

TOWN OF BRUNSWICK
STORM WATER MANAGEMENT PLAN



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INTRODUCTION

The Town of Brunswick Stormwater Management Plan has been developed to comply with the New York State Department of Environmental Conservation General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (GP-0-15-002). It is a shared Stormwater Management Plan (SMP) providing policy and management guidance to the Town of Brunswick. The Town of Brunswick is a member of the Rensselaer County Stormwater Coalition (SCWQCC). This program has contributed to the SMP by developing portions of the plan which are common to all agencies involved in the SCWQCC.

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

Public Education and Outreach

Public Involvement / Participation

Illicit Discharge Detection and Elimination

Construction Site Runoff Control Post-

Construction Stormwater Management

Pollution Prevention / Good Housekeeping for Municipal Operations.

Each Minimum Control Measure and the Best Management Practices that have been implemented to maintain compliance with the NYSDEC GP-0-15-002 General Permit are described in the plan. For each Best Management Practice, responsibilities to achieve and sustain compliance are clearly defined.

Portions of the work necessary are provided through the collective efforts of the Rensselaer County Stormwater Coalition members. The remaining work is the responsibility of the Town of Brunswick's designated Stormwater Management Officer. Certain components of this program have been codified into local law. Refer to Town of Brunswick Local Law Number 5 for the year 2007 Stormwater Management and Erosion and Sediment Control and Town of Brunswick Local Law Number 6 for 2007 to Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer Systems. These laws were adopted by the Town of Brunswick in 2007. This Stormwater Management Plan should be updated on an annual basis in order to take into consideration the latest technologies and information to maintain compliance with the NYSDEC GP-0-15-002 General Permit and revisions thereof.

The MS4 General Permit authorizes the Town of Brunswick to discharge pollutants from MS4 outfalls to the Piscawan Kill, Postenkill Creek, Sweetmilk Creek and other unnamed tributaries to the Hudson, the conditions and limitations prescribed in the permit.

STORMWATER MANAGEMENT PLAN

GENERAL DEFINITIONS AND REQUIREMENTS

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

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

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

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

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

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

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

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

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

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

Industrial Waste - Unwanted materials from an industrial operation. It may be liquid, sludge, solid, or hazardous waste.

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

Maximum Extent Practicable (MEP) – a water quality standard that applies to all MS4 operators under

NPDES permits. The standard has no exact definition, as it was intended to be flexible to allow operators to tailor their stormwater programs to their particular site.

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

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

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

National Pollutant Discharge Elimination System (NPDES) – the EPA’s regulatory program to control the discharge of pollutants to waters of the United States.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

LIST OF COMMONLY USED ABBREVIATIONS

BMPs – Best Management Practices

CWA – Clean Water Act

MEP – Maximum Extent Practicable

MS4 - Municipal Separate Storm Sewer

System **NOI** – Notice of Intent

NPS – Non-Point Source Pollutants

NPDES – National Pollution Discharge Elimination System

NYSDEC – New York State Department of Environmental Conservation

SCWQCC – Schenectady County Water Quality Coordinating Committee

SPDES – State Pollution Discharge Elimination System

SWPPP – Stormwater Pollution Prevention Plan

TMDL – Total Maximum Daily Load

USEPA – United States Environmental Protection Agency

SECTION 1 - PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS

Description of Minimum Control Measure

The Public Education and Outreach minimum control measure consists of Best Management Practices (BMPs) that focus on the development of educational materials designed to inform the public about the impacts that stormwater discharges have on local water bodies and the steps that the public can take to reduce pollutants in stormwater runoff. These BMP's describe steps that the public can take to reduce the impact of stormwater pollutants. They also describe how the public, as individuals or collectively as a group, can participate in reducing pollutants and their impact on the environment. The Public Education and Outreach program and BMPs, in combination, are expected to reach all of the constituents within the MS4's permitted boundary. The target pollutant sources are construction site runoff, impacts from new and re-development projects, illicit discharges and other pollutant sources as identified to be of local concern, i.e. approved TMDL parameters.

General Permit Requirements

An MS4 must, at a minimum:

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

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

Pollutants of Concern:

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

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

<u>Pollutant of Concern</u>	<u>Description</u>	<u>Potential Impacts</u>	<u>Probable Local Sources</u>
Pesticides	Pesticide compounds including herbicides, fungicides, rodenticides, and insecticides.	Pesticides may be present in stormwater at toxic levels, even when pesticides have been applied in accordance with label instructions. Accumulation of these compounds in simple aquatic organisms, such as plankton, provides an avenue for biomagnification through the food web, potentially resulting in elevated levels of toxins in organisms that feed on them, such as fish and birds.	Residential and agricultural usage.

Waterbodies of Concern:

<u>Waterbodies of Concern</u>	<u>Pollutants of Concern</u>
Vanderhayden Reservoir, Coopers Pond Hudson River Tributaries	Floatables, Silt and Sediment, Suspended Solids, Pathogens, Oil and Grease, Metals, Oxygen-Demanding Organics, Pesticides

Geographic Areas of Concern:

<u>Geographic Area of Concern</u>	<u>Specific Locational Information</u>	<u>Additional Detail</u>
Hoosick Road and Street corridors	Entire length in Town	Littering, suspended solids
Brunswick Plaza	Hoosick Road	Littering
Walmart Shopping Center	Hoosick Road	Littering
Price Chopper Plaza	Hoosick Road	Littering
Coopers Pond	Ledgestone Ave	Littering, silt & sediment, oil & grease, pesticides, phosphorus
Vanderhayden Reservoir	North Lake Ave	Littering, Silt & sediment, oil & grease, pesticides, phosphorus
Keys Lane Community Center	Hoosick Road	Littering

Target Audiences are included in Section 2 of the Plan.

Non-Stormwater Discharges:

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

- waterline flushing
- landscape irrigation

diverted stream flows
rising ground waters
uncontaminated ground water infiltration into defective pipes or manholes
uncontaminated ground water
discharges from potable water sources
foundation drains
air conditioning condensate
water from crawl space and basement sump pumps
footing drains
water from individual residential car washing
dechlorinated swimming pool discharges
residual street wash water
discharges or flows from fire fighting activities
Any SPDES permitted discharge

Addressing Pollutants of Concern:

How the Town will address pollutants of concern and specific areas of concern is accomplished through the Stormwater Management Program Plan. More specifically, to address these issues it is necessary for the MS4 to undertake several critical stormwater management tasks such as, but not limited to: defining community goals for stormwater management practices; tailoring local laws to meet stormwater management goals and objectives; supporting land use planning and decision making to accomplish the best methods for managing stormwater in developed or developing areas; providing for community education and public participation, and managing municipal operations in a way to reduce pollutants in stormwater.

Methodology for Compliance with Permit Requirements

The Town of Brunswick and the Rensselaer County Stormwater Coalition develop and share many of the BMP's necessary for this MCM. These have included brochures, posters, webpage, education packages, and kiosk display for community events. These BMP's will be updated by the Town of Brunswick and shared with the Rensselaer County Stormwater Coalition on an annual basis and made available to each MS4 members that are part of the Stormwater Coalition.

Best Management Practices

Stormwater Pollution Prevention

Brochures Description / Methodology

Display brochures within municipal buildings, to target contractors, businesses and schools. Specifically, the brochures are available at Town Hall, the Highway Garage office and the library.

Brochures will be distributed through trade associations, public outreach events, and seminars. The Town of Brunswick will display brochures and handouts at public events the Town sponsors such as the summer concert series and farms market.

The number of brochures handed out at events the number events held at each year will be recorded as measurable goals.

Stormwater Management Officer

Brochures on display and available to the public at Town Hall-ongoing

Webpage:

Description / Methodology

Develop a web site designed to educate the public on the impacts of stormwater runoff on local water bodies.

Develop a list of subjects for inclusion and discussion in the website based on consideration of the following subjects:

- Citizen reporting under the illicit discharge and construction programs.

- Water quality impacts of stormwater runoff to local water bodies.

- Steps the public can take to reduce stormwater pollution.

- Public involvement programs.

- Design and publish the website to the internet for public access.

- Develop a website maintenance schedule that is consistent with the implementation schedule of other BMP's included in this SWMP.

Information on the Town's MS4 Program can be found on the Town of Brunswick Web Site page:

Currently, there are links to the 2015, 2016, and 2017 Annual MS4 Reports, NYSDEC stormwater page, EPA Public Education & Outreach on Stormwater Impacts, EPA Homeowner Care of Septic Systems and NYSDEC Create a Rain Garden sites and others.

