:

II. Project Site Information

5. Project/Site Name:

6. Street Address:

7. City/State/Zip:

III. Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance Information

8. SWPPP Reviewed by:

9. Title/Position:

10. Date Final SWPPP Reviewed and Accepted:

IV. Regulated MS4 Information

11. Name of MS4:

12. MS4 SPDES Permit Identification Number: NYR20A

13. Contact Person:

14. Street Address:

15. City/State/Zip:

16. Telephone Number:

MS4 SWPPP Acceptance Form - continued

V. Certification Statement - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative

I hereby certify that the final Stormwater Pollution Prevention Plan (SWPPP) for the construction project identified in question 5 has been reviewed and meets the substantive requirements in the SPDES General Permit For Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s). Note: The MS4, through the acceptance of the SWPPP, assumes no responsibility for the accuracy and adequacy of the design included in the SWPPP. In addition, review and acceptance of the SWPPP by the MS4 does not relieve the owner/operator or their SWPPP preparer of responsibility or liability for errors or omissions in the plan.

Printed Name:

Title/Position:

Signature:

Date:

VI. Additional Information

EXHIBIT J
SAMPLE SWPPP RELATED FORMS

Appendix J:

Sample SWPPP Related Forms

STORM WATER POLLUTION PREVENTION PLAN
OWNER'S CERTIFICATION

Project Name

Project Location

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designated to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that false statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law. The Owner also certifies that all appropriate storm water control measures will be in place before commencement of construction of any segment of the project that requires such measures."

Signature:

Name (printed):

Company Name:

Address:

Telephone No.:

Title/Responsible For:

Certification Date:

STORM WATER POLLUTION PREVENTION PLAN
GENERAL CONTRACTOR'S CERTIFICATION

Project Name

Project Location

"I certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP for the construction site identified in such SWPPP as a condition of authorization to discharge storm water. I also understand that the operator must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System (SPDES) general permit for storm water discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards"

Signature:

Name (printed):

Company Name:

Address:

Telephone No.:

Date:

Scope of Services:

Operators Project
Manager Signature:

This form must be signed by a responsible corporate officer or other party meeting the "Signatory Requirements" per NY SPDES GP Part V H 1 a-c or other applicable state permit.

STORM WATER POLLUTION PREVENTION PLAN
GENERAL CONTRACTOR'S CERTIFICATION

Project Name

Project Location

"I certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP for the construction site identified in such SWPPP as a condition of authorization to discharge storm water. I also understand that the operator must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System (SPDES) general permit for storm water discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards"

Signature:

Name (printed):

Company Name:

Address:

Telephone No.:

Date:

Scope of Services:

Operators Project
Manager Signature:

This form must be signed by a responsible corporate officer or other party meeting the "Signatory Requirements" per NY SPDES GP Part V H 1 a-c or other applicable state permit.

STORM WATER POLLUTION PREVENTION PLAN
SUBCONTRACTOR'S CERTIFICATION

Project Name

Project Location

"I certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP for the construction site identified in such SWPPP as a condition of authorization to discharge storm water. I also understand that the operator must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System (SPDES) general permit for storm water discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards"

Signature:

Name (printed):

Company Name:

Address:

Telephone No.:

Date:

Scope of Services:

Operators Project
Manager Signature:

This form must be signed by a responsible corporate officer or other party meeting the "Signatory Requirements" per NY SPDES GP Part V H 1 a-c or other applicable state permit.

DAILY RAINFALL LOG

Project Name & Location:

Name

Year: 2013

[illegible]

**STORM WATER POLLUTION PREVENTION PLAN
EARTH DISTURBANCE/STABILIZATION INSPECTION
AND MAINTENANCE REPORT FORM**

Project Name

Project Location

ON A SITE MAP, INDICATED THE EXTENT OF ALL PROPOSED, DISTURBED, STABILIZED AND INACTIVE AREAS OF THE SITE.

STABILIZE WITH MUCH, SEEDING OR PAVEMENT. DOCUMENT ANYTIME EARTH DISTURBANCE OR STABILIZATION OCCURS.

Example: 6/10/04 started earth disturbance in northeast corner site.

Example: 6/15/04 seeded with rye grass mixture in northeast corner.

Example: 6/18/04 seeded and paved roadway in southwestern corner of site.

Example: 6/18/04 northeastern corner of site stabilized.

Date

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

WEEKLY SWPPP SITE INSPECTION REPORT

Project: _____
Owner/Contractor: _____
Inspector: _____
Date: _____ Temperature: _____
Ambient Conditions: _____
Was there a rain event greater than 0.5 inches with in the past 24 hours? _____

INSPECTION CHECKLIST

Record Keeping (Circle one)

Yes	No	N/A	Is a copy of the Notice of Intent (NOI) and acknowledgment posted at the site for public viewing?
Yes	No	N/A	Is a copy of the SWPPP report and all necessary signed permittee and contractor certification statements retained at the construction site?
Yes	No	N/A	Is a copy of the SPDES General Permit retained at the construction site?
Yes	No	N/A	Are the SWPPP inspection report logs and quarterly written summaries retained at the construction site?

Visual Observations (Circle one)

Yes	No	N/A	Was there a discharge of any silt or debris past any silt fence or erosion control fence since the last inspection? If yes, describe the quality and quantity of that discharge.
Yes	No	N/A	Are there currently less than 5 acres of disturbed soils at the site? If no, explain.
Yes	No	N/A	Have structural stabilization measures been implemented on all active areas where there are exposed soils? If no, explain.
Yes	No	N/A	Is the construction entrance/exit installed and effective? If no, recommendations:
Yes	No	N/A	Is perimeter silt fence installed, effective and cleaned? If no, recommendations:
Yes	No	N/A	Is inlet protection installed and effective? If no, recommendations:
Yes	No	N/A	Is outlet protection installed and effective? If no, recommendations:
Yes	No	N/A	Is temporary sediment basin installed and effective? If no, recommendations:
Yes	No	N/A	Is there a material lay down/staging area and is it protected with silt fence/berm, etc.? If no, recommendations:
Yes	No	N/A	Is the underground storm sewer installed?

WEEKLY SWPPP SITE INSPECTION REPORT

Yes	No	N/A	Is the underground storm sewer in operation?
Yes	No	N/A	Is the berm installed and effective? Is there a designated vehicle staging area on sit?
Yes	No	N/A	Are public roads being kept clean? If no, recommendations:

Housekeeping (Circle one)

Yes	No	N/A	Litter, including building materials, has been picked up, and has been disposed of in appropriate dumpsters. Are the dumpsters being emptied regularly? If no, explain.
Yes	No	N/A	Construction equipment has been inspected for oil and grease leaks?
Yes	No	N/A	All construction equipment that was found to be leaking has been repaired.
Yes	No	N/A	Hazardous or toxic materials, including oil, grease, detergents and solvents are stored under cover where they cannot come in contact with storm water.
Yes	No	N/A	Empty containers have been disposed of.
Yes	No	N/A	The hazardous waste inventory is being maintained.
Yes	No	N/A	Adequate quantities of spill clean-up materials are available.
Yes	No	N/A	The spill clean-up supply inventory is being maintained.
Yes	No	N/A	Onsite fueling areas are being maintained and have adequate spill protection devices.

Use this space to explain each "NO" circled above and to provide additional comments as necessary. Identify any areas with all or gully erosion on slopes, loss of vegetation, seed or mulch, excessive deposition of sediments or ponding water along diversion or barrier systems. Also identify any areas of erosion near outlet or overflow structures in the sedimentation basin areas.

Include a site map identifying the following:

- The extent of all disturbed areas and drainage pathways.
- Areas that are expected to undergo initial disturbance or significant work within the next 14-day period.
- Areas that have undergone temporary or permanent stabilization.
- Disturbed areas that have no undergone active site work during the previous 14 days.

Signature of Inspector

STORM WATER POLLUTION PREVENTION PLAN
MONTHLY SUMMARY OF SITE INSPECTION ACTIVITIES

Project Name

Project Location

Date of this Report:

Date of Previous Report:

Provide written summary of last months work regarding grading, temporary stabilization, paving, landscaping, final seeding and erosion control measures. Not percentage of project complete.

Inspected By:

Signature:

Date:

STORM WATER POLLUTION PREVENTION PLAN

QUARTERLY REPORT

Project Name _____

Project Location _____

Date of this Report: _____

Date of Previous Report: _____

Since the previous quarterly report, have all erosion and sediment control procedures been followed?

(circle one) Yes or No If No, explain: _____

Since the previous quarterly report, have temporary erosion and sediment controls been implemented?

(circle one) Yes or No Explain and give dates: _____

Are they adequately functioning? (circle one) Yes or No If No, explain: _____

Since the previous quarterly report, have permanent erosion and sediment controls been implemented?

(circle one) Yes or No Explain and give dates: _____

Are they adequately functioning? (circle one) Yes or No If No, explain: _____

QUARTERLY REPORT

Date: _____

Since the previous quarterly report, have all erosion and sediment controls been maintained and repaired as needed?

(circle one) Yes or No If No, explain: _____

What percent of total site is stabilized? _____%

Since the previous quarterly report, can any temporary erosion control devices be removed?

(circle one) Yes or No Explain: _____

Since the previous quarterly report, have erosion controls and non-stabilized areas been inspected once a week and within 24 hours after a rainfall of 0.5 inches or more?

(circle one) Yes or No If No, explain: _____

Since the previous quarterly report, have the requirements listed in the spill prevention plan of the SWPPP been followed?

(circle one) Yes or No If No, explain: _____

Since the previous quarterly report, have there been any spill cleanups required on site?

(circle one) Yes or No If Yes, explain and give dates: _____

Were the appropriate officials notified?

QUARTERLY REPORT

Date: _____

Since the previous quarterly report, have all of the conditions imposed in the SWPPP been implemented and followed?

(circle one) Yes or No If No, explain: _____

Since the previous quarterly report, have all the required inspections taken place?

(circle one) Yes or No If No, explain: _____

Since the previous quarterly report, is the site log book up to date, and maintained on site?

(circle one) Yes or No If No, explain: _____

Briefly explain what project components need to be completed to finish construction of the project.

