

**TOWN OF UNION
STORMWATER MANAGEMENT
PROGRAM
PLAN**

**TOWN OF UNION IS A MEMBER OF
THE BROOME-TIOGA STORMWATER COALITION**



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Introduction

This Stormwater Management Program (SWMP) Plan has been developed to comply with Part IV.A. of the New York State Department of Environmental Conservation General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (GP-0-08-002) for a Traditional Non-Land Use Control. The purpose of this plan is to maintain or improve water quality. The Town of Union MS4 is a member of the Broome-Tioga Stormwater Coalition (BTSC). The BTSC exists by way of an inter-municipal agreement enacted through municipal resolution by each of the 15 participating members.

Part IV.A (“Stormwater Management Program Requirements, SWMP Background”) of GP-0-08-002 states:

“Permittees must develop, implement, and enforce a SWMP designed to reduce the discharge of pollutants from small MS4s to the maximum extent practicable (“MEP”) in order to protect water quality and to satisfy the appropriate water quality requirements of the [Environmental Conservation Law] and the [Clean Water Act]. Permittees must, by March 9, 2009 (or at the time of a Department audit of the SWMP), prepare a SWMP plan documenting their SWMP.”

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

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

This document describes each MCM and the Best Management Practices (BMPs) that have been implemented to maintain compliance with the NYSDEC GP-0-08-002. Responsibilities to achieve and sustain compliance are clearly defined for each BMP. Some responsibilities are covered through the collective efforts of the Broome-Tioga Stormwater Coalition (BTSC) members. The remaining work is conducted by Town of Union’s Stormwater Management Program Manager and the Stormwater Official Contact.

This SWMP Plan should be reviewed on an annual basis and updated as necessary in order to take into consideration the latest technologies and information to maintain compliance with the NYSDEC GP-0-10-002, as well as to account for progress made.

Minimum Control Measure 1: Public Education and Outreach on Stormwater Impacts

1. Description of Minimum Measure

The Public Education and Outreach MCM consists of BMPs that focus on the development of educational materials, demonstration activities and training sessions designed to inform the public about the impacts that stormwater discharges have on local water bodies. The Public Education and Outreach program and BMPs, in combination, are expected to reach all of the constituents within the MS4's permitted boundary.

2. General Permit Requirements

At a minimum, *all* covered entities must:

Identify POC's, waterbodies of concern, geographic areas of concern, target audiences
Pollutants of Concern: According to the NYSDEC 2009 Susquehanna River Basin Waterbody Inventory and Priority Waterbodies List, "water quality in the Susquehanna River Basin generally ranges from satisfactory to very good." However for the purposes of the Stormwater Management Program pollutants of concern will include sediment and nutrients. Sources of these pollutants include agricultural activities, stream bank erosion and construction site runoff. The focus of this stormwater management plan will be construction site and earth disturbing activities as it pertains to stormwater runoff from these sites.

Geographic Area of Concern: Polluted stormwater runoff from construction sites often flows to MS4s and ultimately is discharged into local rivers and streams, as a result, waterbodies of concern within the Town of Union include the Patterson Creek, Little Choconut Creek, Finch Hollow Creek, Nanticoke Creek, Dead Creek, and the main branch of the Susquehanna River. In order to address portions of requirements within the MS4 area the Town of Union has signed an inter-municipal agreement that allows them to coordinate stormwater activities

Target Audiences: Broome-Tioga Stormwater Coalition and Town of Union will target contractors, school students, residents, municipal officials and workers, as well as various community groups.

Implement an ongoing public education and outreach program

Educational materials may be made available at various accessible locations

Modify as needed measurable goals

Select and implement appropriate education and outreach activities and measurable goals to ensure the reduction of all POC's in stormwater discharges to MEP.

3. Methodology for Compliance with Permit Requirements

Previous permit accomplishments

The Broome-Tioga Stormwater Coalition has formed a special committee to address MCM's 1 and 2 called the BTSC Public Education and Participation Committee. This group has produced educational materials containing specific actions as to how the public, as individuals or collectively as a group, can participate in reducing pollutants and their impact on the environment. The program has included printed materials,

Enviroscape stormwater model demonstrations at MS4 area schools and various public events, press releases and posting on websites.

BTSC created a logo and uses it on all educational material. BTSC has also created a stamp with our logo to use on pre-printed educational material.

Creation of a website dedicated to stormwater issues in the Broome-Tioga MS4 area at www.broometiogastormwater.com.

Brochures and other educational material that the BTSC has produced or collectively purchased are made available at restaurants throughout the MS4 area, municipal offices, municipal websites and at contractor / officials trainings, as well as at events or venues where the EnviroScape Stormwater model is demonstrated.

The BTSC does modify as needed measurable goals. For instance, one goal had been to do an overall PSA that shows residents practices that will least pollute stormwater. Now we have modified that to produce a series of PSA's that are seasonable in nature such as not raking grass clippings after mowing in the summer, not oversalting driveways and walkways in the winter, containing raked leaves in the fall and not fertilizing or installing rain barrels in the spring.

4. Goals

Town of Union will provide brochures on the website targeted to homeowners on ways to reduce pollution to the stormwater system by season. These brochures will also be available at Town Hall and public libraries within the Town.

Town of Union will distribute posters containing ways for municipal workers to reduce polluting stormwater runoff to post in municipal offices and highway garages within the MS4 area

Town of Union will create a separate stormwater webpage on the town's website www.townofunion.com and create a link from that page to the Broome-Tioga Stormwater Coalition website

BTSC municipalities will purchase 10,000 permanent drain markers and install on catchment basins within the MS4 area. Town of Union will install these markers on 100% of catchments basins in the Town.

5. Minimum Required Reporting

At a minimum, the covered entity shall report on items below:

- list education / outreach *activities* performed and provide any results (number of people attended, amount of materials distributed, etc.);

- report on effectiveness of program, *BMP* and *measurable goal* assessment; and

- maintain records of all training activities

These elements are covered in the BTSC/Town of Union MS4 Annual Stormwater reports. Records on training sessions in Broome County are on file in the Broome County Department of Economic Development and Planning Office with supplemental materials located at the Broome County Soil & Water Conservation District Office.

Minimum Control Measure 2: Public Involvement / Participation

1. Description of Minimum Measure

The Public Involvement and Participation MCM consists of a set of BMPs that are focused on getting members of the local community involved in the MS4's municipal stormwater management program. Compliance with State and local public notice requirements will be maintained whenever public participation is sought or required. The BMPs include a number of practices designed to seek public input on the SWMP and Annual Report accomplishments in addition to describing specific activities that encourage public participation. The target audiences for the public involvement program are key individuals and groups that may have an interest in the particular BMPs as well as the general public located within the permitted boundary.

2. General Permit Requirements

At a minimum, *all* covered entities must:

- Comply with State and local public notice requirements when implementing a public involvement / participation program:

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

- Local Stormwater public contact

- Annual Report Presentation

- Record, periodically assess and modify as needed measurable goals

- Select and implement appropriate public involvement / participation activities to ensure the reduction of all the POC's stormwater discharges to the MEP.

3. Methodology for Compliance with Permit Requirements

Past accomplishments

The Town of Union and the Broome-Tioga Stormwater Coalition comply with the State Open Meetings Law when planning annual report presentation public meetings. The meeting notice is distributed as a press release within the required timeframe and is also posted along with the annual report on both the Town of Union's and Broome-Tioga Stormwater Coalition's website.

E-mail contact is always listed on meeting and annual report notices to provide comment. Comments can also be made via e-mail on the BTSC website.

The Broome-Tioga Stormwater Coalition gives proper notice for the annual report presentation public meetings. The annual report meeting is always open to the public. The meeting notice is distributed as a press release providing the required timeframe and is also posted along with the annual report on both the Town of Union's and Broome-Tioga Stormwater Coalition's website. The annual report is also posted on Town of Union's website. Contact information is provided within the press release to make comments or comments can be submitted directly from the BTSC website.

A Notice of Availability is created and distributed to the media and posted on the 2 noted websites every year which includes all the required information about the

annual report, annual report presentation public meeting, and how and when to comment.

The Town of Union SWMP will also be permanently posted on the Town of Union website, Stormwater webpage. It will be replaced as it is modified. Archival versions will be on file in the Town of Union Code Enforcement Office.

4. Goals

The BTSC Final Annual report remains on the specified websites for the entire reporting year for public inspection. When a new one is finalized for the next reporting year, previous annual reports are archived on the BTSC website and the annual report gets replaced on the Town of Union website.

The BTSC will continue to hold a public meeting to solicit comment on the annual report and provide sufficient notice. Town of Union will report annually to its Town Council, also providing sufficient notice through the Council meeting agenda and releasing a notice of availability.

Town of Union will work in partnership to initiate an Adopt-a- Watershed Group that are within the Town of Union. Various community groups will be recruited to participate such as the Conservation Advisory Board, Boys and Girls Scout troops, stream clean up groups, Rotary and Kiwanis Clubs, as well as municipal officials.

The Town of Union and partners will continue to hold the following annual events: stream clean ups, tire collections, household hazardous waste collections and household electronics collections.

BTSC municipalities will purchase 10,000 permanent drain markers and install on catchment basins in the MS4 area.

