

CITY OF SARATOGA SPRINGS

**STORMWATER MANAGEMENT PROGRAM
(SWMP) PLAN**

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

NYSDEC SPDES Permit Number: NYR 20A216



PREPARED FOR:

**City of Saratoga Springs
474 Broadway
Saratoga Springs, New York 12866**

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Permit No. GP-0-15-003**

Introduction

This SWMP Plan has been developed to comply with Part IV.A of the NYSDEC General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (GP-0-15-003). The purpose of this plan is to document planned and implemented Stormwater Management Program (SWMP) elements. This SWMP Plan is a flexible document that will be reviewed as required and updated as necessary in order to assess progress and document changes made in the program.

The City of Saratoga Springs is located in central portion of Saratoga County, New York. At the time of the 2013 census, the population was 26,586. Saratoga Springs covers an approximate area of 29.03 square miles. Saratoga Springs is bordered on the north by the Towns of Greenfield and Wilton, on the south by the Town of Malta, on the west by the Town of Milton and on the east by the Town of Saratoga.

Stormwater is precipitation (rain or snow) that runs off surfaces such as roof tops, driveways, roads, parking lots and lawns. As stormwater moves off these surfaces it can pick up pollutants such as oil, suspended solids, sediment, fertilizers, pesticides, nutrients and pathogens resulting in polluted runoff. Eventually this runoff makes its way into our lakes, streams, etc. and can potentially be one of the major contributors to water pollution in the City.

Polluted stormwater runoff, also known as non-point source pollution, leads to poor water quality, impaired recreational opportunities, and degraded wetlands and wildlife habitats.

The purpose of the stormwater management program is to improve the quality of our nation's waters. The Federal Clean Water Act first sought to accomplish this by minimizing and eliminating what are commonly referred to as "point sources" of pollution – defined as sources of pollution that originate from an outlet pipe or other specific points of discharge. Though there were significant improvements in water quality since the inception of this Act in 1972, pollution remained a problem in our local waterways.

The Clean Water Act was subsequently amended to address non-point sources of pollution and beginning in 1990, municipalities of a certain population were required to develop programs and practices targeted at reducing non-point sources of pollution. This was referred to as Phase I. In 2003, Phase II of the program was implemented that required some municipalities, including small MS4s, to implement programs and practices to reduce non-point source pollution.

The goal of the Phase II program is to reduce the impacts of stormwater runoff thereby improving water quality, enhancing recreational enjoyment of waterways, preventing beach closures and ensuring that seafood is safe for human consumption. In New York, the Phase II program requires all regulated municipalities to maintain a permit from the New York State Department of Environmental Conservation (NYSDEC) for the discharge of stormwater runoff into their surface waters. This permit is commonly referred to as the State Pollutant Discharge Elimination System (SPDES) General Permit. (The currently controlling permit reference is GP-0-15-003.) As a condition of this permit, regulated municipalities must develop and implement a comprehensive stormwater management program that includes mandated programs and practices in the following six categories know as minimum control measures (MCM):

- Public Education and Outreach
- Public Involvement/Participation
- Illicit Discharge Detection and Elimination
- Construction Site Stormwater Runoff Control
- Post-Construction Stormwater Management
- Pollution Prevention/Good Housekeeping for Municipal Operations

Stormwater MS4 Plan

In 2003, the City of Saratoga Springs began work on a comprehensive program to preserve the quality of local water resources by focusing attention on stormwater pollution prevention. In 2008, the City assumed responsibility from New York State to enforce regulations and implement stormwater management practices. Among its identified policies is to protect “Saratoga Springs water resources” and the related implementation strategy is to require/encourage stormwater management practices that minimize impacts on surface water, groundwater, and other natural resources.

Pollutants of Concern (POC)

Pollutants of concern addressed through this SWMP include nutrients, sediment, pathogens, oil, grease, debris and litter. Of particular concern to the water bodies surrounding Saratoga Springs are waterborne pathogenic bacteria, nutrient loading (phosphorus) and sediment buildup within waterbodies caused by land-based activities as documented on the 303d listings.

Waterborne pathogens are of particular concern where water quality impairments linked to stormwater runoff have contributed to the presence of disease causing organisms in surface waters. These originate from leaking sewer pipes or illicit connections, faulty septic systems, and even pet and livestock waste.

Raising public awareness to the problems associated with high concentrations of phosphorus in our waterways is critical to reversing this trend, especially considering phosphorus is naturally plentiful in most soils and doesn’t need to be added to achieve lush, green growth.

Program Administration

The Stormwater Management Program is administered by the Stormwater Management Officer (SMO) and is the City Engineer as designated in Chapter 242 of the City Code. The City Code along with the SMO identifies specific City departments with responsibility for implementing the various components of the City’s stormwater management program.

Definitions

Best Management Practices (BMPs): Accepted practices relating to structural improvements or non-structural activities that help to reduce the quantity and/or improve the quality of stormwater runoff.

Covered Entities: Refers to municipal or private property owners that are subject to the conditions set forth by the EPA relating to Storm Water Management.

Environmental Protection Agency (EPA): Federal body of government that instituted and has jurisdiction over the Stormwater Management Program.

Minimum Control Measure (MCM): Six basic elements of the MS4 stormwater management program that, when implemented together, are expected to result in significant reductions of pollutants discharged into receiving water bodies.

Municipal Separate Storm Sewer Systems (MS4): A conveyance or system of conveyances (including but not limited to roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- Owned or operated by a State, City, Town, Village, Borough, County, Parish, District, Association or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the Clean Water Act (CWA) that discharges to surface waters of the State;
- Designed or used for collecting or conveying stormwater;
- Which is not a combined sewer; and
- Which is not part of a Publicly Owned Treatment Works (POTW) as defined in 40 CFR 122.2.

New York State Department of Environmental Conservation (NYSDEC): State body of government that is the Stormwater National Pollution Discharge Elimination System (NPDES) Permitting Authority.

Small MS4: A small MS4 is conveyance system designed or used for collecting or conveying stormwater and owned by a municipality with a population less than 100,000 and those MS4s located within urbanized areas that were not classified as Medium or Large MS4s under Phase I stormwater rules issued in 1990.

State Pollutant Discharge Elimination System (SPDES): The State system for the issuance of wastewater and stormwater permits under the Federal Water Pollution Control Act (Clean Water Act).

Stormwater Pollution Prevention Plan (SWPPP): A site-specific, written document that:

- Identifies potential sources of stormwater pollution at a construction site,
- Describes practices to reduce pollutants in stormwater discharges from a construction site, and
- Identifies procedures the operator will implement to comply with the terms and conditions of a construction general permit.

Stormwater Management Program (SWMP): The program implemented by the covered entity. A SWMP is designed to address pollutants of concern (POCs) and reduce the discharge of pollutants from the small MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of The Environmental

Conservation Law and Clean Water Act. The SWMP must address all six MCMs. The SWMP needs to include measurable goals for each of the BMPs that are implemented. The SWMP should:

- Describe the BMP/Measurable Goal,
- Identify time lines/schedules and milestones for development and implementation,
- Include quantifiable goals to assess progress over time; and
- Describe how the covered entity will address POCs.

Stormwater Management Program Plan (SWMP Plan): Document used by the covered entity to record developed, planned and implemented SWMP elements. The SWMP plan must describe how pollutants in stormwater runoff will be controlled.

Minimum Control Measure Descriptions and Requirements

Six required Minimum Control Measures (MCM's) per GP-0-15-003, as amended or revised, are detailed as follows:

- Public Education and Outreach
- Public Involvement and Participation
- Illicit Discharge Detection and Elimination
- Construction Stormwater Management
- Post-Construction Stormwater Management
- Pollution Prevention and Good Housekeeping for Municipal Operations

Each of the following sections contains a basic description of the MCM and the General Permit Requirements, followed by an analysis of the City's performance in meeting the requirements.

MCM 1: Public Education & Outreach

1.1 Description of Minimum Control Measures

- A) An informed and knowledgeable public is crucial to the success of a stormwater management program since it helps to ensure the following:
- Greater support for the program as the public gains a better understanding of the reasons why an SWMP is important. Public support is particularly beneficial when operators of small MS4s attempt to budget for stormwater control initiatives and seek to implement program elements, and
 - Greater compliance with the program, mandatory and voluntary, as members of the public becomes aware of their personal responsibilities and how they and others in the community can take actions that will protect or improve local water quality.