OWNER'S CERTIFICATIONS

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 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 false statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

Signature: _____

Name (printed): _____

Company Name: _____

Address: _____

Telephone No.: _____

Title/Responsible For: _____

Certification Date: _____

STORM WATER POLLUTION PREVENTION PLAN
PLAN CHANGES, AUTHORIZATION AND CHANGE CERTIFICATION

Project Name

Project Location

CHANGES REQUIRED TO THE POLLUTION PREVENTION PLAN:

REASONS FOR CHANGE

REQUESTED BY:

DATE:

AUTHORIZED BY:

DATE:

CERTIFICATION OF CHANGES:

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 information submitted. Based on my inquiry of the person or person 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 false statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

Signature:

Date:

Title:

STORM WATER POLLUTION PREVENTION PLAN
SPILL RESPONSE REPORT

Within 1 hour of a spill discovery less than 2 gallons in volume, the following must be notified:

- 1.)
- 2.)

Within 1 hour of a spill discovery greater than 2 gallons in volume, the following must be notified:

- 1.) NYSDEC Spill Response Hotline 800-457-7362
- 2.) Spill response contractor
- 3.)
- 4.)

Please complete the following information:

- 1.) Material spilled: _____
- 2.) Approximate volume: _____
- 3.) Location: _____
- 4.) Distance to nearest down gradient drainage way: _____
- 5.) Distance to nearest down gradient open water: _____
- 6.) Temporary control measures in place: _____

**Signature of Person
reporting Spill and
Completing Form:**

Name (Printed):

Title:

Company:

Date and Time of Spill:

Date and Time Reported:

EXHIBIT K
SAMPLE STORMWATER MANAGEMENT
INSPECTION FORM

**STORM WATER POLLUTION PREVENTION PLAN
EARTH DISTURBANCE/STABILIZATION INSPECTION
AND MAINTENANCE REPORT FORM**

Project Name _____

Project Location _____

ON A SITE MAP, INDICATED THE EXTENT OF ALL PROPOSED, DISTURBED, STABILIZED AND INACTIVE AREAS OF THE SITE.

STABILIZE WITH MUCH, SEEDING OR PAVEMENT. DOCUMENT ANYTIME EARTH DISTURBANCE OR STABILIZATION OCCURS.

Example: 6/10/04 started earth disturbance in northeast corner site.

Example: 6/15/04 seeded with rye grass mixture in northeast corner.

Example: 6/18/04 seeded and paved roadway in southwestern corner of site.

Example: 6/18/04 northeastern corner of site stabilized.

Date _____

[illegible]

WEEKLY SWPPP SITE INSPECTION REPORT

Project: _____
Owner/Contractor: _____
Inspector: _____
Date: _____ Temperature: _____
Ambient Conditions: _____
Was there a rain event greater than 0.5 inches with in the past 24 hours? _____

INSPECTION CHECKLIST

Record Keeping (Circle one)

Yes	No	N/A	Is a copy of the Notice of Intent (NOI) and acknowledgment posted at the site for public viewing?
Yes	No	N/A	Is a copy of the SWPPP report <u>and all necessary signed permittee and contractor certification statements retained at the construction site?</u>
Yes	No	N/A	Is a copy of the SPDES General Permit retained at the construction site?
Yes	No	N/A	Are the SWPPP inspection report logs and quarterly written summaries retained at the construction site?

Visual Observations (Circle one)

Yes	No	N/A	Was there a discharge of any silt or debris past any silt fence or erosion control fence since the last inspection? If yes, describe the quality and quantity of that discharge.
Yes	No	N/A	Are there currently less than 5 acres of disturbed soils at the site? If no, explain.
Yes	No	N/A	Have structural stabilization measures been implemented on all active areas where there are exposed soils? If no, explain.
Yes	No	N/A	Is the construction entrance/exit installed and effective? If no, recommendations:
Yes	No	N/A	Is perimeter silt fence installed, effective and cleaned? If no, recommendations:
Yes	No	N/A	Is inlet protection installed and effective? If no, recommendations:
Yes	No	N/A	Is outlet protection installed and effective? If no, recommendations:
Yes	No	N/A	Is temporary sediment basin installed and effective? If no, recommendations:
Yes	No	N/A	Is there a material lay down/staging area and is it protected with silt fence/berm, etc.? If no, recommendations:
Yes	No	N/A	Is the underground storm sewer installed?

WEEKLY SWPPP SITE INSPECTION REPORT

Yes	No	N/A	Is the underground storm sewer in operation?
Yes	No	N/A	Is the berm installed and effective? Is there a designated vehicle staging area on sit?
Yes	No	N/A	Are public roads being kept clean? If no, recommendations:

Housekeeping (Circle one)

Yes	No	N/A	Litter, including building materials, has been picked up, and has been disposed of in appropriate dumpsters. Are the dumpsters being emptied regularly? If no, explain.
Yes	No	N/A	Construction equipment has been inspected for oil and grease leaks?
Yes	No	N/A	All construction equipment that was found to be leaking has been repaired.
Yes	No	N/A	Hazardous or toxic materials, including oil, grease, detergents and solvents are stored under cover where they cannot come in contact with storm water.
Yes	No	N/A	Empty containers have been disposed of.
Yes	No	N/A	The hazardous waste inventory is being maintained.
Yes	No	N/A	Adequate quantities of spill clean-up materials are available.
Yes	No	N/A	The spill clean-up supply inventory is being maintained.
Yes	No	N/A	Onsite fueling areas are being maintained and have adequate spill protection devices.

Use this space to explain each "NO" circled above and to provide additional comments as necessary. Identify any areas with all or gully erosion on slopes, loss of vegetation, seed or mulch, excessive deposition of sediments or ponding water along diversion or barrier systems. Also identify any areas of erosion near outlet or overflow structures in the sedimentation basin areas.

Include a site map identifying the following:

- The extent of all disturbed areas and drainage pathways.
- Areas that are expected to undergo initial disturbance or significant work within the next 14-day period.
- Areas that have undergone temporary or permanent stabilization.
- Disturbed areas that have no undergone active site work during the previous 14 days.

Signature of Inspector

STORM WATER POLLUTION PREVENTION PLAN

MONTHLY SUMMARY OF SITE INSPECTION ACTIVITIES

Project Name

Project Location

Date of this Report:

Date of Previous Report:

Provide written summary of last months work regarding grading, temporary stabilization, paving, landscaping, final seeding and erosion control measures. Not percentage of project complete.

Inspected By: _____

Signature: _____

Date: _____

STORM WATER POLLUTION PREVENTION PLAN
QUARTERLY REPORT

Project Name _____

Project Location _____

Date of this Report: _____

Date of Previous Report: _____

Since the previous quarterly report, have all erosion and sediment control procedures been followed?

(circle one) Yes or No If No, explain: _____

Since the previous quarterly report, have temporary erosion and sediment controls been implemented?

(circle one) Yes or No Explain and give dates: _____

Are they adequately functioning? (circle one) Yes or No If No, explain: _____

Since the previous quarterly report, have permanent erosion and sediment controls been implemented?

(circle one) Yes or No Explain and give dates: _____

Are they adequately functioning? (circle one) Yes or No If No, explain: _____

QUARTERLY REPORT

Date: _____

Since the previous quarterly report, have all erosion and sediment controls been maintained and repaired as needed?

(circle one) Yes or No If No, explain: _____

What percent of total site is stabilized? _____%

Since the previous quarterly report, can any temporary erosion control devices be removed?

(circle one) Yes or No Explain: _____

Since the previous quarterly report, have erosion controls and non-stabilized areas been inspected once a week and within 24 hours after a rainfall of 0.5 inches or more?

(circle one) Yes or No If No, explain: _____

Since the previous quarterly report, have the requirements listed in the spill prevention plan of the SWPPP been followed?

(circle one) Yes or No If No, explain: _____

Since the previous quarterly report, have there been any spill cleanups required on site?

(circle one) Yes or No If Yes, explain and give dates: _____

Were the appropriate officials notified?

QUARTERLY REPORT

Date: _____

Since the previous quarterly report, have all of the conditions imposed in the SWPPP been implemented and followed?

(circle one) Yes or No If No, explain: _____

Since the previous quarterly report, have all the required inspections taken place?

(circle one) Yes or No If No, explain: _____

Since the previous quarterly report, is the site log book up to date, and maintained on site?

(circle one) Yes or No If No, explain: _____

Briefly explain what project components need to be completed to finish construction of the project.

OWNER'S CERTIFICATIONS

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 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 false statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

Signature: _____

Name (printed): _____

Company Name: _____

Address: _____

Telephone No.: _____

Title/Responsible For: _____

Certification Date: _____

STORM WATER POLLUTION PREVENTION PLAN
PLAN CHANGES, AUTHORIZATION AND CHANGE CERTIFICATION

Project Name _____
Project Location _____

CHANGES REQUIRED TO THE POLLUTION PREVENTION PLAN:

REASONS FOR CHANGE

REQUESTED BY:

DATE:

AUTHORIZED BY:

DATE:

CERTIFICATION OF CHANGES:

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 information submitted. Based on my inquiry of the person or person 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 false statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

Signature: _____ Date: _____
Title: _____

**STORM WATER POLLUTION PREVENTION PLAN
SPILL RESPONSE REPORT**

Within 1 hour of a spill discovery less than 2 gallons in volume, the following must be notified:

- 1.)
- 2.)

Within 1 hour of a spill discovery greater than 2 gallons in volume, the following must be notified:

- 1.) NYSDEC Spill Response Hotline 800-457-7362
- 2.) Spill response contractor
- 3.)
- 4.)

Please complete the following information:

- 1.) Material spilled: _____
- 2.) Approximate volume: _____
- 3.) Location: _____
- 4.) Distance to nearest down gradient drainage way: _____
- 5.) Distance to nearest down gradient open water: _____
- 6.) Temporary control measures in place: _____

**Signature of Person
reporting Spill and
Completing Form:**

Name (Printed):

Title:

Company:

Date and Time of Spill:

Date and Time Reported:



EXHIBIT L

SCOTIA CODE OF LAW

Chapter 155: Flood Damage Prevention

Chapter 163: Illicit Discharges and Connections to Storm Sewer System

Chapter 208: Stormwater Management and Erosion and Sediment Control

Chapter 155

FLOOD DAMAGE PREVENTION

GENERAL REFERENCES

Unsafe buildings — See Ch. 119.

Environmental quality review — See Ch. 129.

Uniform Fire Prevention and Building Code — See Ch. 150.

Illicit discharges and connections to storm sewer system — See Ch. 163.

Stormwater management and erosion and sediment control — See Ch. 208.

Subdivision of land — See Ch. 219.

Zoning — See Ch. 250.

