STORMWATER MANAGEMENT PROGRAM PLAN

Updated May 2016

SPDES General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems
GP-0-15-003

May 1, 2015 – April 30, 2017

Modified for:
City of Tonawanda, NY

WNY Stormwater Coalition

CITY OF TONAWANDA • CORPORATE SEAL •

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May 2006

STORMWATER MANAGEMENT PLAN

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APPENDIX

The reference documents included in the Appendix are versions that were available at the time the Stormwater Management Plan was updated. When using the documents, particularly those pertaining to regulatory matters, it is advisable to verify it as current.

SWMP
This folder includes electronic files of the SWMP in Microsoft Word 2003 format and Portable Document Format (pdf) that can be opened with Adobe Acrobat Reader.

APPENDIX
The following software programs are needed to open all files in the Appendix:

- Adobe Acrobat Reader
- Microsoft Word 2003
- Microsoft Excel 2003
- Microsoft Publisher 2003

The Appendix is organized into the following folders:

MS4 Program
- MS4 General Permit GP-0-15-003
- MS4 GP Fact Sheet 2010
- Urbanized Areas
- NYSDEC MS4 Audit Inspection Checklist

Public Education Participation and Involvement
- Household General Audience
- Posters
- Public Education Display
- Target Business Brochures
- Teacher Education Package
- Public Information Press Package

Illicit Discharge Detection & Elimination
- U.S. EPA: Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessment
- Illicit Discharge Track Down Protocol and Sampling Procedure
- Stormwater Outfall Map Update Request
- Outfall Inspection Report
- Outfall Reconnaissance Inventory
- Working with the GPS Unit
- Guidance for Prioritizing Stormwater Outfalls
- Model Local Law to Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer System

Construction Site Runoff Control
- Sample Local Law for Stormwater Management and Erosion & Sediment Control
- General Permit for Construction Activity GP-0-15-002
- NYS Stormwater Management Design Manual
- NYS Standards and Specifications for Erosion and Sediment Control (Blue Book)
- Urban Hydrology for Small Watersheds TR 55
- Construction Stormwater Inspection Manual
- SWPPP Review Checklist
- SWPPP Acceptance Form

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CITY OF TONAWANDA
STORMWATER MANAGEMENT PROGRAM

REFERENCE GUIDE

1. **To report stormwater related violations contact:**
   Stormwater Management Officer: Assistant City Engineer
   Name: Brian P. Doyle
   Phone: 716-695-8624
   E-Mail: assistantengineer@ci.tonawanda.ny.us
   Location: 200 Niagara Street Tonawanda, NY 14150

2. **Pollutants of Concern:** Floatables, Oxygen Demand, Pathogens

3. **Number of Stormwater Outfalls:** 1~~1~~213
   Frequency of Inspection: Visual Inspections every 5 years or less

4. **Municipal Facilities Affected by the SWMP:** 19 Total
   Buildings (11): City Hall, Department of Public Works, Main Sanitary Pumping Station, Niawanda Park Pavilion, Senior Center, Recreation Department, Fire Department, Niagara Nose Co. #3, Historical Society of the Tonawandas Museum, Benjamin Long Homestead, City Public Library
   Parks (8): Eastern Park, East Niagara Park, Ives Pond Park, Clinton Park, Niawanda Park, Veterans Park, Gateway Harbor Park, Broad Street Playground
   Responsible Party: Engineering; Parks & Recreation
   Name: Amanda Lofft
   Phone: 716-505-1172
   Location: 150 Fillmore Avenue Tonawanda, NY 14150

5. **Stormwater Pollution Prevention Plan (SWPPP) Review:**
   Responsible Party: Engineering
   Name: Brian P. Doyle
   Phone: 716-695-8624
   Location: 200 Niagara Street Tonawanda, NY 14150

6. **Municipal Construction Site Inspection:**
   Responsible Party: Engineering
   Name: Brian P. Doyle
   Phone: 716-695-8624
   Location: 200 Niagara Street Tonawanda, NY 14150

7. **Post Construction Stormwater Management Practices Inspection:**
   Responsible Party: Public Works
   Name: Joe Warthling, Superintendent
   Phone: 716-695-1376
   Location: 150 Fillmore Avenue Tonawanda, NY 14150

INTRODUCTION

The Western New York Stormwater Coalition (WNYSC) Stormwater Management Program Plan was developed to comply with the New York State Department of Environmental Conservation General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (GP-0-15-003). It is a shared Stormwater Management Plan providing policy and management guidance to the regulated municipalities and agencies that are members of the WNYSC.

The City of Tonawanda is a member of the Western New York Stormwater Coalition and a party to this Stormwater Management Plan.

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, include:

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

Each Minimum Control Measure and the Best Management 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 Western New York Stormwater Coalition members. The remaining work is the responsibility of the City of Tonawanda's designated Stormwater Management Officer.

Certain components of this program have been codified into local law. Refer to the Local Law for Stormwater Management and Erosion and Sediment Control and the Local Law to Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer Systems. These laws were adopted by the City of Tonawanda in 2008.

This Stormwater Management Program 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.

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 minimize contamination of runoff, spillage or leaks, sludge or waste disposal, or drainage from materials storage areas.

Clean Water Act - Amendments incorporated into 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 to downstream waters.

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

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

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

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

Heavy Metals - Metals such as zinc, copper, lead, mercury, chromium, cadmium, 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 located 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 located in an incorporated place with a population of more than 100,000 but less than 250,000.

Municipal Separate Storm Sewer Systems (MS4) - Areas with a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, and storm drains) that are not a combined sewer or part of a publicly owned treatment

system and are owned or operated and regulated by a municipality or authorized agency. MS4s may be small, medium or large with the medium or large MS4s being principally determined by population size.

Non-Point Source Pollutants (NPS) – pollution coming from many diffuse sources whose origin is often difficult to identify. This pollution occurs as rain or snowmelt travels over the land surface and mobilizes 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 are allowed to enter drainage systems and lakes.

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

Outfall – the point where a sewer or drainage discharges into a receiving waterway, or where stormwater flows from one municipal jurisdiction into another.

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 an excessive amount flows into rivers and ponds.

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

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

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

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

Stormwater – rain water 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 practices that are 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 body of water.

Urbanized Area (UA) - 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 drains into a certain stream or river and flow out of the area via that stream or river. All of the land that drains to a particular body of water. Also known as a drainage basin.

Waters of the US – includes both groundwater and surface waters such 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.(deleted sentence) Wetlands are also natural stormwater control areas, since they filter out pollutants and are able to retain large amounts of water during storm events.

LIST OF COMMONLY USED ABBREVIATIONS

BMPs – Best Management Practices

CWA – Clean Water Act

ECDEP – Erie County Department of Environment and Planning

MCM – Minimum Control Measure

MEP – Maximum Extent Practicable

MS4 - Municipal Separate Storm Sewer System

NOI – Notice of Intent

NPS – Non-Point Source Pollutants

NPDES – National Pollution Discharge Elimination System

NYSDEC – New York State Department of Environmental Conservation

POC – Pollutant of Concern

SPDES – State Pollution Discharge Elimination System

SOP – Standard Operating Procedure

SWMP – Stormwater Management Plan

SWPPP – Stormwater Pollution Prevention Plan

TMDL – Total Maximum Daily Load

USACOE – United States Army Corps of Engineers

USEPA – United States Environmental Protection Agency

UST – Underground Storage Tank

WNYSC – Western New York Stormwater Coalition

SECTION 1 - PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS

1.1 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. The educational materials contain specific actions as to how the public, as individuals or collectively as a group, can participate in reducing pollutants and their impact on the environment. The Public Education and Outreach program and BMPs, in combination, are expected to reach all of the constituents within the MS4s permitted boundary. The target pollutant sources are construction site runoff, impacts from new and re-development projects, illicit discharges and local/regional Pollutants of Concern (POCs).

1.2 General Permit Requirements

An MS4 must, at a minimum:

a. Identify POCs, waterbodies of concern, geographic areas of concern, target audiences;

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

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

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

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

Non-stormwater discharges are defined in the MS4 General Permit (GP-0-15-003) Part I.A.2 and include:

- Waterline flushing
- Landscape irrigation
- Diverted stream flows
- Rising ground waters
- Uncontaminated ground water infiltration
- Uncontaminated ground water
- Discharges from potable water sources
- Foundation drains
- Air conditioning condensate
- Irrigation water
- Springs
- Water from crawl space and basement sump pumps

- Lawn and landscape watering runoff provided that all pesticides and fertilizers have been applied in accordance with the manufacturer's product label
- Water from individual residential car washing
- Flows from riparian habitats and wetlands
- Dechlorinated swimming pool discharges
- Residual street wash water
- Discharges or flows from fire fighting activities
- Dechlorinated water reservoir discharges
- Any SPDES permitted discharge

Even if the non-stormwater discharges are determined not to be substantial contributors of pollutants, the NYSDEC recommends that the covered entity's SWMP include public education and outreach activities directed at reducing pollutants from these discharges.

1.3 Methodology for Compliance with Permit Requirements

The WNYSC has developed many of the BMPs necessary for this MCM. These have included brochures, posters, webpage, education packages, and a display for community events. These BMPs will be updated by the WNYSC on an annual basis and made available to each MS4 that is a member of the WNYSC.

1.4 Best Management Practices

1.4.1 Identification of POCs, Waterbodies of Concern, Geographic Areas of Concern, Target Audiences

Description/Methodology

The WNYSC has identified the following for the region covered by the participating MS4s:

- POCs as targets for public education: sediment/silt, pathogens, floatables and phosphorus.
- Potential sources: urban runoff, failing septic systems, and erosion.
- Target audiences for the public education and outreach program: households; developers and contractors; and small businesses.

The public education materials developed by the WNYSC address these regional POCs, in some instances topically and in others incidentally.