Town of Union will install “Do Not Dump Drains to River” steel, bolt-on drain markers on 100% of the catchments basins within the Town.

Town of Union will enlist various service working groups such as Broome Works and Alternatives to Incarceration to install “Do Not Dump Drains to River” steel, bolt-on drain markers on 1,400 catchments basins during this 5-year permit

Town of Union will continue to encourage interested groups to conduct storm drain stenciling projects where needed to supplement those not having permanent markers.

Town of Union will post all MCM 1 educational material on Town website

Town of Union will continue to post Public Stormwater Contact and Stormwater Program Manager contact information on the Town website

5. Minimum Required Reporting

- annual report presentation information (date, time, attendees) or information
- about how the annual report was made available for comment;
- comments received and intended responses (as an attachment); and
- report on effectiveness of program, *BMP* and *measurable goal* assessment

These elements are all covered in the BTSC/Town of Union MS4 Stormwater Annual Reports.

Minimum Control Measure 3: Illicit Discharge Detection and Elimination

1. Description of Minimum 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 updating 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.

2. 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.

Field verify all outfall locations.

Conduct an outfall reconnaissance inventory, addressing each outfall at least once every five years, with reasonable progress each year.

Map new outfalls as they are constructed or newly discovered.

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.

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

Develop, record, periodically assess, and modify as needed, measureable goals.

Select and implement appropriate IDDE BMPs and measureable goals to ensure the reduction of all POCs in stormwater discharges to the MS4.

3. Methodology for Compliance with Permit Requirements

Past accomplishments

On March 7, 2007, the Town of Union enacted Local Law #1-2007 to add Chapter 171 Erosion and Sediment Control to meet the requirements of Minimum Control Measures of the SPDES General Permit.

On August 8, 2007, the Town of Union enacted Local Law #5-2007 to add Chapter 134 prohibit illicit discharges, activities and connections to separate storm sewer systems.

The Town of Union has had all the outfalls within the MS4 area mapped by in an AutoCAD drawing file showing the location of each outfall. The information

is maintained by the DCPW for Engineering and is also available as a layer on the Broome County GIS website.

4. Goals

Using the existing outfall mapping, the Town of Union will conduct an outfall reconnaissance inventory during routine maintenance visits, addressing each outfall at least once every five years, with reasonable progress each year.

Maintain a prioritized list of outfalls for inspection, ranked on a 5-tier priority basis as follows:

Priority 1: (Highest Priority): Outfalls in which previous inspections indicated evidence of illicit discharge such as dry weather discharge, color, odor, etc. or outfalls in areas where repeated complaints were received.

Priority 2: Outfalls in heavy industrial or commercial areas or construction sites OR Outfalls in environmentally sensitive areas OR Outfalls to areas of impaired waters in which ambient water quality sampling indicated high levels of particular contaminants.

Priority 3: Outfalls in which previous inspections indicated structural deficiencies.

Priority 4: Outfalls in older areas of the municipality.

Priority 5: (Lowest Priority): None of the above.

The Town of Union Stormwater Management Officer will ensure that outfalls are being inspected; the inspections are documented, and will submit accrued outfall mapping update forms for all outfalls that have been altered since mapping was established to the Broome County GIS Manager.

The Town of Union will provide update information to the base outfall map during routine maintenance visits, scheduled outfall inspections, and responses to complaints. Since outfall mapping is managed by the Broome County GIS Department, information collected on outfalls will periodically be transmitted to the Broome County GIS Manager.

The Town of Union Stormwater Management Officer will periodically review the ordinance and adjust as necessary to maintain compliance with NYS standards and requirements.

The Town of Union will develop a plan, by year 2, to detect illicit discharges by conducting routine visual inspections of every mapped outfall. The plan will set criteria for the inspection process.

If possible, define the drainage areas about each outfall. Having the drainage areas defined is helpful in tracking down illicit discharge sources. This task can only be accomplished if grants or other funding become available to accomplish this task.

The Town of Union Stormwater Management Officer will investigate and confirm the source of pollutants when water quality issues arise due to public complaints or by scheduled inspection of outfalls and implement enforcement action per the Local Law to prohibit illicit discharges, activities and connections to separate storm sewer system. This goal will be aided through utilization of a GIS application. Through the BTSC, handheld GPS mapping units will be purchased to assist in plotting the entire storm sewer

shed.

The Town of Union Stormwater Management Officer will annually update non-stormwater discharge list as necessary such that no exempt stormwater discharge is a substantial contribution 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

The Broome Tioga Stormwater Coalition (BTSC) is in the process of purchasing storm drain markers to be installed on existing catch basins. The Town of Union will try to partner with local work service groups to apply 1400 storm drain markers on catchment basins. As soon as they are available, 1,000 will be installed per year for the time period of this permit. The catch basins will be mapped concurrently with drain marker installation. Town of Union will inspect and clean 1200 catch basins per year on a rotating basis. Through the minimum reporting requirements the Town of Union will document its progress in implementation of BMPs and measureable goals.

5. Minimum Required Reporting

Number and percent of outfalls mapped;

Number of illicit discharges detected and eliminated;

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

Status of system mapping;

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

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

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

These required elements are all covered in the BTSC MS4 Stormwater Annual Report

Minimum Control Measure 4: Construction Stormwater Management

Polluted stormwater runoff from construction sites often flows to MS4s and ultimately is discharged into local rivers and streams. Of the pollutants listed in the box to the right, sediment is usually the main pollutant of concern. Sources of sedimentation include agriculture, urban runoff, construction, and forestry. Sediment runoff rates from construction sites however are typically 10 to 20 times greater than those of agricultural lands, and 1,000 to 2,000 times greater than those of forest lands. During a short period of time, construction sites can contribute more sediment to streams that can be deposited naturally during several decades. The resulting siltation, and the contribution of other pollutants from construction sites, can cause physical, chemical, and biological harm to our waters.

Pollutants Commonly Discharged From Construction Sites

Sediment
Solid and Sanitary Wastes
Phosphorous (fertilizer)
Nitrogen (fertilizers)
Pesticides
Oil and Grease
Concrete truck washout
Construction Chemicals
Construction Debris

1. Description of Minimum Control Measure

The Construction Site Runoff MCM consists of BMPs that focus on the reduction of pollutants to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of stormwater discharges from construction activities disturbing less than one acre will be considered if it is part of a larger common plan of development or sale that would disturb one acre or more. The BMPs describe 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 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 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 privately-owned and management projects, and MS4-owned and managed projects. Therefore, the goals described in this section have application to both types of projects.

2. General Permit Requirements

The Phase II Final Rule requires an operator of a regulated small MS4 to develop, implement, and enforce a program to reduce pollutants in stormwater runoff to their MS4. The MS4 operator is required at a minimum to:

Have an ordinance or other regulatory mechanism equivalent to the NYS SPEDES General Permit for Stormwater Discharges from Construction Sites, requiring the implementation of proper erosion and sediment controls, and controls for other wastes, on applicable construction sites;

Address stormwater runoff from construction activities that result in a land disturbance of greater than or equal to one acre, and those construction activities that are part of a larger common plan of development or sale that would disturb one acre or more;

Include a law, ordinance to require a SWPPP for each applicable land disturbing activity that includes erosion and sediment controls that meet the State's most current technical standards;

Have procedures for site plan review of SWPPPs that consider potential water quality impacts and consistency with State and local sediment and erosion control requirements; MS4 must also have trained individuals performing the reviews, all sites of one acre or greater must be reviewed and an MS4 Acceptance Form must be completed;

Have procedures of site inspection and enforcement of control measures;

Have sanctions to ensure compliance (established in ordinance or other regulatory mechanism);

Establish procedures for the receipt and consideration of information submitted by the public (i.e. Complaints); and

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

Educate construction site owner/operators, design engineers, municipal staff and other individuals to whom these regulations apply about the municipality's stormwater construction requirements

Ensure that construction site operators have received erosion and sediment control training before they do work within the MS4 and maintain records of that training.

Establish and maintain an inventory of active construction sites, including the location of the site, owner/operator contact information;

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

Determine the appropriate BMPs and measurable goals for this minimum control measure to ensure the reduction of all Pollutants of Concern (POCs) in stormwater discharges to the Maximum Extent Practicable. Suggested BMPs (i.e. the program actions/activities) and measurable goals are presented below.

3. Methodology for Compliance with Permit Requirements:

Each participating MS4 of the BTSC had adopted the NYS Sample Local Law for Stormwater Management and Erosion and Sediment Control. This ordinance authorizes the MS4 to enforce a program that reduces pollutant runoff from construction sites. Each MS4 will be responsible for:

- Reviewing SWPPPs

- Inspecting Construction Sites

- Enforcing permit requirements on developers/owners/operators that do not comply with regulations.

The BTSC will also provide training to developers, contractors, and design engineers in order to inform them of the regulations. Training will also be provided by the BTSC to each participating MS4 personnel that will be responsible for inspecting the construction sites and enforcing permit requirements.

Pervious Permit Accomplishments:

Town of Union has adopted a local stormwater ordinance town wide that establishes minimum stormwater management requirements. The ordinance addresses issues relating to the following;

- Erosion & Sediment Control;
- Stormwater Management Design Requirements;
- Construction Requirements; and
- Fee Structure for Municipality services relating to SWPPP reviews, inspections and maintenance.