Stormwater Management Officer

Develop links from the Town website to other storm water websites.

Update and maintain the Town of Brunswick website as necessary.

Develop measurable goals, such as counting number of hits on web pages, comments on Annual Report, etc.

K-12 Education Packages

Description / Methodology/Goals

- Develop and distribute educational materials to school age children in order to foster an early age respect for the environment.

- Publicize environmental education opportunities to local educators regarding pollution prevention and stormwater quality issues to discuss in the classroom.

- Develop age appropriate materials for distribution to local school students.

- Distribute educational materials to local schools.

- Update education materials as necessary to maintain consistency with current standards and to reflect input from school administrators and teachers.

- Maintain records of the number and types of education materials distributed to local schools.

Public Education Display for Community Events

Description / Methodology

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

Stormwater Management Officer

Incorporate stormwater public education into community events or programs. Information targeting stormwater pollution prevention for households will consist of:

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

Procedures for Public Education and Outreach on Stormwater Impacts

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

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

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

<https://www.epa.gov/green-infrastructure> (Public Education and Outreach on Stormwater Impacts - EPA)

http://www.epa.gov/owm/septic/pubs/homeowner_guide_long.pdf (For Homeowner Care of Septic Systems - EPA)

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

5. The website should include a contact number for stormwater related concerns.

SECTION 2 - PUBLIC PARTICIPATION / INVOLVEMENT

Description of Minimum Control Measure

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

General Permit Requirements

An MS4 must, at a minimum:

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

Design and conduct a public involvement/participation program which:

- Identifies key individuals and groups, public and private, who are interested in or affected by the stormwater permitting program.

- Identifies types of input the MS4 would seek from them to support development and implementation of the program and how it is used.

- Describes the public involvement/participation activities the MS4 will undertake to provide program access to those who want it and to gather the needed input. The activities include, but are not limited to a water quality hotline and stewardship activities (stream cleanup, storm drain marking, volunteer water quality monitoring).

- Provides the opportunity for the public to participate in the development, implementation, review and revision of the SWMP.

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

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

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

- The placement of the report on the agenda of this meeting

- The opportunity for public comment

The date and time of the meeting
 The availability of the draft report for prior review
 Recommendations for publicizing this public review opportunity are available from the NYSDEC and EPA websites.

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

Target Audiences:

<u>Target Audiences</u>	<u>Reasons for Including this Audience</u>
Fire Departments	Discharges from fire fighting activities
Schools	Education opportunities
Galesi Group	Industrial Warehousing
Price Chopper	Food storage and distribution facility
Restaurants	Potential grease, litter
Auto Repair & gas stations	Potential oil/grease/fuel spills
Car Washes	Potential phosphorus, detergents
Rotary	Education opportunities, public service
Elks	Education opportunities, public service
VFW	Education opportunities, public service
Apartment & Condo Associations	Education opportunities
Brunswick Senior Citizen's Center	Education opportunities, public service
Churches	Education opportunities, public service
& Brunswick Little Leagues	Education opportunities, public service

Methodology for Compliance with Permit Requirements

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

Best Management Practices

Identify Contact Person for Stormwater
 Program Description / Methodology

Establish a "Stormwater Management Officer" that is responsible for the management of the Town of Brunswick's Stormwater Management Program. A consultant cannot be appointed as Stormwater Management Officer.

Municipal Board

Stormwater Management Officer was established as the Public Works Coordinator in 2005.

Incorporate Feedback Mechanism into Webpage.

Description / Methodology

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

Stormwater Management Officer

Select and implement appropriate public involvement / participation activities and measurable goals to ensure the reduction of POC's in stormwater discharges.

Document input and comments received, and actions taken.

Public Review of Stormwater Management Plan

Description / Methodology

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

Stormwater Management Officer

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

Public Review of Annual Report

Description / Methodology

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

Stormwater Management Officer

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

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

Community Cleanup Event

Description / Methodology

Inform and encourage residents about the many opportunities that exist to participate in area community cleanup events: Household Hazardous Waste Day held once per year by the County; the nationally sponsored Littoral Society "Stream Cleanup"

events that can be organized locally; and locally sponsored, volunteer cleanup activities such as the many Town Park cleanup dates.

Stormwater Management Officer

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

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

Record the number of persons at each event and amount of trash collected.

Additional Information / Resources

Information on the Littoral Society Cleanup event

Storm Drain Stenciling

Description / Methodology

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

The first target area selected was the busiest pedestrian streets, then working into other less busy streets.

Other groups that may be willing to participate in the storm drain stenciling program include:

Local boy and girl scout organizations
Local school groups

Local fund raising groups

Other civic organizations

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

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

Provide necessary support for volunteer storm drain stenciling groups, e.g. stencils, paint, rollers, traffic control, safety equipment, trash bags, and landfill access or bulk litter collection.

Maintain records of storm drain stenciling and volunteer participation.

Annually report on number of storm drains stenciled by volunteers.

Stormwater Management Officer

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

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

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

SECTION 3 - ILLICIT DISCHARGE DETECTION & ELIMINATION

Description of Minimum Control Measure

The Illicit Discharge Detection and Elimination minimum control measure consists of Best Management Practices (BMPs) that focus on the detection and elimination of illicit discharges into the MS4. The BMPs describe outfall mapping and update procedures; the legal authority mechanism that will be used to effectively prohibit illicit discharges; enforcement procedures and actions to ensure that the regulatory mechanism is implemented; the dry weather screening program and procedures for tracing and locating the source of an illicit discharge; procedures for locating priority areas; and procedures for removing the source of the illicit discharge.

General Permit Requirements

An MS4 must, at a minimum:

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

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

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

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

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

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

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

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

- Waterline flushing
- Landscape irrigation
- Diverted stream flows

Rising ground waters

- Uncontaminated ground water infiltration
- Uncontaminated pumped ground water
- Discharges from potable water sources
- Foundation and footing drains
- Air conditioning condensate
- Irrigation water

Springs

- Water from crawl space and basement sump pumps
- Lawn watering runoff
- Water from individual residential car washing
- Flows from riparian habitats and wetlands
- De-chlorinated swimming pool and water reservoir discharges
- Residual street wash water
- Discharges or flows from fire fighting activities
- Any SPDES permitted discharge

Methodology for Compliance with the Permit Requirements

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

Best Management Practices

Outfall Mapping

Description / Methodology

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

Additional Information / Resources

- Schenectady County MS4 Cooperative Coordinated Outfall Reconnaissance Inventory Form (see appendix D)
- Minimum Data Entry Requirements for Outfall Inspection/Monitoring, EPA
- Visual Inspection of Outfalls Physical Conditions, EPA
- Guidelines for Visual Inspections of Stormwater Outfalls

Updating Outfall Mapping/Outfall Information Management

Description / Methodology

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

Update the outfall map as necessary with additional outfalls that have been added to the system. In 2013, the urbanized area within the Town was increased and the Town is pursuing a grant to inspect and add the outfalls in this area to the map and database.

Stormwater Management Officer

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

Additional Information / Resources

Minimum Data Entry Requirements for Outfall Inspection/Monitoring, EPA
Schenectady County MS4 Cooperative Coordinated Outfall Reconnaissance
Inventory Form

Visual Inspection of Outfalls Physical Conditions, EPA

Guidelines for Visual Inspections of Stormwater Outfalls

The Town of Brunswick is in the process of defining the preliminary boundaries of the drainage areas that contribute flow to each outfall. Having the drainage areas defined is helpful in tracking down illicit discharge sources. The County SIMS mapping system has recently added a layer for watershed areas, which covers the Town of Brunswick. This information, along with Town storm sewer mapping and outfall mapping will be used to complete the storm sewer shed mapping.

The Town does not currently have an overall storm sewer system map, which would be the basis for the storm sewershed map. The enclosed map of watersheds within the Town will serve as the base map used to define storm sewersheds. The Town has decided that all catch basins will be located and mapped to be able to accurately establish storm sewersheds and to aid in their IDDE efforts. Schenectady County maintains online GIS mapping of the Town's infrastructure. The Town will purchase a GPS field unit that is compatible with the Schenectady County GIS. As the Town locates the catch basins, they will be uploaded to the County GIS mapping. Highway Department employees will collect the locations of the catch basins as they are inspected and cleaned. It is planned that 20% of the Town's catch basins will be mapped each year. It will require five years to complete this activity in a cost effective manner. The resulting map and inventory will be used to ensure that inspection and maintenance are completed as required.