The City of Tonawanda has identified the following for the areas involved in the County's individual MS4 program:

- POCs as targets for public education: sediment/silt, pathogens, floatables and phosphorus.
- Potential sources: CSOs and urban runoff.
- Target audiences for the public education and outreach program: employees, user population and visitors.
- Geographic Areas of Concern: Areas that discharge to the Niagara River and its tributaries.

1.4.2 Public Education Printed Materials

Description / Methodology

Development of printed public education materials to address stormwater pollution prevention for the general public, target businesses/activities, schools, and other target audiences is an ongoing activity of the WNYSC for the member MS4s, including Niagara County. Thirteen brochures and two posters have been developed and are titled as follows:

- Automotive & Related Industries
- Construction Site Stormwater Runoff Control
- Concrete & Mortar Operations
- Roadwork & Paving
- Food & Restaurant Industries
- Pools, Fountains & Spas
- Mobile Cleaners: Carpet, Upholstery Cleaners, Janitorial Service Providers
- Hospitals, Medical Treatment Centers & Healthcare Facilities
- Pesticide Application, Lawn Care and Landscaping
- Household Guide to Preventing Stormwater Pollution
- Your Septic System: How It Functions & How to Care For It
- Pick Up Your Pet Waste
- Rain Gardens: A How-To Guide
- Pollution Begins and Ends with You (poster)
- What is Stormwater? What Can You Do?

Additional brochures to be developed will address the following topics:

- POCs and their sources
- Illicit discharges
- Post-construction practices
- Erosion and sediment control

Brochures are most often distributed regionally at public outreach events, in public access areas of municipal buildings, at seminars/conferences, and via other educational programming. Regionally, posters are displayed in municipal buildings and public libraries.

The brochures and posters are available on the WNYSC webpage along with information for businesses, municipalities, schools, and the general public to request or download the brochures directly. The City of Tonawanda provides a link to the WNYSC website where these materials are available.

Measurable Goals

WNYSC
Distribute brochures at public outreach events.

Distribute Household Guide and posters to all public libraries.

Provide additional brochures and posters to businesses, schools, and the general public upon request.

Update educational materials and distribute to MS4s.

Maintain records of number of educational materials distributed.

Stormwater Management Officer
Continue to partner with the WNYSC, for distribution of brochures and posters to fulfill regional public education goals.

Display public education materials in City hall.

Inventory existing stock of brochures and replenish as needed.

Check posters for damage and outdated information. Replace outdated or damaged poster with new posters as they become available from the WNYSC.

Maintain records of number of educational materials distributed.

Additional Information / Resources

Refer to the ECDEP website (www.erie.gov/environment/) or Appendix for public education materials referenced above.

1.4.3 Stormwater Webpage

Description / Methodology

The Erie County Department of Environment and Planning hosts a webpage on behalf of the WNYSC to educate the public on the impacts of stormwater runoff on local waterbodies (www.erie.gov/stormwater). The WNYSC webpage addresses the following topics:

- Water quality impacts of stormwater runoff to local water bodies.
- Public education materials, instructional resources and BMP-related work products for each Minimum Control Measure.
- Stormwater contact information for each MS4 in the WNYSC (Municipal Reference Guide).

The City Engineering department hosts a webpage with information specific to the City's program (www.ci.tonawanda.ny.us/residents/engineering.php). The webpage provides the follow:

- General stormwater information.
- The City Annual MS4 Report
- Links to WNYSC web page and educational brochures.

Measurable Goals

WNYSC
Update and post new information to the webpage as necessary.

Stormwater Management Officer
Update and maintain the MS4 webpage as necessary.

Additional Information / Resources

None

1.4.4 K-12 Education Packages

Description / Methodology

The WNYSC assembled an age appropriate K-12 Education Package for distribution to local educators in order to foster an early age respect for the environment. The packages include lesson plans and stormwater public education brochures as well as information pertaining to the environmental education services available to local educators regarding stormwater quality issues. Education materials are updated as necessary to maintain consistency with current standards and to reflect any input received from school administrators and teachers.

Measurable Goals

WNYSC
Update education materials as needed.

Distribute education materials to all schools biennially and maintain records of the distribution.

Stormwater Management Officer
Continue to partner with the WNYSC to fulfill regional public education goals.

Additional Information / Resources

Refer to Appendix for K-12 Education Package referenced above.

1.4.5 Public Education Display for Community Events

Description / Methodology

A variety of public education displays, addressing general stormwater pollution prevention and rain gardens, have been developed for use by MS4's to satisfy their public outreach requirements. Each MS4 has a two sided banner display, a wall-mounted plaque and a brochure holder for the individual public education and outreach activities. Additional displays are prepared and maintained by the WNYSC. Among the displays available, there is a total of five different messages to convey. Printed public education materials, an Enviroscape watershed model, stormwater quiz cards, a prize wheel and promotional items (answering a quiz card successfully allows a spin on the wheel) augment the display and allow the regional target audiences to take the stormwater message home. Venues for the use of the display include: community events, municipal buildings, libraries, public meetings and employee trainings.

Annual Compliance Requirements

ECDEP
Conduct outreach and education at regional community events on behalf of WNYSC membership

Maintain records pertaining to DEP use of the public education display(s)

Stormwater Management Officer
Incorporate stormwater public education into at least two community events or programs.

Display stormwater plaque in prominent location in City hall.

Additional Information / Resources

Refer to Appendix for public education display content referenced above.

1.4.6 Public Information Press Package

Description / Methodology

The WNYSC created a short video and three public service announcements (PSAs) addressing stormwater pollution prevention efforts in the Western New York MS4 area. The video is for public education and outreach at events such as public meetings, in schools and where feasible, at community events. The video and PSAs will also be on the WNYSC webpage (www.erie.gov/stormwater) and ideally, cable access stations.

Measurable Goals

WNYSC
Post the video and PSAs on the WNYSC webpage.

Utilize the video and PSAs at public meetings, in schools and at community events.

Maintain records pertaining to DEP use of the video and PSAs.

Stormwater Management Officer
Continue to partner with the WNYSC to fulfill regional public education goals.

Additional Information / Resources

Refer to the WNYSC webpage (www.erie.gov/stormwater) for the PSAs and video referenced above.

1.5 Required Reporting

At a minimum, the permittee shall report on the items below:

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

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

- IDDE education activities planned or completed for public employees, businesses, and the general public, as required by Part VII.A.3 of GP-0-15-003;

- construction site stormwater control training planned or completed, as required by Part VII.A.4 of GP-0-15-003; and
- employee pollution prevention / good housekeeping training planned or completed, as required by Part VII.A.6 of GP-0-15-003 ; and

To facilitate shared annual reporting, if the education and outreach activities above are implemented by a third party, and the third party is completing the associated portions of the annual report, that third party may report on the education and outreach activities within MCM 1 of the annual report and not within the MCMs that the education and outreach activities are required by; and

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

d. maintain records of all training activities.

2 PUBLIC PARTICIPATION / INVOLVEMENT

2.1 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 public participation. The BMPs include a number of practices designed to seek public input on the SWMP and Annual Report accomplishments. They also describe specific activities that encourage public participation. The target audiences for the public involvement program are key individuals and groups that may have an interest in the particular BMPs and the general public located within the permitted boundary.

2.2 General Permit Requirements

An MS4 must, at a minimum:

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

b. Develop and implement a public involvement/participation program that:

- identifies key individuals and groups, public and private, who are interested in or affected by the SWMP ;
- identifies types of input the permittee will seek from the key individuals and groups, public and private, to support development and implementation of the SWMP and how the input will be used; and
- describes the public involvement / participation activities the permittee will undertake to provide program access to those who want it and to gather the needed input. The activities included, but are not limited to a water quality hotline (report spills, dumping, construction sites of concern, etc.), stewardship activities like stream cleanups, storm drain marking, and volunteer water quality monitoring;

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

d. Annual report presentation.
Below are the requirements for the annual report presentation:

i. prior to submitting the final annual report to the Department, by June 1 of each reporting year (see Part V.C.), present the draft annual report in a format that is open to the public, where the public can ask questions about and make comments on the report. This can be done:

- at a meeting that is open to the public, where the public attendees are able to ask questions about and make comments on the report. This may be a regular meeting of an existing board, such as planning, zoning or the town board. It may also be a separate

meeting, specifically for stormwater. If multiple permittees are working together, they may have a group meeting (refer to Part V.C.2); or

- on the internet by:
  - making the annual report available to the public on a webpage;
  - providing the public the opportunity to provide comments on the internet or otherwise; and
  - making available the opportunity for the public to request an open meeting to ask questions about and make comments on the report. If a public meeting is requested by 2 or more persons, the permittee must hold such a meeting. However, the permittee need only hold a public meeting once to satisfy this requirement.

ii. provide public notice about the presentation, making public the following information when noticing the presentation in accordance with the local public notice requirements:

- the placement of the annual report on the agenda of this meeting or location on the internet;
- the opportunity for public comment. This general SPDES permit does not require a specified time frame for public comments, although it is recommended that permittees do provide the public an opportunity to comment for a period after the meeting. Comments received after the final annual report is submitted shall be reported with the following year's annual report. Permittees must take into account those comments in the following year;
- the date and time of the meeting or the date the annual report becomes available on the internet; and
- the availability of the draft report for prior review prior to the public meeting or duration of availability of annual report on the internet;

iii. the Department recommends that announcements be sent directly to individuals (public and private) known to have a specific interest in the permittee's SWMP;

iv. include a summary of comments and (intended) responses with the final annual report. Changes made to the SWMP in response to comments should be described in the annual report; and

v. ensure that a copy of the final report and, beginning in 2009, the SWMP plan are available for public inspection;

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

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

2.3 Methodology for Compliance with Permit Requirements

In order to comply with this MCM, the City of Tonawanda must involve the local public in their SWMP. By participating in the WNYSC, the City of Tonawanda can comply with certain aspects of the SWMP such as public participation at the WNYSC meetings, incorporating a feedback mechanism into the webpage, community cleanup events, and public meetings in targeted Erie and Niagara County Watersheds. The City of Tonawanda responsible for allowing public review of their individual SWMPs and Annual

Reports. MS4s can also develop programs such as volunteer monitoring of outfalls, adopt-a-stream program, and storm sewer stenciling. These BMPs are not General Permit requirements but do foster public involvement and may be of interest to the local MS4 for incorporating into their SWMP.