A checklist developed by NYSDEC Division of Water Region 7 is utilized by the Town of Union to complete reviews of SWPPPs and is available to contractors, developers, engineers or the owner of the project. Town of Union has contracted services with a Consultant to review SWPPPs. The Consultant will conduct the review of the SWPPP and then the Town will sign the SWPPP Acceptance Form based upon their recommendations.

4. Goals

Construction Plan Review Goals:

Develop and implement the fee schedule as needed and amend the stormwater ordinance as necessary to maintain the NYS stormwater standards and requirements as defined by the current or any future permits pertaining to stormwater management activities.

Develop and implement a set of criteria that the member MS4 can use to verify construction plan compliance with local, state, and/or federal stormwater regulations

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

Develop & implement an 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

Provide training for any municipal representatives that will be completing the construction plan reviews for the municipality, including planning and zoning boards.

Conduct SWPPP review for all sites within the Town of Union where disturbance is one acre or greater to ensure consistency with State and local sediment and erosion control requirements and complete SWPPP Acceptance Form.

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

Provide notice to the public that a project will be open for review and comment. For example the Planning Board and Town Board agendas for proposed projects list the projects to be discussed, and are posted the Friday prior to the meeting.

Notify owners/operators of local construction sites who are in violation of the standards as defined by the General Construction Permit.

Maintain records of plans reviewed and approved under this program.

Construction Inspection Procedures and Certification Program Goals:

Develop and implement inspection forms and procedures based on the adopted local laws regulating construction sites within the Town of Union that disturb one acre of land or more. The inspection forms and procedures must keep track of, but are not limited to the following stormwater management procedures:

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

Conduct and report on inspection procedures and educational efforts to familiarize municipal staff and the local construction community with local stormwater regulations relating to construction activities.

By May 1, 2010 all construction site operators must verify at least one employee on site has received the required four hours of erosion and sediment control training within the last 3 years before they do work within the Town of Union. The Town should obtain proof.

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

Take action against owners and/or operators of local construction sites that are in violation of local construction stormwater regulations using the enforcement regulation outlined in the adopted local laws.

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

Educate municipal staff and the local construction community with regards to local inspection procedures; and

Ensure that all appropriate municipal staff and members of the local construction community have been trained by May 1, 2011.

Inspect and maintain records of all construction sites where one acre of land or more is being disturbed using appropriate inspection procedures and forms to ensure compliance with local stormwater regulations;

5. Minimum Required Reporting

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

Number of SWPPPS reviewed

Number and Type of Enforcement Action

Percent of active construction sites inspected once

Percent of active construction sites inspected more than once

Number of Construction sites authorized for disturbance activities of one acre or more

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

These elements are covered in the BTSC/ Town of Union MS4 Annual Stormwater Reports.

Minimum Control Measure 5: Post-Construction Stormwater Management

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

There are generally two forms of substantial impacts of post-construction runoff. The first is caused by an increase in the type and quantity of pollutants in stormwater runoff. As runoff flows over areas altered by development it picks up harmful sediment and chemical such as oil and grease, pesticides, heavy metals, and nutrients. These pollutants often become suspended in runoff and are carried to receiving waters, such as lakes, ponds and streams. Once deposited, these pollutants can enter the food chain through small aquatic life, eventually entering the tissues of fish and humans. The second kind of post-construction runoff impact occurs by increasing the quantity of water delivered to the waterbody during storms. Increased impervious surfaces (i.e. Parking lots, driveways, and rooftops) interrupt the natural cycle of gradual percolation of water through vegetation and soil. Instead, water is collected from surfaces such as asphalt and concrete and routed to drainage systems where large volumes of runoff quickly flow to the nearest receiving water. The effects of this process include streambank erosion and downstream flooding, which often lead to a loss of aquatic life and damage to property.

1. Description of Minimum Control Measure

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

2. General Permit Requirements

The Phase II Final Rule requires an operator of a regulated small MS4 to develop, implement, and enforce a program to reduce pollutants in stormwater runoff to their MS4. The MS4 operator is required at a minimum to:

- Provide equivalent protection to the NYS SPDES General Permit for Stormwater Dischargers from Construction Activities

- Address post-construction runoff to their MS4 from new development and redevelopment projects that result in the land disturbance activities of greater than or equal to one acre or part of a larger common plan of development;

Have an ordinance or other regulatory mechanism requiring the implementation of post-construction runoff controls to the extent allowable under State, or Local law and meets the State's most current technical standards;

Develop and implement strategies which include a combination of structural and/or non-structural best management practices, this includes considering Low Impact Development (LID), Better Site Design (BSD) and other Green Infrastructure, as well as smart growth principles, natural resource protection, impervious area reduction, riparian buffers or set back distances for protection of environmentally sensitive areas such as streams, wetlands and erodible soils when developing watershed plans, municipal comprehensive plans, land use regulations, etc.

Have procedures for site plan review of SWPPPs that consider potential water quality impacts and consistency with State and local sediment and erosion control requirements; MS4 must also have trained individuals performing the reviews, all sites of one acre or greater must be reviewed and an MS4 Acceptance Form must be completed;

Ensure adequate long term operation and maintenance of post-construction stormwater management practices within the covered entities jurisdiction. Inventory to include location of practice, type of practice, maintenance needed per practice, SWPPP, dates and type of maintenance performed;

Provide adequate resources for a program to inspect development and re-development sites by trained staff and to enforce and penalize violators;

Record, annually assess and modify as needed measurable goals;

Determine the appropriate best management practices and measurable goals for this minimum control measure.

3. Methodology for Compliance with Permit Requirements

All participating MS4s in the BTSC have adopted the NYS Sample Local Law for Stormwater Management and Erosion & Sediment Control which includes provisions to enforce a program that reduces pollutant runoff from both newly and re-developed sites. Each MS4 will be responsible for inspecting the sites for proper operation and maintenance and enforcing the permit requirements and for properties that are not in compliance. In this manner, the MS4 can ensure adequate long-term management practices for both public and private facilities.

Previous Permit Accomplishments:

Each member of the BTSC has adopted a post-construction stormwater management ordinance. This ordinance establishes minimum stormwater management requirements and controls. The ordinance addresses issues relating to the following:

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

4. Goals

Develop and implement the fee schedule as needed and amend the stormwater ordinance as necessary to maintain the NYS stormwater standards and requirements as defined by the current or any future permits pertaining to stormwater management activities. (The

fee structure should be referenced in Local Law but should be done in a way to update without having to revise the Local Law as a whole).

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

Inspection Program for Newly and Re-Developed Sites:

Develop an inspection program for newly developed and re-developed sites for compliance with post construction regulations. This program must include a form and procedures that includes a list of items that municipal personnel and/or members of the local building community can use to guide their operations. This list can include, but is not limited to the following items:

- Construction of controls according to approved development plans and specifications;
- Adherence to any legal commitment to operate and maintain permanent stormwater quality structures;
- Conformance to open space and landscaping requirements; and
- Conformance to local development standards.

Train inspection personnel and/or members of the local construction community on local post-construction runoff regulations and final inspection procedures.

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

Issue enforcement measures to owners and/or operators of local development projects that are in violation of local post-construction runoff regulations.

Develop internal tracking procedures to keep tabs on development projects that are under construction, those that have been completed and any corrective/enforcement measure that were taken.

Develop and maintain an inventory of projects under local post-construction runoff regulations in accordance with the General Permit.

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

5. Minimum Required Reporting

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

Number of SWPPPS reviewed

Number and Type of Enforcement Action

Number and Type of Post Construction Stormwater Management Practices inventoried;

Number and Type of Post Construction Stormwater Management Practices inspected

Number and Type of Post Construction Stormwater Management Practices maintained;

Regulatory mechanism status – certification that regulatory mechanism is equivalent to one of the “NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control” and

Report on effectiveness of program, BMP and Measurable Goal Assessment.

These elements are covered under the BTSC/Town of Union MS4 Annual Stormwater Reports.

Minimum Control Measure 6: Pollution Prevention and Good Housekeeping

1. Description of Minimum Control Measure

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

2. General Permit Requirements

An MS4 *must*, at a minimum:

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

- Addresses municipal operations and facilities;
- Includes a self-assessment of all municipal operations;
- Determines management practices that will be developed and implemented;
- Priorities pollution prevention and good housekeeping efforts;
- Addresses pollution prevention and good housekeeping priorities;
- Includes an employee training program and ensures staff receives training;
- Requires third party entities to make required certification;
- Monitoring and record keeping by municipal operations in accordance with MSGP;
- Incorporate cost effective runoff reduction techniques and green infrastructure;

Develop measureable goals.

Select and implement appropriate BMPs and measureable goals to ensure the reduction of POCs in stormwater discharges to the MS4.

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

3. Methodology for Compliance with Permit Requirements

Past Accomplishments

The Town of Union does not utilize fertilizers as part of the green space maintenance at Town of Union Parks.

All used oils are disposed on in a waste oil burner which is used as a heat source in winter months.

The Town of Union has a fuel dispensing system at the main highway garage located at 3111 E. Main Street. The staff monitor the fuel usage and check the system for leaks on a weekly basis.

The current Town of Union street sweeping policy is that all town roads are swept and all catch basins are cleaned once a year. Street sweeping in the MS4 areas within the Town begins as soon as possible in the spring.