ARTICLE I

Findings; Purpose; Objectives**§ 155-1. Findings.**

The Board of Trustees of the Village of Scotia finds that the potential and/or actual damages from flooding and erosion may be a problem to the residents of the Village of Scotia and that such damages may include destruction or loss of private and public housing, damage to public facilities, both publicly and privately owned, and injury to and loss of human life. In order to minimize the threat of such damages and to achieve the purposes and objectives hereinafter set forth, this chapter is adopted.

§ 155-2. Statement of purpose.

It is the purpose of this chapter to promote the public health, safety, and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

- A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards or which result in damaging increases in erosion or in flood heights or velocities;
- B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;
- D. Control filling, grading, dredging and other development which may increase erosion or flood damages;
- E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and
- F. Qualify for and maintain participation in the National Flood Insurance Program.

§ 155-3. Objectives.

The objectives of this chapter are:

- A. To protect human life and health;
- B. To minimize expenditure of public money for costly flood-control projects;
- C. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- D. To minimize prolonged business interruptions;

- E. To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone, sewer lines, streets and bridges located in areas of special flood hazard;
- F. To help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;
- G. To provide that developers are notified that property is in an area of special flood hazard; and
- H. To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

ARTICLE II
Definitions and Word Usage

§ 155-4. Word usage.

Unless specifically defined below, words or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this chapter its most reasonable application.

§ 155-5. Definitions.

As used in this chapter, the following terms shall have the meanings indicated:

APPEAL — A request for a review of the local administrator's interpretation of any provision of this chapter or a request for a variance.

AREA OF SHALLOW FLOODING — A designated AO, AH or VO Zone on a community's Flood Insurance Rate Map (FIRM) with a one-percent or greater annual chance of flooding to an average annual depth of one foot to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

AREA OF SPECIAL FLOOD HAZARD — The land in the floodplain within a community subject to a one-percent or greater chance of flooding in any given year. This area may be designated as Zone A, AE, AH, AO, A1-A30, A99, V, VO, VE, or V1-V30. It is also commonly referred to as the base floodplain or one-hundred-year floodplain. For purposes of this chapter, the term "special flood hazard area (SFHA)" is synonymous in meaning with the phrase "area of special flood hazard."

BASE FLOOD — The flood having a one-percent chance of being equaled or exceeded in any given year.

BASEMENT — That portion of a building having its floor subgrade (below ground level) on all sides.

BUILDING — See "structure."

CELLAR — Has the same meaning as "basement."

CRAWL SPACE — An enclosed area beneath the lowest elevated floor, 18 inches or more in height, which is used to service the underside of the lowest elevated floor. The elevation of the floor of this enclosed area, which may be of soil, gravel, concrete or other material, must be equal to or above the lowest adjacent exterior grade. The enclosed crawl space area shall be properly vented to allow for the equalization of hydrostatic forces which would be experienced during periods of flooding.

DEVELOPMENT — Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, paving, excavation or drilling operations or storage of equipment or materials.

ELEVATED BUILDING — A nonbasement building i) built, in the case of a building in Zone A1-A30, AE, A, A99, AO, AH, B, C, X, or D, to have the top of the elevated floor or, in the case of a building in Zone V1-30, VE, or V, to have the bottom of the lowest horizontal structure member of the elevated floor elevated above the ground level by means of pilings, columns (posts and piers), or shear walls parallel to the flow of the water, and ii) adequately anchored so as not to impair the structural integrity of the building during a flood of up to the magnitude of the base flood. In the case of Zone A1-A30, AE, A, A99, AO, AH, B, C, X, or D, "elevated building" also includes a building elevated by means of fill or solid-foundation perimeter walls with openings sufficient to facilitate the unimpeded movement of floodwaters. In the case of Zone V1-V30, VE, or V, "elevated building" also includes a building otherwise meeting the definition of "elevated building," even though the lower area is enclosed by means of breakaway walls that meet the federal standards.

FEDERAL EMERGENCY MANAGEMENT AGENCY — The federal agency that administers the National Flood Insurance Program.

FLOOD BOUNDARY AND FLOODWAY MAP (FBFM) — An official map of the community published by the Federal Emergency Management Agency as part of a riverine community's Flood Insurance Study. The FBFM delineates a regulatory floodway along watercourses studied in detail in the Flood Insurance Study.

FLOOD ELEVATION STUDY — An examination, evaluation and determination of the flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of flood-related erosion hazards.

FLOOD HAZARD BOUNDARY MAP (FHBM) — An official map of a community, issued by the Federal Emergency Management Agency, where the boundaries of the areas of special flood hazard have been designated as Zone A but no flood elevations are provided.

FLOOD INSURANCE RATE MAP (FIRM) — An official map of a community on which the Federal Emergency Management Agency has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

FLOOD INSURANCE STUDY — See "flood elevation study."

FLOOD or FLOODING —

- A. A general and temporary condition of partial or complete inundation of normally dry land areas from:
 - (1) The overflow of inland or tidal waters;
 - (2) The unusual and rapid accumulation or runoff of surface waters from any source.
- B. "Flood" or "flooding" also means the collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion

or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as a flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in A(1) above.

FLOODPLAIN or FLOOD-PRONE AREA — Any land area susceptible to being inundated by water from any source (see the definition of "flooding").

FLOODPROOFING — Any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

FLOODWAY — Has the same meaning as "regulatory floodway."

FUNCTIONALLY DEPENDENT USE — A use which cannot perform its intended purpose unless it is located or carried out in close proximity to water, such as a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, and ship repair facilities. The term does not include long-term storage, manufacturing, sales, or service facilities.

HIGHEST ADJACENT GRADE — The highest natural elevation of the ground surface, prior to construction, next to the proposed walls of a structure.

HISTORIC STRUCTURE — Any structure that is:

- A. Listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- B. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- C. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- D. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - (1) By an approved state program as determined by the Secretary of the Interior; or
 - (2) Directly by the Secretary of the Interior in states without approved programs.

LOCAL ADMINISTRATOR — The person appointed by the community to administer and implement this chapter by granting or denying development permits in accordance with its provisions. This person is often the Building

Inspector, Code Enforcement Officer, or employee of an engineering department.

LOWEST FLOOR — The lowest floor of the lowest enclosed area (including basement or cellar). An unfinished or flood-resistant enclosure, usable solely for the parking of vehicles, building access, or storage in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable nonelevation design requirements of this chapter.

MANUFACTURED HOME — A structure, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term does not include a "recreational vehicle."

MANUFACTURED HOME PARK OR SUBDIVISION — A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

MEAN SEA LEVEL — For purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929, the North American Vertical Datum of 1988 (NAVD 88), or other datum, to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.

MOBILE HOME — Has the same meaning as "manufactured home."

NEW CONSTRUCTION — Structures for which the start of construction commenced on or after the effective date of a floodplain management regulation adopted by the community and includes any subsequent improvements to such structure.

ONE-HUNDRED-YEAR FLOOD or 100-YEAR FLOOD — Has the same meaning as "base flood."

PRINCIPALLY ABOVE GROUND — At least 51% of the actual cash value of the structure, excluding land value, is above the ground.

RECREATIONAL VEHICLE — A vehicle which is:

- A. Built on a single chassis;
- B. Four hundred square feet or less when measured at the largest horizontal projections;
- C. Designed to be self-propelled or permanently towable by a light-duty truck; and
- D. Not designed primarily for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

REGULATORY FLOODWAY — The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height as determined by the Federal Emergency

Management Agency in a Flood Insurance Study or by other agencies as provided in § 155-15B of this chapter.

START OF CONSTRUCTION — The date of permit issuance for new construction and substantial improvements to existing structures, provided that actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement is within 180 days after the date of issuance. The "actual start of construction" means the first placement of permanent construction of a building (including a manufactured home) on a site, such as the pouring of a slab or footings, installation of pilings or construction of columns. Permanent construction does not include land preparation (such as clearing, excavation, grading, or filling), or the installation of streets or walkways, or excavation for a basement, footings, piers or foundations, or the erection of temporary forms, or the installation of accessory buildings such as garages or sheds not occupied as dwelling units or not part of the main building. For a substantial improvement, the actual "start of construction" means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

STRUCTURE — A walled and roofed building, including a gas or liquid storage tank that is principally above the ground, as well as a manufactured home.

SUBSTANTIAL DAMAGE — Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50% of the market value of the structure before the damage occurred.

SUBSTANTIAL IMPROVEMENT — Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50% of the market value of the structure before the start of construction of the improvement. The term includes structures which have incurred substantial damage, regardless of the actual repair work performed. The term does not, however, include either:

- A. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or
- B. Any alteration of an historic structure, provided that the alteration will not preclude the structure's continued designation as an historic structure.

VARIANCE — A grant of relief from the requirements of this chapter which permits construction or use in a manner that would otherwise be prohibited by this chapter.

VIOLATION — The failure of a structure or other development to be fully compliant with the community's floodplain management regulations.

ARTICLE III
General Provisions

§ 155-6. Lands to which this chapter applies.

This chapter shall apply to all areas of special flood hazard within the jurisdiction of the Village of Scotia, Schenectady County.

§ 155-7. Basis for establishing areas of special flood hazard.

- A. The areas of special flood hazard for the Village of Scotia, Community No. 360742, are identified and defined on the following documents prepared by the Federal Emergency Management Agency:
- (1) Flood Insurance Rate Map Panel Nos. 36093C0151D, 36093C0152D, 36093C0153D, 36093C0154D, whose effective date is January 8, 2014, and any subsequent revisions to these map panels that do not affect areas under our community's jurisdiction.
 - (2) A scientific and engineering report entitled "Flood Insurance Study, Schenectady County, New York, All Jurisdictions" dated January 8, 2014.
- B. The above documents are hereby adopted and declared to be a part of this chapter. The Flood Insurance Study and/or maps are on file at Office of the Building Inspector, Village Hall, 4 N. Ten Broeck Street, Scotia, NY.

§ 155-8. Interpretation and conflict with other laws.

- A. This chapter includes all revisions to the National Flood Insurance Program through October 27, 1997, and shall supersede all previous laws adopted for the purpose of flood damage prevention.
- B. In their interpretation and application, the provisions of this chapter shall be held to be minimum requirements, adopted for the promotion of the public health, safety, and welfare. Whenever the requirements of this chapter are at variance with the requirements of any other lawfully adopted rules, regulations, or ordinances, the most restrictive, or that imposing the higher standards, shall govern.

§ 155-9. Severability.

The invalidity of any section or provision of this chapter shall not invalidate any other section or provision thereof.

§ 155-10. Penalties for offenses.