At a minimum, the Town will complete a desktop assessment of illicit discharge potential. This will include review of zoning district information, outfall mapping data and initial inspection information to rank their outfalls on a three to five tier priority basis. (Example: Very High, High, Medium, Low, Very Low) as to likelihood of an illicit discharge. The guidance to assist in determining these priorities will be, at a minimum, based on consideration of the following characteristics:

Identified or known illicit discharge

Watershed mapping review

Outfalls to a U. S. Waterbody over internal outfalls from one MS4 to another Quality and/or classification of the receiving waterbody

Land use or uses within the drainage area of the outfall (Industrial vs. commercial vs. residential vs. open space vs. agricultural)

Outfall Inspection & Pollutant Source Tracking Procedures

Description / Methodology

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

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

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

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

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

Inspection forms are reviewed and filed.

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

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

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

Discharge will be documented in the Town's computer tracking system and will be investigated by Highway Department personnel.

The Highway Department will use the storm sewer system map to attempt to trace the discharge to its source, using a sewer camera, dye-testing, smoke-testing, and interior building visual inspections, as necessary. If sampling of the storm water for suspected pollutants is necessary, the Town will contract with a lab to obtain proper sample containers and will submit the samples for testing. Test results will be compared with known byproducts from businesses or industrial users upstream from the outfall.

If the source is definitively located, appropriate action will be taken according to Town Code Chapter 270 Article XXIX Illicit Discharges, Activities and Connections to Separate Storm Sewer System.

Any actions taken will be documented in the Town's computer tracking system and included in the annual report.

Stormwater Management Officer

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

Implement enforcement action per the stormwater management ordinance

Customize the spill response plan to meet municipality's needs

Additional Resources:

None

Adopt Stormwater Management Ordinance

Description / Methodology

The Town of Brunswick adopted a stormwater management ordinance to prohibit illicit discharges, and implement enforcement procedures and actions as needed on January 1, 2008.

Stormwater Management Officer

Customize enforcement action procedures to meet Town's requirements

Municipal Board

The Town of Brunswick adopted a stormwater management ordinance on April 27, 2005.

Stormwater Management Officer & Municipal Board

Adjust stormwater ordinances as necessary to maintain compliance with NYS Standards and Requirements.

Addressing Categories of Non-Stormwater Discharges

Description / Methodology

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

Stormwater Management Officer

Develop list of non-stormwater discharges allowed to the MS4

Update non -stormwater discharge list as necessary such that no exempt stormwater discharge is a substantial contribution of pollutants.

Additional Information /

Resources None

Education

Description / Methodology

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

Stormwater Management Officer

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

Track and record public employees that receive IDDE training.

Measurable Goals

Description / Methodology

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

Stormwater Management Officer

Review BMPs annually and update, as necessary.

Tally number of employees that receive IDDE training.

Record the number of letters that are sent to businesses or groups describing what illicit discharges are and how they can be prevented.

Track the number or percentage of outfalls inspected.

Document number of illicit discharge complaints received.

Record number of illicit discharges investigated and found.

Total the number of illicit discharge sources removed.

Input all of the above information into the Town's computer tracking system, so that the program effectiveness can be tracked from year to year.

SECTION 4 - CONSTRUCTION SITE RUNOFF CONTROL

Description of Minimum Control Measure

The Construction Site Runoff minimum control measure consists of Best Management Practices (BMP's) that focus on the reduction of pollutants in any stormwater runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of stormwater discharges from construction activity disturbing less than one acre will be considered if it is part of a larger common plan of development or sale that would disturb one acre or more. The BMPs describe the legal authority mechanism that will be used to require erosion and sediment controls; enforcement procedures and actions to ensure compliance; requirements for construction site operators to implement appropriate erosion and sediment control BMPs; requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter and sanitary waste at the construction site; procedures for site plan review which incorporate the consideration of potential water quality impacts; procedures for receipt and consideration of information submitted by the public; and procedures for site inspection and enforcement of control measures. The stormwater regulations for Construction Site Runoff Control apply to both privately owned and managed projects, and MS4-owned and managed projects. Therefore, the BMP's described in this section have application to both types of projects.

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

General Permit Requirements

An MS4 must, at a minimum:

Develop, implement, and enforce a program to reduce pollutants in any stormwater runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Control of stormwater discharges from construction activity disturbing less than one acre must be included in the program if:

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

If controlling such activities in a particular watershed is required by the NYSDEC.

At a minimum, a program must provide equivalent protection to the NYS SPDES General Permit for Stormwater Discharges from Construction Activities and must include the development and implementation of:

An ordinance or other regulatory mechanism to require erosion and sediment controls

Requirements for construction site operators to implement erosion and sediment control management practices

Sanctions to ensure compliance to the extent allowable by State or local law Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality

Procedures for site plan review that incorporate consideration of potential Water quality impacts and review of individual preconstruction site plans to ensure consistency with local sediment and erosion control requirements

Procedures for receipt and consideration of information submitted by the public

Procedures for site inspections and enforcement of control measures including Steps to identify priority sites for inspection and enforcement based on the nature of the construction activity, topography, and the characteristics of soils and receiving water

Education and training measures for construction site operators regarding the requirement to develop and implement a Stormwater Pollution Prevention Plan (SWPPP) and any other requirements they must meet for construction sites within the MS4's jurisdiction

Methodology for Compliance with Permit Requirements

The Town of Brunswick adopted an ordinance regulating these activities in 2005. This ordinance authorizes the Town of Brunswick to enforce a program that reduces pollutant runoff from construction sites. The Town of Brunswick Planning Board selected TDE shall be responsible for reviewing SWPPP's, and inspecting construction sites. Any violations will be brought to the attention of the CEO and enforcement action shall be taken on developers that do not comply with the regulations. The Town of Brunswick will also provide information on training to developers, contractors, and design engineers in order to inform them of the regulations. Training will also be provided to the Town of Brunswick personnel that will be responsible for inspecting the construction sites and enforcing the permit requirements.

Best Management Practices

Stormwater Ordinance

Description / Methodology

Adopt a stormwater management ordinance to establish minimum stormwater management requirements and controls to protect the general health, safety, and welfare of the public. (Adopted on 4/27/05)

Stormwater ordinance to address issues relating to:

Erosion and Sediment Control

Stormwater Design Requirements

Construction Requirements

Fees for municipal services relating to SWPPP reviews, inspections, and maintenance.

Additional resources:

Review Sample Stormwater Management Local Law developed by NYSDEC.

Modify fee structure for Planning review services relating to SWPPP reviews, inspections, and maintenance.

Municipal Board

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

2005: Adopted stormwater management ordinance.

Stormwater Management Officer & Municipal Board

Revise fee schedule as needed.

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

Additional Information / Resources

NYSDEC Sample Stormwater Management Local Law

Design Requirements

Description / Methodology

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

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

Stormwater Management Officer & Municipal Board

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

Revise design and permitting guidelines as necessary

Additional Information / Resources

General Permit for Construction Activity GP-0-10-002

Stormwater Permit Process Flowchart

Notice of Intent for Stormwater Discharges Associated with Construction Activity, GP-0-10-002

Notice of Termination for Stormwater Discharges Associated with Construction Activity, GP-0-10-002

Interim Strategy for Redevelopment Projects

FAQ's about Technical Requirements of the SPDES General Permit for Stormwater Discharges from Construction Activities

FAQ's about Permit Requirements of the SPDES General Permit for Stormwater Discharges from Construction Activities

Construction Plan & SWPPP Review

Description / Methodology

There are two potential paths for new project reviews in the Town of Brunswick. A project requiring Site Plan Review or Subdivision will go through the Planning Board and a project only requiring a Building Permit will go through the Building Department. In either case, the applicant will be provided with A SWPPP Preparation and Review Checklist (see enclosed) that will help them to develop and submit the proper information to the Town. A SWPPP submitted to the Building Department may be reviewed by Department personnel or a Town Designated Engineer (TDE) may be hired for the review, if over one acre of disturbance is proposed. A SWPPP submitted to the Planning Department will be reviewed by a TDE. Once the TDE has approved the SWPPP, the Supervisor will sign the SWPPP Acceptance Form and provide to the site owner / operator to include with the SWPPP submission to NYSDEC to obtain permit coverage.