During ice and snow storms, all areas within the Town of Union MS4 receive a high concentration of salt to prevent excessive silt and sediment from entering the storm drain system.

The Broome County Soil & Water Conservation District has and will facilitate training to the municipal personnel of participating MS4s. These personnel will be responsible for implementing the BMPs in their everyday activities.

4. Goals

Training

Provide training to each member of the municipality whose work may potentially impact stormwater. For the Town of Union this includes the Highway, Parks, and Sewer departments. Several members of the Town, trained through the BTSC, will be responsible for training the remaining members of their municipality, as necessary.

The Stormwater Management Officer will annually provide refresher training for employees and provide training to new employees when hired.

The Municipal Training Program Documentation Form following this section is provided to record training of employees.

Landscaping & Lawn Care

Reduce the discharge of landscaping and lawn care waste from Town owned facilities through better mowing and landscaping maintenance practices. Report annually on the activities conducted under this program.

Maintain an inventory of landscaping and lawn care areas that are owned by the Town of Union within the MS4 regulated area.

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

- 1) Fertilizers
- 2) Leaf litter and tree trimmings
- 3) Litter and floatable materials
- 4) Equipment fluids

Ensure that proper litter collection is scheduled prior to any mowing activities.

Train employees in the proper application of lawn care products.

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.

Evaluate methods for containing and/or composting trimmings and grass clippings.

Develop zero input/low input lawns that require minimal or no herbicide/pesticide application.

Consider alternative landscape techniques (i.e. naturescaping – landscaping with native plants to reduce water, energy, and chemical usage; xeriscaping – landscaping with native and drought resistant plants to reduce irrigation needs).

Plant trees away from sewer lines or other underground utilities.

Use drip irrigation techniques for landscaping.

Establish monitoring program to promptly identify problems with vegetation.

Establish a maintenance program to accomplish the following:

- 1) Minimize/eliminate fertilizer application.
- 2) Leave grass clippings on lawn.
- 3) Water lawns no more than 1 inch per week.
- 4) Mow with sharpened blades set at or higher than 3 inches.
- 5) Water plants before 10 AM.

Rinse grass from lawn care equipment on permeable (grassed) areas.

Town of Union Parks Maintenance Supervisor will annually review monitoring and maintenance program and revise as necessary.

The Lawn Care Inspection Form following this section is provided to document lawn maintenance to prevent erosion and contamination of stormwater.

Vehicle/Equipment Maintenance

Maintain vehicles owned by the Town of Union according to manufacturer's specifications and identify and eliminate significant vehicle fluid leaks.

Conduct routine maintenance on all vehicles according to manufacturer's specifications.

- 1) During routine maintenance of Town owned vehicles, inspect vehicles for the presence of fluid leaks.
- 2) Schedule repairs for vehicles determined to have significant fluid leaks.
- 3) Maintain vehicle maintenance records and document fluid leak repair activities.

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.

Use non-hazardous cleaners. Use non-chlorinated solvents instead of chlorinated solvents. Use steam cleaning / pressure washing instead of solvents for parts cleaning.

Store batteries in leak proof, compatible (i.e. non-reactive) containers.

Standard Operating Procedure:

- 1) Maintain an inventory of municipal owned vehicles.
- 2) Require municipal vehicle operators to conduct daily inspections of vehicles to check for fluid leaks.
- 3) Review vehicle inspection and maintenance records to evaluate conformance to vehicle manufacturer service specifications and local stormwater program requirements.

The Vehicle/Equipment Maintenance and Inspection Form following this section is provided to document inspections for and repair of fluid leaks, and manufacturer's specified routine maintenance.

Vehicle/Equipment Washing

Town of Union owned vehicles and equipment are washed in a manner to prevent discharge of pollutants to the municipal storm sewer system or local water bodies.

Maintain an inventory of Town owned vehicles and equipment.

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

Initiate single purpose use of vehicle bays - dedicate only one bay for washing (with floor drain system).

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

Use minimal amounts of biodegradable soap 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).

Map storm drain locations accurately to avoid illegal discharges.

Building Maintenance

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

Maintain a list of the maintenance activities required inside and outside of each municipal building, and identify which activities have an impact on stormwater.

Implement mitigation measures for each activity that impacts stormwater.

Annually review the mitigation measures for each activity and revise as necessary.

Hazardous and Waste Materials Management

Prevent the discharge of hazardous (lube oils, coatings and their components, anti-freeze, cleaning agents and fuels) and waste materials from impacting municipal stormwater systems and local waterbodies.

The Superintendent of Highways, Parks Maintenance Supervisor and Vehicle Maintenance will:

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

- Plan for proper storage of hazardous and waste materials that are not currently stored properly.
- Implement plan for proper storage of all hazardous and waste materials.
- 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.
- Ensure that all materials are stored in closed, labeled containers – if stored outside, drums should be placed on pallets, away from storm receivers – inside storage areas should be located away from floor drains.
- Eliminate floor drain systems that discharge to storm drains, if possible.
- Use a pretreatment system to remove contaminants prior to discharge.
- Reduce stock of materials “on hand” – use “first in/first out” management technique.
- Use the least toxic material (i.e. non hazardous) to perform the work.
- Install/use secondary containment devices where appropriate.
- Eliminate wastes by reincorporating coating/solvent mixtures into the original coating material for reuse.
- Recycle materials if possible, or ensure proper disposal of wastes.
- Annually inspect material storage areas (inside and outside).
- Annually inspect cleaning of oil/water separators by qualified contractor.
- Annually inspect stormwater discharge locations (for contaminants, soil staining, plugged discharge lines).

Operational By Products/Wastes

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

The Superintendent of Highways will:

- Post “no dumping” signs where needed.
- Illuminate area if possible.
- Prevent access – erect barriers where needed.
- 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).
- Store mulch and leaves on high ground to mitigate contact with stormwater.
- Clean up and dispose of “illegally dumped” materials, trash/debris in accordance with environmental regulations.
- Cut and remove vegetation from dump areas.
- Regularly schedule inspections for areas of maintenance concerns.
- Coordinate with police for unscheduled patrolling of dump areas.

Roadway and Bridge Maintenance

Assess roadway and bridge maintenance activities and modify procedures to reduce stormwater quality impacts.

The Superintendent of Highways will:

- 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/pesticides application to roadside vegetation.

- Use porous asphalt for shoulder work.
- Sweep and vacuum paved roads and shoulders as necessary to remove debris and particulate matter.
- Maintain roadside vegetation; select vegetation with a high tolerance to road salt.
- Identify “alternative” maintenance practices that would reduce the discharge of road-materials during construction or maintenance activities (e.g. repairing leaking/defective containers or equipment on paving equipment).
- 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 in planning for regular operations & maintenance activities.
- 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
- Install catch basins in place of bridge scuppers.
- Use tarps, booms, and vacuums during painting or blasting activities to control/capture particulate matter.
- Inspect roads and bridges for implementation of applicable BMPs.
- Evaluate roadway maintenance program annually and revise roadway maintenance specifications according to identified alternative practices.

Road Salt Storage and Application

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

The Superintendent of Highways will:

- Train operators on environmental hazards of over-salting roads.
- Identify areas particularly susceptible to contamination in the MS4 area.
- Use covered facility for salt storage (prevents lumping and run-off loss), sized properly for seasonal needs.
- Store salt on highest ground elevation to mitigate contact with stormwater.
- Calibrate salt spreaders as necessary.
- Consider alternative deicing materials (i.e. calcium chloride, magnesium chloride).
- If possible, use a wetting agent with salt to minimize “bouncing” during application.
- Unload salt deliveries directly into storage facility, or if not possible, move inside immediately.
- Inspect salt storage shed for leaks, other problems. Repair as needed.
- Inspect salt piles for proper coverage, and/or 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 down slope.
- 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.

Catch Basin and Storm Drain System Cleaning

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

The Superintendent of Highways will:

- Identify areas where catch basins, surface inlets, and/or storm sewer manholes should be periodically cleaned to reduce discharge of floatable materials, sediment, and other materials.
- Prioritize storm drain systems and catch basins (e.g. catch basins on steep grades may need more frequent cleaning).
- Develop a schedule for inspection and cleaning of inlet structures, catch basins, and manholes.
- Inspect catch basins, (below grade) storm sewer systems, and open ditches for need of maintenance or cleaning.
 - Clean catch basins when depth of deposits is $> 1/3$ to bottom of pipe.
 - Storm event inspection – identify pollution problems (i.e. sediments).
 - Post storm event inspection – identify problems (i.e. blockage).
- Evaluate the catch basin cleaning schedule on an annual basis.
 - Increase frequency of cleaning as necessary.
- 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.
- Maintain slope of drainage ditches.
- Maintain vegetation in drainage ditches by cutting (to capture sediment).
- Remove obstacles/ debris from drainage ditches.
- After excavation /ditch scraping, reseed ditch.

The Storm Drain System Inspection Form following this section is provided to document maintenance operations including inspections and cleaning of catch basins and ditches.

New Construction and Land Disturbance

Comply with the Town's construction and post-construction minimum control measures.

The Superintendent of Highways will:

- 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.
- Inspect erosion and sediment controls (ES&C) devices.
- Inspect ES&C devices during storm or snow melt events.