No structure in an area of special flood hazard shall hereafter be constructed, located, extended, converted, or altered and no land shall be excavated or filled without full compliance with the terms of this chapter and any other applicable regulations. Any infraction of the provisions of

this chapter by failure to comply with any of its requirements, including infractions of conditions and safeguards established in connection with conditions of the permit, shall constitute a violation. Any person who violates this chapter or fails to comply with any of its requirements shall, upon conviction thereof, be fined no more than \$250 or imprisoned for not more than 15 days, or both. Each day of noncompliance shall be considered a separate offense. Nothing herein contained shall prevent the Village of Scotia from taking such other lawful action as necessary to prevent or remedy an infraction. Any structure found not compliant with the requirements of this chapter for which the developer and/or owner has not applied for and received an approved variance under Article VI will be declared noncompliant and notification sent to the Federal Emergency Management Agency.

§ 155-11. Warning and disclaimer of liability.

The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This chapter does not imply that land outside the area of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the Village of Scotia, any officer or employee thereof, or the Federal Emergency Management Agency, for any flood damages that result from reliance on this chapter or any administrative decision lawfully made thereunder.

ARTICLE IV
Administration

§ 155-12. Designation of local administrator.

The Village of Scotia Building Inspector is hereby appointed local administrator to administer and implement this chapter by granting or denying floodplain development permits in accordance with its provisions.

§ 155-13. Floodplain development permit.

- A. Purpose. A floodplain development permit is hereby established for all construction and other development to be undertaken in areas of special flood hazard in this community for the purpose of protecting its citizens from increased flood hazards and insuring that new development is constructed in a manner that minimizes its exposure to flooding. It shall be unlawful to undertake any development in an area of special flood hazard, as shown on the Flood Insurance Rate Map enumerated in § 155-7, without a valid floodplain development permit. Application for a permit shall be made on forms furnished by the local administrator and may include, but not be limited to, plans, in duplicate, drawn to scale and showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures; fill; storage of materials; drainage facilities; and the location of the foregoing.
- B. Fees. All applications for a floodplain development permit shall be accompanied by an application fee according to a fee schedule established by the Board of Trustees. In addition, the applicant shall be responsible for reimbursing the Village of Scotia for any additional costs necessary for review, inspection and approval of this project. The local administrator may require a deposit of no more than \$500 to cover these additional costs.

§ 155-14. Application for permit.

The applicant shall provide the following information as appropriate. Additional information may be required on the permit application form.

- A. The proposed elevation, in relation to mean sea level, of the lowest floor (including basement or cellar) of any new or substantially improved structure to be located in Zone A1-A30, AE or AH or Zone A if base flood elevation data are available. Upon completion of the lowest floor, the permittee shall submit to the local administrator the as-built elevation, certified by a licensed professional engineer or surveyor.
- B. The proposed elevation, in relation to mean sea level, to which any new or substantially improved nonresidential structure will be floodproofed. Upon completion of the floodproofed portion of the structure, the permittee shall submit to the local administrator the as-built floodproofed elevation, certified by a professional engineer or surveyor.

- C. A certificate from a licensed professional engineer or architect that any utility floodproofing will meet the criteria in § 155.17C, Utilities.
- D. A certificate from a licensed professional engineer or architect that any nonresidential floodproofed structure will meet the floodproofing criteria in § 155.18B, Nonresidential structures.
- E. A description of the extent to which any watercourse will be altered or relocated as a result of proposed development. Computations by a licensed professional engineer must be submitted that demonstrate that the altered or relocated segment will provide equal or greater conveyance than the original stream segment. The applicant must submit any maps, computations or other material required by the Federal Emergency Management Agency (FEMA) to revise the documents enumerated in § 155-7, when notified by the local administrator, and must pay any fees or other costs assessed by FEMA for this purpose. The applicant must also provide assurances that the conveyance capacity of the altered or relocated stream segment will be maintained.
- F. A technical analysis, by a licensed professional engineer, if required by the local administrator, which shows whether proposed development to be located in an area of special flood hazard may result in physical damage to any other property.
- G. In Zone A, when no base flood elevation data are available from other sources, base flood elevation data shall be provided by the permit applicant for subdivision proposals and other proposed developments (including proposals for manufactured home and recreational vehicle parks and subdivisions) that are greater than either 50 lots or five acres.

§ 155-15. Duties and responsibilities of local administrator.

Duties of the local administrator shall include, but not be limited to, the following:

- A. Permit application review. The local administrator shall conduct the following permit application review before issuing a floodplain development permit:
 - (1) Review all applications for completeness, particularly with the requirements of § 155.14, Application for permit, and for compliance with the provisions and standards of this chapter.
 - (2) Review subdivision and other proposed new development, including manufactured home parks, to determine whether proposed building sites will be reasonably safe from flooding. If a proposed building site is located in an area of special flood hazard, all new construction and substantial improvements shall meet the applicable standards of Article V, Construction Standards and, in particular, § 155.16A, Subdivision proposals.

- (3) Determine whether any proposed development in an area of special flood hazard may result in physical damage to any other property (e.g., stream bank erosion and increased flood velocities). The local administrator may require the applicant to submit additional technical analyses and data necessary to complete the determination. If the proposed development may result in physical damage to any other property or fails to meet the requirements of Article V, Construction Standards, no permit shall be issued. The applicant may revise the application to include measures that mitigate or eliminate the adverse effects and resubmit the application.
- (4) Determine that all necessary permits have been received from those governmental agencies from which approval is required by state or federal law.

B. Use of other flood data.

- (1) When the Federal Emergency Management Agency has designated areas of special flood hazard on the community's Flood Insurance Rate Map (FIRM) but has neither produced water surface elevation data (these areas are designated Zone A or V on the FIRM) nor identified a floodway, the local administrator shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source, including data developed pursuant to § 155.14G, as criteria for requiring that new construction, substantial improvements or other proposed development meet the requirements of this chapter.
- (2) When base flood elevation data are not available, the local administrator may use flood information from any other authoritative source, such as historical data, to establish flood elevations within the areas of special flood hazard, for the purposes of this chapter.

C. Alteration of watercourses.

- (1) Notification to adjacent communities and the New York State Department of Environmental Conservation prior to permitting any alteration or relocation of a watercourse, and submittal of evidence of such notification to the Regional Administrator, Region II, Federal Emergency Management Agency.
- (2) Determine that the permit holder has provided for maintenance within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.

D. Construction stage.

- (1) In Zones A1-A30, AE and AH, and also Zone A if base flood elevation data are available, upon placement of the lowest floor or completion of floodproofing of a new or substantially improved

structure, obtain from the permit holder a certification of the as-built elevation of the lowest floor or floodproofed elevation, in relation to mean sea level. The certificate shall be prepared by or under the direct supervision of a licensed land surveyor or professional engineer and certified by same. For manufactured homes, the permit holder shall submit the certificate of elevation upon placement of the structure on the site. A certificate of elevation must also be submitted for a recreational vehicle if it remains on a site for 180 consecutive days or longer (unless it is fully licensed and ready for highway use).

- (2) Any further work undertaken prior to submission and approval of the certification shall be at the permit holder's risk. The local administrator shall review all data submitted. Deficiencies detected shall be cause to issue a stop-work order for the project unless immediately corrected.
- E. Inspections. The local administrator and/or the developer's engineer or architect shall make periodic inspections at appropriate times throughout the period of construction in order to monitor compliance with permit conditions and enable said inspector to certify, if requested, that the development is in compliance with the requirements of the floodplain development permit and/or any variance provisions.
- F. Stop-work orders.
- (1) The local administrator shall issue, or cause to be issued, a stop-work order for any floodplain development found ongoing without a development permit. Disregard of a stop-work order shall subject the violator to the penalties described in § 155-10 of this chapter.
 - (2) The local administrator shall issue, or cause to be issued, a stop-work order for any floodplain development found noncompliant with the provisions of this chapter and/or the conditions of the development permit. Disregard of a stop-work order shall subject the violator to the penalties described in § 155-10 of this chapter.
- G. Certificate of compliance.
- (1) In areas of special flood hazard, as determined by documents enumerated in § 155-7, it shall be unlawful to occupy or to permit the use or occupancy of any building or premises, or both, or part thereof hereafter created, erected, changed, converted or wholly or partly altered or enlarged in its use or structure until a certificate of compliance has been issued by the local administrator stating that the building or land conforms to the requirements of this chapter.
 - (2) A certificate of compliance shall be issued by the local administrator upon satisfactory completion of all development in areas of special flood hazard.

- (3) Issuance of the certificate shall be based upon the inspections conducted as prescribed in § 155-15E, Inspections, and/or any certified elevations, hydraulic data, floodproofing, anchoring requirements or encroachment analyses which may have been required as a condition of the approved permit.
- H. Information to be retained. The local administrator shall retain, and make available for inspection, copies of the following:
- (1) Floodplain development permits and certificates of compliance;
 - (2) Certifications of as-built lowest floor elevations of structures, required pursuant to § 155-15D(1) and (2), and whether or not the structures contain a basement;
 - (3) Floodproofing certificates required pursuant to § 155-15D(1), and whether or not the structures contain a basement;
 - (4) Variances issued pursuant to Article VI, Variance Procedure; and
 - (5) Notices required under § 155-15C, Alteration of watercourses.

ARTICLE V
Construction Standards

§ 155-16. General standards.

The following standards apply to new development, including new and substantially improved structures, in the areas of special flood hazard shown on the Flood Insurance Rate Map designated in § 155-7.

- A. Subdivision proposals. The following standards apply to all new subdivision proposals and other proposed development in areas of special flood hazard (including proposals for manufactured home and recreational vehicle parks and subdivisions):
- (1) Proposals shall be consistent with the need to minimize flood damage;
 - (2) Public utilities and facilities such as sewer, gas, electrical and water systems shall be located and constructed so as to minimize flood damage; and
 - (3) Adequate drainage shall be provided to reduce exposure to flood damage.
- B. Encroachments.
- (1) Within Zones A1-A30 and AE, on streams without a regulatory floodway, no new construction, substantial improvements or other development (including fill) shall be permitted unless:
 - (a) The applicant demonstrates that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any location; or
 - (b) The Village of Scotia agrees to apply to the Federal Emergency Management Agency (FEMA) for a conditional FIRM revision, FEMA approval is received and the applicant provides all necessary data, analyses and mapping and reimburses the Village of Scotia for all fees and other costs in relation to the application. The applicant must also provide all data, analyses and mapping and reimburse the Village of Scotia for all costs related to the final map revision.
 - (2) On streams with a regulatory floodway, as shown on the Flood Boundary and Floodway Map or the Flood Insurance Rate Map adopted in § 155-7, no new construction, substantial improvements or other development in the floodway (including fill) shall be permitted unless:

- (a) A technical evaluation by a licensed professional engineer shows that such an encroachment shall not result in any increase in flood levels during occurrence of the base flood; or
- (b) The Village of Scotia agrees to apply to the Federal Emergency Management Agency (FEMA) for a conditional FIRM and floodway revision, FEMA approval is received and the applicant provides all necessary data, analyses and mapping and reimburses the Village of Scotia for all fees and other costs in relation to the application. The applicant must also provide all data, analyses and mapping and reimburse the Village of Scotia for all costs related to the final map revisions.