Develop a set of criteria to be utilized by the municipality to verify construction plan compliance with local, state, and/or federal construction stormwater regulations.

Prepare a list of approved structural and non-structural BMP's that meets the requirements of the stormwater regulations. This list will identify if the BMP needs to be used in combination with other BMP's in order to completely satisfy the regulations requirements.

Develop internal tracking and plan review procedures to cover the following issues:

- Conformance to local stormwater regulations

- Appropriate use of temporary erosion controls

- Inclusion of any required local, state, and/or federal stormwater permit documents

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

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

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

Stormwater Management Officer

Implement the construction plans review procedures for local construction sites. Notify the owners of construction plans when deficiencies are found in the plans during the review process.

Maintain records of plans reviewed and approved for construction under this program and a list of active construction sites. A record of all stormwater management facilities installed from 2003 to present date is currently being set up in the Town's BAS computer system. This system will be used to track the requirements for inspection and maintenance of stormwater management facilities. As inspections and maintenance is provided at the various sites, records will be kept in the Town's BAS computer system.

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

Notify the local construction community (contractors, developers, engineers, architects) for them to review the draft inspection documents and procedures. Provide notification to the local construction community of the final inspection procedures.

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

Train Town of Brunswick inspection personnel on local construction stormwater regulations and inspection procedures.

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

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

Maintain records of construction site inspections, enforcement actions, and corrective actions performed by local construction site owners and operators.

Additional Information / Resources

Refer to Appendix for Sample Inspection Forms

Project Status Monitoring and Reporting

Description / Methodology

The Town's Department of Public Works is responsible for site inspections and enforcement actions. The Town will hire a TDE (or inspector with proper DEC sponsored erosion and sediment control training) to perform the required SWPPP inspections and complete an inspection report (see enclosed DEC checklist). All active construction sites with a SWPPP will be tracked in the Town's BAS database. Any violations noted on the inspection reports will be brought to the attention of the Department of Public Works so that appropriate actions may be taken, which could include a stop work order and fines. The Town's TDE (or certified inspector) will perform a final site inspection to determine if all work has been completed in

accordance with the approved SWPPP. The Owner or operator of the construction project will then be allowed to submit the Notice of Termination (NOT) to NYSDEC once the Town Supervisor has signed the “MS4 Acceptance” statement on the NOT.

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

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

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

Stormwater Management Officer

The Town’s Department of Public Works is responsible for site inspections and enforcement actions. The Town will hire a TDE (or inspector with proper DEC sponsored erosion and sediment control training) to perform the required SWPPP inspections and complete an inspection report (see enclosed DEC checklist). Priority sites will be identified based on the size of the proposed project, the nature of the site, topography, soil characteristics, receiving water quality and public input. All active construction sites with a SWPPP will be tracked in the Town’s BAS database. Following the start of construction, site inspections shall be conducted by a qualified professional at least every seven calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater per Article XXVI: Erosion and Sediment Control Section 270-215 L. Erosion and Sediment Control Inspection, item 6) of the Town Code. Any violations noted on the inspection reports will be brought to the attention of the Department of Public Works so that appropriate actions may be taken, which could include a stop work order and fines. The Town’s TDE (or certified inspector) will perform a final site inspection to determine if all work has been completed in accordance with the approved SWPPP. The Owner or operator of the construction project will then be allowed to submit the Notice of Termination (NOT) to NYSDEC once the Town Supervisor has signed the “MS4 Acceptance” statement on the NOT.

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

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

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

Additional Information /
Resources Annual Report

Public Review of Design Plans and Construction Projects

Description / Methodology

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

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

Stormwater Management Officer

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

Stormwater Management Officer or Planning Department

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

Additional Information / Resources

None

Education and Training Measures for Construction Site Operators

Description / Methodology

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

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

The Town of Brunswick has set the following procedures for the enforcement of construction operator training. This section shall be modified and expanded as necessary.

1. The Town will create a directory of contracting companies that typically work in the Town. The contractors included in this list have typically worked for either the Town or developers.
2. A letter will be sent to each of the contracting companies identified on the list that notifies them of the requirement to attend training prior to the start any construction within the Town.
3. At the pre-construction meeting for each project, the Town will require proof of training prior to the start of work at the site.

SECTION 5 - POST-CONSTRUCTION STORMWATER MANAGEMENT

Description of Minimum Control Measure

The Post-Construction Stormwater Management minimum control measure consists of Best Management Practices (BMP's) that focus on the prevention or minimization of water quality impacts from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale that discharge into the Town of Brunswick system. The BMP's describe structural and/or non-structural practices; the legal authority mechanism that will be used to address post-construction runoff from new development and redevelopment projects; and procedures to ensure long term operation and maintenance of BMP's.

General Permit Requirements

An MS4 must, at a minimum:

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

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

Ensure adequate long-term operation and maintenance of management practices, including monitoring to determine whether the practices are reducing the discharge of pollutants to the maximum extent practicable.

Develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre. This includes projects of less than one acre that are part of a larger common plan of development or sale, or that have been designated by the NYSDEC to protect water quality, and to control water quantities that discharge into an MS4. The program must ensure that controls are in place that would protect water quality and reduce the discharge of pollutants to the maximum extent practicable. The Town of Brunswick will follow applicable guidance available from the NYSDEC or EPA.

Consider smart growth principles, natural resource protection, impervious area reduction, riparian buffers, low impact development, better site design and green infrastructure practices to reduce the discharge of pollutants to the MEP.

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

Methodology for Compliance with Permit Requirements

The Town of Brunswick has adopted an ordinance that authorizes them to enforce a program that reduces pollutant runoff from newly developed and redeveloped sites.

The Town of Brunswick will be responsible for inspecting the sites for proper operation and maintenance and enforcing the permit requirements for properties that are not in compliance. In this manner, the Town of Brunswick can ensure adequate long-term management practices for both public and private facilities.

Best Management Practices:

Stormwater Ordinance

Description / Methodology

Adopt a stormwater management ordinance to establish minimum stormwater management requirements and controls to protect the general health, safety, and welfare of the public. (completed 2005)

Stormwater ordinance to address issues relating to:

Erosion and Sediment Control

Stormwater Design Requirements

Construction Requirements

Fees for municipal services relating to SWPPP reviews, inspections, and maintenance.

Municipal Board

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

Adopt stormwater management ordinance.

Provide notification to the local construction community on the adoption of the stormwater management ordinance.

Stormwater Management Officer & Planning Board

Revise the fee structure, enforcement, penalties and ordinance as needed.

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

Additional Information / Resources

NYSDEC Sample Stormwater Management Local Law

Inspection Program for Newly Developed and Redeveloped Sites

Description / Methodology

Develop an inspection program for newly developed and redeveloped sites for compliance with the post-construction regulations.

Develop a list of items to incorporate in the inspection of project sites based on the final post-construction runoff control regulations including consideration of the following:

Construction of controls according to approved development plans and specifications.

Adherence to any legal commitment to operate or maintain permanent stormwater quality structures.

Conformance to open space and landscaping requirements.

Conformance to local development standards.

Develop post-construction inspection forms and procedures. Develop internal tracking procedures for tracking development projects that are under construction and/or have been completed.

A record of all stormwater management facilities installed from 2003 to current date is being set up in the Town's BAS computer system. This system will be used to track the requirements for inspection and maintenance of stormwater management facilities. As inspections and maintenance is provided at the various sites, records will be kept in the Town's BAS computer system. The Highway Department will use the materials in this directory to perform the inspection and maintenance at the sites.

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

Inspect qualifying project sites using adopted inspection forms and procedures to ensure conformance with local post-construction runoff regulations. Issue enforcement actions to owners or operators of local development projects that are not in compliance with local post-construction runoff regulations. Maintain records of development project site inspections, enforcement actions, and corrective actions performed by local development project owners.

Stormwater Management Officer

Develop a list of projects that qualify for inspection under local post-construction runoff regulations.

Inspect qualifying development project sites using adopted inspection forms and procedures to ensure conformance with local post-construction runoff regulations.

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

Additional Information / Resources

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

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

The Town of Brunswick has set the following procedures for the inspection and maintenance of post-construction stormwater management areas. This section shall be modified and expanded as necessary.