The Land Disturbance Inspection Form following this section is provided to document inspections of erosion and sediment control devices.

Hydrologic Habitat Modification

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.

The Superintendent of Highways will:

- Identify any potential habitat modification to the Broome County Soil & Water Conservation District, NYSDEC and USACOE through their Joint Application for Permit Program.
- Comply with all requirements of the NYSDEC and USACOE permits for work within freshwater wetlands and streams.
- Comply with the construction and post-construction requirements within the stormwater regulations.
- Provide the NYSDEC and USACOE with the required information in the Joint Application for Permit to obtain their approval prior to proceeding.
- Tioga County Soil & Water Conservation District will annually provide additional training as necessary to the municipal work crews.

Street Cleaning and Maintenance

Develop requirements for the sweeping of streets and roadways in order to reduce the amount of sediment and associated pollutants discharged to the MS4 from roadways.

The Superintendent of Highways will:

- Identify the type of roadways that should be swept to remove sediment and other pollutants.
- Perform operations such as paving in dry weather only.
- Maintain records of streets that have been cleaned.
- Adjust sweeping schedules according to program needs.
- Prior to road reconstruction, consider/evaluate the use of “shouldered roads” instead of “curbed roads”.
- Maintain roadside vegetation; select plants/trees that can withstand the action of road salt and direct runoff to these areas.

The Roadway Maintenance and Inspection Form following this section is provided to document roadway sweeping/cleaning operations.

The Parks Maintenance Supervisor will:

- Minimize the impact of the following items:
 - Sedimentation from barren soils.
- Implement the following:
 - Minimize impervious areas – install vegetated buffer strips (i.e. grass, shrubs).
 - Provide covered trash receptacles.
 - Identify areas of runoff that lack vegetation.
 - Regularly check fueling areas, maintenance areas for spills, other potential sources of pollution.

Pest Control

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

The Parks Maintenance Supervisor will:

- Identify pests within municipality. Determine if levels are acceptable or if action needs to be taken to control them.
 - Assess each location for opportunities to implement alternative practices and to retrofit structures in order for non-pesticide methods of maintenance to become effective.
 - Develop a prioritized list of areas where retrofits and alternative pest control practices would reduce overall pesticide and herbicide application volumes.
- Maintain 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
 - 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 or 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).
- Inspect pest traps (bait boxes) regularly. Remove and properly dispose of dead pests.
- Block/eliminate access to buildings/structures for pests.
- Remove pests (insects).

- Follow NYSDEC regulations (6NYCRR Part 325).

The Pest Control Materials Management Form following this section is provided to document the application of herbicides and pesticides to prevent the contamination of stormwater.

Septic System Management

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

The Parks Maintenance Supervisor will:

- Divert stormwater runoff (i.e. from roof drains) away from septic system.
- Divert groundwater (sump pump) discharges away from septic system.
- Prevent problems caused by vegetation - growth of woody plants on the System.
- Prevent hydraulic overloading - "Spread out" the use of devices which use large volumes of water across the entire day. Repair leaky fixtures.
- Minimize water usage by using flow restrictors on potable water distribution devices (i.e. shower heads, water faucets)
- Develop an inventory of existing municipal sewage treatment systems.
- Prevent heavy equipment from driving on top of the system components.
- Assess each septic system on an annual basis for the following conditions:
 - "back up" of wastewater in sewer lines
 - sewage odors
 - leach field/sand filter - wetness/ponding on surface
 - overflow of wastes from system components
 - heavy vegetation (woody plants) growth on system components
- Determine the interval for pumping out each municipal septic tank.

The Septic System Inspection Form following this section is provided to document inspection and maintenance of municipal septic systems

5. Minimum Required Reporting

Program Development:

Identification of municipal operations and facilities that will be considered for inclusion in the program;

Description of PP/GH program priorities;

Description of management practices and policies to be developed;

Identification of staff and equipment available;

Description of employee PP/GH training program, begin training, report on number of staff trained;

Description of development management practices.

Program Implementation:

Commence implementation reporting after three year development permit.

Implementation reporting can begin earlier if implementation begins during development period.

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

Describe the management practices, policies and procedures that have been developed and report on the following items:

Acres of parking lot swept;

Miles of street swept;
Number of catch basins inspected and cleaned (where necessary);
Post-construction control stormwater management practices inspected and cleaned (where necessary);
Pounds of phosphorus applied in chemical fertilizer
Pounds of nitrogen applied in chemical fertilizer; and
Acres of pesticides/herbicides applied.
Staff training events and number of staff trained; and
Report on effectiveness of program

STORMWATER MANAGEMENT PROGRAM PLAN: Implementation Schedule

		Expected Annual Accomplishment					
MCM	Description of Activity	Who is Responsible?	Year 1	Year 2	Year 3	Year 4	Year 5
MCM 1	Demonstrate stormwater model	Broome-Tioga Stormwater Coalition and Town of Union	Contact schools within Broome County	Establish classrooms for demos	2 classroom demos	2 classroom demos	2 classroom demos
	Develop brochures	Broome-Tioga Stormwater Coalition	Determine subjects and design brochure formats	Develop and distribute brochure 1	Develop and distribute brochure 2	Develop and distribute brochure 3	Develop and distribute brochure 4
	Develop TV PSA campaign	Broome-Tioga Stormwater Coalition	Outreach to TV stations and consultants	Develop campaigns	Rollout Campaign 1	Rollout Campaign 2	Rollout Campaign 3
	Webpage / Create links to BTSC website	Town of Union	Design web page and create link to BTSC site	Design web page and create link to BTSC site	Update as needed	Update as needed	Update as needed
MCM 2	Purchase & install 1000 Storm Drain Markers	Highway Department	Town of Vestal bid markers, BrCo Soil & Water admins NYS grant.	Receive 1,000 markers initially	Install 1000 storm drain markers	Install 1000 storm drain markers	Install 1000 storm drain markers
	River Bank Cleanup, Coordinate w/ Public	BCEMC & Town of Union Refuse Department	Conduct public outreach for continued	Continue participation	Continue participation	Continue participation	Continue participation

Expected Annual Accomplishment							
MCM	Description of Activity	Who is Responsible?	Year 1	Year 2	Year 3	Year 4	Year 5
	projects		volunteer participation				on
MCM3	Outfall reconnaissance inventory	Town of Union Engineering	Inventoried all outfalls	Utilize NYSDEC supplied forms for annual inspections	Continue annual inspections	Continue annual inspections	Continue annual inspections
3 cont.	Develop Catchbasin inventory	Town of Union Engineering	Began listing and identifying CBs in a data base	Continue development of the data base	Continue development of the data base	Continue development of the data base	Continue development of the data base
	Map catch basins within the MS4	Town of Union Engineering	Storm system was mapped in AutoCAD in 2005	Update as needed	Update as needed	Update as needed	Update as needed
	Catch Basin and storm drain system inspection and cleaning	Town of Union Highway	Continue with current level of inspection and cleaning of CBs, ditches and outlets	Continue with current effort.	Continue with current effort	Continue with current effort	Continue with current effort
	Develop public service information	BTSC/Town of Union SWM					

		Expected Annual Accomplishment					
MCM	Description of Activity	Who is Responsible?	Year 1	Year 2	Year 3	Year 4	Year 5
MCM 4	Site Plan and Project Review	Planning Board and SWM	Continue current requirement to review plans for conformance with NYSDEC and JC storm water requirements.	Continue plan review.	Continue plan review.	Continue plan review.	Continue plan review.
MCM 5	Inspection of stormwater facilities	Superintendent of Highways	Develop a form and inspect installed stormwater facilities	Continue facility inspections	Continue facility inspections	Continue facility inspections	Continue facility inspections
MCM6	Training	BTSC / Town of Union	Provide training to each member of the municipality who's work may impact stormwater	Refresher training	Refresher training	Refresher training	Refresher training
	Street Sweeping, ditch and catchbasin cleaning	DPW	Continue current efforts of cleaning and documenting.	Continue current efforts of cleaning and documenting.	Continue current efforts of cleaning and documenting.	Continue current efforts of cleaning and documenting.	Continue current efforts of cleaning and documenting.