§ 155-17. Standards for all structures.

The following standards apply to new development, including new and substantially improved structures, in the areas of special flood hazard shown on the Flood Insurance Rate Map designated in § 155-7:

- A. Anchoring. New structures and substantial improvement to structures in areas of special flood hazard shall be anchored to prevent flotation, collapse or lateral movement during the base flood. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.
- B. Construction materials and methods.
 - (1) New construction and substantial improvements to structures shall be constructed with materials and utility equipment resistant to flood damage.
 - (2) New construction and substantial improvements to structures shall be constructed using methods and practices that minimize flood damage.
 - (3) Enclosed areas below lowest floor.
 - (a) For enclosed areas below the lowest floor of a structure within Zone A1-A30, AE or AH, and also Zone A if base flood elevation data are available, new and substantially improved structures shall have fully enclosed areas below the lowest floor that are usable solely for the parking of vehicles, building access or storage in an area other than a basement and which are subject to flooding designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a licensed professional engineer or architect or meet or exceed the following minimum criteria:

- [1] A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding; and
- [2] The bottom of all such openings no higher than one foot above the lowest adjacent finished grade.

(b) Openings may be equipped with louvers, valves, screens or other coverings or devices, provided that they permit the automatic entry and exit of floodwaters. Enclosed areas subgrade on all sides are considered basements and are not permitted.

C. Utilities.

- (1) New and replacement electrical equipment, heating, ventilating, air-conditioning, plumbing connections, and other service equipment shall be located at least two feet above the base flood elevation or be designed to prevent water from entering and accumulating within the components during a flood and to resist hydrostatic and hydrodynamic loads and stresses. Electrical wiring and outlets, switches, junction boxes and panels shall also be elevated or designed to prevent water from entering and accumulating within the components unless they conform to the appropriate provisions of the electrical part of the Building Code of New York State or the Residential Code of New York State for location of such items in wet locations;
- (2) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system;
- (3) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters. Sanitary sewer and storm drainage systems for buildings that have openings below the base flood elevation shall be provided with automatic backflow valves or other automatic backflow devices that are installed in each discharge line passing through a building's exterior wall; and
- (4) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

§ 155-18. Residential structures.

A. Elevation. The following standards apply to new and substantially improved residential structures located in areas of special flood hazard, in addition to the requirements in §§ 155-16A, Subdivision proposals, and B, Encroachments, and 155-17, Standards for all structures.

- (1) Within Zones A1-A30, AE and AH and also Zone A if base flood elevation data are available, new construction and substantial improvements shall have the lowest floor (including basement) elevated to or above two feet above the base flood elevation.

- (2) Within Zone A, when no base flood elevation data are available, new construction and substantial improvements shall have the lowest floor (including basement) elevated at least three feet above the highest adjacent grade.
 - (3) Within Zone AO, new construction and substantial improvements shall have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as two feet above the depth number specified in feet on the community's Flood Insurance Rate Map enumerated in § 155-7 (at least two feet if no depth number is specified).
 - (4) Within Zones AH and AO, adequate drainage paths are required to guide floodwaters around and away from proposed structures on slopes.
- B. Nonresidential structures. The following standards apply to new and substantially improved commercial, industrial and other nonresidential structures located in areas of special flood hazard, in addition to the requirements in §§ 155-16A, Subdivision proposals, and B, Encroachments, and 155-17, Standards for all structures:
- (1) Within Zones A1-A30, AE and AH, and also Zone A if base flood elevation data are available, new construction and substantial improvements of any nonresidential structure shall either:
 - (a) Have the lowest floor, including basement or cellar, elevated to or above two feet above the base flood elevation; or
 - (b) Be floodproofed so that the structure is watertight below two feet above the base flood elevation, including attendant utility and sanitary facilities, with walls substantially impermeable to the passage of water. All structural components located below the base flood level must be capable of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy.
 - (2) Within Zone AO, new construction and substantial improvements of nonresidential structures shall:
 - (a) Have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as two feet above the depth number specified in feet on the community's FIRM (at least two feet if no depth number is specified); or
 - (b) Together with attendant utility and sanitary facilities, be completely floodproofed to that level to meet the floodproofing standard specified in § 155-18B(1)(b).
 - (3) If the structure is to be floodproofed, a licensed professional engineer or architect shall develop and/or review structural design, specifications, and plans for construction. A floodproofing certificate or other certification shall be provided to the local

administrator that certifies the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions of § 155-18B(1)(b), including the specific elevation (in relation to mean sea level) to which the structure is to be floodproofed.

- (4) Within Zones AH and AO, adequate drainage paths are required to guide floodwaters around and away from proposed structures on slopes.
 - (5) Within Zone A, when no base flood elevation data are available, the lowest floor (including basement) shall be elevated at least three feet above the highest adjacent grade.
- C. Manufactured homes and recreational vehicles. The following standards, in addition to the standards in § 155-16, General standards, and § 155.17, Standards for all structures apply, as indicated, in areas of special flood hazard to manufactured homes and to recreational vehicles which are located in areas of special flood hazard:
- (1) Recreational vehicles.
 - (a) Recreational vehicles placed on sites within Zones A1-A30, AE and AH shall either:
 - [1] Be on site fewer than 180 consecutive days;
 - [2] Be fully licensed and ready for highway use; or
 - [3] Meet the requirements for manufactured homes in § 155-18C(2), (3) and (4).
 - (b) A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick-disconnect-type utilities and security devices and has no permanently attached additions.
 - (2) A manufactured home that is placed or substantially improved in Zones A1-A30, AE and AH shall be elevated on a permanent foundation such that the lowest floor is elevated to or above two feet above the base flood elevation and is securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.
 - (3) Within Zone A, when no base flood elevation data are available, new and substantially improved manufactured homes shall be elevated such that the manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and are securely anchored to an adequately anchored foundation system to resist flotation, collapse or lateral movement.

- (4) Within Zone AO, the floor shall be elevated above the highest adjacent grade at least as high as two feet above the depth number specified on the Flood Insurance Rate Map enumerated in § 155-7 (at least two feet if no depth number is specified).

ARTICLE VI
Variance Procedure

§ 155-19. Appeals Board.

- A. The Zoning Board of Appeals, as established by the Village of Scotia, shall hear and decide appeals and requests for variances from the requirements of this chapter.
- B. The Zoning Board of Appeals shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the local administrator in the enforcement or administration of this chapter.
- C. Those aggrieved by the decision of the Zoning Board of Appeals may appeal such decision to the Supreme Court pursuant to Article 78 of the Civil Practice Law and Rules.
- D. In passing upon such applications, the Zoning Board of Appeals shall consider all technical evaluations, all relevant factors, standards specified in other sections of this chapter and:
 - (1) The danger that materials may be swept onto other lands to the injury of others;
 - (2) The danger to life and property due to flooding or erosion damage;
 - (3) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - (4) The importance of the services provided by the proposed facility to the community;
 - (5) The necessity to the facility of a waterfront location, where applicable;
 - (6) The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
 - (7) The compatibility of the proposed use with existing and anticipated development;
 - (8) The relationship of the proposed use to the Comprehensive Plan and floodplain management program of that area;
 - (9) The safety of access to the property in times of flood for ordinary and emergency vehicles;
 - (10) The costs to local governments and the dangers associated with conducting search and rescue operations during periods of flooding;

- (11) The expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and
 - (12) The costs of providing governmental services during and after flood conditions, including search-and-rescue operations, maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems and streets and bridges.
- E. Upon consideration of the factors of § 155-19D and the purposes of this chapter, the Zoning Board of Appeals may attach such conditions to the granting of variances as it deems necessary to further the purposes of this chapter.
- F. The local administrator shall maintain the records of all appeal actions, including technical information, and report any variances to the Federal Emergency Management Agency upon request.

§ 155-20. Conditions for variances.

- A. Generally, variances may be issued for new construction and substantial improvements to be erected on a lot of 1/2 acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing items in § 155-19D(1) through (12) have been fully considered. As the lot size increases beyond the 1/2 acre, the technical justification required for issuing the variance increases.
- B. Variances may be issued for the repair or rehabilitation of historic structures upon determination that:
- (1) The proposed repair or rehabilitation will not preclude the structure's continued designation as an historic structure; and
 - (2) The variance is the minimum necessary to preserve the historic character and design of the structure.
- C. Variances may be issued by a community for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use, provided that:
- (1) The criteria of Subsections A, D, E, and F of this section are met; and
 - (2) The structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threat to public safety.
- D. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- E. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

- F. Variances shall only be issued upon receiving written justification of:
- (1) A showing of good and sufficient cause;
 - (2) A determination that failure to grant the variance would result in exceptional hardship to the applicant; and
 - (3) A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public or conflict with existing local laws or ordinances.
- G. Notice.
- (1) Any applicant to whom a variance is granted for a building with the lowest floor below the base flood elevation shall be given written notice over the signature of a community official that:
 - (a) The issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage; and
 - (b) Such construction below the base flood level increases risks to life and property.
 - (2) Such notification shall be maintained with the record of all variance actions as required in § 155-15H of this chapter.

Chapter 163

ILLICIT DISCHARGES AND CONNECTIONS TO STORM SEWER SYSTEM

GENERAL REFERENCES

Environmental quality review — See Ch. 129. Sewers — See Ch. 200.

Building construction — See Ch. 150. Stormwater management — See Ch. 208.

Flood damage prevention — See Ch. 155.

§ 163-1. Purpose; intent.

The purpose of this chapter is to provide for the health, safety, and general welfare of the citizens of the Village of Scotia through the regulation of nonstormwater discharges to the municipal separate storm sewer system (MS4) to the maximum extent practicable as required by federal and state law. This chapter 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 chapter are:

- A. To meet the requirements of the SPDES general permit for stormwater discharges from MS4s, Permit No. GP-02-02, or as amended or revised;
- B. To regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process or discharge nonstormwater wastes;
- C. To prohibit illicit connections, activities and discharges to the MS4;
- D. To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this chapter; and
- E. 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.