1. A directory of Town and privately owned Post-Construction Stormwater Management Areas that have been approved and constructed since March of 2003 shall be maintained in the Town's computer system. This directory will include a list of the sites to be inspected and maintained, site plans depicting the areas to be inspected and maintained at each site, and the Post-Construction Inspection and

Maintenance requirements as noted in the projects Stormwater Pollution Prevention Plans (SWPPPs). As new projects are approved the Town will add the necessary information to the directory to keep it up-to-date.

2. The materials in the Post-Construction directory will be printed for the Town Highway Department. The Highway Department will use the list of sites to record inspection dates, results, and maintenance. Highway Department employees will take the printed materials to each site and review the site conditions. The Highway Department will report any deficiency noted to the Department of Public Works for review before corrective actions are taken. Each site will be inspected yearly.

3. Any maintenance or corrective actions performed will be recorded in the Town's computer system.

Procedures for Receipt and Follow up on Stormwater Related Complaints

The Town of Brunswick has set the following procedures for the Receipt and Follow up on Stormwater Related Complaints. This document shall be modified and expanded as necessary.

1. The website will include a number for the public to call to direct stormwater concerns located within the MS4.

2. The Building Department will document the complaint in the BAS computer system and investigate it with a site visit if necessary.

3. The responsible party will be notified of the required corrective actions, if necessary.

4. A follow up visit will be conducted as necessary and the results will be recorded in the BAS computer system.

SECTION 6 - POLLUTION PREVENTION / GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

Description of Minimum Control Measure

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

General Permit Requirements

An MS4 must, at a minimum:

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

Follow management practices identified in the *NYS Pollution Prevention and Good Housekeeping Assistance Document* or other equivalent guidance materials available from the EPA, New York State, or other organization. Examples of the *NYS Management Practices Catalogues* available include Roadway and Right-of-Way Maintenance, Marine Operations, and Hydrologic Habitat Modification.

Methodology for Compliance with Permit Requirements

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

Town properties are inventoried through the Municipal Self-Audits included in the SWMP appendix L.

Self -Audits will be reviewed and updated a minimum of every three (3) years. This will include recording, periodically assessing and modifying measurable goals, as needed. Pollution prevention and good housekeeping efforts will be prioritized based on geographical area, potential to improve water quality, facilities or operations most in need of modification or improvement and the Town's capabilities.

The Town shall conducted a self-assessment of all municipal operations and facilities. These include the following locations:

Town Hall, 336 Town Office Road
Community Center Keyes Lane
North Lake Pump Station 573 North Lake Ave.
Special Sewer Six Sewer Pump Staion
Brunswick Meadows Sewer Lift Station
Walmart Pump Statoin McChesney Ave.

The Town will consider and incorporate cost effective runoff reduction techniques and green infrastructure in the routine upgrade of the existing stormwater conveyance systems and municipal properties to the MEP.

Best Management Practices

Municipal Training Program

Description / Methodology

Develop a program that provides training to each member of the municipality whose work may potentially impact stormwater. This includes highway, water, buildings and grounds, sewer, and parks and recreation departments. The training program will be developed such that all pertinent personnel are trained.

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

In addition, all Town employees should be aware of the MS4 program and its requirements including how to identify and report illicit discharges and practice good housekeeping procedures.

If at all possible, training will be held in conjunction with neighboring municipalities and/or Schenectady County.

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

Training attendance records will be retained and included in the annual report.

Administrative personnel including SMO/DPW Supt. & Building Inspectors should also receive additional training related to the administration of the MS4 program and contractor education.

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

Stormwater Management Officer & Department Heads

Identify which municipal employees will be trained.

Stormwater Management Officer

Ensure Refresher training for new employees.

Additional Information / Resources

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

Landscaping and Lawn Care

Description / Methodology

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

Grass on Town property is mowed with mulching mowers (clippings are not bagged). Fertilizer will be used only in minimum quantities necessary.

All fluids with the potential to harm surface waters will be stored with appropriate secondary containment. This includes indoor storage tanks for heating oil.

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

Fertilizers

- Leaf litter and tree trimmings

- Litter and floatable materials

- Equipment fluids

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

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

Use slow release or naturally derived (organic) fertilizers.

Train employees in the proper application of lawn care products. Evaluate methods for containing and/or composting trimmings and grass clippings.

Develop zero input/low input lawns.

Consider alternative landscape techniques (i.e. naturescaping, xeriscaping).

Plant trees away from sewer lines or other underground utilities.

Use drip irrigation techniques for landscaping.

Report annually on the activities conducted under this program.

Pounds of phosphorus and nitrogen applied in chemical fertilizer. Acres of pesticides / herbicides used.

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

Develop an inventory of all Town owned landscaping and lawn care areas.

Establish monitoring program to identify problems during the early stages.

Establish a maintenance program to accomplish the following:

Minimize/eliminate fertilizer application

Leaving grass clippings on lawn

Watering lawns no more than 1 inch per week

Mowing with sharpened blades set at or higher than 3

inches. Watering plants before 10 AM.

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

Review monitoring and maintenance program and revise as necessary. Additional Information / Resources

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

Vehicle/Equipment Maintenance

Description / Methodology

Maintain municipal owned vehicles according to manufacturer's specifications and identify and eliminate vehicle fluid leaks.

Develop and maintain an inventory of municipal owned vehicles. Conduct routine maintenance on all vehicles according to manufacturer's specifications.

Conduct maintenance indoors whenever possible.

For maintenance performed outside, guard against spillage of materials that could discharge to storm receivers.

If possible, seal floor drains that discharge directly to the environment. If not possible, obtain wastewater discharge permits from regulatory agency.

Initiate single purpose use of vehicle bays – dedicate one (or more) bays that have no (or sealed) floor drains for repairs/maintenance

Clean up spilled materials immediately, using "dry" methods

Install pretreatment systems (oil/water separators) where necessary in sewer lines to capture contaminants (oil, grit), and maintain as needed

Never leave vehicles unattended while refueling

Identify appropriate recycling/disposal options for wastes

During routine maintenance of Town owned vehicles, inspect vehicles for the presence of fluid leaks.

Schedule repairs for vehicles determined to have fluid leaks.

Maintain vehicle maintenance records and document fluid leak repair activities. Require vehicle operators to conduct daily inspections of vehicles to check for fluid leaks.

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

Public Works Coordinator

Develop and maintain an inventory of municipal owned vehicles.

Conduct routine inspection on all municipal vehicles according to manufacturers' specifications, also inspecting vehicle for the presence of fluid leaks.

Schedule repairs for vehicles determined to have fluid leaks.

Require municipal vehicle operators to conduct daily inspections of vehicles to check for fluid leaks.

Review vehicle inspection and maintenance records to evaluate conformance to vehicle manufacturer service specifications and local stormwater program requirements.

Additional Information / Resources

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

Vehicle/Equipment Maintenance & Washing

Description / Methodology

Wash and maintain municipal owned vehicles and equipment to prevent discharge of pollutants to the municipal storm sewer system or local waterbodies.

Initiate single purpose use of vehicle bays - dedicate only one bay for washing (with floor drain system, oil water separator and sanitary sewer connection).

Perform cleaning with pressurized cold water, without the use of soaps, if wastewaters will flow to a storm sewer system.

Use minimal amounts of biodegradable soaps only if wastewaters will discharge to a sanitary sewer system.

Rinse with hoses that are equipped with automatic shutoff devices and spray nozzles.

Steam clean (without soap) where wastes can be captured for proper disposal (i.e. oil/water separator).

An inventory of Town vehicles by department will be updated yearly by department heads.

The majority of Town vehicles are maintained at the Highway garage. Yearly inspections and select maintenance is handled by local garages.

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

Look into providing each DPW vehicle with a spill response kit for spills that may take place in the field.

Any building where vehicles are stored indoors also has a spill kit.

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

Public Works Coordinator

Inspect floor drain systems regularly – use only those that discharge to a sanitary sewer or that are permitted by the regulatory agency. Identify the need for cleaning of catch basins, oil/water separators.

Perform steam cleaning or pressure washing where wastes can be captured for proper disposal.

Additional Information / Resources

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

Buildings & Grounds Maintenance

Director of Parks

Building Maintenance

Description / Methodology

Conduct building maintenance activities such that they do not impact the stormwater systems and local water bodies.

Develop a list of the maintenance activities required inside and outside of each municipal building.

Identify which activities have an impact on stormwater.

Develop mitigation measures for each activity that impacts stormwater. Review the maintenance activity list on an annual basis to determine if any improvements are necessary.