Expected Annual Accomplishment							
MCM	Description of Activity	Who is Responsible?	Year 1	Year 2	Year 3	Year 4	Year 5
							ng.
	Vehicle/ Equipment Maintenance	Mechanics	Purchased fire proof cabinet for storage of vehicle repair fluids	Continue proper storage of fluids	Continue proper storage of fluids	Continue proper storage of fluids	Continue proper storage of fluids
	Yardwaste Collection	Refuse Department	Continue collection of yardwaste with disposal at a Village of Endicott Compost Facility	Continue collection of yardwaste	Continue collection of yardwaste	Continue collection of yardwaste	Continue collection of yardwaste
	Riverbank Cleanup	Broome County Environmental Management Council and Town of Union Refuse	Continue to participate in the annual Riverbank Cleanup Program	Continue to participate in the annual Riverbank Cleanup Program waste materials storage	Continue to participate in the annual Riverbank Cleanup Program	Continue to participate in the annual Riverbank Cleanup Program	Continue to participate in the annual Riverbank Cleanup Program

APPENDICES

Appendix A: SPDES Permit No. GP-0-10-002


http://www.dec.ny.gov/docs/water_pdf/ms4gp2011.pdf

*Appendix B: Catchbasin, Drainage Ditch, Street Sweeping
Summary*

**BEEHIVES AND TRASHRACKS TO INSPECT AND CLEAN
FOR PRESTORM AND POSTSTORM**

Location	Year - 2020	Date & Time - Employee
1- Beehive @ Greenwood Place off 17C		8:10 1/15/20 PL
2- Catch Basin Marshall Rd. West Side 150' from Airport		8:15 1/15/20 PL
3- Beehive IBM Glendale Loop (Perimeter Dr) 1st dway - left		8:05 1/15/20 PL
4- Catch Basin on the West Side of Dallas Court		8:00 1/15/20 PL
5- Culvert & Ditch West Side of Destin Dr / Near Morlando		7:55 1/15/20 PL
6- Beehive Prospect St. (Across From S.T.C.R.) 7 & 9 Prospect		
7- Catch Basin Dead End of Mary Street		
8- Ditch West Side of Galley Plaza off of Hooper Road		
9- Trashrack on East Side of Valley View Drive / Near Alpine		
10- Catch Basins behind Houses Northwood Dr & Elmwood Dr		
11- Catch Basin Behind Houses Talan Dr & Grandview Pl.		
12- 3717 Frazier Drive - (3) Catch Basins in Back Yard		
13- Catch Basin Dead End of Oak St. & Fairmont Park		
14- Beehive - End of Sycamore Street in Fairmont Park		
15- Check Sluice Pipes @ Bottom of Kot Rd (by water tower)		
16 - Catch Basins Rhodes Rd & Catch Basin in woods @ 1205		
17- Sluice Pipe Inlet to the Left @ 1115 Arnold Drive (Rear)		
18- 611 Prescott Ave, Beehive & Inlet Pipe behind Curb		8:50 1/15/20 PL
19- 701 Prescott Ave, Beehive & Inlet Pipe behind Curb		8:55 1/15/20 PL
20- Bean Hill Road, all Catch Basins (Both Sides of Roadway) Box # 102, 55, 100, 124, 128, 146, 216 , 60' below Dway @ 208		1/15/20 7:30 - 7:45 PL

**BEEHIVES AND TRASHRACKS TO INSPECT AND CLEAN
FOR PRESTORM AND POSTSTORM**

Location	Year - 2020	Date & Time - Employee
21 - Townline Road up from Box # 1371 (2) Catch Basins		8:15 - 8:40 1/15/20 <i>JK</i>
22- Bornt Hill Road - East Side Up from E. Campville Road Catch Basins - (3) of them		
23- Sally Piper Road - North Side of the Road - Catch Basins		
24- Rhodes Road - West Side of the Road - Catch Basins		
25- Kot Road - East Side of the Road - Catch Basins		
Comments and Additional Notes		
A:		
B:		
C:		
D:		
E:		
F:		
G:		
H:		

Appendix C: Inter-municipal Agreement

**A MEMORANDUM OF AGREEMENT
WITH THE MUNICIPAL CORPORATIONS COMPRISING THE
BROOME-TIOGA STORMWATER COALITION FOR
STORMWATER ASSET MAPPING IMPLEMENTATION
IN BROOME AND TIOGA COUNTIES**

May 2020

A MEMORANDUM OF AGREEMENT among municipal corporations of the County of Broome, 60 Hawley St, Binghamton NY 13902 and the County of Tioga, 56 Main Street, Owego NY 13827, hereinafter referred to as "Counties" and the City of Binghamton, 38 Hawley Street, Binghamton NY 13901, hereinafter referred to as the "City" and the Town of Binghamton, 279 Park Avenue, Binghamton NY 13903, the Town of Chenango, Chenango Town Hall, 1529 State Rt. 12, Binghamton NY 13901, the Town of Conklin, PO Box 182, 1271 Conklin Rd, Conklin NY 13748, the Town of Dickinson, 531 Old Front Street #4, Binghamton NY 13905, the Town of Fenton, 44 Park Street, Port Crane NY 13833, the Town of Kirkwood, 70 Crescent Drive, Kirkwood NY 13795, the Town of Owego, 2354 State Route 434, Apalachin, NY 13732, the Town of Union, 3111 E Main Street, Endwell NY 13760, the Town of Vestal, 605 Vestal Parkway W, Vestal NY 13850, hereinafter referred to as "Towns", and the Village of Endicott, 1009 E Main Street, Endicott NY 13760, the Village of Johnson City, 243 Main Street, Johnson City NY 13790, and the Village of Port Dickinson, 786 Chenango Street, Binghamton NY 13901, hereinafter referred to as "Villages".

WHEREAS, Broome County and Tioga County are responsible for coordination of water quality management activities in their Counties through the Broome and Tioga County Water Quality Coordinating Committees and;

WHEREAS, the Phase II federal stormwater regulations require that small municipal separate storm sewer systems must be authorized in accordance with the State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems; and;

WHEREAS, the Phase II federal stormwater regulations require that regulated small municipal separate storm sewer system operators must prepare and implement a stormwater management program that includes six minimum control measures, and;

WHEREAS, the municipalities recognize that, because watersheds and separate storm sewer systems cross municipal boundaries and because there are opportunities to save time, money, and energy by working collaboratively, the municipalities should work together to identify and analyze options for meeting the requirements of the Phase II Federal stormwater regulations, and;

WHEREAS, the Counties, Towns, Villages and City have an interest in protecting water quality and have been participating in or following the work of the Broome-Tioga Stormwater Coalition and;

WHEREAS, the Towns and Villages and City and the Counties of Broome and Tioga recognize the benefits of cooperating to achieve improved water quality and flood control, and;

WHEREAS, a Broome-Tioga Stormwater Coalition started has been holding meetings since January of 2003 to identify and analyze options for pooling resources to meet the requirements of the Phase II Federal Stormwater Regulations, and;

WHEREAS, the Broome-Tioga Stormwater Coalition provides participating MS4 communities with access to public education programming, public participation events, training opportunities, collaborative annual reporting, and mapping services, and;

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter set forth, the parties hereto mutually agree as follows:

1. To continue participation as formal members of the Broome-Tioga Stormwater Coalition.
2. To contribute a local match of \$2,200 toward the implementation of Broome-Tioga Stormwater Coalition Asset Mapping Project to be submitted by May 1st annually starting in 2020 and not to be extended past May 2023, to the Southern Tier East Regional Planning Development Board per their role in BTSC administration.
3. Each municipal corporation will contribute and provide to the Southern Tier East Regional Planning Development Board, copies of any and all geospatial datasets, and copies or access to any and all site plans, maps, plats, or other descriptions or depictions, that will aid in the development of any geospatial datasets that are to be developed as per the objectives of the Asset Mapping Project grant.
4. To authorize the work of the Broome-Tioga Stormwater Coalition whose purpose it is to cooperatively implement the MS4 Stormwater Management Plans required by the DEC's Phase II Stormwater regulations and thereby oversee the utilization and expenditure of funds received on behalf of the Coalition for said purpose.
5. This Agreement may be modified or amended only in writing duly executed by all parties, which shall be attached to and become a part of this Agreement.
6. Each municipal corporation shall, to the extent of its general commercial liability insurance, indemnify and hold harmless the other municipal corporations, its officers, agents and assigns for all liability arising as a result of its own acts and omissions regarding the activities under this Agreement. It is understood and agreed that no municipal corporation shall indemnify any or all of the other municipal corporations for liability arising as a result of the acts or omissions of another municipal corporation who is a party to this Agreement.
7. The Agreement shall be governed by and construed in accordance with the laws of New York State without regard or reference to its conflict of laws and principles.
8. This agreement shall become effective upon the municipal corporation's execution of the

Agreement. In the event that not all of the municipal corporations identified in the initial paragraph of this Agreement execute the Agreement, the municipal corporations executing the Agreement agree that it shall be binding as to them.

9. Any municipal corporation may withdraw from this Agreement upon sixty (60) days written notice to the other municipal corporations who are parties to the Agreement. The withdrawal of one or more municipal corporation shall not result in the termination of this Agreement and its provisions shall continue to be applicable to the municipal corporations remaining parties to the Agreement.

10. This Agreement may be terminated upon the written consent of a majority of the municipal corporations who are parties to this Agreement at the time of the proposed termination.

IN WITNESS THEREOF the signatories of this agreement hereby authorize this Memorandum of Agreement:

Jason T. Garner, Broome County Executive	Date
Martha Sauerbrey, Tioga County Legislative Chair	Date
Richard C. David, City of Binghamton Mayor	Date
Elizabeth Rounds, Town of Binghamton Supervisor	Date
Jo Anne Klenovic, Town of Chenango Supervisor	Date
William Dumian Jr., Town of Conklin Supervisor	Date
Michael Marinaccio, Town of Dickinson Supervisor	Date
Gary J. Holcomb, Town of Fenton Supervisor	Date
Gordon Kniffen, Town of Kirkwood Supervisor	Date
Donald Castellucci Jr., Town of Owego Supervisor	Date
Richard Materese, Town of Union Supervisor	Date
W. John Schaffer, Town of Vestal Supervisor	Date
Linda Jackson, Village of Endicott Mayor	Date
Gregory W. Deemie, Village of Johnson City Mayor	Date
Kevin M. Burke, Village of Port Dickinson Mayor	Date

Appendix D: Town Code Chapter 134 Illicit Discharges

Town of Union, NY
Monday, February 15, 2021

Chapter 134. Illicit Discharges, Activities and Connections to Storm Sewers

[HISTORY: Adopted by the Town Board of the Town of Union 8-8-2007 by L.L. No. 5-2007. Amendments noted where applicable.]