§ 163-2. Definitions.

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

BEST MANAGEMENT PRACTICES (BMPS) — Schedules of activities, prohibitions of practices, general good housekeeping 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.

CLEAN WATER ACT — The Federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.) and any subsequent amendments thereto.

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.

DEPARTMENT — The New York State Department of Environmental Conservation.

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.

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:

- A. Any conveyances which allow any nonstormwater 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
- B. Any drain or conveyance connected from a commercial or industrial and use to the MS4 which has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.

ILLICIT DISCHARGE — Any direct or indirect nonstormwater discharge to the MS4, except as exempted in § 163-5 of this chapter.

INDUSTRIAL ACTIVITY — Activities requiring the SPDES permit for discharges from industrial activities except construction, GP-98-03, as amended or revised.

MS4 — Municipal separate storm sewer system.

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):

- A. Owned or operated by the Village of Scotia;
- B. Designed or used for collecting or conveying stormwater;
- C. Which is not a combined sewer; and
- D. Which is not part of a publicly owned treatment works (POTW) as defined at 40 CFR 122.2.

MUNICIPALITY — The Village of Scotia.

NONSTORMWATER DISCHARGE — Any discharge to the MS4 that is not composed entirely of stormwater.

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.

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, or 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.

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

SPECIAL CONDITIONS —

- A. Discharge compliance with water quality standards: the condition that applies where a municipality has been notified that the discharge of stormwater authorized under its 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.
- B. 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.
- C. 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 the EPA for a water body 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.

- D. The condition in the municipality's MS4 permit that applies if a TMDL is approved in the future by the EPA for any water body 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 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.

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.

STORMWATER — Rainwater, surface runoff, snowmelt and drainage.

STORMWATER MANAGEMENT OFFICER (SMO) — The Superintendent of Public Works or other public official(s) designated by the Village of Scotia to enforce this chapter.

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. Section 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.

TMDL — Total maximum daily load.

TOTAL MAXIMUM DAILY LOAD — The maximum amount of a pollutant to be allowed to be released into a water body so as not to impair uses of the water, allocated among the sources of that pollutant.

WASTEWATER — Water that is not stormwater, is contaminated with pollutants and is or will be discarded.

§ 163-3. Applicability.

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

§ 163-4. Responsibility for administration.

The Village of Scotia Superintendent of Public Works is designated the Stormwater Management Officer for this chapter. The Stormwater Management Officer (SMO) shall administer, implement, and enforce the provisions of this chapter. 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.

§ 163-5. Discharge prohibitions; exemptions.

A. 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 this § 163-5A. The commencement, conduct or continuance of any illegal discharge to the MS4 is prohibited, except as described as follows:

- (1) The following discharges are exempt from discharge prohibitions established by this chapter, unless the Department or the Village SMO 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 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, and any other water source not containing pollutants. Such exempt discharges shall be made in accordance with an appropriate plan for reducing pollutants.
- (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 chapter.
- (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.
- (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.

B. Prohibition of illicit connections.

- (1) The construction, use, maintenance or continued existence of illicit connections to the MS4 is prohibited.
- (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.

- (3) A person is considered to be in violation of this chapter if the person connects a line conveying sewage to the municipality's MS4 or allows such a connection to continue.

§ 163-6. Prohibition against activities contaminating stormwater.

- A. Activities that are subject to the requirements of this section are those types of activities that:
 - (1) Cause or contribute to a violation of the municipality's MS4 SPDES permit.
 - (2) Cause or contribute to the municipality being subject to the special conditions as defined in § 163-2, Definitions.
- B. Upon notification to a person he, she or it 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 the person no longer causes or contributes to violations of the municipality's MS4 SPDES permit authorization.

§ 163-7. Prevention, control and reduction of stormwater pollutants by use of best management practices.

Where the SMO has identified illicit discharges as defined in § 163-2 or activities contaminating stormwater as defined in § 163-6 the municipality may require implementation of Best Management Practices (BMPs) to control those illicit discharges and activities.

- A. The owner or operator of a commercial or industrial establishment shall provide, at his or her own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the MS4 through the use of structural and nonstructural BMPs.
- B. Any person responsible for a property or premises which is, or may be, the source of an illicit discharge as defined in § 163-2 or an activity contaminating stormwater as defined in § 163-6 may be required to implement, at said person's expense, additional structural and nonstructural BMPs to reduce or eliminate the source of pollutant(s) to the MS4.
- C. 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.

§ 163-8. Suspension of access to MS4; illicit discharges in emergency situations.

- A. 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.

- B. Suspension due to the detection of illicit discharge. Any person discharging to the municipality's MS4 in violation of this chapter may have its 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 it is found 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.

§ 163-9. 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.

§ 163-10. Access to facilities; monitoring of discharges.

- A. Applicability. This section applies to all facilities that the SMO must inspect to enforce any provision of this chapter 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 chapter.
- B. Access to facilities.
- (1) The SMO shall be permitted to enter and inspect facilities subject to regulation under this chapter as often as may be necessary to determine compliance with this chapter. 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.
 - (2) Facility operators shall allow the SMO ready access to all parts of the premises for the purposes of inspection, sampling, examination

and the copying of records as may be required to implement this chapter.

- (3) The municipality shall have the right to set up on any facility subject to this chapter such devices as are necessary in the opinion of the SMO to conduct monitoring and/or sampling of the facility's stormwater discharge.
- (4) The municipality has the right to require the facilities subject to this chapter to install monitoring equipment as is reasonably necessary to determine compliance with this chapter. 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.
- (5) Unreasonable delays in allowing the municipality access to a facility subject to this chapter is a violation of this chapter. A person who is the operator of a facility subject to this chapter 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 chapter.
- (6) If the SMO has been refused access to any part of the premises from which stormwater is discharged and he or she is able to demonstrate probable cause to believe that there may be a violation of this chapter, 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 chapter or any order issued hereunder, then the SMO may seek issuance of a search warrant from any court of competent jurisdiction.

§ 163-11. 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 nonhazardous 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.

§ 163-12. Enforcement; penalties for violations.

- A. Notice of violation. When the municipality's SMO finds that a person has violated a prohibition or failed to meet a requirement of this chapter, he or she may order compliance by written notice of violation to the responsible person. Such notice may require, without limitation:
- (1) The elimination of illicit connections or discharges;
 - (2) That violating discharges, practices, or operations shall cease and desist;
 - (3) The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property;
 - (4) The performance of monitoring, analyses, and reporting;
 - (5) Payment of a fine; and
 - (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. All expenses incurred by the Village in connection with the proceeding to repair, secure or demolish and remove the unsafe building, including the cost of actually securing, repairing or demolishing and removing such unsafe building, shall be assessed against the land on which such unsafe building is located.
- B. Penalties. In addition to or as an alternative to any penalty provided herein or by law, any person who violates the provisions of this chapter shall be guilty of a violation punishable by a fine not exceeding \$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 \$350 nor more than \$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 \$700 nor more than \$1,000 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 chapter 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.

§ 163-13. Appeal of notice of violation.

Any person receiving a notice of violation may appeal the determination of the SMO to the 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.

§ 163-14. Corrective measures after appeal.

- A. 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 five 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.
- B. 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.

§ 163-15. Injunctive relief.

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this chapter. If a person has violated or continues to violate the provisions of this chapter, 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.

§ 163-16. Alternative remedies.

- A. Where a person has violated a provision of this chapter, he or she or it may be eligible for alternative remedies in lieu of a civil penalty, upon recommendation of the Municipal Attorney and concurrence of the SMO, where:
 - (1) The violation was unintentional.
 - (2) The violator has no history of previous violations of this chapter.
 - (3) Environmental damage was minimal.

(4) The violator acted quickly to remedy the violation.

(5) The violator cooperated in the investigation and resolution.

B. Alternative remedies may consist of one or more of the following:

(1) Attendance at compliance workshops.

(2) Storm drain stenciling or storm drain marking.

(3) River, stream or creek cleanup activities.

§ 163-17. Violations deemed 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 chapter 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.

§ 163-18. Remedies not exclusive.

The remedies listed in this chapter 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.

§ 163-19. Severability.

The provisions of this chapter are hereby declared to be severable. If any provision, clause, sentence, or paragraph of this chapter 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 chapter.

Chapter 208

STORMWATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL

GENERAL REFERENCES

Environmental quality review — See Ch. 129. Subdivision of land — See Ch. 219.

Building construction — See Ch. 150. Zoning — See Ch. 250.

**Illicit discharges and connections to storm
sewers — See Ch. 163.**

§ 208-1. Findings of fact.

It is hereby determined that:

- A. 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.
- B. This stormwater runoff contributes to increased quantities of water-borne pollutants, including siltation of aquatic habitat for fish and other desirable species.
- C. Clearing and grading during construction tends to increase soil erosion and add to the loss of native vegetation necessary for terrestrial and aquatic habitat.
- D. Improper design and construction of stormwater management practices can increase the velocity of stormwater runoff, thereby increasing stream bank erosion and sedimentation.
- E. Impervious surfaces allow less water to percolate into the soil, thereby decreasing groundwater recharge and stream base flow.
- F. Substantial economic losses can result from these adverse impacts on the waters of the municipality.
- G. Stormwater runoff, soil erosion and nonpoint source pollution can be controlled and minimized through the regulation of stormwater runoff from land development activities.
- H. 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.
- I. 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.

§ 208-2. Purpose.

The purpose of this chapter 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 above. This chapter seeks to meet those purposes by achieving the following objectives:

- A. 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;

- B. Require land development activities to conform to the substantive requirements of the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) general permit for construction activities GP-02-01, or as amended or revised;
- C. Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and stream bank erosion and maintain the integrity of stream channels;
- D. Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality;
- E. Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and
- F. 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.

§ 208-3. Responsibility for administration.

The Village of Scotia Building Inspector is designated the Stormwater Management Officer and shall be responsible for the administration, implementation and enforcement of this chapter.

§ 208-4. Applicability.

- A. This chapter shall be applicable to all land development activities as defined in § 208-6 unless exempted in § 208-5.
- B. The Village Stormwater Management Officer shall 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 Board of Trustees, engage the services of a registered professional engineer to review the plans, specifications and related documents at a cost to be paid by the applicant; or
 - (3) Accept the certification of a licensed professional that the plans conform to the requirements of this chapter.
- C. All land development activities subject to review and approval by the Planning Board of the Village of Scotia under subdivision or site plan

or by the Board of Trustees under special permit regulations shall be reviewed in consultation with the Stormwater Management Officer and be subject to the standards contained in this chapter.