- Implement the mitigation measures for each activity.

- Review the maintenance activity list and update as necessary.

- Review the mitigation measures for each activity and revise as necessary.

Additional Information / Resources

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

Hazardous and Waste Materials Management

Description / Methodology

Prevent the discharge of hazardous and waste materials from impacting municipal stormwater systems and local waterbodies.

Ensure that all materials are stored in closed, labeled containers – if stored outside, drums should be placed on pallets, away from storm receivers –inside storage areas should be located away from floor drains.

Eliminate floor drain systems that discharge to storm drains.

Use a pretreatment system to remove contaminants prior to discharge to sanitary sewers.

Reduce stock of materials “on hand” – use “first in/first out” management technique.

Use the least toxic material (i.e. non hazardous) to perform the work. Install/use secondary containment devices where appropriate.

Eliminate wastes by reincorporating coating/solvent mixtures into the original coating material for reuse.

Recycle materials if possible, or ensure proper disposal of wastes

Public Works Coordinator

Develop an inventory of existing hazardous and waste materials and their storage locations.

Develop a plan for proper storage of hazardous and waste materials that are not currently stored properly.

Inspect material storage areas (inside and outside).

Inspect cleaning of oil/water separators by qualified contractor.

Inspect stormwater discharge locations (for contaminants, soil staining, plugged discharge lines).

Repair or replace any leaking/defective containers, and replace labels as necessary.

Maintain caps and/or covers on containers.

Maintain aisle space for inspection of products/wastes.

Additional Information / Resources

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

Operational By Products/Wastes

Description / Methodology

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

Post “no dumping” signs.

Illuminate area if possible.

Prevent access – erect barriers.

Identify the by products/wastes that should be recycled (i.e. paper,

cardboard) or can be legally disposed of on municipal lands (i.e. deer carcasses) by referencing NYSDEC regulations (6NYCRR PART 360)

Public Works Coordinator

Regularly schedule inspections - for maintenance concerns

Coordinate with police for unscheduled patrolling of dump areas.

Additional Information / Resources

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

Spill Response and Prevention

Description / Methodology

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

- Evaluate each Town owned facility and determine if Spill Prevention Control and Countermeasures Plans (SPCC) are required.

- Develop and/or maintain SPCC plans for Town owned facilities that require plans.

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

 - Conduct employee training.

 - Maintain spill prevention equipment.

 - Keep all materials properly stored in closed, labeled containment systems. Use secondary containment systems where appropriate.

 - Obtain spill recovery materials for immediate response to a spill. Maintain SPCC records.

 - Update and re-certify the SPCC plan according to SPCC regulations

 - Annually report on the number of facilities with SPCC plans and the current status of each SPCC plan.

Highway Superintendent

Inspect secondary containment systems and oil/water separators

- Inspect containers for leaks, areas near storm receiver inlets and outlets, floor drains for indication of spills.

 - Pump out oil water separators as needed.

 - Protect drains with oil absorbent materials

 - Clean out receivers on regular schedule

 - Remove spilled salt from salt loading area

 - Maintain cover over salt storage pile

Additional Information / Resources

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

Roadway and Bridge Maintenance

Description / Methodology

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

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

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

Revise roadway maintenance specifications according to identified alternative practices.

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

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

Pave in dry weather only.

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

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

Consider porous asphalt for pothole repair and shoulder work.

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

Maintain roadside vegetation; select vegetation with a high tolerance to road salt.

Control particulate wastes from bridge sandblasting operations.

Clean out bridge scuppers and catch basins regularly.

Direct water from bridge scuppers to vegetated areas.

Mechanically remove (i.e. sweep) debris from bridge deck and structure prior to washing

Additional Information / Resources

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

Road Salt Storage and Application

Description / Methodology

Salt is stored under a tarpaulin at the Town Highway Facility located on Duanesburg Road. No salt should be stored outside of the cover and only as much salt as needed should be stored on the site.

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

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

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

Salt spreaders will be calibrated as necessary.

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

Highway Superintendent

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

Inspect salt piles for proper coverage, tarps for leaks or tears. Replace tarps as needed.

Inspect salt application equipment.

Inspect salt regularly for lumping or water contamination.

Inspect surface areas for evidence of runoff – salt stains on ground near and around the salt shelter, loading area, or downslope.

Inspect for excessive amounts of salt on roads.

Inspect equipment to verify proper operation. Service trucks and calibrate spreaders regularly to ensure accurate, efficient distribution of salt.

Additional Information / Resources

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

Catch Basin and Storm Drain System Cleaning

Description / Methodology

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

Develop a catch basin cleaning schedule and document disposal location.

Maintain a cleaning log to track dates when basins are cleaned.

Develop a storm system map to ensure all basins are cleaned and to plan the cleaning route. The cleaning log provides for reporting any illicit discharges along with documenting the condition of storm basins and pipes. Any repairs will be made as time allows.

Review the catch basin cleaning schedule on an annual basis.

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

- Sealed to prevent discharge

- Permitted by NYSDEC

- Discharged to sanitary sewers

- Repair/replace storm drain receiver and catch basin receiver grates as necessary.

Public Works Coordinator

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

Additional Information / Resources

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

New Construction and Land Disturbance

Description / Methodology

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

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

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

Minimize compaction of soils

Minimize impervious cover Maximize opportunities for infiltration

Install sediment control devices before disturbing soil

Limit grading to small areas

Stabilize site to protect against sediment runoff Protect against sediment flowing into storm drains Maintain

native vegetation (especially near waterways) Install sediment barriers on slopes or divert stormwater

Provide additional training as necessary to the municipal work crews.

Additional Information / Resources

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

Hydrologic Habitat Modification

Description / Methodology

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

Identify any potential habitat modification to the NYSDEC and USACOE.

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

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

Provide additional training as necessary to the municipal work crews.

Street Cleaning and Maintenance

Description / Methodology

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

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

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

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

The disposal location for street sweeping should be documented.

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

Other things to consider are:

- Perform operations such as paving in dry weather only.

- Prior to road reconstruction, consider/evaluate the use of “shouldered roads” instead of “curbed roads”.

- Maintain roadside vegetation; select plants/trees that can withstand the action of road salt. Direct runoff to these areas.

Director of Parks

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

Provide operation and maintenance for each selected BMP.

Additional Information / Resources

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

Pest Control

Description / Methodology

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

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

- Area of application

- Type of pesticide or herbicide applied
- Purpose of application

- Prepare a pesticide and herbicide application schedule.

- Comply with local, state, and federal regulations associated with pesticide and herbicide application, e.g. licensing regulations.

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

Do not apply pesticides immediately prior to or during rain events

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

Develop zero input, low input lawns

Eliminate food, water, and shelter for pests

Adopt integrated pest management (IPM) techniques

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

Septic System Management

Description / Methodology

Prevent or reduce the discharge of pollutants to stormwater system and natural streams from sanitary and septic waste. This management practice will significantly reduce nutrients, bacteria and viruses, and oxygen demanding substances.

Property owners with septic systems should be informed that the tank should be pumped out regularly (every 3 years) to maintain a healthy system. They should also be advised to learn where their tank and leach field are and to not drive over it, or build over it. Strong chemicals and materials that do not easily degrade should not be flushed down the toilet.

Closed Landfill

Description / Methodology

The closed landfill grounds require maintenance per the closure plan as well as routine leachate tank pumping.

Leachate is hauled with a Town owned tanker truck and is disposed of at the Town's WWTP.

Procedures for Pollution Prevention and Good Housekeeping Personnel and Contractor Training

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

1. The Town will create a directory of all Town personnel and identify employees to receive training. The Planning and Zoning Boards as well as the Highway Department, Parks Department, and Water and Sewer Maintenance Department personnel shall receive training. Additional employees can be added to this list as needs are identified.

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

Procedures for MS4 Annual Assessment

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

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



TOWN OF BRUNSWICK

CONSTRUCTION STORMWATER INSPECTION REPORT

Project Name and Location: _____

Date: _____ Entry Time: _____ Exit Time: _____

Weather Conditions: _____

On-site Representative(s): _____ Phone #: _____

INSPECTION CHECKLIST

Required On-site Documentation

Yes No N/A

1. Is a copy of the NOI posted at the construction site for public viewing?
2. Is an up-to-date copy of the signed SWPPP retained at the construction site?
3. Is a copy of the SPDES General Permit retained at the construction site?