1.2 General Permit Requirements

- A) Identify Pollutants of Concern (POC), waterbodies of concern, geographic areas of concern and target audiences,
- **Pollutants of Concern** - Pollutants of concern addressed through this SWMP include nutrients (phosphorus), sediment, and pathogens. Oil, grease, nitrogen, debris and litter are also of concern but to a lesser extent. Of particular concern to the water bodies surrounding Saratoga Springs are waterborne pathogenic bacteria, nutrient loading (phosphorus) and sediment buildup within waterbodies caused by land-based activities. Waterborne pathogens are of particular concern where water quality impairments linked to stormwater runoff have contributed to the presence of disease causing organisms in surface water. These can originate from leaking sewer pipes or illicit connections, faulty septic systems, and even pet and livestock waste. Raising public awareness to the problems associated with high concentrations of phosphorus in our waterways is critical to reversing this trend, especially considering phosphorus is naturally plentiful in most soils and doesn't need to be added to achieve lush, green growth.
 - **Waterbodies/Geographic Areas of Concern** - Polluted stormwater runoff often flows within MS4s and ultimately is discharged into local streams, lakes and wetlands. Waterbodies of concern within the City of Saratoga Springs include Lake Lonely, Spring Run and Bog Meadow Brook as defined in the 303d list of impaired waters. The Inner City District is the geographic area of concern.
 - **Target Audiences** – The City of Saratoga Springs will target contractors/developers, residents, municipal officials and workers as well as the general public.
- B) Implement an ongoing public education and outreach program designed to describe to the general public and target audiences:
- The impacts of polluted stormwater discharges on water bodies,
 - POCs and their sources
 - Steps that contributors can take to reduce pollutants in stormwater runoff, and
 - Steps that can be taken to reduce pollutants in non-stormwater discharges,

- C) Record, periodically assess and modify as needed measurable goals, and
- D) Select and implement appropriate education and outreach activities and measurable goals to ensure the reduction of all POCs in stormwater discharges to the Maximum Extent Practical (MEP).

1.3 Watershed Improvement Strategy Requirements

- A) Plan and conduct an ongoing public education and outreach program designed to describe the impacts of the POC on the 303d waterbodies within the City. The program must identify potential sources of pathogenic bacteria in stormwater runoff and describe steps that contributors can take to reduce the pathogenic bacteria in stormwater runoff. The program must also describe steps that contributors of non-stormwater discharges can take to reduce pathogenic bacteria.
- B) Develop, or acquire if currently available, specific educational material dealing with sources of pathogenic bacteria in stormwater and pollutant reduction practices. At a minimum, the educational material should address the following topics:
 - Where, why and how pathogenic bacteria pose threats to the environment and to the community,
 - Sanitary/Septic systems, water fowl and pets as a source of pathogenic bacteria and
 - Sediment and nutrient loading (nitrogen and phosphorus) and sediment buildup within waterbodies caused by land-based activities.

1.4 Methodology for Compliance with Permit Requirements

- A) The City has developed and implemented various BMPs in order to address the Public Education and Outreach control measure. Implemented BMPs include brochures, displays at municipal properties, public presentations in conjunction with the Saratoga County Inter-Municipal Stormwater Management Program, web pages, and published articles. The BMPs are updated, altered or expanded as needed in response to SWMP programmatic needs and evolving permit requirements

1.5 Best Management Practices Implemented or Underway

- A) Previous permit accomplishments:
 - The City along with the Saratoga County Inter-Municipal Stormwater Management Program has developed and implemented various BMPs in order to address the Public Education and Outreach control measure.
 - Implemented BMPs include brochures, displays at municipal properties, web pages, and published articles. Educational materials containing 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 city currently places the brochures at a number of locations in City Hall.
 - The BMPs are updated, altered or expanded as needed in response to SWMP programmatic needs and evolving permit requirements.

- Brochures and other educational material that the City and the Saratoga County Inter-Municipal Stormwater Management Program has produced or collectively purchased are made available at municipal offices, municipal websites and at contractor/officials trainings, as well as at events or venues.
- Stormwater Pollution Prevention information is included in the City of Saratoga Springs water bill mailing to all residents and businesses quarterly. The information/message provided varies and also contains the stormwater coordinator contact information for questions or concerns.
- The City’s website is also updated to include information on upcoming events, a list of typical stormwater practices for City residents to follow and contact information for the Stormwater Program Coordinator.
- At Congress Park and the Farmers Market, information/warning signs are posted and trash receptacles are available for pet waste.
- The City has installed signs indicating that feeding waterfowl is prohibited on City property including Congress Park.
- The City Engineering Department encourages commercial businesses that redesign existing parking or landscape areas incorporate stormwater management features such as bioretention/rain gardens, stormwater planters, collection areas for roof areas, and shared parking.
- The City educates its DPW workers on how to reduce polluting stormwater runoff and post information/guidance in municipal offices.
- The City currently has a catch basin stenciling/curb marking program that applies an educational message. The approximate number of catch basins marked is 250 with the City marking/remarking 25 to 50 catch basins per year.
- The City administers a household hazardous waste collection day every other year. This program is based on funding assistance from the NYSDEC program.
- The City helps homeowners with water conservation practices by including “leaky” pipe information on quarterly water utility bills.
- To help with nutrient-rich stormwater runoff from lawns, the City has a brochure explaining proper lawn care practices and how stormwater may be affected.

In conjunction with the Saratoga County Inter-Municipal Stormwater Management Program, a website has been created concerning stormwater issues in the Saratoga County MS4 area at www.saratogastormwater.org. The webpage includes information on:

- Links to Federal and State water quality laws & regulations,
- Information for Residents,
- Information for Business Owners,
- Information for Contractors and Developers,
- Stormwater Training,
- EPA guidance to homeowners on minimizing their contribution to Stormwater Pollution,
- Documents for download, including:
 - Information for Lawn Care,
 - Pet Waste information,
 - Water Quality Fact Sheets.

The City's Engineering Department along with the Public Works Department provides educational information on recycling, and community clean up events, household waste and business waste reduction. The City's website provides a link to the various Public Works Department webpages for the transfer station, leaf pick-up, recycling program and others.

1.6 Best Management Practices for Future Consideration

- A) Possible Practices under City Consideration:
- Coordinate erosion and sediment control training session each semester at BOCES for heavy equipment operators program.
 - The City is attempting to work with the Saratoga Downtown Business Association to include stormwater educational information in their monthly newsletter one of two times a year.
 - The City is discussing providing environmental themed magnets, posters or pens at City operated facilities. These items would include slogans and/or graphics to help raise public awareness of stormwater pollution issues.
 - The City is discussing updating their website to include information that household hazardous waste should not be dumped in catch basins and instead should be disposed of in an environmental friendly manner.
 - The City in conjunction with the Saratoga County Inter-Municipal Stormwater Management Program is looking at the possibility of providing illicit discharge detection training for the Saratoga Springs Police Department.

1.7 Minimum Reporting Requirements

- A) List education/outreach activities performed for the general public and target audiences and provide any results, number of people attended, quantity of materials distributed, etc.
- B) Covered Entities performing the education and outreach activities required by other MCMs (listed below), may report on those activities in MCM 1 and provide the following information applicable to their program:

IDDE education activities planned or completed for public employees, businesses, and the general public, as required by Part VII.A.3,

Construction site stormwater control training planned or completed, as required by Part VII.A.4 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,

- C) Report on effectiveness of program, BMP and measurable goal assessment, and

D) Maintain records of all training activities.

These elements are covered in the Saratoga Springs MS4 Annual Stormwater reports. Records on training sessions for the City are on file at the office of the Stormwater Coordinator.

MCM 2: Public Involvement & Participation

2.1 Description of Minimum Control Measures

The EPA believes that the public can provide valuable input and assistance to a regulated small MS4's municipal stormwater management program and therefore suggests that the public be given opportunities to play an active role in both the development and implementation of the program.

An active and involved community is crucial to the success of a stormwater management program because it allows for:

Broader public support since citizens who participate in the development and decision making process are partially responsible for the program and therefore be more likely to take an active role in program development,

Shorter implementation schedules facilitate increased public buy-in and increased resources in the form of citizen volunteers,

The provision of a more diverse base of participation that can serve as a free source of intellectual benefit to the program, and

Conduits to other programs as citizens involved in the stormwater program development process provide important cross-connections and relationships with other community and government programs. This benefit is particularly valuable when trying to implement stormwater reduction efforts on a watershed basis.

2.2 General Permit Requirement

- A) Comply with the State Open Meetings Law and local public notice requirements when implementing a public involvement/participation program.
- B) 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 that City of Saratoga Springs will seek from the key individuals and groups, public and private, to support development and implementation of the SWMP program and how the input will be used,
 - Describes the public involvement/participation activities the City will undertake to provide program access to those who want it and to gather the needed input. The activities include, but are not limited to, a web link for immediate notification process to report spills, dumping, construction sites of concern, etc., storm drain marking, and volunteer water quality monitoring,
 - Provide the opportunity for the public to participate in the development, implementation, review and revision of the SWMP.