- D. All land development activities not subject to review as stated in § 208-4C 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 chapter.

§ 208-5. Exemptions.

The following activities may be exempt from review under this chapter:

- A. Agricultural activity as defined in this chapter.
- B. Silvicultural activity, except that landing areas and log haul roads are subject to this chapter.
- C. 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.
- D. Repairs to any stormwater management practice or facility deemed necessary by the Stormwater Management Officer.
- E. Any part of a subdivision if a plat for the subdivision has been approved by the Village of Scotia on or before the effective date of this chapter.
- F. Land development activities for which a building permit has been approved on or before the effective date of this chapter.
- G. Cemetery graves.
- H. Installation of fence, sign, telephone, and electric poles and other kinds of posts or poles.
- I. Emergency activity immediately necessary to protect life, property or natural resources.
- J. Activities of an individual engaging in home gardening by growing flowers, vegetables and other plants primarily for use by that person and his or her family.
- K. Landscaping and horticultural activities in connection with an existing structure.

§ 208-6. Definitions.

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

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, snowmelt 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 nonstructural 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.

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 man-made 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.

§ 208-7. Stormwater pollution prevention plans.

- A. Stormwater pollution prevention plan required. No application for approval of a land development activity shall be approved until the SMO

has received a stormwater pollution prevention plan (SWPPP) prepared in accordance with the specifications in this chapter.

B. Contents of stormwater pollution prevention plans.

- (1) All SWPPPs shall provide the following background information and erosion and sediment controls:
 - (a) Background information about the scope of the project, including location, type and size of the project.
 - (b) 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). The site map should be at a scale not more than one inch equals 50 feet;
 - (c) A description of the soil(s) present at the site;
 - (d) A 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 acres shall be disturbed at any one time unless pursuant to an approved SWPPP.
 - (e) A 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;
 - (f) A 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;
 - (g) 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 closeout;
 - (h) A site map/construction drawing(s) specifying the location(s), size(s) and length(s) of each erosion and sediment control practice;

- (i) Dimensions, material specifications and installation details for all erosion and sediment control practices, including the siting and sizing of any temporary sediment basins;
 - (j) Temporary practices that will be converted to permanent control measures;
 - (k) An implementation schedule for staging temporary erosion and sediment control practices, including the timing of initial placement and the duration that each practice should remain in place;
 - (l) A maintenance schedule to ensure continuous and effective operation of the erosion and sediment control practice;
 - (m) Name(s) of the receiving water(s);
 - (n) Delineation of SWPPP implementation responsibilities for each part of the site;
 - (o) A 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
 - (p) Any existing data that describes the stormwater runoff at the site.
- (2) Land development activities as defined in § 208-6 of this chapter, and meeting Condition A, B or C below shall also include water quantity and water quality controls (postconstruction stormwater runoff controls) as set forth in § 208-7B(3) below as applicable:
- (a) 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.
 - (b) Condition B: stormwater runoff from land development activities disturbing five or more acres.
 - (c) Condition C: stormwater runoff from land development activity disturbing between one and five acres of land during the course of the project, exclusive of the construction of single-family residences and construction activities at agricultural properties.
- (3) SWPPP requirements for Conditions A, B and C:
- (a) All information in § 208-7B(1) above.

- (b) A description of each postconstruction stormwater management practice.
 - (c) Site map/construction drawing(s) showing the specific location(s) and size(s) of each postconstruction stormwater management practice.
 - (d) Hydrologic and hydraulic analysis for all structural components of the stormwater management system for the applicable design storms.
 - (e) Comparison of postdevelopment stormwater runoff conditions with predevelopment conditions
 - (f) Dimensions, material specifications and installation details for each postconstruction stormwater management practice.
 - (g) A maintenance schedule to ensure continuous and effective operation of each postconstruction stormwater management practice.
 - (h) 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.
 - (i) An inspection and maintenance agreement binding on all subsequent landowners served by the on-site stormwater management measures in accordance with this chapter.
 - (j) 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 meets the requirements in this chapter.
- C. 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.
- D. Contractor certification.
- (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) The certification must include the name and title of the person providing the signature; the address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.
 - (3) The certification statement(s) shall become part of the SWPPP for the land development activity.
- E. 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.

§ 208-8. Performance and Design Criteria.

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

- A. Technical standards. For the purpose of this chapter, 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 chapter:
- (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").
 - (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").
- B. 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 this section, and the SWPPP shall be prepared by a licensed professional.
- C. 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.

§ 208-9. Maintenance, inspection and repair of stormwater facilities.

- A. Maintenance and inspection during construction.
- (1) The applicant or developer of the land development activity or his or her 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 chapter. Sediment shall be removed from sediment traps or sediment ponds whenever their design capacity has been reduced by 50%.

- (2) For land development activities as defined in this chapter and meeting Condition A, B or C in § 208-7B(2), the applicant shall have a qualified professional conduct site inspections and document the effectiveness of all erosion and sediment control practices every seven 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 logbook.
 - (3) If required by the Stormwater Management Officer, the applicant or developer or his or her 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.
- B. 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 SMO or his designee to ensure that the facility is maintained in proper working condition to meet design standards and any other provisions established by this chapter. The easement shall be recorded by the grantor in the office of the County Clerk after approval by the counsel for the Village.
- C. Maintenance after construction. The owner or operator of permanent stormwater management practices installed in accordance with this chapter shall ensure they are operated and maintained to achieve the goals of this chapter. Proper operation and maintenance also includes, as a minimum, the following:
- (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 chapter.
 - (2) Written procedures for operation and maintenance and training new maintenance personnel.
 - (3) Discharges from the SMPs shall not exceed design criteria or cause or contribute to water quality standard violations in accordance with this chapter.
- D. Maintenance agreements. The Village of Scotia Board of Trustees 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 prescribed by the Village. The Village, 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 chapter and includes adequate and perpetual access and sufficient area, by easement or otherwise, for inspection and regular maintenance.

§ 208-10. Administration; enforcement; penalties for offenses; fees.

A. Erosion and sediment control inspections.

(1) Erosion and sediment control inspection.

- (a) The Village Stormwater Management Officer may require such inspections as necessary to determine compliance with this chapter 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 chapter and the stormwater pollution prevention plan (SWPPP) as approved. To obtain inspections, the applicant shall notify the Stormwater Management Officer at least 48 hours before any of the following as required:

- [1] Start of construction.
- [2] Installation of sediment and erosion control measures.
- [3] Completion of site clearing.
- [4] Completion of rough grading.
- [5] Completion of final grading.
- [6] Close of the construction season.
- [7] Completion of final landscaping.
- [8] Successful establishment of landscaping in public areas.

- (b) 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.

- (2) Stormwater management practice inspections. The Village Stormwater Management Officer, or his designee, 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.

- (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.
- (4) Submission of reports. The Village Stormwater Management Officer may require monitoring and reporting from entities subject to this chapter as are necessary to determine compliance with this chapter.
- (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 Village the right to enter the property at reasonable times and in a reasonable manner for the purpose of inspection as specified in § 208-10A(3).

B. Performance guarantee.

- (1) Construction completion guarantee.
 - (a) In order to ensure the full and faithful completion of all land development activities related to compliance with all conditions set forth by the Village of Scotia in its approval of the stormwater pollution prevention plan, the Village 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 Village as the beneficiary. The security shall be in an amount to be determined by the Village based

on submission of final design plans, with reference to actual construction and landscaping costs.

- (b) The performance guarantee shall remain in force until the surety is released from liability by the Village, 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 Village of Scotia. Per annum interest on cash escrow deposits shall be reinvested in the account until the surety is released from liability.
- (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 Village of Scotia 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 Village of Scotia may draw upon the account to cover the costs of proper operation and maintenance, including engineering and inspection costs.
- (3) Recordkeeping. The Village of Scotia may require entities subject to this chapter to maintain records demonstrating compliance with this chapter.

C. Enforcement and penalties.

- (1) Notice of violation. When the Stormwater Management Officer determines that a land development activity is not being carried out in accordance with the requirements of this chapter, he may issue a written notice of violation to the landowner. 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 this chapter, 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 violation may be appealed to the municipality by filing a written notice of appeal within 15 days of service of the notice of violation.
- (2) Stop-work orders. The Stormwater Management Officer may issue a stop-work order for violations of this chapter. 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 Stormwater Management Officer 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 chapter.
- (3) Violations. Any land development activity that is commenced or is conducted contrary to this chapter may be restrained by injunction or otherwise abated in a manner provided by law.
- (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 chapter shall be guilty of a violation punishable by a fine not exceeding \$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 \$350 nor more than \$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 \$700 nor more than \$1,000 or imprisonment for a period not to exceed six months, or both. Each week's continued violation shall constitute a separate additional violation.
- (5) Withholding of certificate of occupancy. If any building or land development activity is installed or conducted in violation of this chapter, the Village Stormwater Management Officer 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 Village of Scotia may take necessary corrective action, the cost of which shall become a lien upon the property until paid.
- D. Fees for services. The Village of Scotia may require any person undertaking land development activities regulated by this chapter to pay reasonable costs at prevailing rates for review of SWPPPs,

inspections, or SMP maintenance, performed by the Village or performed by a third party for the Village. The Village may require that such estimated costs be placed in escrow.

Chapter 208

STORMWATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL

GENERAL REFERENCES

Environmental quality review — See Ch. 129. Subdivision of land — See Ch. 219.

Building construction — See Ch. 150. Zoning — See Ch. 250.

**Illicit discharges and connections to storm
sewers — See Ch. 163.**

§ 208-1. Findings of fact.

It is hereby determined that:

- A. 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.
- B. This stormwater runoff contributes to increased quantities of water-borne pollutants, including siltation of aquatic habitat for fish and other desirable species.
- C. Clearing and grading during construction tends to increase soil erosion and add to the loss of native vegetation necessary for terrestrial and aquatic habitat.
- D. Improper design and construction of stormwater management practices can increase the velocity of stormwater runoff, thereby increasing stream bank erosion and sedimentation.
- E. Impervious surfaces allow less water to percolate into the soil, thereby decreasing groundwater recharge and stream base flow.
- F. Substantial economic losses can result from these adverse impacts on the waters of the municipality.
- G. Stormwater runoff, soil erosion and nonpoint source pollution can be controlled and minimized through the regulation of stormwater runoff from land development activities.
- H. 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.