SWPPP Content

Yes No N/A

4. Does the SWPPP describe and identify the erosion & sediment control measures to be employed?
5. Does the SWPPP provide a maintenance schedule for the erosion & sediment control measures?
6. Does the SWPPP describe and identify the post-construction SW control measures to be employed?
7. Does the SWPPP identify the contractor(s) and subcontractor(s) responsible for each measure?
8. Does the SWPPP include all the necessary contractor certification statements?
9. Is the SWPPP signed/certified by the permittee?

Recordkeeping

Yes No N/A

10. Are inspections being performed as required by the permit (every 7 days or after significant rain event)?
11. Are the site inspections being performed by a qualified professional?
12. Are all required reports signed/certified by the permittee?
13. Does the SWPPP include copies of the monthly/quarterly written summaries of compliance status?

Visual Observations

Yes No N/A

14. All erosion and sediment control measures have been installed/constructed?
15. All erosion and sediment control measures are being maintained properly?
16. Are there currently more than 5 acres of disturbed soil at the site without prior approval?
17. Have stabilization measures been initiated in inactive areas?
18. Are permanent stormwater control measures being implemented?
19. Was there a discharge into the receiving water on the day of inspection?
20. Is there evidence of turbidity, sedimentation, or oil in the receiving waters? (If yes, complete Page 2)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

OVERALL INSPECTION RATING: SATISFACTORY MARGINAL UNSATISFACTORY

Lead Inspector Name: _____ Signature of Lead Inspector: _____

Water Quality Observations

Describe the discharge(s) [source(s), impact on receiving water(s), etc.]

Describe the quality of the receiving water(s) both upstream and downstream of the discharge

Describe any other water quality standards or permit violations:

Additional Comments:

Photographs Attached

TOWN OF BRUNSWICK



**POLLUTION PREVENTION/GOOD HOUSEKEEPING
FOR MUNICIPAL OPERATIONS
STANDARD OPERATING PROCEDURES**

May 16, 2016

POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS:

STANDARD OPERATING PROCEDURES

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13. STREET CLEANING AND MAINTENANCE
14. ROAD SALT STORAGE AND APPLICATION
15. CONSTRUCTION AND LAND DISTURBANCE

Standard Operating Procedures for:

Landscaping and Lawn Care

Purpose: to prevent contamination of stormwater by minimizing contact with fertilizer and by using innovative landscaping techniques

1.	Plant vegetation that needs minimal amounts of care (i.e. water, fertilizer).	Frequency – At time of initial landscaping
2.	Implement landscaping techniques that minimize water usage.	Frequency – At time of initial landscaping
3.	Water just enough to supplement rainfall – use drip irrigation techniques.	Frequency - Always
4.	Minimize fertilizer application, use slow release fertilizers.	Frequency - Always
5.	Mow with blades set high, leave grass clippings on lawn.	Frequency - Always
6.	Use compost or natural (organic) fertilizers.	Frequency – Whenever possible

Standard Operating Procedures for:

Spill Response and Prevention

Purpose: to prevent contamination of stormwater by using proper washing techniques, proper washing locations, and proper disposal of wash water

1.	Monitor equipment storage areas, materials storage areas, and waste storage areas, checking for: fluid leaks, uncovered containers, and deteriorating labels and/or containers, and correct any problems that are noted.	Frequency- Daily
2.	Inspect secondary containment systems (i.e. oil, fuel storage tanks) as necessary, and empty them as necessary.	Frequency- Monthly
3.	Monitor oil/water separators and their downstream discharges. An oily discharge indicates that the unit is either not functioning properly or needs to be “pumped out”.	Frequency- Monthly
4.	Install oil absorbent materials in floor drains and/or catch basins, and inspect, remove/replace as appropriate.	Frequency- Monthly
5.	Monitor floor drains and storm receiver inlets and outlets for excessive amounts of contaminants, and clean out as necessary.	Frequency- Monthly
6.	Remove spilled salt from salt loading area, and use or store.	Frequency- Monthly
7.	Document any/all inspection activities on the proper forms.	Frequency – Always
8.	In the event of a chemical spill refer to the Town of Brunswick Spill Prevention, Control, and Countermeasure Plan.	Frequency – Always

Standard Operating Procedures for:

Pest Control

Purpose: to prevent contamination of stormwater by pesticides which can be toxic to aquatic life and may contaminate receiving waters

1.	Purchase only enough pesticides for 1 year, and store properly.	Frequency – Always
2.	Adopt Integrated Pesticide Management techniques.	Frequency – Always
3.	Adopt alternatives to pesticides options.	Frequency – Always
4.	Eliminate food, water, harborage for pests by implementing routine inspections.	Frequency – Weekly
5.	Inspect pest traps regularly, remove and properly dispose of dead pests.	Frequency – Daily
6.	Minimize pesticide application, use non toxic/lowest toxicity pesticides - (glue boards).	Frequency – As Warranted
7.	Do not apply pesticides immediately before/during rain events.	Frequency – Always

Standard Operating Procedures for:

Pet Waste Collection

Purpose: to prevent contamination of stormwater via contact with pet related wastes

1.	Check for pet waste (i.e. feces, food wastes) each day.	Frequency – Daily
2.	Remove all pet waste, and dispose of properly. Preferred method of disposal is into a toilet for disposal at either a municipal wastewater treatment plant or a septic system.	Frequency – Daily
3.	Document any/all inspection activities on the proper forms.	Frequency – Always

Standard Operating Procedures for:

Septic System Management

Purpose: to prevent contamination of stormwater that may contact septic system effluents

1.	Physically mark the locations of each of the appurtenances that make up the system - septic tank/lid, distribution lines, distribution box, absorption field or sand filter, chlorination tank, and outlet. Then, make a site sketch of the system, and file that document.	Frequency – At time of Construction / Modifications
2.	To prevent damage, never allow heavy equipment to travel on top of the system	Frequency – Always
3.	Prevent materials that are not readily decomposed (i.e. cigarette butts, plastic items, trash) from entering the system.	Frequency – Always
4.	Minimize solids loading by avoiding the use of a garbage disposal, and minimize hydraulic loading by “spreading out” the processes that use water	Frequency – Weekly
5.	Maintain vegetation (optimally, grass) that grows on the system by mowing regularly. Remove all woody vegetative growth.	Frequency – Weekly
6.	Inspect the system, looking for evidence of problems, such as sewage odors, backup of wastewater in sewer lines or the distribution box, “ponding” of wastewater on the ground’s surface at the system’s components	Frequency – Monthly
7.	Pump out the septic tank as needed.	Frequency – As Warranted
8.	Maintain records of inspections, pump outs. Store contractor information where it is readily available.	Frequency – Always
9.	Document any/all inspection activities on the proper forms.	Frequency – Always

Standard Operating Procedures for:

Vehicle and Equipment Maintenance

Purpose: to prevent contamination of stormwater by using proper maintenance techniques, proper maintenance locations, and retrofitting infrastructure

1.	Conduct maintenance work indoors – dedicate specific vehicle bays, seal floor drain systems.	Frequency – At time of Construction / Modifications
2.	If work is performed outside, protect stormwater drainage conveyances from spills.	Frequency – Always
3.	Clean up spilled materials immediately, using dry methods (absorbents).	Frequency – Always
4.	Install oil/water separators where necessary.	Frequency – At time of Construction / Modifications
5.	Rinse grass from lawn care equipment over permeable, vegetated areas.	Frequency – Always
6.	Never leave vehicles/equipment unattended while refueling.	Frequency – Always
7.	Document any/all inspection activities on the proper forms.	Frequency – Always

Standard Operating Procedures for:

Vehicle and Equipment Washing

Purpose: to prevent contamination of stormwater by using proper washing techniques, proper washing locations, and proper disposal of wash water

1.	Designate a specific vehicle washing bay/facility – the wastewater from the floor drain should flow into an oil/water separator – the treated wastewater should flow to a municipal sanitary sewer line, if possible. If a sanitary sewer is not available, a wastewater permit must be obtained for the floor drain discharges.	Frequency – At time of Construction / Modifications
2.	Close unneeded floor drains.	Frequency – At time of Construction / Modifications
3.	Wash vehicles indoors, using water and limited amounts of detergents for washing – DO NOT OVERUSE DETERGENTS, as they emulsify oils thereby making the oil/water separator less effective.	Frequency – Always
4.	Equip hoses with automatic shutoff devices and spray nozzles.	Frequency – Always
5.	Inspect oil/water separators and floor drain systems periodically to determine maintenance needs.	Frequency – Yearly
6.	Document any/all inspection activities on the proper forms.	Frequency – Always