- C) Local Stormwater Program public contact.
Publicize the City's SMO as the local point of contact for public concerns regarding stormwater management and compliance with the SPDES general permit. The email, phone, and contact information are published on the City's website.
- D) MS4 Annual Report presentation. Below are the requirements for the MS4 Annual Report presentation:
- Prior to submitting the City's final MS4 Annual Report to the NYSDEC, by June 1 of each reporting year (see Part V.C. of GP-0-15-003), present the draft MS4 Annual Report in a format that is open to the public, where the public can ask questions about and make comments on the draft MS4 Annual Report. This is done by:
 - Placing the report on the City Website/internet for 30 days, where the public is able to ask questions about and make comments on the report. This report is publicized in the agenda for City Council Meetings for the purpose of reviewing and commenting on the City of Saratoga Springs draft MS4 Annual Report, and
 - Include a summary of comments and (intended) responses with the City's final MS4 Annual Report. Changes made to the SWMP in response to comments should be described in City's final MS4 Annual Report, and
 - Ensure that a copy of the City's final MS4 Annual Report and the City's SWMP plan are maintained at City Hall for public viewing.
- E) Record, periodically assess and modify as needed measurable goals.
- F) Select and implement appropriate public involvement/participation activities and measurable goals to ensure the reduction of POCs in stormwater discharges to the Maximum Extent Practical (MEP).

2.3 Methodology for Compliance with Permit Requirement

The City has developed and implemented various BMPs that address the Public Involvement and Participation control measure. Implemented BMPs include providing the opportunity for the public to comment on the draft MS4 Annual Report. BMPs are updated, altered or expanded as needed in response to SWMP programmatic needs and evolving permit requirements.

2.4 Best Management Practices Implemented or Underway

Previous permit accomplishments:

- Documentation related to the SWMP is available to interested members of the public. Annual reports are posted on the City's Stormwater Management Program web page. In addition, residents may contact the City's Stormwater Management Program

Coordinator, Timothy Wales, P.E., at (518) 587-7098 or by email: timothy.wales@saratoga-springs.org.

The following procedure allows for comment on the draft Annual MS4 Report:

- A notice is placed in the agenda for the City Council Meeting announcing the date that the draft MS4 Annual Report will be placed on the City website/internet for public review and/or comment,
- The City complies with the State Open Meetings Law when indicating the draft MS4 Annual Report is available for review,
- E-mail contact is always listed on meeting and annual report notices to provide comment. Comments can also be made via e-mail,
- If public comments are received, a summary response may be incorporated into the current final MS4 Annual Report or the next year's final MS4 Annual Report in accordance with the requirements of the MS4 General Permit.
- The City's final MS4 Annual Report is submitted to the NYSDEC by June 1st of each year.
- The City in conjunction with the Saratoga County Inter-Municipal Stormwater Management Program will continue to seek/advertise for volunteers to help with annual cleanups and plant-ins.

Citizen Volunteer Events

- The City previously established a program working with the Waldorf School to install storm drain markings on catch basins. The teacher/instructor has since left the school district and the City is actively trying to recruit another volunteer group.
- Various volunteer events associated with stormwater/cleanup events are noted on the Saratoga County Inter-Municipal Stormwater Management Program's website and other community event notifications. In conjunction with the Saratoga County Inter-Municipal Stormwater Management Program, public access and stream cleanups are planned in the spring and fall.

2.5 Best Management Practices for Future Consideration

A) Possible Practices under City Consideration:

- The City in conjunction with the Saratoga County Inter-Municipal Stormwater Management Program will continue to seek/advertise for volunteers to help with annual clean-ups and plant-ins.
- In conjunction with the Saratoga County Inter-Municipal Stormwater Management Program, the City will explore the possibility of an "Adopt-A-Outfall" program for residents and schools to become involved with.
- The City is reviewing the possibility of creating a Citizen Advisory Board to help foster additional involvement with the general public.

2.6 Minimum Reporting Requirements

- MS4 Annual Report presentation information (date, time and number of attendees) and information about how the annual report was made available for comment,
- Comments received and intended responses,
- Public involvement/participation activities are reviewed, and
- Report on effectiveness of program, BMP and measurable goal assessment.

These elements are covered in the Saratoga Springs MS4 Annual Stormwater reports. Records are on file at the office of the Stormwater Coordinator.

MCM 3: Illicit Discharge Detection and Elimination

3.1 Description of Minimum Control Measures

Federal regulations define an illicit discharge as “...any discharge to an MS4 that is not composed entirely of stormwater...”. There are limited exceptions; these include discharges from NPDES permitted industrial sources and discharges from fire-fighting activities. Illicit discharges are considered “illicit” because MS4s are not designed to accept, process or discharge such non-stormwater wastes. In addition to uncontrolled spills resulting from roadway accidents, examples of illicit discharges include the illicit disposal of:

- Sanitary wastewater,
- Septic tank/cesspool effluents,
- Swimming pool water,
- Car wash wastewater,
- Laundry wastewater,
- Automotive fluids, and
- Household toxics.

Illicit discharges enter the system through either direct connections (e.g., wastewater piping either mistakenly or deliberately connected to storm drains) or indirect connections (e.g., infiltration into the MS4 from cracks in sanitary systems, spills collected by drain outlets as well as paint or used oil dumped directly into a drain). The result is untreated discharge that contributes pollutants in increased levels, including heavy metals, toxics, oil, grease, solvents, nutrients, viruses, and bacteria to receiving water bodies. Pollutant levels from these illicit discharges have been shown in EPA studies to be high enough to significantly degrade receiving water quality and threaten aquatic wildlife, and human health.

3.2 General Permit Requirements

- A) Develop, implement and enforce a program to detect and eliminate illicit discharges (as defined at 40CFR 122.26(b) (2)) into the small MS4,
- B) Maintain a map, at a minimum within the covered entity’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 covered entity’s storm sewer sheds using GIS or other tools, even if they extend outside of the urbanized area (to facilitate track down), and
 - Additionally designated area within the covered entity’s jurisdiction, and
 - When grant funds are made available or for sewer lines surveyed during an illicit discharge track down, the covered entity’s storm sewer system in accordance with available State and EPA guidance,
- C) Field verify outfall locations,

- D) Conduct an outfall reconnaissance inventory, as described in the USEPA publication titled “Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessment”, addressing every outfall within the urbanized area and additionally designated area within the covered entity’s jurisdiction at least once every five years, with reasonable progress each year,
- E) Map new outfalls as they are constructed or newly discovered within the urbanized area and additionally designated area.
- F) Prohibit, through a law, ordinance, or other regulatory mechanism, illicit discharges into the 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 MS4 as being equivalent to the State’s model illicit discharge local law. Laws adopted 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 MS4 in accordance with current assistance and guidance documents from the State and EPA. The program must include:
- Procedures for identifying priority areas of concern (geographic, audiences, or otherwise) for the IDDE program; description of priority areas of concern, available equipment, staff, funding, etc.,
 - Procedures for identifying and locating illicit discharges (track down),
 - Procedures for eliminating illicit discharges, and
 - Procedures for documenting actions
- H) Inform public employees, businesses, and the general public of the hazards associated with illegal discharges and improper disposal of waste, and maintain records of notifications,
- I) Address the categories of non-stormwater discharges or flows listed in Part I.A.2 as necessary,
- J) Develop, record, periodically assess, and modify as needed, measurable goals, and
- K) Select and implement appropriate IDDE BMPs and measurable goals to ensure the reduction of all POCs in stormwater discharges to the MEP.

3.3 Watershed Improvement Strategy Requirements

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

Conduct field investigations/inspections in accordance with the most current version of the EPA publication titled “Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessment” to detect the presence of ongoing and/or intermittent on-site sanitary discharges to the storm sewer system. An advanced system inspection requiring completion by a certified professional is not required by this permit, but may be used where site specific conditions warrant. On-site sanitary system IDDE program development shall include the establishment of the necessary legal authority (such as new or revised local laws) for implementation and enforcement.

B) Develop and maintain a map showing the entire small MS4 conveyance system. At a minimum, the map and/or supportive documentation for the conveyance system shall include the following information:

- Type of conveyance system - closed pipe or open drainage,
- For closed pipe systems - pipe material, shape, and size as available
- For open drainage systems - location and dimensions of any culvert crossings,
- Drop inlet, catch basin, and manhole locations, and
- Number and size of connections (inlets/outlets) to catch basins and manholes, direction of flow. All information shall be prepared in digital format suitable for use in GIS software.

3.4 Methodology for Compliance with Permit Requirements

The City has developed and implemented various BMPs in order to address the Illicit Discharge Detection and Elimination MCM. Implemented BMPs include:

- Mapping all of the City’s stormwater outfalls,
- Continued mapping of the stormwater conveyance systems (Inner City District mostly complete and partial completion of outlying area),
- Mapping and delineating the City’s stormwater sewersheds,
- Incorporating all mapping into a GIS database,
- Searching for illicit discharges,
- Enforcing the IDDE local law, and
- Identify a prioritized area of IDDE areas for focused monitoring.

3.5 Best Management Practices Implemented or Underway

3.5.1 Outfall Inventory

The City maintains an outfall inventory. The outfall inventory is updated as needed. There are 85 outfalls located within the City’s jurisdiction (see “map of Municipal Stormwater Outfalls – City of Saratoga Springs, NY”.) Outfall inspection forms are on file in the City Engineers Office and include information regarding outfall location, surrounding land use, outfall/pipe characteristics, and flow conditions with some digital photographs. Future inspections of all outfalls will be conducted at least once every five years (per MS4 permit requirements).