2.4 Best Management Practices

2.4.1 Identify key individuals and groups who are interested in/or affected by the permitting program

Description / Methodology

Environmental groups identified as having an interest in the WNYSC's Stormwater Management Program include: Erie County Environmental Management Council (EMC), Niagara County EMC, municipal Conservation Advisory Committees (CAC's), and the Buffalo Niagara Riverkeepers, Citizens Coalition for the Environment (CCE), and the Erie County Water Quality Committee (ECWQC).

Measurable Goals

WNYSC
The WNYSC continuously works with regional environmental groups on exchanging information and accomplishing joint goals including participation of Buffalo Niagara Riverkeeper; Erie County Soil & Water Conservation District and Niagara County Soil & Water Conservation District in WNYSC meetings, trainings and/or activities. Observation is measured by the number of times other entities participated in a program Niagara County is involved with.

Stormwater Management Officer
Outreach to CAC regarding stormwater requirements and how the group may assist the City of Tonawanda with their Stormwater Management Program. The ECDEP on behalf of the WNYSC will continue to work with regional environmental groups.

Additional Information / Resources

None

2.4.2 Identify Types of Input the MS4 would seek from the Individuals or Groups to Support Development and Implementation of the Program

Description / Methodology

Environmental groups identified as having an interest in the WNYSC's Stormwater Management Program will be enlisted to assist with its implementation through participation in the WNYSC's public education and public involvement workgroup. These groups will be encouraged to:

Attend monthly WNYSC meetings.

Assist with public education and public involvement activities.

Plan and staff community cleanup events.

Review the Draft Annual Report of the WNYSC and MS4s.

Annual Compliance Requirements

WNYSC
Interact with EMCs, Buffalo Niagara Riverkeepers, CCE, and ECWQC and encourage their support/participation in WNYSC workgroup activities and implementation of the Stormwater Management Program.

Stormwater Management Officer
Enlist support/participation of the municipal CAC in efforts related to implementation of their local Stormwater Management Program.

Additional Information / Resources

None

2.4.3 Public Participation in the Stormwater Management Program

Description / Methodology

To provide the public with an ongoing opportunity to participate in the development, implementation, review and revision of the SWMP Plan, MS4s will make the SWMP Plan available in areas where the public has access and/or on the internet. Public access areas include, but are not limited to, municipal buildings and public libraries. Included with the SWMP Plan will be information pertaining to how the public can participate. The SWMP Plan will also be presented annually, and at that time, the public will be informed of their opportunity to participate in the SWMP.

Annual Compliance Requirements

WNYSC
Maintain WNYSC stormwater webpage feedback mechanism for residents to document their input/comments on the stormwater management program.

Document input/comments received, and actions taken.

Stormwater Management Officer
For MS4s with their own Stormwater webpages:
Provide an opportunity for continuous public inspection of the SWMP Plan. Present the SWMP Plan once per year, ideally with the draft Annual Report at a public meeting.

Document input and comments received, and actions taken.

Additional Information / Resources

None

2.4.4 *Open WNYSC Meetings to Reach Key Groups and Individuals and Promote Public Involvement Opportunities*

Description / Methodology

Twice per year, the WNYSC will schedule open meetings to educate key individuals and groups who are interested in or affected by the SWMP on the status of implementation in the MS4s of Erie and Niagara County. Public employees, environmental groups and the general public are targets for attendance. The meetings will be used to solicit input from those key individuals and groups on the SWMP Plan, the Annual Report and to publicize opportunities for public participation and involvement. The meetings will be hosted by the WNYSC membership.

Annual Compliance Requirements

WNYSC

Bi-Annual: Publish a notice in the local paper for each public meeting held by the WNYSC, notifying the public of their invitation to participate.

Stormwater Management Officer

Bi-Annual: Assist the WNYSC by promoting the meeting to key individuals and groups within the MS4 and by attending the meeting.

Additional Information / Resources

None

2.4.5 *Public Involvement/Participation Activities*

Description / Methodology

Inform and encourage residents about the many opportunities that exist to participate in area community cleanup events: Household Hazardous Waste Collections held several times per year by Erie County and continuously by Niagara County; nationally sponsored "Great American Cleanup" events that can be organized locally; and locally sponsored, volunteer cleanup activities such as Buffalo Niagara Riverkeepers spring shoreline cleanup and Fall Beach Sweep; and State sponsored Adopt-A-Highway Programs.

Annual Compliance Requirements

ECDEP

Publish a notice in the local paper and on the Erie County Household Hazardous Waste webpage that notifies residents of their opportunity to participate in the Erie County Household Hazardous Waste Collections events.

Stormwater Management Officer

Ensure at least one stream or roadway cleanup occurs per year or schedule and publicize a community-wide clean up day.

Have information on local cleanup opportunities available at the office of the ECDEP or local Stormwater Management Officer. Also, advertise these events on the town and/or county webpage.

Additional Information / Resources

None

2.4.6 *Provide Public Comment Mechanism on Webpage*

Description / Methodology

Through either the WNYSC, and/or the municipality's webpage, provide a means for public input/comment regarding the SWMP.

Annual Compliance Requirements

WNYSC
Maintain WNYSC stormwater webpage feedback mechanism for residents to document their input/comments on the SWMP.

Document input/comments received, and actions taken.

Stormwater Management Officer
For MS4s with their own Stormwater webpages:
Maintain MS4 stormwater webpage feedback mechanism for residents to document their input/comments on the MS4 stormwater management program.

Document input and comments received, and actions taken.

Additional Information / Resources

None

2.4.7 *Identify Local Stormwater Public Contact*

Description / Methodology

Designate a "Stormwater Management Officer" that is responsible for the management of the MS4s stormwater management program.

Annual Compliance Requirements

Stormwater Management Officer
Provide contact information with public review documents, such as SWMP Plan and Annual Reports, and on a web page dedicated to stormwater.

City Council
Update the designated Stormwater Management Officer as necessary.

Additional Information / Resources

None

2.4.8 Annual Report Presentation

Description / Methodology
All regulated MS4s must submit an annual report by June 1 of each year that updates the NYSDEC on the status of their SWMP. Before submittal of the annual report to NYSDEC, the draft report will be prepared and presented to the public for their review and comment.

Annual Compliance Requirements

WNYSC
Present the WNYSC's shared draft Annual Report at a WNYSC meeting that is open to the public. See Section 2.4.4 above.

Stormwater Management Officer
Present the draft Annual Report at a meeting that is open to the public and/or on the internet to solicit public review and comment.

Provide public notice about the presentation in accordance with State Open Meetings Law or other local public notice requirements. See Section 2.2 for specific Permit requirements.

Additional Information / Resources

None

2.5 Required Reporting

At a minimum, the permittee shall report on the items below:

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

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

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

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

3 ILLICIT DISCHARGE DETECTION & ELIMINATION

3.1 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, procedures for tracking down and locating the source of an illicit discharge; procedures for locating priority areas; and procedures for removing the source of the illicit discharge.

3.2 General Permit Requirements

An MS4 must, at a minimum:

a. Develop, implement and enforce a program to detect and eliminate illicit discharges (as defined at Section 122.26(b)(2) of GP-0-15-003) into the small MS4;

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

- the location of all outfalls and the names and location of all surface waters of the State that receive discharges from those outfalls;
- the preliminary boundaries of the permittee's storm sewersheds determined using GIS or other tools, even if they extend outside of the urbanized area (to facilitate trackdown), and additionally designated area within the permittee's jurisdiction; and
- when grant funds are made available or for sewer lines surveyed during an illicit discharge trackdown, the permittee's storm sewer system in accordance with available State and EPA guidance;

c. Field verify outfall locations;

d. Conduct an outfall reconnaissance inventory, as described in the EPA publication entitled Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessment, addressing every outfall within the urbanized area and additionally designated area within the permittee's jurisdiction at least once every five years, with reasonable progress each year;

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

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

This mechanism must be equivalent to the State's model IDDE local law "NYSDEC Model Local Law to Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer Systems". The mechanism must be certified by the attorney representing the small MS4 as being equivalent to the State's model illicit discharge local law. Laws adopted during the GP-02-02

permit cycle must also be attorney certified as effectively assuring implementation of the State's model IDDE law;

g. Develop and implement a program to detect and address non-stormwater discharges, including illegal dumping, to the small MS4. The program must include: procedures for identifying priority areas of concern (geographic, audiences, or otherwise) for IDDE program; description of priority areas of concern, available equipment, staff, funding, etc.; procedures for identifying and locating illicit discharges (trackdown); procedures for eliminating illicit discharges; and procedures for documenting actions;

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

i. Address the categories of non-stormwater discharges or flows (listed in Section 1.2 of this document) as necessary;

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

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

3.3 Methodology for Compliance with the Permit Requirements

The WNYSC developed a GIS-based map of outfalls in the MS4 Urbanized Areas of Erie and Niagara Counties. For each outfall mapped, a dataset can be accessed. The WNYSC Outfall Locator map is maintained by Erie County DEP's Office of GIS Services. The City of Tonawanda has since reviewed and updated outfall locations and information. The City of Tonawanda annually updates outfall information in accordance with their annual inspections. The WNYSC Outfall Location map and database are available electronically through the Erie County DEP managed Countywide GIS website.