- I. 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.

§ 208-2. Purpose.

The purpose of this chapter 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 above. This chapter seeks to meet those purposes by achieving the following objectives:

- A. 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;
- B. Require land development activities to conform to the substantive requirements of the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) general permit for construction activities GP-02-01, or as amended or revised;
- C. Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and stream bank erosion and maintain the integrity of stream channels;
- D. Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality;
- E. Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and
- F. 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.

§ 208-3. Responsibility for administration.

The Village of Scotia Building Inspector is designated the Stormwater Management Officer and shall be responsible for the administration, implementation and enforcement of this chapter.

§ 208-4. Applicability.

- A. This chapter shall be applicable to all land development activities as defined in § 208-6 unless exempted in § 208-5.
- B. The Village Stormwater Management Officer shall 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 Board of Trustees, engage the services of a registered professional engineer to review the plans, specifications and related documents at a cost to be paid by the applicant; or
 - (3) Accept the certification of a licensed professional that the plans conform to the requirements of this chapter.
- C. All land development activities subject to review and approval by the Planning Board of the Village of Scotia under subdivision or site plan or by the Board of Trustees under special permit regulations shall be reviewed in consultation with the Stormwater Management Officer and be subject to the standards contained in this chapter.
- D. All land development activities not subject to review as stated in § 208-4C 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 chapter.

§ 208-5. Exemptions.

The following activities may be exempt from review under this chapter:

- A. Agricultural activity as defined in this chapter.
- B. Silvicultural activity, except that landing areas and log haul roads are subject to this chapter.
- C. 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.
- D. Repairs to any stormwater management practice or facility deemed necessary by the Stormwater Management Officer.
- E. Any part of a subdivision if a plat for the subdivision has been approved by the Village of Scotia on or before the effective date of this chapter.
- F. Land development activities for which a building permit has been approved on or before the effective date of this chapter.
- G. Cemetery graves.
- H. Installation of fence, sign, telephone, and electric poles and other kinds of posts or poles.

- I. Emergency activity immediately necessary to protect life, property or natural resources.
- J. Activities of an individual engaging in home gardening by growing flowers, vegetables and other plants primarily for use by that person and his or her family.
- K. Landscaping and horticultural activities in connection with an existing structure.

§ 208-6. Definitions.

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

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.

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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 nonstructural 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.

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 man-made 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.

§ 208-7. Stormwater pollution prevention plans.

- A. Stormwater pollution prevention plan required. No application for approval of a land development activity shall be approved until the SMO has received a stormwater pollution prevention plan (SWPPP) prepared in accordance with the specifications in this chapter.
- B. Contents of stormwater pollution prevention plans.
 - (1) All SWPPPs shall provide the following background information and erosion and sediment controls:
 - (a) Background information about the scope of the project, including location, type and size of the project.
 - (b) 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). The site map should be at a scale not more than one inch equals 50 feet;
 - (c) A description of the soil(s) present at the site;
 - (d) A 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 acres shall be disturbed at any one time unless pursuant to an approved SWPPP.
 - (e) A 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;

- (f) A 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;
 - (g) 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 closeout;
 - (h) A site map/construction drawing(s) specifying the location(s), size(s) and length(s) of each erosion and sediment control practice;
 - (i) Dimensions, material specifications and installation details for all erosion and sediment control practices, including the siting and sizing of any temporary sediment basins;
 - (j) Temporary practices that will be converted to permanent control measures;
 - (k) An implementation schedule for staging temporary erosion and sediment control practices, including the timing of initial placement and the duration that each practice should remain in place;
 - (l) A maintenance schedule to ensure continuous and effective operation of the erosion and sediment control practice;
 - (m) Name(s) of the receiving water(s);
 - (n) Delineation of SWPPP implementation responsibilities for each part of the site;
 - (o) A 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
 - (p) Any existing data that describes the stormwater runoff at the site.
- (2) Land development activities as defined in § 208-6 of this chapter, and meeting Condition A, B or C below shall also include water quantity and water quality controls (postconstruction stormwater runoff controls) as set forth in § 208-7B(3) below as applicable:
- (a) 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.

- (b) Condition B: stormwater runoff from land development activities disturbing five or more acres.
- (c) Condition C: stormwater runoff from land development activity disturbing between one and five acres of land during the course of the project, exclusive of the construction of single-family residences and construction activities at agricultural properties.

(3) SWPPP requirements for Conditions A, B and C:

- (a) All information in § 208-7B(1) above.
- (b) A description of each postconstruction stormwater management practice.
- (c) Site map/construction drawing(s) showing the specific location(s) and size(s) of each postconstruction stormwater management practice.
- (d) Hydrologic and hydraulic analysis for all structural components of the stormwater management system for the applicable design storms.
- (e) Comparison of postdevelopment stormwater runoff conditions with predevelopment conditions
- (f) Dimensions, material specifications and installation details for each postconstruction stormwater management practice.
- (g) A maintenance schedule to ensure continuous and effective operation of each postconstruction stormwater management practice.
- (h) 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.
- (i) An inspection and maintenance agreement binding on all subsequent landowners served by the on-site stormwater management measures in accordance with this chapter.
- (j) 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 meets the requirements in this chapter.

C. 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.

D. Contractor certification.

- (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) The certification must include the name and title of the person providing the signature; the address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.
- (3) The certification statement(s) shall become part of the SWPPP for the land development activity.

E. 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.

§ 208-8. Performance and Design Criteria.

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

- A. Technical standards. For the purpose of this chapter, 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 chapter:
- (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").
 - (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").
- B. 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 this section, and the SWPPP shall be prepared by a licensed professional.

- C. 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.

§ 208-9. Maintenance, inspection and repair of stormwater facilities.

A. Maintenance and inspection during construction.

- (1) The applicant or developer of the land development activity or his or her 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 chapter. Sediment shall be removed from sediment traps or sediment ponds whenever their design capacity has been reduced by 50%.
- (2) For land development activities as defined in this chapter and meeting Condition A, B or C in § 208-7B(2), the applicant shall have a qualified professional conduct site inspections and document the effectiveness of all erosion and sediment control practices every seven 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 logbook.
- (3) If required by the Stormwater Management Officer, the applicant or developer or his or her 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.

B. 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 SMO or his designee to ensure that the facility is maintained in proper working condition to meet design standards and any other provisions established by this chapter. The easement shall be recorded by the grantor in the office of the County Clerk after approval by the counsel for the Village.

C. Maintenance after construction. The owner or operator of permanent stormwater management practices installed in accordance with this chapter shall ensure they are operated and maintained to achieve the

goals of this chapter. Proper operation and maintenance also includes, as a minimum, the following:

- (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 chapter.
 - (2) Written procedures for operation and maintenance and training new maintenance personnel.
 - (3) Discharges from the SMPs shall not exceed design criteria or cause or contribute to water quality standard violations in accordance with this chapter.
- D. Maintenance agreements. The Village of Scotia Board of Trustees 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 prescribed by the Village. The Village, 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 chapter and includes adequate and perpetual access and sufficient area, by easement or otherwise, for inspection and regular maintenance.

§ 208-10. Administration; enforcement; penalties for offenses; fees.

A. Erosion and sediment control inspections.

- (1) Erosion and sediment control inspection.
 - (a) The Village Stormwater Management Officer may require such inspections as necessary to determine compliance with this chapter 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 chapter and the stormwater pollution prevention plan (SWPPP) as approved. To obtain inspections, the applicant shall notify the Stormwater Management Officer at least 48 hours before any of the following as required:
 - [1] Start of construction.
 - [2] Installation of sediment and erosion control measures.
 - [3] Completion of site clearing.
 - [4] Completion of rough grading.
 - [5] Completion of final grading.

[6] Close of the construction season.

[7] Completion of final landscaping.

[8] Successful establishment of landscaping in public areas.

- (b) 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.
- (2) Stormwater management practice inspections. The Village Stormwater Management Officer, or his designee, 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.
- (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.
- (4) Submission of reports. The Village Stormwater Management Officer may require monitoring and reporting from entities subject to this chapter as are necessary to determine compliance with this chapter.
- (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 Village the right to enter the property at reasonable times and in a reasonable manner for the purpose of inspection as specified in § 208-10A(3).

B. Performance guarantee.

(1) Construction completion guarantee.

(a) In order to ensure the full and faithful completion of all land development activities related to compliance with all conditions set forth by the Village of Scotia in its approval of the stormwater pollution prevention plan, the Village 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 Village as the beneficiary. The security shall be in an amount to be determined by the Village based on submission of final design plans, with reference to actual construction and landscaping costs.

(b) The performance guarantee shall remain in force until the surety is released from liability by the Village, 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 Village of Scotia. Per annum interest on cash escrow deposits shall be reinvested in the account until the surety is released from liability.

(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 Village of Scotia 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 Village of Scotia may draw upon the account to cover the costs of proper operation and maintenance, including engineering and inspection costs.

(3) Recordkeeping. The Village of Scotia may require entities subject to this chapter to maintain records demonstrating compliance with this chapter.

C. Enforcement and penalties.

(1) Notice of violation. When the Stormwater Management Officer determines that a land development activity is not being carried out in accordance with the requirements of this chapter, he may

issue a written notice of violation to the landowner. 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 this chapter, 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 violation may be appealed to the municipality by filing a written notice of appeal within 15 days of service of the notice of violation.
- (2) Stop-work orders. The Stormwater Management Officer may issue a stop-work order for violations of this chapter. 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 Stormwater Management Officer 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 chapter.
- (3) Violations. Any land development activity that is commenced or is conducted contrary to this chapter may be restrained by injunction or otherwise abated in a manner provided by law.
- (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 chapter shall be guilty of a violation punishable by a fine not exceeding \$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 \$350 nor more than \$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 \$700 nor more than \$1,000 or imprisonment for a period not to exceed six months, or both. Each week's continued violation shall constitute a separate additional violation.

- (5) Withholding of certificate of occupancy. If any building or land development activity is installed or conducted in violation of this chapter, the Village Stormwater Management Officer 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 Village of Scotia may take necessary corrective action, the cost of which shall become a lien upon the property until paid.
- D. Fees for services. The Village of Scotia may require any person undertaking land development activities regulated by this chapter to pay reasonable costs at prevailing rates for review of SWPPPs, inspections, or SMP maintenance, performed by the Village or performed by a third party for the Village. The Village may require that such estimated costs be placed in escrow.

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