3.5.2 Mapping Stormwater Systems & Conveyances

The City re-mapped both the storm and sanitary sewer systems of the Inner City District using GPS technology and AutoCad software. Over 1,450 manholes were located, each having been tagged with a specific identification number for tracking purposes. This digital map provides a key element in the IDDE program and serves as a base for additional data and overlays.

To improve manageability, the digitally mapped storm sewer for the Inner City District has been divided into drainage areas. These areas have been delineated and mapped to enable IDDE-related work and allow focus on smaller segments of the storm systems. The discharge point for each drainage area has been tagged on the map and provides a starting point for many IDDE-related activities.

The Public Works Department systematically inspected all storm sewer manholes situated in the City's Inner District. Inspection forms were completed in the field and the information then transferred to a computer management database (Microsoft Access). The information is maintained in the City Engineer's office. The inspections included an evaluation of structural and performance characteristics, and also indicate any evidence (odors, grey water, etc.) of an illicit discharge. This evidence triggers the investigation process and the filing of a "Findings and Remediation Report".

3.5.3 Illicit Discharge Detection Efforts

When potential pollution is observed during monitoring, sampling and testing will be conducted as necessary. For example, samples may be drawn from the suspect outfall(s) and submitted to a licensed lab for testing and analysis. The results will help identify and track potential illicit discharges.

The City currently samples 16 drainage outfalls in the Inner City District three times a year (April, August, and December). Samples are obtained during dry-weather conditions, and flow characteristics such as odor, color, turbidity and floatables are recorded. Testing parameters are based on factors such as potential pollutants (pathogen), surrounding land use and suspected pollutants. Test results are maintained in the City Engineer's office.

An Engineering Technician within the Department of Public Works is assigned to spearhead investigations into illicit discharges. Additional assistance from the Department's field personnel is readily available when needed. In addition to GPS equipment and mapping software, the City also acquired a closed-circuit television/videotape unit, a smoke testing machine, dye testing materials and other equipment to carry out an investigation. These resources are effectively used to identify and locate the source of a potential illicit discharge.

3.5.4 Creation and Maintenance of GIS-Based Structure

All stormwater related data, including outfalls, structures and conveyances, is incorporated into a database that is mapped and maintained in conjunction with the Saratoga County Inter-Municipal Stormwater Management Program. Data includes location and piping material that has been recorded in areas where it can be field verified.

3.5.5 Adoption of the IDDE Stormwater Management Local Law

The City officially enacted a local law in 2007 that prohibits illicit discharges within the City (Chapter 138 of the City Code). Specifically, the law seeks to:

- Meet the requirements of the SPDES General Permit for Stormwater Discharges,
- Regulate the contribution of pollutants to the MS4,
- Prohibit illicit connections, activities and discharges to the MS4,
- Establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with the ordinance
- Promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants in the MS4.

3.6 Best Management Practices for Future Consideration

3.6.1 Expand Efforts to Map Conveyance Systems

The City in conjunction with the Saratoga County Inter-Municipal Stormwater Management Program will continue to map its stormwater infrastructure. The City's focus has been mapping of networks/watersheds draining to local surface waterbodies.

3.6.2 Illicit Discharge Detection Efforts

The City will continue to perform IDDE investigations on a regular basis as required by the MS4 General Permit.

3.7 Measurable Goals

3.7.1 Outfall Inventory

The City will perform outfall inventories at least once every five (5) years with reasonable progress every year, as required by Part VII.A.6 of the Permit, in order to ensure that maps are kept up to date.

3.7.2 Stormwater Complaints

The City uses a few different methods to collect data about stormwater system complaints from residents. These include a web-based email (City Website or web-based complaint form), a Public Works Phone number (518-587-3550, ext. 2573) and by contacting code enforcement personnel in the City's Public Safety Department. Calls received at City Hall after hours are directed to the Police Department dispatcher.

3.8 Minimum Reporting Requirements

- 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) Activities in and results from informing public employees, businesses and the general public of hazards associated with illegal discharges and improper disposal of waste,
- E) 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
- F) Report on effectiveness of program, BMP and measurable goal assessment.

All records are maintained in the City Engineer's office and are covered in the MS4 Stormwater Annual Report.

MCM 4: Construction Site Stormwater Runoff Control

4.1 Description of Minimum Control Measures

Polluted stormwater runoff from construction sites often flows to MS4s and is potentially discharged into local waterbodies. The pollutants most commonly discharged from construction sites include:

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

According to the EPA's 2012 New York State Section 305(b) Water Quality Report, Urban stormwater runoff is identified as a major source in 37% of all waterbodies assessed as impaired in New York State. In another 40% of impaired waterbodies, urban stormwater runoff is a contributing source (though not the most significant source). In addition, for 35% of the waters with less severe minor impacts or threats urban stormwater runoff is noted as a major contributing source of impact.

4.2 General Permit Requirements

A) Develop, implement, and enforce a program that:

- Provides equivalent protection to the NYS SPDES General Permit for Stormwater Discharges from Construction Activities (GP-0-15-002).
- Addresses stormwater runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Control of stormwater discharges from construction activity disturbing less than one (1) 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,
- Includes a law, ordinance or other regulatory mechanism to require a SWPPP for each applicable land disturbing activity that includes erosion and sediment controls that meet the State's most current technical standards:
 - This mechanism must be equivalent to one of the versions of the "NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control", and
 - Equivalence must be documented:
 - By adoption of one of the sample local laws without changes, or
 - By using the NYSDEC Gap Analysis Workbook, or

- By adoption of a modified version of the sample law, or an alternative law, and, in either scenario, certification by the attorney representing the MS4 that the adopted law is equivalent to one of the sample local laws.
- Contains requirements for construction site operators to implement erosion and sediment control management practices,
- Allows for sanctions to ensure compliance to the extent allowable by State law,
- 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,
- 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 have been adequately trained and understand the State and local sediment and erosion control requirements,
 - All SWPPPs must be reviewed for sites where the disturbance is one acre or greater, and
 - After review of SWPPPs, the covered entity must utilize the "MS4 SWPPP Acceptance Form" created by the Department, and required by the SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002 or as amended or revised) when notifying construction site owner/operators that their plans have been accepted by the City,
- Describes procedures for receipt and follow up on complaints or other information submitted by the public regarding construction site storm water runoff,
- Describes procedures for site inspections and enforcement of erosion and sediment control measures including steps to identify priority sites for inspection and enforcement based on the nature of the construction activity, topography and the characteristics of soils and receiving water:
 - The covered entity must ensure that the individual(s) performing the inspections are adequately trained and understand the State and local sediment and erosion control requirements. Adequately trained means receiving inspector training by NYSDEC sponsored or approved training syllabus,
 - All sites must be inspected where the disturbance is one acre or greater, and
 - Covered entities must determine that it is acceptable for the owner or operator of a construction project to submit the Notice of Termination (NOT) to the City of Saratoga Springs Engineering Office 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 (GP-0-15-002 or as amended or revised). The duly authorized representative (see Part VI.J)

- shall document their determination by signing the “MS4 Acceptance” statement on the NOT,
- 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,
- Ensures that construction site operators have received erosion and sediment control training before they do work within the City of Saratoga Springs’ jurisdiction and maintain records of that training. Small home site 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 City or other qualified entities (such as Soil and Water Conservation Districts),
 - The City is not expected to perform such training, but they may co-sponsor training for construction site operators in their area,
 - The City may ask for a certificate of completion or other such proof of training, and
 - The City may provide notice of upcoming sediment and erosion control training by posting in the building department or distribute with the building permit application,
- Establishes and maintains an inventory of active construction sites, including the location of the site, owner/operator contact information,
- Develop, record, periodically assess and modify as needed measurable goals, and
- Select and implement 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

The City has developed and implemented various BMPs in order to address the Construction Stormwater Management MCM. Implemented BMPs include passing a stormwater construction local law (Chapter 242 of the City Code), implementing a SWPPP review procedure and conducting SWPPP construction site inspections.

4.4 Best Management Practices Implemented or Underway

4.4.1 Stormwater Discharges from Construction Activities Law

The City successfully drafted and passed a local law (Chapter 242) for stormwater and construction activities. The specific intent of the law is to:

- Meet the requirements of minimum control measures four and five of the NYSDEC State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s) Permit (GP-0-15-003) or as amended or revised,

- Require land disturbance activities to conform to the substantive requirements of the NYSDEC SPDES General Permit for Construction Activities (GP-0-15-002) or as amended or revised,
- Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels,
- Minimize increases in pollution caused by stormwater runoff from land disturbance activities that would otherwise degrade local water quality,
- Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable, and
- Reduce stormwater runoff rates and volumes, soil erosion and non-point source pollution wherever possible through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety.