GENERAL REFERENCES

Aquifer recharge and watershed protection zones — See Ch. 74.

Drainage — See Ch. 102.

Flood damage prevention — See Ch. 121.

Freshwater wetlands — See Ch. 125.

Sewers — See Ch. 165.

Erosion and sediment control — See Ch. 171.

Subdivision of land — See Ch. 181.

Zoning — See Ch. 205.

§ 134-1. Purpose; intent.

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

- A. To meet the requirements of the SPDES General Permit for Stormwater Discharges from MS4s, Permit No. GP-02-02, or as amended or revised;
- B. To regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process or discharge nonstormwater wastes;
- C. To prohibit illicit connections, activities and discharges to the MS4;
- D. To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this chapter; and
- E. To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the MS4.

§ 134-2. Definitions.

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

BEST MANAGEMENT PRACTICES (BMPS)

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

CLEAN WATER ACT

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

CONSTRUCTION ACTIVITY

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

DEPARTMENT

The New York State Department of Environmental Conservation.

HAZARDOUS MATERIALS

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

ILLCIT CONNECTIONS

Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the MS4, including but not limited to:

- A. Any conveyances which allow any nonstormwater discharge including treated or untreated sewage, process wastewater, and wash water to enter the MS4 and any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by an authorized enforcement agency; or
- B. Any drain or conveyance connected from a commercial or industrial land use to the MS4 which has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.

ILLCIT DISCHARGE

Any direct or indirect nonstormwater discharge to the MS4, except as exempted in § 134-5 of this chapter.

INDUSTRIAL ACTIVITY

Activities requiring the SPDES Permit for Discharges From Industrial Activities Except Construction, GP-98-03, as amended or revised.

MS4

Municipal separate storm sewer system.

MUNICIPALITY

The Town of Union.

MUNICIPAL SEPARATE STORM SEWER SYSTEM

A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- A. Owned or operated by the Town of Union;
- B. Designed or used for collecting or conveying stormwater;
- C. Which is not a combined sewer; and
- D. Which is not part of a publicly owned treatment works (POTW) as defined at 40 CFR 122.2.

NONSTORMWATER DISCHARGE

Any discharge to the MS4 that is not composed entirely of stormwater.

PERSON

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

POLLUTANT

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

PREMISES

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

SPECIAL CONDITIONS

- A. Discharge compliance with water quality standards: the condition that applies where a municipality has been notified that the discharge of stormwater authorized under their MS4 permit may have caused or has the reasonable potential to cause or contribute to the violation of an applicable water quality standard. Under this condition, the municipality must take all necessary actions to ensure future discharges do not cause or contribute to a violation of water quality standards.
- B. 303(d) Listed Waters. The condition in the municipality's MS4 permit that applies where the MS4 discharges to a 303(d) listed water. Under this condition, the stormwater management program must ensure no increase of the listed pollutant of concern to the 303(d) listed water.
- C. Total maximum daily load (TMDL) strategy: The condition in the municipality's MS4 permit where a TMDL including requirements for control of stormwater discharges has been approved by EPA for a water body or watershed into which the MS4 discharges. If the discharge from the MS4 did not meet the TMDL stormwater allocations prior to September 10, 2003, the municipality was required to modify its stormwater management program to ensure that reduction of the pollutant of concern specified in the TMDL is achieved.
- D. The condition in the municipality's MS4 permit that applies if a TMDL is approved in the future by EPA for any water body or watershed into which an MS4 discharges: under this condition, the municipality must review the applicable TMDL to see if it includes requirements for control of stormwater discharges. If an MS4 is not meeting the TMDL stormwater allocations, the municipality must, within six months of the TMDL's approval, modify its stormwater management program to ensure that reduction of the pollutant of concern specified in the TMDL is achieved.

STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES) STORMWATER DISCHARGE PERMIT

A permit issued by the Department that authorizes the discharge of pollutants to waters of the state.

STORMWATER

Rainwater, surface runoff, snowmelt and drainage.

STORMWATER MANAGEMENT OFFICER (SMO)

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

303(D) LIST

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

TMDL

Total maximum daily load.

TOTAL MAXIMUM DAILY LOAD

The maximum amount of a pollutant to be allowed to be released into a water body so as not to impair uses of the water allocated among the sources of that pollutant.

WASTEWATER

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

§ 134-3. Applicability.

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

§ 134-4. Responsibility for administration.

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

§ 134-5. Discharge prohibitions; exceptions.

A. Prohibition of illegal discharges. No person shall discharge or cause to be discharged into the MS4 any materials other than stormwater except as provided in Subsection **A(1)**. The commencement, conduct or continuance of any illegal discharge to the MS4 is prohibited except as described as follows:

- (1) The following discharges are exempt from discharge prohibitions established by this chapter, unless the Department or the 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 groundwater, uncontaminated groundwater infiltration to storm drains, uncontaminated pumped groundwater, foundation or footing drains, crawl space or basement sump pumps, air conditioning condensate, irrigation water, springs, water from individual residential car washing, natural riparian habitat or wetland flows, dechlorinated swimming pool discharges, residential street wash water, water from fire-fighting activities, and any other water source not containing pollutants. Such exempt discharges shall be made in accordance with an appropriate plan for reducing pollutants.

- (2) Discharges approved in writing by the SMO to protect life or property from imminent harm or damage, provided that such approval shall not be construed to constitute compliance with other applicable laws and requirements, and further provided that such discharges may be permitted for a specified time period and under such conditions as the SMO may deem appropriate to protect such life and property while reasonably maintaining the purpose and intent of this chapter.
- (3) Dye testing in compliance with applicable state and local laws is an allowable discharge, but requires a verbal notification to the SMO prior to the time of the test.
- (4) The prohibition shall not apply to any discharge permitted under an SPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the Department, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the MS4.

B. Prohibition of illicit connections.

- (1) The construction, use, maintenance or continued existence of illicit connections to the MS4 is prohibited.
- (2) This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.
- (3) A person is considered to be in violation of this chapter if the person connects a line conveying sewage to the municipality's MS4, or allows such a connection to continue.

§ 134-6. Prohibition against activities contaminating stormwater.

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

- (1) Cause or contribute to a violation of the municipality's MS4 SPDES permit.
- (2) Cause or contribute to the municipality being subject to the special conditions as defined in § 134-2, Definitions, of this chapter.

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

§ 134-7. Prevention, control, and reduction of stormwater pollutants by use of best management practices.

Where the SMO has identified illicit discharges as defined in § 134-2 or activities contaminating stormwater as defined in § 134-7, the municipality may require implementation of best management practices (BMPs) to control those illicit discharges and activities.

- A. The owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the MS4 through the use of structural and nonstructural BMPs.
- B. Any person responsible for a property or premise, which is, or may be, the source of an illicit discharge as defined in § 134-2 or an activity contaminating stormwater as defined in § 134-7,

may be required to implement, at said person's expense, additional structural and nonstructural BMPs to reduce or eliminate the source of pollutant(s) to the MS4.

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

§ 134-8. Suspension of access to MS4.

Illicit discharges in emergency situations:

- A. The SMO may, without prior notice, suspend MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment, to the health or welfare of persons, or to the MS4. The SMO shall notify the person of such suspension within a reasonable time thereafter in writing of the reasons for the suspension. If the violator fails to comply with a suspension order issued in an emergency, the SMO may take such steps as deemed necessary to prevent or minimize damage to the MS4 or to minimize danger to persons.
- B. Suspension due to the detection of illicit discharge. Any person discharging to the municipality's MS4 in violation of this chapter may have their MS4 access terminated if such termination would abate or reduce an illicit discharge. The SMO will notify a violator in writing of the proposed termination of its MS4 access and the reasons therefor. The violator may petition the SMO for a reconsideration and hearing. Access may be granted by the SMO if he/she finds that the illicit discharge has ceased and the discharger has taken steps to prevent its recurrence. Access may be denied if the SMO determines in writing that the illicit discharge has not ceased or is likely to recur. A person commits an offense if the person reinstates MS4 access to premises terminated pursuant to this section without the prior approval of the SMO.

§ 134-9. Industrial or construction activity discharges.

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

§ 134-10. Applicability; access to facilities; monitoring of discharges.

- A. Applicability. This section applies to all facilities that the SMO must inspect to enforce any provision of this chapter, or whenever the authorized enforcement agency has cause to believe that there exists, or potentially exists, in or upon any premises any condition which constitutes a violation of this chapter.
- B. Access to facilities.
 - (1) The SMO shall be permitted to enter and inspect facilities subject to regulation under this chapter as often as may be necessary to determine compliance with this chapter. If a discharger has security measures in force which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to the SMO.
 - (2) Facility operators shall allow the SMO ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records as may be required to implement this chapter.