In partnership with Buffalo State College, an Illicit Discharge Trackdown Protocol and Sampling Procedure was developed to assist Ms4s with identification of illicit discharges to their systems and the process to use to track down the source and eliminate it if it is impacting water quality. The City of Tonawanda performs inspections of outfalls annually, based on geographic area, to screen for illicit discharges based on physical parameters. The City of Tonawanda has procedures to track down sources of illicit discharges should physical indications be present. The City of Tonawanda will perform chemical analysis of discharge waters should indications be present or as a baseline for select locations if no track down is indicated during that year's inspections.

To prohibit illicit discharges to the MS4 and establish enforcement procedures, NYS's Model Local Law to Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer System by the member municipalities of the WNYSC.

3.4 Best Management Practices

3.4.1 Outfall Mapping

Description / Methodology

Outfall Map

The WNYSC has a shared GIS Outfall Locator map that is housed by the Erie County Department of Environment and Planning's Office of GIS Services (http://gis2.erie.gov/GC/ENSSO/PublicLaunchPage.aspx). The map includes outfalls for the entire Western New York Urbanized Area including the City of Tonawanda. Each outfall point can be queried to obtain specific data including its identification number, photo, surface water discharge point, physical attributes, observations at the time of inspection and GPS coordinates. These data can be printed in report format directly from the website.

Preliminary Sewershed Boundaries

The Outfall Locator map has an optional layer to depict Preliminary Storm Sewershed boundaries which are essentially watersheds, basins and sub-basins that, when displayed along with the outfall data, may help to define the drainage area for a given outfall. Once an illicit discharge is detected at a specific outfall, the existing basin information and boundaries will be used to define the potential area where the source is located. The MS4 at this point will review storm sewer system drawings and plans to better define the sewershed associated with the outfall of concern.

Storm Sewer System Mapping

Grant funds have been successfully acquired and storm sewer system mapping is ongoing.

Erie County DEP / WNYSC
Manage GIS data and web based mapping system to ensure MS4 access to maps.

Update the outfall map as necessary with additional outfalls that have been added or changes made to the system by MS4 request.

Stormwater Officer
None.

Additional Information / Resources

Refer to Appendix for the Following:

U.S. EPA: Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessment

WNYSC: Illicit Discharge Track Down Protocol and Sampling Procedure

3.4.2 Outfall Reconnaissance Inventory (ORI)

Description / Methodology

The City of Tonawanda will conduct an Outfall Reconnaissance Inventory, essentially a dry weather, routine, visual inspection of every mapped outfall and interconnection. The ORI is intended to detect illicit discharges and will be conducted according to procedures set forth in the WNYSC's Illicit Discharge Track Down Protocol and Sampling Procedure guidance document which is based on EPA guidance.

Inherent in the ORI process are opportunities for the MS4 to field verify outfall locations (required), update existing data, add outfalls that are newly discovered or newly constructed (required) and prioritize outfalls for illicit discharge follow up.

The City of Tonawanda will schedule inspections so that a portion of the outfalls/interconnections will be inspected yearly based on geographic location and all outfalls/interconnections are visually inspected once every 5 years.

All updates to the WNYSC's Outfall Locator Map, which is located on the Erie County Geographic Information System Internet Server, will be made by the Erie County's GIS staff upon request by the MS4. The City of Tonawanda requesting modification of their outfall will complete a Stormwater Outfall Map Update Request form (provided in the Appendix) and submit it to Tom Hersey at EC DEP. The City of Tonawanda will attach a copy of the ORI completed in full for new outfalls or with new information highlighted for existing outfalls.

Annual Compliance Requirements

WNYSC
Update the outfall map as necessary with additional outfalls that have been added to the system.

Stormwater Management Officer
Conduct scheduled annual inspections according to the ORI process.

ECDEP Contact – Tom Hersey (716) 858-7674
Regional Mapping Manager – Dale Morris (716) 858-8390

Additional Information / Resources
Refer to Appendix for the following information:

WNYSC: Illicit Discharge Track Down Protocol and Sampling Procedure

Outfall Reconnaissance Inventory

Guidance for Prioritizing Stormwater Outfalls

Stormwater Outfall Map Update Request Form

3.4.3 Local Ordinance Prohibiting Illicit Discharges into the MS4

Description / Methodology

A stormwater management ordinance to prohibit illicit discharges and implement enforcement procedures and actions is required under GP-0-15-003. The ordinance must be equivalent to New York State's Model Local Law to Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer Systems and be certified as such by an attorney representing the MS4.
The City of Tonawanda formally adopted NYS's Model Local Law to Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer Systems on January 8, 2008.

Annual Compliance Requirements

Stormwater Management Officer & City Council
Amend stormwater ordinance as necessary to maintain compliance with NYS standards and requirements.

Revise enforcement action procedures as needed.

Additional Information / Resources

Refer to the NYSDEC website (http://www.dec.ny.gov/chemical/8468.html) for information on the NYS Model Local Law to Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer System.

Refer to the appendix for the City of Tonawanda Local Law to Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer System.

3.4.4 Pollutant Source Tracking Procedures

Description / Methodology

The WNYSC developed an Illicit Discharge Track Down Protocol and Sampling Procedure guidance document to detect and address non-stormwater discharges, including illegal dumping. The guidance includes:

- Sampling procedures
- Lab analysis and results interpretation
- Protocol to track down the sources of pollution and provide sufficient evidence to pursue elimination and remediation of the illicit discharge.

Annual Compliance Requirements

Stormwater Management Officer
Implement and enforce an Illicit Discharge Track Down and Elimination program utilizing the recommended protocol and in accordance with the Model Local Law to Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer System. (Refer to Section 3.4.3)

Additional Information / Resources

Refer to Appendix for the following information:

WNYSC: Illicit Discharge Track Down Protocol and Sampling Procedure

3.4.5 Public Education of Hazards Associated with Illegal Discharges

Description / Methodology

The public education materials developed by the WNYSC to comply with the regional public education goals include target audiences and provisions to inform the public of the hazards associated with illegal discharges and improper disposal of waste. Similarly, employee training programs, particularly the Pollution Prevention and Good Housekeeping for Municipal Operations training, include instruction on the hazards of illegal discharges as well as identification and prevention.

Annual Compliance Requirements

WNYSC
Update educational materials and distribute to MS4s.

Maintain records of number of educational materials distributed.

Stormwater Management Officer
Display public education materials in City hall.

Maintain records of number of educational materials distributed.

Address hazards of illegal discharges in employee training programs

Additional Information / Resources

None

3.4.6 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: water line flushing, landscape irrigation, diverted stream flows, rising ground water, uncontaminated ground water infiltration [as defined at 40 CFR 35.2005(20)], uncontaminated ground water, discharges from potable water sources, foundation drains, air conditioning condensate, irrigation water, springs, water from crawl space or basement sump pumps, footing drains, lawn and landscape watering runoff provided that all pesticides and fertilizers have been applied in accordance with the manufacturer's product label, water from individual residential car washing, flows from riparian habitats or wetlands, dechlorinated swimming pool discharges, residual street wash water, discharges or flows from fire fighting activities, dechlorinated water reservoir discharges, and any SPDES permitted discharge..

Annual Compliance Requirements

Stormwater Management Officer
Review non-stormwater discharge list as necessary such that no exempt stormwater discharge is a substantial contribution of pollutants.

Additional Information / Resources

None

3.5 Required Reporting

At a minimum, the permittee shall report on the items below:

a. number and percent of outfalls mapped;

b. number of illicit discharges detected and eliminated;

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

d. status of system mapping;

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

f. regulatory mechanism status - certification that law is equivalent to the State's model IDDE law (if not already completed and submitted with an earlier annual report); and

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

Section 4 CONSTRUCTION SITE RUNOFF CONTROL

4.1 Description of Minimum Control Measure

The Construction Site Runoff minimum control measure consists of Best Management Practices (BMPs) that focus on the reduction of pollutants to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of stormwater discharges from construction 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 BMPs described in this section have application to both types of projects.

As per Criterion 3 of the Designation Criteria, Part II.F and defined in Part X.B of GP-0-15-003, operators of traditional land use control MS4s must extend the implementation of MCM 4 to its full jurisdiction.

4.2 General Permit Requirements

An MS4 must, at a minimum:

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

i. provides equivalent protection to the NYS SPDES General Permit for Stormwater Discharges from Construction Activities (either GP-02-01 GP-0-08-001, GP-0-10-001, or GP-0-15-002), unless more stringent requirements are contained within this general SPDES permit;

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

- that construction activity is part of a larger common plan of development or sale that would disturb one acre or more; or
- if controlling such activities in a particular watershed is required by the Department;

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

- this mechanism must be equivalent to one of the versions of the "NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control"; and
- equivalence must be documented:

- by adoption of one of the sample local laws without changes;
- by using the NYSDEC Gap Analysis Workbook; or
- by adoption of a modified version of the sample local law, or an alternative law, and, in either scenario, certification by the attorney representing the small MS4 that adopted law is equivalent to one of the versions of the sample local;

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

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

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

vii. describes procedures for SWPPP review with consideration of potential water quality impacts and review of individual SWPPPs to ensure consistency with State and local sediment and erosion control requirements;

- ensure that the individuals performing the reviews are adequately trained and understand the State and local sediment and erosion control requirements;
- all SWPPPs must be reviewed for sites where the disturbance is one acre or greater; and
- after review of SWPPPs, the permittee must utilize the "MS4 SWPPP Acceptance Form" created by the Department and required by the SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002) when notifying construction site owner / operators that their plans have been accepted and approved by the permittee;

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

ix. describes procedures for site inspections and enforcement of erosion and sediment control measures including steps to identify priority sites for inspection and enforcement based on the nature of the construction activity, topography, and the characteristics of soils and receiving water;