4.4.2 SWPPP Review Procedure

During the City’s review of applications for a subdivision, site plan, soil disturbance, demolition and/or building permit, if the proposed activity is determined to result in the disturbance of one (1) acre or more, the site owner/operator is notified that the construction activity requires coverage under the SPDES General Construction Permit. The City also included stricter guidance in their Local Law that if the proposed activity for non-residential development results in the disturbance of 0.1 acres or more, the site owner/operator is notified that the construction activity requires the owner/operator to meet the guidelines in the latest NYS Stormwater Management Design Manual but does not require a SPDES General Construction Permit as this threshold is still one (1) acre.

Projects that require a SWPPP review are processed under the overall Planning Board Review. The City Engineer/Stormwater Management Officer provides a cursory review of the SWPPP. The City Designated Engineering Firm provides the main review of the SWPPP to insure consistency with the SWPPP State Guidelines and provides comments through the Planning Board review process. Questions and comments from the general public will be addressed during the open comment period associated with the Planning Board Review Process. The City’s approval of the construction activity is only granted upon satisfactory completion of a SWPPP, City’s “sign-off” of the “MS4 Acceptance Form” and receipt of a copy of the “Letter of Acknowledgment” from the NYS Department of Environmental Conservation (NYSDEC) that a Notice of Intent (NOI) has been filed by the owner/operator with NYSDEC to gain coverage under the SPDES General Permit. The City uses a spreadsheet that is updated regularly to track a project’s progress and help provide guidance on future inspections.

Construction site owner/operators, design engineers and general contractors for all approved site plans that propose disturbance are required to participate in a Pre-Construction Meeting with the City. At the meeting, implementation of required erosion and sediment control management practices are discussed. In the case of activities required to obtain coverage under SPDES, the proposed SWPPP and all issues related to erosion and sediment control management are reviewed. Construction site operators will be required to have been trained by certified NYSDEC trainers and completed the 4 hours of NYSDEC Department endorsed training in principles and

practices of erosion and sediment control. Proof of course completion in the form of a copy of a training certificate(s) or "green card(s)" shall be provided to the City at the pre-construction meeting and copies shall also be kept with the on-site SWPPP document.

4.4.3 SWPPP Construction Site Inspections

During a periodic site visit (or visit in response to a public complaint), the City (using its Construction Site Inspection Form) will determine if the site is in compliance with the SPDES General Permit. If minor violations are noted, the owner/operator is notified and given 24 hours to begin corrective measures. If the City determines that there are severe violations of the provisions of SPDES permit requirements, a written Notice of Violation (NOV) to the construction site owner/operator serves as a formal demand that the site be brought into compliance with the SPDES permit.

Failure to comply with the NOV can result in the issuance of a Stop Work Order, halting all land development activities other than those directly required to address the violation leading to the Stop Work Order. Failure to comply with any lawful order of the City to adhere to the requirements of the SPDES permit subjects the site owner/operator to civil penalties established in City of Saratoga Springs Code (Chapter 242-10 – Administration and Enforcement).

The City uses different methods to collect data about stormwater problems from residents which may eventually lead to construction site inspections. These include a web-based email (City Website or web-based complaint form), a Public Works Phone number (518-587-3550, ext. 2573) and by contacting code enforcement personnel in the City's Public Safety Department. Calls received at City Hall after hours are directed to the Police Department dispatcher. Upon receipt, complaints will be directed to the appropriate personnel in the Engineering Department. The complaint will then be reviewed, prioritized, and an inspection of the construction site performed immediately if the complaint is found to be of a serious nature. Otherwise, a site inspection is scheduled as soon as practical. The City Engineer is available after normal office hours and can be reached in the case of an emergency situation. Following the site inspection, the City's representative will discuss the complaint and inspection findings with the construction manager at the site, or by phone or email if no one is present at the construction site during the time of inspection. The Project Engineer responsible for stormwater management is also contacted to discuss the situation and any necessary requirements to address the complaint. The Project Owner/Operator may also be contacted, as necessary, to discuss the situation.

Relevant city staff has been trained by certified NYSDEC trainers and completed the 4 hours of NYSDEC Department endorsed training in principles and practices of erosion and sediment control. The staff is trained in MS4 sediment and erosion control perform compliance review and the use of the Standard Stormwater Pollution Prevention Plan Checklist to ensure consistency with State and Local erosion and sediment control requirements. City staff will visit the construction sites on a periodic basis. The sites visits are determined by priorities such as area of disturbance, potential impact to waterbodies, construction phase, complaints, etc.

The City of Saratoga Springs Stormwater Management Officer does require monitoring and reporting from the owner/operator subject to Chapter 242 of the City Code as is necessary to determine compliance with the City Code and project SWPPP. During onsite visits by the City representative/inspectors, all inspection reports and any practices requested to be brought up to standards, must be available for review. Any reports indicating substandard work/complaints are scrutinized by the City.

At the conclusion of construction, the city engineer/inspector conducts a final site inspection. All applicants are required to submit "as built" plans for all stormwater management practices located on site. The plan must show the final design specifications for each stormwater management practice and must be certified by a professional engineer verifying all practices have been constructed in conformance with the SWPPP and are operational. Based on a successful inspection a Notice of Termination (NOT) is approved by the City Engineer/Stormwater Management Officer and issued to site owner/operator indicating it is acceptable for the owner/operator to submit a Notice of Termination to NYSDEC.

4.4.4 Education and Training

The Engineering Department makes available brochures at the front counter that detail the SWPPP process for contractors and construction site operators and includes best management practices designed to minimize construction site erosion and sedimentation. In addition, the City Engineer/Stormwater Management Officer and City engineering staff are available to answer questions and help local contractors comply with SWPPP procedures and permit requirements.

Engineering Department staff that are trained in MS4 sediment and erosion control perform compliance review. Employee MS4 training is acquired via in-person at training seminars. The City provides or makes available this training as part of the job requirement for those performing SWPPP reviews and site inspections. The training is provided by a NYSDEC sponsored entity as required. Personal attend training classes offered by NYSDEC, the Eastern NY Stormwater Regional Training Center, and the Saratoga County Inter-Municipal Stormwater Management Program.

4.5 Measurable Goals

4.5.1 SWPPP Review

The City seeks to incorporate SWPPP review procedures into all relevant applications for construction sites disturbing one (1) acre or greater. The City also included stricter guidance in their Local Law that if the proposed activity for non-residential development results in the disturbance of 0.1 acres or more, the site owner/operator is notified that the construction activity requires the owner/operator to meet the guidelines in the latest NYS Stormwater Management Design Manual but does not require a SPDES General Construction Permit as this threshold is still one (1) acre.

4.5.2 Educate Construction Contractors

The City seeks to ensure that construction site owners and operators have been provided with appropriate informational resources on erosion and sediment control BMPs and to monitor contractor compliance with SWPPP process and procedure educational requirements.

4.6 Minimum Reporting Requirements

- A) Number of SWPPP's 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 disturbance of one acre or more, and
- F) Report of effectiveness of program, BMP and measurable goal assessment.

These elements are covered in the MS4 Annual Stormwater Reports.

MCM 5: Post-Construction Stormwater Management

5.1 Description of Minimum Control Measures

Post-construction stormwater management in areas undergoing new development or redevelopment is necessary because runoff from these areas has been shown to significantly affect receiving water bodies. Many studies indicate that prior planning and design for the minimization of pollutants in post-construction stormwater discharges is the most cost-effective approach to stormwater quality management.

There are generally two forms of substantial impacts of post-construction runoff. The first is caused by an increase in the type and quantity of pollutants in stormwater runoff. As runoff flows over areas altered by development, it picks up harmful sediment and chemicals such as oil and grease, pesticides, and nutrients (e.g., nitrogen and phosphorus). These pollutants often become suspended in runoff and are carried to receiving waters.

The second kind of post-construction runoff impact occurs by increasing the quantity of water delivered to the water body during storms. An increase in impervious surfaces (e.g., parking lots, driveways and rooftops) interrupts the natural cycle of gradual percolation of water through vegetation and soil. Water that is collected from surfaces such as asphalt and concrete and is routed to drainage systems creates the potential for large volumes of runoff to flow into receiving waters. The impacts can include stream bank scouring and flooding that often leads to a loss of aquatic life and damage to property.