Standard Operating Procedures for:

Roadway Maintenance

Purpose: to prevent contamination of stormwater as it flows over debris that is deposited on road infrastructure

1.	Pave only in dry weather	Frequency – Always
2.	Cover manholes and catch basins prior to paving, patching, etc.	Frequency – Always
3.	Clean all fluid leaks immediately	Frequency – Always
4.	Maintain roadside vegetation – restrict pesticide use	Frequency – Whenever possible
5.	Sweep/vacuum roadways and shoulders to remove debris, particulate matter	Frequency – Whenever possible

Standard Operating Procedures for:

Alternative Discharge Options for Chlorinated Water

Purpose: to prevent contamination of stormwater that may come into contact with pool water or with treated waters from municipal systems

1.	For each source of chlorinated water which will be discharged, determine whether (or not) a sanitary sewer system is available for that discharge.	Frequency – At time of Construction / Modifications
2.	Prior to discharge, allow disinfectant in the pool to dissipate, or dechlorinate. The disinfectant will break down more quickly in sunny conditions. Check the residual with the proper test kit –the target residual is 0.2 ppm or less.	Frequency –As Needed
3.	If a sanitary sewer is available for discharge, contact the sewer authority/wastewater treatment plant personnel and obtain their guidelines for this activity.	Frequency –As Needed
4.	If no sanitary sewer is available, discharge the water at a slow rate (i.e. using a siphon hose) to a vegetated area so that it can be filtered and absorbed, not to a surface water, storm sewer, or ditch where it can potentially harm aquatic life.	Frequency –As Needed
5.	Discharge during dry weather conditions only.	Frequency – Always
6.	Document any/all inspection activities on the proper forms.	Frequency – Always

Standard Operating Procedures for:

Hazardous and Waste Materials Management

Purpose: to prevent contamination of stormwater by properly storing, handling, and disposing of hazardous and waste materials

1 .	Store all materials/wastes in closed, labeled containers – if outside storage is necessary, the storage area should be sheltered from the weather.	Frequency – Always
2.	Designate storage areas away from floor drains (if inside) and storm receivers (if outside)	Frequency – Always
3.	Install a pretreatment system (oil/water separator) where a potential exists for petroleum products to enter floor drains. Eliminate floor drains if possible	Frequency – At time of Construction / Modifications
4.	Reduce stocks of materials where viable - use “first in/first out” management techniques	Frequency –As Needed
5.	Use least toxic materials	Frequency – Always
6.	Install secondary containment devices where appropriate	Frequency – At time of Construction / Modifications
7.	Recycle/dispose of materials properly	Frequency – Always
8.	Do not mix dissimilar wastes in the same containers	Frequency – Always
9.	Document any/all inspection activities on the proper forms.	Frequency – Always

Standard Operating Procedures for:

Operational By Products/Wastes

Purpose: to prevent contamination of stormwater by preventing “illegal” disposal, and by properly storing, handling, and disposing of facility generated and wastes

FOR FACILITY GENERATED WASTES:

1.	Develop a list of wastes, with associated procedures for handling/storage/recycling/disposal, and provide to staff. Instruct all staff to adhere to this information, and to inform the facility manager if new wastes are generated.	Frequency – Initially, with annual reviews/updates
2.	Secure the facility to prevent access (fence/lock gates)	Frequency – At close of business

FOR MUNICIPAL AREAS THAT ARE SUSCEPTIBLE TO ILLEGAL DUMPING:

1.	Post/maintain “NO DUMPING” signs, erect barriers to prevent access, illuminate area.	Frequency –As Needed
2.	Patrol areas.	Frequency –As Needed
3.	Maintain areas/remove illegally dumped trash/debris.	Frequency –As Needed
4.	Document any/all inspection activities on the proper forms.	Frequency –As Needed

Standard Operating Procedures for:

Catch Basin and Storm Drain System Cleaning

Purpose: to prevent contamination of stormwater via contact with debris which has been deposited in storm drain systems by performing periodic maintenance

Catch basins

1.	Identify catch basins that need frequent maintenance, and prioritize.	Frequency – Always
2.	During cleaning, identify the need for repair of structure (also pertains to manholes, piping).	Frequency – Always
3.	Clean catch basins when debris has filled it 1/3 of the way to the outlet.	Frequency – Always
4.	Inspect/determine the need for cleaning after storm events.	Frequency – Always
5.	Coordinate catch basin cleaning with related street sweeping events.	Frequency – Whenever possible

Ditches

1.	When cleaning, remove obstacles/debris.	Frequency – Always
2.	Cut/remove vegetation (as opposed to ditch scraping) to allow capture of sediment.	Frequency – Whenever possible
3.	Document any/all inspection activities on the proper forms.	Frequency – Always
4.	ID excessive siltation in ditch - may indicate the need to re-grade the ditch.	Frequency – Always
5.	During ditch scraping, maintain vegetation (downstream in ditch) to capture sediment.	Frequency – Always
6.	If ditch scraping results in bare soil, hydro-seed / mulch the exposed soil upon completion.	Frequency – Always

Standard Operating Procedures for:

Street Cleaning and Maintenance

Purpose: to prevent contamination of stormwater as it comes into contact with debris that has been deposited on roadways

1.	Consider shouldered roads instead of curbed roads	Frequency – At time of Construction / Modifications
2.	Coordinate activity with catch basin cleaning	Frequency – Always
3.	Prioritize street cleaning, perform maintenance routinely	Frequency – Always
4.	Maintain roadside vegetation, re-seed as necessary	Frequency – Whenever possible
5.	Maintain equipment – address fluid leaks immediately	Frequency – At scheduled times
5.	Cover catch basins/storm inlets prior to street maintenance	Frequency – Always
6.	Collect leaves (Autumn)	Frequency – As warranted
7.	Sweep/vacuum sand/salt residues (Spring)	Frequency – As warranted

Standard Operating Procedures for:

Road Salt Storage and Application

Purpose: to prevent contamination of stormwater by using proper storage techniques, and improving application techniques of deicing materials

1.	Store road salt, road salt/sand mixtures in properly sized, covered structure.	Frequency – At time of Construction / Modifications
2.	Order/request salt delivery prior to the onset of winter weather to enable immediate storage (i.e. in salt barn, under tarp) to prevent runoff.	Frequency – At time of purchase
3.	Unload salt deliveries directly into barn, or move inside immediately.	Frequency – At time of delivery
4.	Store salt on highest ground possible.	Frequency – Always
5.	Cover salt loading area or “build into” storage shed.	Frequency – At time of Construction / Modifications
6.	Control spreading speeds, use a wetting agent to minimize “bounce”.	Frequency – As needed
7.	Control spread patterns to concentrate material where it is most effective.	Frequency – Always
8.	Inspect salt storage area, salt loading area to ensure that salt is not exposed to weather.	Frequency – Once daily
9.	Minimize salt usage by calibrating salt application equipment periodically.	Frequency – Weekly
10.	Minimize salt spillage by not exceeding capacities of equipment (i.e. front end loader, truck bed) during loading operations.	Frequency – Always
11.	Always plow when de-icing roads.	Frequency – Always
12.	Reference/use Chemical Application Rate Charts.	Frequency – Always
13.	Consider alternative treatments (plow only, erect snow fence) that do not require the application of materials.	Frequency – As applicable
14.	Document any/all inspection activities on the proper forms.	Frequency – Always

Standard Operating Procedures for:

Construction and Land Disturbance

Purpose: to prevent contamination of stormwater runoff by preventing contact with barren soils and/or capturing silt and sediment prior to leaving the site

1.	Install sediment barriers prior to land disturbance, and maintain.	Frequency – Always
2.	Maintain native vegetation, if possible.	Frequency – Always
3.	Install sediment control devices prior to land disturbance, and maintain.	Frequency – Always
4.	Stabilize site.	Frequency – Always
5.	Maximize opportunities for infiltration.	Frequency – Always
6.	Minimize compaction of soils, limit grading to small areas.	Frequency – Whenever possible
7.	Divert stormwater away from barren slopes.	Frequency – Whenever possible
8.	Refer to the <u>New York Standards and Specifications for Erosion and Sediment Control</u> for further guidance pertaining the proper selection and use of erosion and sediment control practices.	Frequency – As applicable