- the permittee must ensure that the individual(s) performing the inspections are adequately trained and understand the State and local sediment and erosion control requirements. Adequately trained means receiving inspector training by a NYSDEC sponsored or approved training;
- all sites must be inspected where the disturbance is one acre or greater;
- permittee must determine that it is acceptable for the owner or operator of a construction project to submit the Notice of Termination (NOT) to the Department by performing a final site

inspection themselves or by accepting the Qualified Inspector's final inspection certification(s) required by the SPDES General Permit for Stormwater Discharges from Construction Activity. The principal executive officer, ranking elected official, or duly authorized representative (see Part VI.J.) shall document their determination by signing the "MS4 Acceptance" statement on the NOT.

x. educates construction site owner / operators, design engineers, municipal staff and other individuals to whom these regulations apply about the municipality's construction stormwater requirements, when construction stormwater requirements apply, to whom they apply, the procedures for submission of SWPPPs, construction site inspections, and other procedures associated with control of construction stormwater;

xi. ensures that construction site operators have received erosion and sediment control training before they do work within the covered entity's jurisdiction and maintain records of that training. Small home site construction (construction where the Erosion and Sediment Control Plan is developed in accordance with Appendix E of the "New York Standards and Specifications for Erosion and Sediment Control") is exempt from the requirements below:

- training may be provided by the Department or other qualified entities (such as Soil and Water Conservation Districts);
- the covered entity is not expected to perform such training, but they may co-sponsor training for construction site operators in their area;
- the covered entity may ask for a certificate of completion or other such proof of training; and
- the covered entity may provide notice of upcoming sediment and erosion control training by posting in the building department or distribute with building permit application;

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

xiii. develop, record, periodically assess and modify as needed measurable goals; and

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

4.3 Methodology for Compliance with Permit Requirements

Each participating MS4 of the WNYSC has adopted NYS's Sample Local Law for Stormwater Management and Erosion & Sediment Control. This ordinance authorizes the MS4 to enforce a program that reduces pollutant runoff from construction sites. Each MS4 will be responsible for reviewing SWPPPs, inspecting construction sites, and enforcing GP-0-15-002 requirements on construction sites that do not comply with the regulations. The WNYSC provides training to developers, contractors, and design engineers in order to inform them of the regulations. In addition, the WNYSC often co-sponsors NYSDEC sponsored/approved trainings provided by Soil and Water Conservation Districts for MS4 personnel that will be responsible for inspecting the construction sites and enforcing the permit requirements.

4.4 Best Management Practices

4.4.1 Stormwater Ordinance

Description / Methodology

A stormwater management ordinance is required under GP-0-15-003. The ordinance must be equivalent to New York State's Sample Local Law for Stormwater Management and Erosion & Sediment Control and be certified as such by an attorney representing the MS4.

The City of Tonawanda formally adopted NYS's Sample Local Law for Stormwater Management and Erosion & Sediment Control on January 8, 2008.

The stormwater management ordinance establishes minimum stormwater management requirements and controls to protect the general health, safety, and welfare of the public. The ordinance addresses issues relating to:

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

Annual Compliance Requirements

Stormwater Management Officer & Municipal Board
Revise fee schedule as needed.

Amend stormwater ordinance as necessary to maintain compliance with NYS Standards and Requirements.

Additional Information / Resources

Refer to Appendix for the following information:

Sample Local Law for Stormwater Management and Erosion & Sediment Control

4.4.2 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 and design requirements, and communicate requirements to the design and construction communities.

Many MS4-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 the MS4 on a project-by-project basis, and the owner's preparation of the GP-0-15-002 Stormwater Pollution Prevention Plan (SWPPP) is the mechanism by which accepted practices are evaluated by MS4.

Annual Compliance Requirements

WNYSC
Review construction project, planning, and design criteria to determine changes needed to comply with local, state and/or federal construction stormwater regulations.

Stormwater Management Officer & City Council
Prepare construction design and permitting guidelines for the local design and construction communities, and involved MS4 personnel.

Distribute construction design and permitting guidelines to the local design and construction communities, and involved MS4 personnel.

Additional Information / Resources

Refer to Appendix for the following:

General Permit for Construction Activity (GP-0-15-002)

NYS Stormwater Management Design Manual

4.4.3 Construction Plan Review

Description / Methodology

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 BMPs that meet the requirements of the stormwater regulations. This list will identify if the BMP needs to be used in combination with other BMPs 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.

Provide training for municipal engineers, building department staff, and other municipal representatives that will be completing the construction plan reviews within each municipality.

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

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.

Conduct SWPPP review for all sites within the MS4 Urbanized Area where the disturbance is one acre or greater to ensure consistency with State and local sediment and erosion control requirements:

- SWPPP Acceptance Form issued by NYSDEC, and required by the General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002), must be signed prior to obtaining permit coverage to indicate plans have been accepted and approved by the MS4. The construction site owner / operators should include the signed SWPPP Acceptance Form with the NOI submitted to NYSDEC for Permit coverage.

Conduct a final inspection of completed projects, or accept the Qualified Inspector's final inspection certification(s) as required by GP-0-10-001.

- MS4 Acceptance statement on the Notice of Termination (NOT) must be signed prior to permit holder submitting NOT.

Annual Compliance Requirements

WNYSC
Continue to train municipal staff that will be completing construction plan reviews.

Educate the local construction community on the construction plans review process.

Stormwater Management Officer
Develop criteria to verify construction plan compliance

Implement construction plans review procedures for local construction sites.

Train additional municipal staff as necessary and update per customized local code. Any changes to construction plan review procedures must be communicated to municipal staff.

Customize checklist to incorporate any local requirements and update as needed.

Ensure SWPPP reviews are conducted by qualified professionals or supervised by qualified professionals

Additional Information / Resources

Refer to Appendix for the following:

NYS Standards and Specifications for Erosion and Sediment Control (Blue Book)

NYS Stormwater Management Design Manual

Urban Hydrology for Small Watersheds TR 55

Construction Stormwater Inspection Manual

SWPPP Review Check List GP-0-15-002

SWPPP Acceptance Form GP-0-15-002

Notice of Intent for Stormwater Discharges Associated with Construction Activity, GP-0-15-002

Notice of Termination for Stormwater Discharges Associated with Construction Activity, GP-0-15-002

4.4.4 Construction Inspection Procedures and Certification Program

Description / Methodology

Develop inspection procedures and educate the local construction community on local stormwater regulations related to construction activities.

Conduct inspections of local construction sites that discharge stormwater to the City of Tonawanda to determine compliance with local construction stormwater regulations.

Develop a list of items to incorporate in the inspection of local construction sites based on the final local construction stormwater regulations and including the following categories:

- Use of temporary erosion controls
- Control of other construction related wastes
- Operational and general prohibitions
- Site closure and stabilization requirements
- On-site documentation and records
- Enforcement actions and on-site communication issues

Require all construction site operators to verify at least one employee on site has received required 4 hour erosion and sediment control training within the last 3 years before they do work within the City of Tonawanda.

Develop inspection forms and procedures necessary to inspect local construction sites in order to ensure compliance with local construction stormwater regulations.

Develop internal procedures for tracking new and on-going construction activities.

Train MS4 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.

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.

Maintain inventory of active construction sites within the MS4 Urbanized Area.

Annual Compliance Requirements

WNYSC
Develop inspection forms and procedures necessary to inspect local construction sites in order to ensure compliance with local construction stormwater regulations.

Sponsor training for MS4 inspection personnel on local construction stormwater regulations, inspection procedures and erosion and sediment control requirements (i.e. NYS's 4 Hour Erosion and Sediment Control Training program offered by Erie County Soil and Water Conservation District).

Stormwater Management Officer
Inspect qualifying construction sites using appropriate inspection procedures and forms to ensure compliance with local stormwater regulations.

Issue enforcement actions to owners and operators of local construction sites that are not in compliance with local construction stormwater regulations.

Ensure that all construction site operators have least one employee on site who has received required 4 hour erosion and sediment control training within the last 3 years before they do work within the MS4's jurisdiction.
The Stormwater Management Officer should obtain proof in the form of an attendance record or other documentation provided to attendees for the purpose of documentation (GP-0-15-003 Part VII.A.4.a.xi).

Maintain an Inventory of active construction sites within the MS4 Urbanized Area in accordance with GP-0-15-003 Part VII.A.4.a.vii.

Additional Information / Resources

Refer to Appendix for the following:

Stormwater Compliance Inspection Form

NYSDEC Construction Inspection Manual

4.4.5 *Project Status Monitoring and Reporting*

Description / Methodology

As part of the enforcement code in 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.

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

Annual Compliance Requirements

Stormwater Management Officer
Maintain compliance records for all construction sites requiring state and/or federal construction stormwater permits.

Additional Information / Resources

None

4.4.6 *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.

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

Annual Compliance Requirements

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 City Council agendas for proposed projects.

Provide a form on the City of Tonawanda webpage and at the municipal administration building to allow residents to comment on design plans.

Provide a form on the City of Tonawanda webpage and at the municipal administration building that allows residents to relay concerns regarding a construction project.

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

Additional Information / Resources

None

4.4.7 *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.

Annual Compliance Requirements

WNYSC
Provide additional training sessions as necessary.

Additional Information / Resources

None

4.5 Required Reporting

At a minimum, the permittee shall report on the items below:

a. number of SWPPPs reviewed;

b. number and type of enforcement actions;

c. percent of active construction sites inspected once;

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

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

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

SECTION 5 POST-CONSTRUCTION STORMWATER MANAGEMENT

5.1 Description of Minimum Control Measure

The Post-Construction Stormwater Management minimum control measure consists of Best Management Practices (BMPs) 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 MS4. The BMPs describe structural and/or non-structural practices; the legal authority mechanism that will be used to address post-construction runoff from new development and redevelopment projects; and procedures to ensure long term operation and maintenance of BMPs.

As per Criterion 3 of the Designation Criteria, Part II.F and defined in Part X.B of GP-0-15-003, operators of traditional land use control MS4s must extend the implementation of MCM 5 to its full jurisdiction.