5.2 General Permit Requirements

- A) Implement and enforce a program that:
- Provides equivalent protection to the NYSDEC SPDES General Permit for Construction Activities (GP-0-15-003),
 - 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 (1) 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),
 - Includes a law, ordinance or other regulatory mechanism to require post construction runoff controls from new development and re-development projects to the extent allowable under State law that meet the State’s most current technical standards.
 - The mechanism must be equivalent to one of the versions of the “NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control”, and Equivalence must be documented:
 - By adoption of one of the sample local laws without changes, or
 - By using the NYSDEC Gap Analysis Workbook, or
 - By adoption of a modified version of the sample law, or an alternative law, and, in either scenario and certification by the attorney representing the small MS4 that the adopted law is equivalent to one of the sample local laws,

- Includes a combination of structural or non-structural management practices (according to standards defined in the most current version of the NYS Stormwater Management Design Manual) that will reduce the discharge of pollutants to the MEP. In the development of the watershed plans, municipal comprehensive plans, open space preservation programs, local law, ordinances and land use regulations, covered entities must consider principles of Low Impact Development (LID), Better Site Design (BSD), and other Green Infrastructure practices to the MEP. In the development of the watershed plans, municipal comprehensive plans, open space preservation programs, local law, ordinances and land use regulations, covered entities must consider smart growth principles, natural resource protection, impervious area reduction, maintaining natural hydrologic conditions in developments, riparian buffers or set back distances for protection of environmentally sensitive areas such as streams, wetlands, and erodible soils:
 - Covered entities are required to review according to the Green Infrastructure practices defined in the Design Manual at a site level, and are encouraged to review, and revise where appropriate, local codes and laws that include provisions that preclude green infrastructure or construction techniques that minimize or reduce pollutant loadings, and
 - 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,
 - Describes procedures for SWPPP review with consideration of potential water quality impacts and review of individual SWPPPs to ensure consistency with state and local post-construction stormwater requirements: Ensure that the individuals performing the reviews are adequately trained and understand the State and local post construction stormwater requirements,
 - Ensure that the individuals performing the reviews for SWPPPs that include post-construction stormwater management practices are qualified professionals or under the supervision of a qualified professional,
 - All SWPPPs must be reviewed for sites where the disturbance is one acre or greater, After review of SWPPPs, the covered entity must utilize the “MS4 SWPPP Acceptance Form” created by the Department of Engineering Services and required by the NYSDEC SPDES General Permit for Construction Activities (GP-0-15-002) when notifying construction site owner/operators that their plans have been accepted by the covered entity, and
 - Utilize available training from sources such as Soil and Water Conservation Districts, Planning Councils, The New York State Department of State, USEPA, and/or the Department of Engineering Services to educate municipal boards and Planning and Zoning Boards on low impact development principles, better site design approach and green infrastructure applications,
- B) Maintain an inventory of post-construction stormwater management practices within the covered entities jurisdiction. At a minimum, include practices discharging to the small

MS4 that have been installed since March 10, 2003, all practices owned by the small MS4, and those practices found to cause or contribute to water quality standard violations:

- The inventory shall include at a minimum: location of practice (street address or coordinates); type of practice; maintenance needed per the NYS Stormwater Management Design Manual, SWPPP, or other provided documentation; and dates and type of maintenance performed,
- C) Ensure adequate long-term operation and maintenance of management practices identified in Part VII.5.a.vi by trained staff, including inspection to ensure that practices are performing properly:
- The inspection shall include inspection items identified in the maintenance requirements (NYS Stormwater Management Design Manual, SWPPP, or other maintenance information) for the practice. Covered entities are not required to collect stormwater samples and perform specific chemical analysis,
- D) Implement and provide adequate resources for a program to inspect development and redevelopment sites by trained staff and to enforce and penalize violators,
- E) Record annually and assess and modify as needed measurable goals, and
- F) Select and implement 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 Saratoga Springs has adopted a Local Law for Stormwater Management and Erosion & Sediment Control which includes provisions to enforce a program that reduces pollutant runoff from both newly and re-developed sites. The private owner or operator of permanent stormwater management practices installed in accordance with Chapter 242 of the City of Saratoga Springs Code shall ensure that they are operated and maintained to achieve the goals of the code.

The City is responsible for inspecting the City owned stormwater practices for proper operation and maintenance.

The City of Saratoga Springs shall approve a formal maintenance agreement for stormwater management facilities binding on all subsequent landowners and recorded in the office of the County Clerk as a deed restriction on the property prior to final plan approval. The maintenance agreement shall be consistent with the terms and conditions of Schedule A of the City Code – Chapter 242 entitled Sample Stormwater Control Facility Maintenance Agreement. The City of Saratoga Springs, in lieu of a maintenance agreement, at its sole discretion may accept dedication of any existing or future stormwater management facility, provided such facility meets all the requirements of this chapter and includes adequate and perpetual access and sufficient area, by easement or otherwise, for inspection and regular maintenance.

5.4 Best Management Practices Implemented or Underway

Previous Permit Accomplishments:

- The City has adopted a post-construction stormwater management ordinance. This ordinance establishes minimum stormwater management requirements and controls. The ordinance addresses issues relating to the following:
 - Permanent Erosion & Sediment Controls;
 - Stormwater Management Design Requirements; and
 - Fees for municipal services relating to SWPPP reviews, inspections and maintenance. All approved Stormwater Management Plans meet the requirements contained in the General Permit GP 0-15-002 or as amended or revised. All SWPPP's must include discussions/review concerning Low Impact Development, Better Site Design, and Green infrastructure as detailed in the NYS Stormwater Management Design Manual. Stormwater Management Practices designed, installed and maintained in accordance with the NYS Stormwater Management Design Manual are assumed to have met post-construction stormwater discharge criteria.

The City uses the Planning Board Process as a way to require that developers/homeowners contain stormwater on site and minimize the amount of stormwater that leaves their property. For example, a site plan application from any development tries to maintain/require that natural buffering features on all properties adjacent to surface water remain. The Public Works Department uses personnel, equipment and private contractors to maintain publicly owned stormwater infrastructure. Private stormwater management practices are maintained by individual owners/operators and require a periodic inspection by a professional engineer.

The City currently owns and maintains seven (7) post-construction stormwater management practices. The practices are inspected and maintained as required in the operation and maintenance manual.

The City is currently updating its database of privately owned stormwater management practices that are regulated by the EPA and the City. Per the maintenance agreement, the privately owned practice will need to be inspected and the proper documentation describing the current functionality and condition of the facility be submitted to the City.

Additionally, as funding becomes available, the City will try to make improvements to the existing stormwater infrastructure for water quality and quantity. The City has performed drainage studies (Nelson Avenue and East Side Study) in response to street flooding.

5.5 Measurable Goals

As part of the site plan approval process, the City requires maintenance agreements be placed on properties developed with a SWPPP. The maintenance agreement gives the City the legal authority to track, manage and require property owners to maintain all required post-construction stormwater practices in proper working order.

The City provides training for staff to attend green infrastructure techniques, erosion and sediment control courses and updates to the SPDES General Permit requirements. The City also

employs a licensed Professional Engineer (PE) who serves as the City’s stormwater management officer and advisor on green initiatives.

The City continues to develop and implement as needed and amend the stormwater ordinance as necessary to maintain the NYS stormwater standards and requirements as defined by the current or any future permits pertaining to stormwater management activities.

The City will amend the stormwater ordinance, as necessary, to maintain compliance with NYS stormwater standards and requirements as defined by the current or any future permits pertaining to stormwater management activities.

The City currently has an inspection program for newly developed and re-developed sites for compliance with post construction regulations.

The City has trained its personal on local post-construction runoff regulations and final inspection procedures.

Performs inspections on qualifying project sites using adopted inspection forms and procedures to ensure conformance with post-construction runoff regulations.

Issue enforcement measures to owners and/or operators of development projects that are in violation of post-construction runoff regulations. The City is updating its internal tracking procedures to keep tabs on development projects under construction, those that have been completed and any corrective/enforcement measure that were taken.

Inspects project sites using inspection forms and procedures to ensure conformance with post-construction runoff regulations in accordance with the General Permit.

5.6 Minimum Reporting Requirements

- A) Number of SWPPPS reviewed
- B) Number and Type of Enforcement Action
- C) Number and Type of Post Construction Stormwater Management Practices inventoried;
- D) Number and Type of Post Construction Stormwater Management Practices inspected;
- E) Number and Type of Post Construction Stormwater Management Practices maintained;
- F) Regulatory mechanism status – certification that regulatory mechanism is equivalent to one of the “NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control” and
- G) Report on effectiveness of program, BMP and Measurable Goal Assessment.

These elements are covered under the City of Saratoga Springs MS4 Annual Stormwater Reports.

MCM 6: Pollution Prevention & Good Housekeeping for Municipal Operations

6.1 Description of Minimum Control Measures

The Pollution Prevention/Good Housekeeping for Municipal Operations minimum control measure is a key element of the MS4 stormwater management program. This measure requires the small MS4 operator to examine and subsequently alter their own actions to help ensure a reduction in the amount and type of pollution that collects on streets, parking lots, open spaces, and storage and vehicle maintenance areas and is discharged into local waterways; and results from actions such as environmentally damaging land development and flood management practices or poor maintenance of storm sewer systems.

This measure is meant primarily to improve or protect receiving water quality by altering municipal facilities and operations. However it also can result in a cost savings because proper and timely maintenance of storm sewer systems can help avoid repair costs from damage caused by age and neglect.

6.2 General Permit Requirements

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

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 conveyance 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 and
- Hydrologic habitat modification.

At a minimum frequency of once every three years, perform and document a self-assessment of all municipal operations addressed by the SWMP to:

- Determine the sources of pollutants potentially generated by the covered entity's operations and facilities, and
- Identify the municipal operations and facilities that will be addressed by the pollution prevention and good housekeeping program,
- Determine 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 USEPA, New York State or other organizations,

- Prioritize 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 the covered entity’s capabilities,
- Address pollution prevention and good housekeeping priorities,
- Includes an employee pollution prevention and good housekeeping training program and ensures that staff receive and utilize training,
- Require third party entities performing contracted services, including but not limited to street sweeping, snow removal, lawn/grounds care, to meet permit requirements as the requirements apply to the activity being performed, and
- Require municipal operations and facilities that would otherwise be subject to the NYS SPDES Multi-Sector General Permit (MSGP) for Stormwater Discharges from Industrial Activities for industrial stormwater discharges to prepare and implement provisions in the SWMP that comply with Parts III. A, C, D, J, K and L of the MSGP. The covered entity must also perform monitoring and record keeping in accordance with Part IV of the MSGP. If required, Discharge Monitoring Reports (DMRs) must be attached to the City’s final MS4 Annual Report. For those operations or facilities that are not required to gain coverage under the MSGP, implementation of the above noted provisions of the SWMP will ensure that MEP is met for discharges from those facilities,

B) Consider and incorporate cost effective runoff reduction techniques and green infrastructure in the routine upgrade of the existing stormwater conveyance systems and municipal properties to the MEP.

C) Develop, record, periodically assess and modify as needed measurable goals,

D) Select and implement appropriate pollution prevention and good housekeeping BMPs and measurable goals to ensure the reduction of all POCs in stormwater discharges to the MEP, and

E) Adopt techniques to reduce the use of fertilizers, pesticides, and herbicides.

6.3 Watershed Improvement Strategy Requirements

A) Enforce local laws prohibiting improper pet waste disposal and feeding waterfowl on municipal properties.

B) Enforce state regulations requiring the collection and proper disposal of pet waste.

C) Continue to manage and control the local duck/goose population.

6.4 Methodology for Compliance with Permit Requirements

The City is required to perform a self-assessment of municipal facilities and operations as specified in Part VII.A.6.a.ii of the permit once every three years. The City is currently in the process of reviewing/implementing BMPs that address the pollutants of concern that may be generated from City's facilities. BMPs that were previously implemented include road and stormwater structure maintenance efforts, limiting the use of fertilizers and pesticides, employee good housekeeping training, and adoption of local laws relating to the cleanup of pet waste (City Code 101-25) and the feeding of waterfowl (City Code 112-3).

The City or its representative will perform self-assessments as required by the permit using the City's standard site assessment inspection checklist. The self-assessment will include a site visit(s) to each required location and discussions with City personnel concerning the facilities and procedures currently in place. All assessments will be documented and kept on file in the Engineering Department.

6.5 Best Management Practices Implemented or Underway

6.5.1 Current Practices

Parking Lot and Street Cleaning

The City is responsible for maintaining the public roads as well as municipal parking lots. As part of its comprehensive maintenance program, the Department of Public Works sweeps all public roads and parking lots each spring at the conclusion of winter sand and salt operations. During the spring and summer months, the Inner City District streets are swept as needed. The Downtown Business district and other tourist areas (i.e. Saratoga Horse Track) are swept on a regular basis throughout the summer months. The City prioritizes the sweeping schedule based on areas of concern and begins sweeping as soon as the "snow melts" which reduces the amount of potential pollutants entering surface waters.

The policy is to separate sweepings into two categories, a "fill" category and a "trash contaminated" category requiring proper disposal at a solid waste facility. Downtown sweepings generally fall into the trash category while sweeping from other sections of the City are generally handled as fill material.

The City currently has two Elgin "pelican" mechanical sweepers that are in excellent condition and are included in the annual DPW Fleet Maintenance Program.

Storm Drain System Cleaning

The City attempts to inspect/clean approximately 200 structures per year. During inspection, sediment and debris is removed using a vacuum truck. Some inspections are based on public complaints. Storm sewer pipes that experiences surcharge conditions are flushed to help remove sediment and debris. If the condition continues, a video of the pipe is used to identify the problem. The problem is addressed through repair, replacement and/or root removal. During cleaning and inspections (dry flow), the DPW staff looks for evidence of illegal discharges/dumping or illicit connections. The staff typically:

- Looks for spills such as paint or oil, discoloring, surface sheen, etc.,
- Checks for any odors not typically associated with drainage systems,
- Tracks potential pollution back to source and conducts investigation.

Illegal dumping control is important in preventing contaminated runoff from entering drainage systems and eventually surface runoff. The City currently conducts a Household Hazardous Waste Collection Day approximately every two years. This helps prevent waste from being dumped into catch basins and ensures it's disposed of properly. No Dumping signs have been posted in areas where dumping has previously occurred and a Public Complaint Form is utilized by the City.

Municipal Landscape Practices

The City has instituted guidance to reduce the amount of fertilizers and pesticides used on City owned properties. Commercial fertilizers experience limited use in the City's landscaping operations. When needed, it is applied per manufacturer's instructions and during dry weather. Plant/flower fertilizer is soluble, contains minimal phosphorus, and is mixed at low concentrations. Grass applications (granular) at limited locations occurs once in the spring and fall. The City has a certified application specialists on staff who assures that any pesticides are handled, stored and disposed of in accordance with the manufacturer recommendations. The City currently uses various procedures to help minimize exposure such as:

- Do not apply if rain is expected or in windy conditions,
- Do not prepare or mix fertilizers/pesticides near storm drains or on impervious areas,
- Prepare the minimum amount required at the lowest application rate,
- Calibrate application equipment,
- Purchase only a reasonable amount of fertilizer/pesticide to avoid storage.

Landscapes waste must be safely stored and disposed of without the risk of entering the water systems. Landscaped waste material (leaves, clippings, weeds) generated by the DPW is immediately collected by crews and transported to the City's compost facility. Seasonal spring and fall yard waste generated by residents is collected and transported to the City's compost facility. These materials are converted to mulch and used for municipal planting and landscaping as well as available for purchase by private citizens and businesses.

Local nurseries and landscape professionals are consulted to assist in determining appropriate selection of flowers and tree types to be planted. During lawn mowing operations, the grass is cut not shorter than 3 inches. For private developments, the City Planning Board requires a landscaping plan be developed by a professional that promotes natural vegetation, minimizes erosion and reduces water loss. Natural features and vegetation are also protected to the extent possible.

Municipal Vehicle Fueling

The objective is to reduce the potential discharge of pollutants through source control and BMP implementation. Successful implementation depends on effective training of employees and general pollution prevention strategies.

The fueling island is located adjacent to the manned dispatch office and is monitored during normal business hours. The dispensing nozzles do not have a “hold-open” latch but do have automatic shutoffs. The fueling island is protected from the weather by an overhanging roof and has a concrete surface. All of the fueling tanks are located above ground within secondary containment basins and are equipped with overflow alarms. There is a secondary containment system used (concrete dike) when transferring fuel from tank trucks to the fuel tanks. The area uses dry cleanup methods such as absorbents for leaks/spills, and sweeping for removal of litter and debris. The fueling area is designed so that stormwater runoff is directed away from it. Signs are posted at the island to warn of “topping off” vehicle fuel tanks.

Spills and leaks that occur during vehicle and equipment fueling can contribute pollutants to stormwater runoff. Employees from the DPW facilities and operations attended a training session in Feb. 2016 to review various aspects of stormwater pollution prevention. Updated training is scheduled for every three years or sooner for new employees. The primary focus of employee training is focused on containment of spills and cleanup. The mechanic supervisor currently performs a monthly inspection of the above ground storage tank system. The tanks and containment systems are inspected for corrosion, leaks and other physical damage. A qualified professional also conducts a periodic inspection of the fuel station and distribution system to ensure proper operation per PBS regulations. All valves are labeled to reduce human error and automatic shutoff valves are in place.

Any waste/litter collected at the fueling station is placed in trash barrels with plastic bags and is collected daily. Spot clean leaks and drips routinely to prevent movement of the oil/fuel.

Municipal Vehicle and Equipment Repair

Common activities at municipal maintenance shops include part replacement, vehicle fluid replacement, and equipment repair. Fluid spills and improper disposal of materials can result in pollutants and other materials entering surface waters which could cause an environmental risk. To prevent this, all City maintenance facilities employ “dry shop” techniques.

The city currently does this by having all maintenance activities performed inside at their Public Works Mechanics garage. All material that makes its way to the floor drain(s) is directed to an oil/water separator and then to the sanitary sewer treatment facility.

A solvent service supplies parts and cleaning materials and picks up the “used” solvent. Dry cleaning techniques (Speed-Dri, absorbent pads) are used to cleanup spills or leaks. The City mechanics are trained to properly handle and dispose of oils, fluids and cleaners.

The mechanics supervisor manages the purchase of cleaners/solvents/oils to limit the amount of on-site storage. Bio-degradable degreasers are used to clean equipment parts and non-chlorinated brake clean is also used. A parts cleaning station is provided inside the garage and used solvent is collected by a recycling contractor. Used oil, fluids and antifreeze are recycled.

Any necessary work outdoors (vehicle break down) will require storm drain protection (drain mat) and immediate cleanup of spills using “dry-clean” methods (Speed-Dri, absorbent pads).