5.2 General Permit Requirements

An MS4 must, at a minimum:

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

i. provides equivalent protection to the NYS SPDES General Permit for Stormwater Discharges from Construction Activities (either GP-02-01, GP-0-08-001, GP-0-10-001, or GP-0-15-002), unless more stringent requirements are contained within this general SPDES permit (GP-0-15-003);

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

- that project is part of a larger common plan of development or sale; or
- if controlling such activities in a particular watershed is required by the Department;

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

- the mechanism must be equivalent to one of the versions of the" NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control"; and
- equivalence must be documented
    - by adoption of one of the sample local laws without changes;
    - by using the NYSDEC Gap Analysis Workbook; or
    - by adoption of a modified version of the sample local law, or an alternative law, and, in either scenario, certification by the attorney representing the City of Tonawanda that adopted law is equivalent to one of the versions of the sample local;

iv. includes a combination of structural management practices (according to standards defined in the most current version of the NYS Stormwater Management Design Manual) that will reduce the discharge of pollutants to the maximum extent practicable (MEP). In the development of watershed plans, municipal comprehensive plans, open space preservation programs, local law, ordinances and land use regulations, permittees must consider principles of Low Impact Development (LID), Better Site Design (BSD) and other Green Infrastructure practices to the MEP. In the development of the watershed plans, municipal comprehensive plans, open space preservation programs, local law, ordinances and land use regulations, permittees must consider smart growth principles, natural resource protection, impervious area reduction, maintaining natural hydrologic conditions in developments, riparian buffers or set back distances for protection of environmentally sensitive areas such as streams, wetlands, and erodible soils.

- permittees are required to review according to the Green Infrastructure practices defined in the Design Manual at a site level, and are encouraged to review, and revise where appropriate, local codes and laws that include provisions that preclude green infrastructure or construction techniques that minimize or reduce pollutant loadings.

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

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

- ensure that the individuals performing the reviews are adequately trained and understand the State and local post construction stormwater requirements;
- ensure that the individuals performing the reviews for SWPPPs that include post-construction stormwater management practices are qualified professionals or under the supervision of a qualified professional (as defined in (GP-0-15-003);
- all SWPPPs must be reviewed for sites where the disturbance is one acre or greater; and
- after review of SWPPPs, the permittee must utilize the "SWPPP Acceptance Form" created by the Department and required by the SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002) when notifying construction site owner / operators that their plans have been accepted and approved by the permittee;
- utilize available training from sources such as Soil and Water Conservation Districts, Planning Councils, the New York State Department of State, USEPA, and/or NYSDEC to educate municipal boards, and Planning and Zoning Boards on low impact development principles, better site design approach, and green infrastructure applications.

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

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

vii. ensures adequate long-term operation and maintenance of management practices identified in Part VII.5.a.vi by trained staff, including inspection to ensure that practices are performing properly.

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

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

- Ensure that offset exceeds a standards reduction by factor of at least 2
- Offset is implemented within the same watershed
- Proposed offset address the POC of the watershed
- Tracking system is established for the watershed
- Mitigation is applied for retrofit or redevelopment
- Offset project is completed prior to beginning of the proposed construction
- A legal mechanism is established to implement the banking and credit system

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

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

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

5.3 Methodology for Compliance with Permit Requirements

The City of Tonawanda adopted a modified version of NYS's Sample Local Law for Stormwater Management and Erosion & Sediment Control which includes provisions to enforce a program that reduces pollutant runoff from newly developed and redeveloped sites. The City of Tonawanda is 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 City of Tonawanda can ensure adequate long-term management practices for both public and private facilities.

5.4 Best Management Practices:

5.4.1 Local Ordinance for Stormwater Management and Erosion & Sediment Control

Description / Methodology

A stormwater management ordinance is required under GP-0-10-002. The ordinance must be equivalent to New York State's Sample Local Law for Stormwater Management and Erosion & Sediment Control and be certified as such by an attorney representing the MS4.

The City of Tonawanda formally adopted NYS's Sample Local Law for Stormwater Management and Erosion & Sediment Control on January 8, 2008.

- The stormwater management ordinance establishes minimum stormwater management requirements and controls to protect the general health, safety, and welfare of the public. In addition to construction-related stormwater issues, the ordinance addresses long term management of post-construction stormwater practices.

Annual Compliance Requirements

City Council
Customize the fee structure and ordinance to incorporate municipal 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.

Stormwater Management Officer & City Council
Amend stormwater ordinance as necessary to maintain compliance with NYS Standards and Requirements.

Revise fee schedule as needed.

Additional Information / Resources

Refer to Appendix for the following information:

Sample Local Law for Stormwater Management and Erosion & Sediment Control

5.4.2 *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.

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.

Conduct SWPPP review for all sites within the MS4 Urbanized Area where the disturbance is one acre or greater to ensure consistency with State and local post-construction stormwater requirements;

- SWPPP Acceptance Form issued by NYSDEC, and required by the General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002), must be signed prior to obtaining permit coverage to indicate plans have been accepted and approved by the MS4. The construction site owner / operators should include the signed SWPPP Acceptance Form with the NOI submitted to NYSDEC for Permit coverage.

Conduct a final inspection of completed projects, or accept the Qualified Inspector's final inspection certification(s) as required by GP-0-10-001.

- MS4 Acceptance statement on the Notice of Termination (NOT) must be signed prior to submitting NOT.

Annual Compliance Requirements

WNYSC
Develop inspection forms and procedures necessary to inspect local new and re-development projects in order to ensure compliance with local post-construction runoff regulations and approved plans.

Train inspection personnel on local post-construction runoff regulations and final inspection procedures.

Stormwater Management Officer
Maintain an inventory of projects that qualify for inspection under local post-construction runoff regulations in accordance with GP-0-15-003 Part VII.A.5.a.vi..

Inspect qualifying development project sites using adopted inspection forms and procedures to ensure conformance with local post-construction runoff regulations in accordance with GP-0-15-003 Part VII.A.5.a.vii..

Issue enforcement actions to owners or operators of local development projects that are not in compliance with local post-construction runoff regulations.

Ensure SWPPP reviews are conducted by qualified professionals or supervised by qualified professionals (as defined in GP-0-15-003).

Additional Information / Resources

Refer to Appendix for Post-Construction Inspection Procedures for project sites.

5.4.3 Maintenance for Existing Storm Drainage Facilities

Description / Methodology

Develop an inventory, inspection and maintenance program for post construction facilities in the MS4 area under County control. Inventory will summarize practices, inspection dates and associated required maintenance. Identify the location of each storm drainage facility including:

Measurable Goals

Stormwater Management Officer
Identify the existing post construction facilities.

Inspect a storm facilities according to manufacturer's recommendations. Develop and maintain the prioritized list of necessary improvements.

Additional Information / Resources

None

5.5 Required Reporting

At a minimum, the permittee shall report on the items below:

i. number of SWPPPs reviewed;

ii. number and type of enforcement actions;

iii. number and type of post-construction stormwater management practices inventoried;

iv. number and type of post-construction stormwater management practices inspected;

v. number and type of post-construction stormwater management practices maintained;

vi. regulatory mechanism status - certification that regulatory mechanism is equivalent to one of the "NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control" (if not already done); and

vii. report on effectiveness of program, BMP and measurable goal assessment, and implementation of banking and credit system, if applicable.

SECTION 6 - POLLUTION PREVENTION / GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

6.1 Description of Minimum Control Measure

The Pollution Prevention / Good Housekeeping minimum control measure consists of Best Management Practices (BMPs) that focus on training and on the prevention or reduction of pollutant runoff from municipal operations. The BMPs describe the training program; specific municipal operations that are impacted by the proposed operation and maintenance programs (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.

6.2 General Permit Requirements

An MS4 must, at a minimum:

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

i. addresses municipal operations and facilities that contribute or potentially contribute POCs to the small MS4 system. The operations and facilities may include, but are not limited to: street and bridge maintenance; winter road maintenance; stormwater system maintenance; vehicle and fleet maintenance; park and open space maintenance; municipal building maintenance; solid waste management; new construction and land disturbances; right-of-way maintenance; marine operations; hydrologic habitat modification; or other;

ii. at a minimum frequency of once every three years, perform a self assessment of all municipal operations addressed by the SWMP to:

- determine the sources of pollutants potentially generated by the permittee's operations and facilities; and
- identify the municipal operations and facilities that will be addressed by the pollution prevention and good housekeeping program, if it is not done already;

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

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

v. addresses pollution prevention and good housekeeping priorities;

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

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

viii. requires municipal operations and facilities that would otherwise be subject to the NYS Multisector General Permit (MSGP, GP-0-06-002) for industrial stormwater discharges to prepare and implement provisions in the SWMP that comply with Parts III. A, C, D, J, K and L of the MSGP. The permittee must also perform monitoring and record keeping in accordance with Part IV. of the MSGP. Discharge monitoring reports must be attached to MS4 annual report. Those operations or facilities are not required to gain coverage under the MSGP. Implementation of the above noted provisions of the SWMP will ensure that MEP is met for discharges from those facilities;

b. Evaluate and incorporate cost effective runoff reduction techniques and green infrastructure in the routine upgrade of the existing stormwater conveyance systems and municipal properties to the MEP. Some examples include replacement of closed drainage with grass swales, replacement of existing islands in parking lots with rain gardens, or curb cuts to route the flow through below grade infiltration areas or other low cost improvements that provide runoff treatment or reduction.

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

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

e. Adapt techniques to reduce the use of fertilizers, pesticides, and herbicides, as well as their potential impact to surface water.

6.3 Methodology for Compliance with Permit Requirements

The WNYSC has developed a guidance document for use by each participating MS4 that identifies the BMPs to reduce and prevent discharge of pollutants to the maximum extent practicable from municipal activities. The WNYSC will provide training to the municipal personnel of participating MS4s. These personnel will be responsible for implementing the BMPs in their everyday activities. Guidance and training pertaining to performing an environmental assessment of municipal operations and facilities that are addressed by the MS4 Pollution Prevention and Good Housekeeping program will also be provided by the WNYSC.