The City currently maintains two pieces of equipment at the compost yard which require on-site maintenance because of their large size and transport limitations.

The City practices “Good Housekeeping” methods. This includes indoor maintenance activities, recycling used oils, solvents and antifreeze. Used batteries are stored on appropriate shelving and recycled. All fluids are promptly transferred to recycling drums or containers to prevent spills. Employees receive training on pollution prevention, spill response, reinforcement of proper disposal practices and routine equipment checks to cleanup any leaks and scheduled repairs. The DPW garage facility schematics are located in the SPCC plan and are updated, as needed, to accurately reflect the fuel storage and piping systems.

Employees are currently trained in the proper handling and disposal/recycle of engine fluids and waste materials. A training log is kept by the Engineering department that includes dates, content and attendance.

Road Salt Application and Storage

Many of the problems associated with contamination of local waterways stem from the improper storage of deicing materials. Salts are very soluble when they come into contact with stormwater. They can migrate into the ground water and contaminate surface waters.

The City stores its salt in a salt barn at the DPW garage facility. The covered salt shed reduces the salt loss from stormwater runoff and contamination to surface waters.

The City currently regulates the amount of salt placed on streets, roadways, and parking lots. It also has begun adding sand to help reduce the amount of salt used. Calibration devices currently mounted in the cabs of the spreader trucks help insure that the correct amount is placed. Alternative materials, such as sand are used in sensitive areas. The City has also experimented with using a liquid additive to reduce the amount of salt.

Employees are trained in the use of the spreader trucks and how the units work. Additionally, employees make every effort to minimize any spills during the loading process.

Municipal Vehicle and Equipment Washing

Wash water from vehicle and equipment cleaning activities performed outdoors or in areas where wash water flows onto the ground can contribute contamination to surface waterways.

The City uses two designated indoor bays to wash all equipment. Floor drains flow to an oil-water separator (OWS) which discharges to the sanitary sewer system. Bio-degradable, non-toxic, OWS-friendly detergents are supplied to wash water using a metered, automatic feed system. Any debris/sediment is removed from the wash bay and placed in a trash container located in the covered bay area.

Employee training and education remains a priority in reducing the pollutants in the wash water. Insuring that the wash water is directed to the floor drains is critical to the overall success.

Hazardous Material Storage

Failure to properly store hazardous materials dramatically increases the probability they will end up in local waterways.

The City currently stores hazardous materials indoors to protect them from the weather and vandalism. All material is stored in secure containers and/or in original containers. Certain hazardous materials are stored in secondary containment areas. All areas are kept clean and free of any other materials.

Hazardous waste shall be placed in appropriate containers for disposal and to be closed tightly when not in use. Wastes are not to be mixed and washout water or any other liquid is to be placed in the containers. Only appropriate solid wastes are to be added to solid waste containers. Certain wastes such as hazardous wastes, appliances, fluorescent lamps, pesticides, etc. may not be disposed of in solid waste containers. Different types of waste shall not be stored or mixed as this can cause chemical reactions and make recycling impossible and complicate disposal.

The City periodically conducts a Household Hazardous Waste Collection Day where the DPW has the opportunity to collect various unused hazardous wastes such as paints, solvents and pesticides. Paints, solvents and similar materials are then collected and disposed of by a hazardous waste disposal company.

Spill Response and Prevention

A spill prevention and control plan should effectively reduce the risk of surface and ground water contamination. Improper storage and handling of solid wastes, hazardous materials and pesticides can allow these toxic compounds, oils/grease and pollutants to enter stormwater runoff.

The City currently has a Spill Prevention Control and Countermeasure Plan (SPCC) in place for the fueling delivery system at the DPW garage. It is located in the dispatch office with response signs located near the tank locations. A Spill Prevention Report (SPR) for chemical storage at the Excelsior Avenue Water Treatment Facility is also in place for the facility.

By recycling, reclaiming, or reusing process materials, the amount of materials that are onsite can be reduced. Inspections and maintenance on tanks, valves, pumps and other equipment can prevent spills.

The City has personnel that have been trained in the techniques used to control spills. Training is updated as required.

Municipal Facilities Management

Management of the City's facilities and operations is critical to preventing any unwanted contamination to the local surface waterbodies. Stormwater runoff from building and grounds maintenance can be contaminated with solvents, fertilizers/pesticides, suspended solids, etc.

The City currently conducts building maintenance activities in such a manner to insure they do not impact the stormwater system or local water bodies. Any outside building cleaning is done with pressure washers without detergents or chemical agents. Washing on any paved surface is not allowed. Filter fabric is placed in susceptible storm drains.

Drop clothes/tarps are used to collect any drops during painting operations. Only the appropriate amount of paint and solvent (if needed) are brought to each site to limit potential exposure. All materials are stored under cover. Water-based paints are preferred and cleanup is directed to the sanitary sewer. When working near storm drains, they are protected by appropriate methods.

Mowing, trimming and landscaping activities shall be conducted in a manner as to prevent debris from entering the storm sewers. Leaves, sticks, landscape wastes are collected and taken to the City's compost facility. Soil disturbances are to be seeded and mulched to control erosion. Stocking of landscape waste shall be covered until it can be removed from the site. Fertilizers, etc. shall only be applied according to the manufactures recommendations.

Preventing the discharge of possible pollutants such as trash, suspended solids, hydrocarbons, oil and grease, etc. from entering the City's storm sewer system is a priority. Currently litter is controlled by the DPW's aggressive policy of daily inspections of City owned parking lots and other municipal areas. These areas are kept clean from litter and other foreign substances. Litter receptacles (garbage cans) are provided throughout the downtown area while no littering signs are posted and anti-littering laws are enforced. Garbage cans are emptied on a regular basis.

6.5.2 Equipment List Inventory

The City maintains a list of all vehicles, machinery and equipment. The list is compiled by the individual departments (Public Safety and Public Works) to which fleets and equipment is assigned.

6.5.3 Pet Waste Ordinance

The City Code includes a provision to control pet waste that requires pet owners on public property to immediately pick up after pets and properly dispose of the animal waste in an appropriate receptacle. Signs have been posted as necessary.

6.5.4 Feeding of Waterfowl Law

Feeding waterfowl may cause water quality problems due to increased fecal coliform loading. In order to protect the public health, safety and welfare, the City passed a local law prohibiting the feeding of waterfowl on City property. Signs have been posted as necessary.

6.6 Best Management Practices for Future Consideration

The City seeks to improve its SWMP by considering facility improvements and new management practices that can lessen the potential for stormwater pollution impacts. The MS4 self-assessment process has been incorporated as a working tool during the review procedure.

This is intended to stimulate innovation and create additional opportunities for BMP implementation in the future

6.7 Measurable Goals

The City regularly evaluates municipal facilities to determine if BMPs are being properly implemented, therefore minimizing the potential for pollutants to enter local water bodies.

The City continues to evaluate and upgrade wherever possible both training practices for municipal employees and the implementation of storm water control BMPs at municipal facilities as improvement strategies are developed, reviewed and gain acceptance.

6.8 Minimum Reporting Requirements

- A) Indicate the municipal operations and facilities that the pollution prevention and good housekeeping program assessed,
- B) Describe the management practices, policies, and procedures that have been developed, modified, and/or implemented and report, at a minimum, on the items below that the covered entity's pollution prevention and good housekeeping program addressed during the reporting year:
 - Acres of parking lot swept,
 - Miles of street swept,
 - Number of catch basins inspected and, where necessary, cleaned,
 - Post-construction control stormwater management practices inspected and, where necessary, cleaned,
 - Pounds of phosphorus applied in chemical fertilizer,
 - Pounds of nitrogen applied in chemical fertilizer, and
 - Acres of pesticides/herbicides applied,
- 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 covered entity shall report on items that will demonstrate program effectiveness.

These elements are covered under the City of Saratoga Springs MS4 Annual Stormwater Reports.

Annual SWMP Evaluation of Program Compliance

The City recognizes that the process of conducting an annual assessment of the Stormwater Management Program, including compliance with MS4 General Permit requirements, is directly related to program planning and annual goal-setting, and that assessment can occur throughout the year to determine whether established goals are being achieved. The City's goals with respect to stormwater generally address the following categories:

- Water Quality Trends,
- Education and Outreach,
- Public Involvement,
- Illicit Discharge Detection and Elimination (IDDE),
- Construction Stormwater Requirements,
- Pollution Prevention and Housekeeping,
- Employee Training,
- Assessment of BMPs, and
- Compliance with MS4 General Permit Requirements.

The City conducts its Stormwater Management Program assessment utilizing a varied approach. Applicable departments are asked to identify goals that they would like to attain as it relates to stormwater and pollution prevention. As the year progresses, the Stormwater Manager communicates with applicable departments to discuss progress toward achieving the identified goals.

In connection with this ongoing assessment, applicable guidance documents are also utilized to effectively evaluate those activities which are successful in reducing pollutant discharges. The City fully anticipates its annual assessment process to continually evolve, and that changes and enhancements may be considered in future years to address specific results and changes in goals.