6.4 Best Management Practices

6.4.1 Implement Pollution Prevention/Good Housekeeping BMPs

Description / Methodology

The WNYSC has developed a Pollution Prevention /Good Housekeeping for Municipal Operations: Best Management Practices guidance document addressing seventeen BMPS that are relevant to municipal facilities and their typical day-to-day operations. Corresponding Standard Operating Procedures and checklists were also developed. See Sections 6.4.7 - 6.4.20 for detailed descriptions of the seventeen BMPs.

Annual Compliance Requirements

WNYSC
Update documents as needed.

Stormwater Management Officer
Review Pollution Prevention /Good Housekeeping for Municipal Operations: Best Management Practices document to identify BMPs relevant to MS4 facilities and operations.

Incorporate appropriate BMPs at municipal facilities.

Distribute BMPs to Department heads for posting in employee access areas.

Coordinate with Department heads regularly to ensure employees are trained on BMPs and documentation of implementation is current.

Identify BMPs relevant to third party contractors and ensure the BMP is included in all agreements.

Reference Information

NYS Pollution Prevention and Good Housekeeping Assistance Document

U.S. EPA Menu of Best Management Practices

Additional Information / Resources

Pollution Prevention /Good Housekeeping for Municipal Operations: Best Management Practices

Pollution Prevention /Good Housekeeping for Municipal Operations: Standard Operating Procedures

Inspection Checklists regarding Pollution Prevention/Good Housekeeping for Municipal Operations

6.4.2 *Develop an Inventory of Municipal Facilities and Operations*

Description / Methodology

Develop an inventory of municipal facilities and operations that contribute or potentially contribute POCs to the MS4 system. Relevant BMPs from the WNYSC's Pollution Prevention /Good Housekeeping for Municipal Operations: Best Management Practices guidance document should be identified and prioritized.

Annual Compliance Requirements

Stormwater Management Officer
Review inventory annually and update as needed

Reference Information

None

Additional Information / Resources

None

6.4.3 Perform Environmental Self Assessment of All Municipal Operations Addressed by the SWMP

Description / Methodology

The WNYSC developed an outline, checklist and training program to assist MS4s with conducting an environmental self assessment.

Annual Compliance Requirements

WNYSC
Conduct on-site training sessions for the MS4 employee(s)

Stormwater Management Officer
Conduct Environmental Self Assessment for all municipal facilities and operations addressed by the SWMP at least once every three years.

Maintain records documenting compliance

Reference Information

None

Additional Information / Resources

Refer to the Appendix for the following:

Performing an Environmental Self Assessment of Municipal Operations and Facilities (Power Point presentation)

Environmental Assessments of Municipal Facilities Guidance

6.4.4 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. The training program will be developed such that one or two members of each municipality are trained through the WNYSC. These individuals will then become responsible for training the remaining members of their municipality.

Training programs include: Pollution Prevention and Good Housekeeping for Municipal Operations, Performing an Environmental Self Assessment of Municipal Operations and Facilities, Identifying Green Infrastructure and Runoff Reduction Opportunities in Routine Municipal Upgrades

Annual Compliance Requirements

WNYSC
Conduct training sessions for the municipal employee(s) that have been designated for teaching the remaining members of the municipality.

Stormwater Management Officer
Provide refresher training for employees

Train all (new) municipal employees whose job duties (will) involve work pertaining to all municipal operations that have the potential to affect stormwater runoff – identify new BMPs, develop/modify inspection checklists, develop/implement SOP's

Reference Information

Periodically, search sources/documents for reference information to identify any new information pertaining to stormwater BMPs, and incorporate as necessary into existing municipal operations

Additional Information / Resources

Refer to the Appendix for the following:

Pollution Prevention /Good Housekeeping for Municipal Operations: Best Management Practices

Pollution Prevention /Good Housekeeping for Municipal Operations: Standard Operating Procedures

Inspection Checklists regarding Pollution Prevention/Good Housekeeping for Municipal Operations

Performing an Environmental Self Assessment of Municipal Operations and Facilities (Power Point presentation)

Performing an Environmental Assessment Outline

6.4.5 *Incorporate Runoff Reduction Techniques and Green Infrastructure*

Description / Methodology

For all routine upgrades to the existing stormwater conveyance system and municipal properties, runoff reduction techniques and green infrastructure practices must be considered and where cost effective, implemented to the MEP. Examples include replacement of closed drainage with grass swales, replacement of existing islands in parking lots with rain gardens, or curb cuts to route the flow through below grade infiltration areas or other low cost improvements that provide runoff treatment or reduction.

Annual Compliance Requirements

WNYSC
None

Stormwater Management Officer
Coordinate with DPW, Buildings and Grounds Department heads regularly to ensure runoff reduction and green infrastructure opportunities are considered.

Reference Information

NYS Stormwater Management Design Manual

Additional Information / Resources

None

6.4.6 *Adopt Techniques to Reduce Fertilizer, Pesticide and Herbicide Use*

Description / Methodology

In order to minimize potential impacts to surface waters, MS4s need to reduce fertilizer, pesticide and herbicide use to the MEP.

Annual Compliance Requirements

WNYSC
None

Stormwater Management Officer
Inventory City of Tonawanda use of fertilizers, pesticides and herbicides and third party contracts.

Prioritize use of products and determine reduction or elimination of use.

Reference Information

NYS Stormwater Management Design Manual

Additional Information / Resources

None

6.4.7 *Landscaping and Lawn Care*

Description / Methodology

Reduce the discharge of pollutants from permittee owned facilities through better mowing and landscaping maintenance practices.

Develop an inventory of landscaping and lawn care areas that are owned by the permittee.

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 – store properly to avoid waste generation (spills, leaks).

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.

Water plants with runoff collected from roof downspouts.

Report annually on the activities conducted under this program.

Annual Compliance Requirements

Stormwater Management Officer
Superintendent of Parks / Building and Grounds / Public Works

Review monitoring and maintenance program and revise as necessary.

Maintain/update as necessary an inventory of all municipally owned lands that are/will be subject to landscaping and lawn care activities.

Additional Information / Resources

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

6.4.8 Vehicle/Equipment Maintenance

Description / Methodology

Develop and maintain an inventory of municipally owned vehicles.

Maintain vehicles according to manufacturer's specifications,

Require vehicle operators to conduct daily inspections of vehicles to identify fluid leaks, schedule repairs, and eliminate leaks.

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

Never leave vehicles unattended while refueling

Identify appropriate recycling/disposal options for wastes

Maintain vehicle maintenance records and document fluid leak repair activities.

Review vehicle inspection and maintenance records on an annual basis to evaluate conformance to vehicle manufacturer service specifications.

Annual Compliance Requirements

Stormwater Management Officer
Superintendent of Public Works
Review vehicle inspection and maintenance records to evaluate conformance to vehicle manufacturer service specifications and local stormwater program requirements.

Maintain/update as necessary an inventory of all municipally owned vehicles and equipment

Additional Information / Resources

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

6.4.9 Vehicle/Equipment Washing

Description / Methodology

Wash vehicles and equipment using methods 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).

Annual Compliance Requirements

Stormwater Management Officer
Superintendent of Public Works

Inspect floor drain systems regularly – use only those that discharge to a sanitary sewer or those 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.

Maintain/update as necessary an inventory of all vehicles and equipment.

Additional Information / Resources

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

6.4.10 Building Maintenance

Description / Methodology

Conduct building maintenance activities so that runoff does not impact the stormwater systems and/or 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.

Annual Compliance Requirements

Stormwater Management Officer
Superintendent of Buildings & Maintenance
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.

Maintain/update as necessary an inventory of all facilities and material storage areas.

Additional Information / Resources

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

6.4.11 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 waste generation (i.e. reincorporate coating/solvent mixtures into the original coating material for reuse).

Recycle materials if possible, or ensure proper disposal of wastes

Annual Compliance Requirements

Stormwater Management Officer
Superintendent of Public Works
Implement plan for proper storage of all hazardous and waste materials.

Verify that floor drains have been sealed (or redirected to sanitary sewer).

Inspect material storage areas (inside and outside).

Ensure timely 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.

Maintain/update as necessary an inventory of all facilities and material storage areas.

Additional Information / Resources

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

6.4.12 Operational By Products/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 the by products/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)

Annual Compliance Requirements

Stormwater Management Officer
Superintendent of Public Works
Clean up and dispose of "illegally dumped" materials, trash/debris in accordance with environmental regulations.

Cut and remove vegetation from "dump areas".

Regularly schedule inspections - for maintenance concerns

Coordinate with police for unscheduled patrolling of dump areas.

Maintain/update as necessary an inventory of all municipally owned lands – identify areas at which illegal dumping may occur, and patrol those areas.

Additional Information / Resources

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

6.4.13 Spill Response and Prevention

Description / Methodology

Review spill response procedures to ensure stormwater quality protection measures are considered during spill response.

Conduct employee training

Maintain spill prevention equipment.
Keep all materials properly stored in closed, labeled containment systems.
Use secondary containment systems where appropriate

Annual Compliance Requirements

Stormwater Management Officer
Superintendent of Public Works
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 Appendix for Guidance Documents and Inspection Checklists regarding Pollution Prevention/Good Housekeeping for Municipal Operations.

6.4.14 Roadway and Bridge Maintenance

Description / Methodology

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

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.

Use porous asphalt for pothole repair and shoulder work.

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

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.

Annual Compliance Requirements

Stormwater Management Officer
Superintendent of Public Works
Assess current roadway maintenance activities to determine if modification to current practices would benefit stormwater quality.

Identify alternative practices that would minimize the contamination of stormwater runoff 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.

Evaluate roadway maintenance program and revise roadway maintenance specifications according to identified alternative practices.

Maintain/update as necessary an inventory of all municipally owned infrastructure – it is essential to include underground infrastructure (i.e. ditches, underground storm piping, septic systems, UST's, oil/water separators, catch basins/sewers, etc.)

Additional Information / Resources

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

6.4.15 Road Salt Storage and Application

Description / Methodology

Provide proper storage and application of road salt to reduce the impact of salt on plants, aquatic life, and the local waterbodies.

Require covered facility for salt storage (prevents lumping and run-off loss), and size properly for seasonal needs.

Store salt on highest ground elevation to mitigate contact with stormwater.

Calibrate salt spreaders as necessary.

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

Consider building a covered area for salt loading operations (if none exists).

If possible, use a wetting agent with salt to minimize "bounce" during application, if possible.

Unload salt deliveries directly into storage facility, or if not possible, move inside immediately.

Annual Compliance Requirements

Stormwater Management Officer
Superintendent of Public Works

Inspect salt storage shed for leaks, structural 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.

Maintain/update as necessary an inventory of all municipally owned facilities and salt storage areas, structures, and equipment.

Additional Information / Resources

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

6.4.16 Catch Basin and Storm Drain System Cleaning

Description / Methodology

Reduce sediment and floatable materials discharges by routinely cleaning municipal catch basins and stormwater inlet structures.

Identify areas where catch basins, surface inlets, and/or storm sewer manholes should be more frequently cleaned to reduce discharge of floatable materials, sediment, and other materials.

Develop a preliminary schedule for cleaning inlet structures, catch basins, and manholes.

Implement the catch basin cleaning program according to the developed schedule.

Evaluate the catch basin cleaning schedule on an annual basis.

Address storm drain receivers and (below grade) storm sewer systems,
- parking lot receivers, and open ditches.

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.

Annual Compliance Requirements

Stormwater Management Officer
Superintendent of Public Works

Implement the catch basin cleaning program according to the developed schedule.

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

Maintain/update as necessary an inventory of all municipally owned infrastructure – it is essential to include underground infrastructure (i.e. septic systems, UST's, oil/water separators, catch basins/sewers, etc.)

Additional Information / Resources

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

6.4.17 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

Maintain native vegetation (especially near waterways)

Install sediment barriers on slopes or divert stormwater

Annual Compliance Requirements

WNYSC

Provide additional training as necessary to the municipal work crews.

Stormwater Management Officer
Superintendent of Parks / Director of Public Works

Incorporate BMPs into the work activities of the work crews during land disturbance activities.

Monitor work activities to verify compliance with land disturbance requirements.

Review new construction design plans to incorporate PP/GH BMPs so as to avoid all deleterious effects to stormwater runoff (prior to construction).

Additional Information / Resources

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

Refer to/comply with the SPDES General Permit For Stormwater Discharges From Construction Activities (GP-0-15-002)

Refer to/comply with Sections 4 and 5 of this document.

6.4.18 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, and provide training to the municipal work crews regarding those requirements.

Identify any potential habitat modification to the NYSDEC and USACOE through their Joint Application for Permit Program.

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.

Annual Compliance Requirements

WNYSC

Provide additional training as necessary to the municipal work crews.

Stormwater Management Officer
Superintendent of Public Works
Provide the NYSDEC and USACOE with the required information in the Joint Application for Permit to obtain approvals prior to proceeding.

Comply with all requirements of the NYSDEC and USACOE permits.

Additional Information / Resources

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

6.4.19 *Street Cleaning and Maintenance*

Description / Methodology

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

Identify the type of roadways that can be swept to remove sediment and other pollutants.

Schedule and implement street sweeping of identified roadways.

Perform operations such as paving in dry weather only.

Maintain records of streets that have been cleaned.

Adjust sweeping schedules according to program needs.

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.

Annual Compliance Requirements

Stormwater Management Officer
Superintendent of Public Works

Implement street sweeping in accordance with the identified schedule.

Adjust sweeping schedules according to program needs.

Maintain/update as necessary an inventory of all municipally owned infrastructure – it is essential to include underground infrastructure (i.e. septic systems, UST's, oil/water separators, catch basins/sewers, etc.)

Additional Information / Resources

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

6.4.20 *Marina Operations*
(DOES NOT CURRENTLY APPLY TO CITY OF TONAWANDA OPERATIONS)

Description / Methodology

Provide for proper operation and maintenance of marinas in order to mitigate the contamination of the stormwater system and local waterbodies.

Minimize the impact of the following items:

- Liquids associated with boat maintenance products (oils, fuels, antifreeze, wood preservatives, etc.)and particulate matter (i.e. boat bottom paint from hull sanding)
- Contaminated bilge water
- Sanitary sewage from wastewater holding tanks

Construct and maintain pump out stations (for sanitary wastes)

Build and maintain fish cleaning stations

Stabilize shoreline

Designate locations for boat maintenance away from the water

Minimize impervious areas – install vegetated buffer strips (i.e. grass, shrubs)

Provide spill clean up kits at fueling stations, replace as needed

Provide covered trash receptacles

Educate (posters, signage) boaters and other marina users of potential problems

Identify areas of runoff that lack vegetation

Regularly check fueling areas, maintenance areas for spills, other potential sources of pollution

Regularly check (and empty as necessary) fish cleaning stations, sewage pump out stations, trash cans

6.4.21 Pest Control

Description / Methodology

Reduce the discharge of pesticides from municipal facilities as they may harm aquatic life and may contaminate local water bodies and sediment.

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

- Area of application
- Type of pesticide applied
- Purpose of application
- Prepare a pesticide application schedule.

Comply with local, state, and federal regulations associated with pesticide 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 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)

Annual Compliance Requirements

Stormwater Management Officer
Animal Control Officer / Other department heads that handle pesticides

Review pesticide application at all facilities/lands and incorporate new methodologies for application, or determine if pesticide application can be discontinued at sites.

Additional Information / Resources

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

6.4.22 Pet Waste Collection

Description / Methodology

Minimize the potential for pet waste to impact stormwater runoff.

House all animals in an enclosed, roofed shelter.

Identify and utilize permitted waste disposal facilities for animal wastes.

Post signage which dissuades the public from leaving excrement from their pets on public property.

Annual Compliance Requirements

Stormwater Management Officer
Animal Control Officer

Inspect shelters regularly for necessary cleanup/removal of wastes.

Maintain an inventory of any new animal shelters and incorporate applicable BMPs.

Additional Information / Resources

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

6.4.23 Septic System Management

Description / Methodology

Prevent improperly treated wastewaters from septic systems from impacting municipal stormwater systems and local waterbodies.

Divert stormwater runoff (i.e. from roof drains) away from septic system

Divert groundwater (sump pump) discharges away from septic system

Locate swimming pools away from the septic system (at least 20' from the septic tank, at least 35' from the closest edge of the leach field or sand filter system)

Prevent problems caused by vegetation - growth of woody plants on the system

Prevent hydraulic overloading - "Spread out" the use of devices which use large volumes of water across the entire day – clothes washing, dish washing, and bathing. Repair leaky fixtures.

Minimize water usage by using flow restrictors on potable water distribution devices (i.e. shower heads, water faucets)

Annual Compliance Requirements

Stormwater Management Officer
Superintendent of Public Works

Determine the interval for pumping out each municipal septic tank.

Maintain/update as necessary an inventory of all municipally owned septic systems and corresponding dates of service for each.

Additional Information / Resources

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

6.4.24 *Alternative Discharge Options for Chlorinated Water*

Description / Methodology

Prevent the discharge of chlorinated water from impacting municipal stormwater systems and local waterbodies.

Dechlorinate pool water before any discharge, be it over land or to the sanitary sewer, or allow the "disinfectant" to dissipate with sunlight, use, etc. prior to discharge.

Use ultraviolet radiation or osmosis to disinfect water/wastewater.

Backwash water should be discharged to the sanitary sewer, if available – if not available, discharge water over vegetated areas, not to surface waters

Annual Compliance Requirements

Stormwater Management Officer
Superintendent of Parks / Director of Public Works
Obtain permission from the municipal POTW prior to discharging any chlorinated pool waters to a sanitary sewer system

Identify opportunities to change current maintenance practices to incorporate opportunities to abate the potential for stormwater contamination (i.e. change from disinfection with chlorine compounds to disinfection with osmosis, UV light).

Additional Information / Resources

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

6.4.25 *Road Kill/Composting Operations*

Description / Methodology

Prevent decaying road kill/composting operations from impacting municipal stormwater systems and local waterbodies.

Establish compost pile/windrow on a well drained, impervious surface that has minimal slope – segregate from other operations.

Identify the proper types of carcasses (typically, deer) that should be composted.

Locate compost piles at least 200 ft. away from receiving waters or wetlands.

Prevent access by vermin/scavengers – erect barriers (i.e. snow fence) around pile.

Annual Compliance Requirements

Stormwater Management Officer
Superintendent of Public Works
Review operations to ensure that stormwater runoff is not being contaminated from current operations. Implement new procedures, Best Management Practices as necessary.

Additional Information / Resources

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

6.5 Reporting Requirements

At a minimum, the permittee shall report on the items below:

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

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

- acres of parking lot swept;
- miles of street swept;
- number of catch basins inspected and, where necessary, cleaned;
- post-construction control stormwater management practices inspected and,
- where necessary, cleaned;
- pounds of phosphorus applied in chemical fertilizer
- pounds of nitrogen applied in chemical fertilizer; and
- acres of pesticides / herbicides applied.

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

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

General Practices for the Pollution Prevention/Good Housekeeping Program

Assess/identify modified (or new) municipal operations to identify changes in operations that affect stormwater runoff, and develop/implement new BMPs or modify existing BMPs to prevent the discharge of pollutants from municipal operations.

Adjust monitoring and maintenance programs as necessary.

Incorporate costs for stormwater permit compliance (i.e. necessary infrastructure upgrades/capital improvements) when developing annual budgets.