- (3) The municipality shall have the right to set up on any facility subject to this chapter such devices as are necessary in the opinion of the SMO to conduct monitoring and/or sampling of the facility's stormwater discharge.
- (4) The municipality has the right to require the facilities subject to this chapter to install monitoring equipment as is reasonably necessary to determine compliance with this chapter. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure stormwater flow and quality shall be calibrated to ensure their accuracy.
- (5) Unreasonable delays in allowing the municipality access to a facility subject to this chapter is a violation of this chapter. A person who is the operator of a facility subject to this chapter commits an offense if the person denies the municipality reasonable access to the facility for the purpose of conducting any activity authorized or required by this chapter.
- (6) If the SMO has been refused access to any part of the premises from which stormwater is discharged, and he/she is able to demonstrate probable cause to believe that there may be a violation of this chapter, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this chapter or any order issued hereunder, then the SMO may seek issuance of a search warrant from any court of competent jurisdiction.

§ 134-11. Notification of spills.

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

§ 134-12. Enforcement; penalties for offenses.

A. Notice of violation.

- (1) When the municipality's SMO finds that a person has violated a prohibition or failed to meet a requirement of this chapter, he/she may order compliance by written notice of violation to the responsible person. Such notice may require, without limitation:
 - (a) The elimination of illicit connections or discharges;
 - (b) That violating discharges, practices, or operations shall cease and desist;
 - (c) The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property;
 - (d) The performance of monitoring, analyses, and reporting;
 - (e) Payment of a fine; and

(f) The implementation of source control or treatment BMPs.

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

B. Penalties. In addition to or as an alternative to any penalty provided herein or by law, any person who violates the provisions of this chapter shall be guilty of a violation punishable by a fine not exceeding \$350 or imprisonment for a period not to exceed six months, or both for conviction of a first offense; for conviction of a second offense, both of which were committed within a period of five years, punishable by a fine not less than \$350 nor more than \$700 or imprisonment for a period not to exceed six months, or both; and upon conviction for a third or subsequent offense, all of which were committed within a period of five years, punishable by a fine not less than \$700 nor more than \$1,000 or imprisonment for a period not to exceed six months, or both. However, for the purposes of conferring jurisdiction upon courts and judicial officers generally, violations of this chapter shall be deemed misdemeanors, and for such purpose only, all provisions of law relating to misdemeanors shall apply to such violations. Each week's continued violation shall constitute a separate additional violation.

§ 134-13. Appeal of notice of violation.

Any person receiving a notice of violation may appeal the determination of the SMO to the Town Board within 15 days of its issuance, which shall hear the appeal within 30 days after the filing of the appeal, and within five days of making its decision, file its decision in the office of the municipal clerk and mail a copy of its decision by certified mail to the discharger.

§ 134-14. Corrective measures after appeal.

- A. If the violation has not been corrected pursuant to the requirements set forth in the notice of violation, or, in the event of an appeal, within five business days of the decision of the municipal authority upholding the decision of the SMO, then the SMO shall request the owner's permission for access to the subject private property to take any and all measures reasonably necessary to abate the violation and/or restore the property.
- B. If refused access to the subject private property, the SMO may seek a warrant in a court of competent jurisdiction to be authorized to enter upon the property to determine whether a violation has occurred. Upon determination that a violation has occurred, the SMO may seek a court order to take any and all measures reasonably necessary to abate the violation and/or restore the property. The cost of implementing and maintaining such measures shall be the sole responsibility of the discharger.

§ 134-15. Injunctive relief.

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

§ 134-16. Alternative remedies.

- A. Where a person has violated a provision of this chapter, he/she may be eligible for alternative remedies in lieu of a civil penalty, upon recommendation of the Municipal Attorney and concurrence of the Municipal Code Enforcement Officer, where:
- (1) The violation was unintentional;
 - (2) The violator has no history of previous violations of this chapter;
 - (3) Environmental damage was minimal;
 - (4) Violator acted quickly to remedy violation;
 - (5) Violator cooperated in investigation and resolution.
- B. Alternative remedies may consist of one or more of the following:
- (1) Attendance at compliance workshops;
 - (2) Storm drain stenciling or storm drain marking;
 - (3) River, stream or creek cleanup activities.

§ 134-17. Violations deemed a public nuisance.

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

§ 134-18. Remedies not exclusive.

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

*Appendix E: Town Code Chapter 171 Erosion and
Sediment Control*

Town of Union, NY
Monday, February 15, 2021

Chapter 171. Erosion and Sediment Control

[HISTORY: Adopted by the Town Board of the Town of Union 3-7-2007 by L.L. No. 1-2007.^[1]
Amendments noted where applicable.]

GENERAL REFERENCES

Building code administration — See Ch. 86.
Drainage — See Ch. 102.
Environmental quality review — See Ch. 109.
Flood damage prevention — See Ch. 121.
Freshwater wetlands — See Ch. 125.
Subdivision of land — See Ch. 181.
Zoning — See Ch. 205.

ATTACHMENTS

171a Schedule A 

171b Schedule B 

[1] *Editor's Note: This local law also repealed former Ch. 171, Soil Erosion, adopted 8-21-1991 by L.L. No. 5-1991.*

Article I. General Provisions

§ 171-1. Findings of fact.

It is hereby determined that:

- A. Land development activities and associated increases in site impervious cover often alter the hydrologic response of local watersheds and increase stormwater runoff rates and volumes, flooding, stream channel erosion, or sediment transport and deposition;
- B. This stormwater runoff contributes to increased quantities of water-borne pollutants, including siltation of aquatic habitat for fish and other desirable species;
- C. Clearing and grading during construction tend to increase soil erosion and add to the loss of native vegetation necessary for terrestrial and aquatic habitat;
- D. Improper design and construction of stormwater management practices can increase the velocity of stormwater runoff, thereby increasing stream bank erosion and sedimentation;
- E. Impervious surfaces allow less water to percolate into the soil, thereby decreasing groundwater recharge and stream baseflow;
- F. Substantial economic losses can result from these adverse impacts on the waters of the municipality;
- G. Stormwater runoff, soil erosion and nonpoint source pollution can be controlled and minimized through the regulation of stormwater runoff from land development activities;

- H. The regulation of stormwater runoff discharges from land development activities in order to control and minimize increases in stormwater runoff rates and volumes, soil erosion, stream channel erosion, and nonpoint source pollution associated with stormwater runoff is in the public interest and will minimize threats to public health and safety.
- I. Regulation of land development activities by means of performance standards governing stormwater management and site design will produce development compatible with the natural functions of a particular site or an entire watershed and thereby mitigate the adverse effects of erosion and sedimentation from development.

§ 171-2. Purpose.

The purpose of this chapter is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of fact in § 171-1 hereof. This chapter seeks to meet those purposes by achieving the following objectives:

- A. Meet the requirements of Minimum Measures 4 and 5 of the SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-02-02, or as amended or revised;
- B. Require land development activities to conform to the substantive requirements of the NYS Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities, Permit No. GP-02-01, or as amended or revised;
- C. Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and stream bank erosion and maintain the integrity of stream channels;
- D. Minimize increases in pollution caused by stormwater runoff from land development activities, which would otherwise degrade local water quality;
- E. Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and
- F. Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety.

§ 171-3. Statutory authority.

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

§ 171-4. Applicability.

- A. This chapter shall be applicable to all land development activities as defined in this chapter.

- B. The municipality shall designate a Stormwater Management Officer who shall accept and review all stormwater pollution prevention plans and forward such plans to the applicable municipal board. The Stormwater Management Officer may:
- (1) Review the plans,
 - (2) Upon approval by the Town Board of the Town of Union, engage the services of a registered professional engineer to review the plans, specifications and related documents at a cost not to exceed a fee schedule established by said governing board, or
 - (3) Accept the certification of a licensed professional that the plans conform to the requirements of this chapter.
- C. All land development activities subject to review and approval by the Planning Department, Planning Board, Zoning Board of Appeals or Town Board of the Town of Union under subdivision, zoning, site plan, and/or special permit regulations shall be reviewed subject to the standards contained in this chapter.
- D. All land development activities not subject to review as stated in Subsection C shall be required to submit a Stormwater Pollution Prevention Plan (SWPPP) to the Stormwater Management Officer, who shall approve the SWPPP if it complies with the requirements of this chapter.

§ 171-5. Exemptions.

The following activities may be exempt from review under this chapter:

- A. Agricultural activity as defined in this chapter;
- B. Silvicultural activity, except that landing areas and log haul roads are subject to this chapter;
- C. Routine maintenance activities that disturb less than five acres and are performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility;
- D. Repairs to any stormwater management practice or facility deemed necessary by the Stormwater Management Officer;
- E. Any part of a subdivision if a plat for a subdivision that has been approved by the Town of Union and construction activities have started on or before the effective date of this chapter;
- F. Land development activities for which a building permit has been approved on or before the effective date of this chapter;
- G. Cemetery graves;
- H. Installation of fence, sign, telephone, and electric poles and other kinds of posts or poles;
- I. Emergency activity immediately necessary to protect life, property or natural resources;
- J. Activities of an individual engaging in home gardening by growing flowers, vegetable and other plants primarily for use by that person and his or her family;
- K. Landscaping and horticultural activities in connection with an existing structure.

Article II. Stormwater Control

§ 171-6. Definitions.

The terms used in this chapter or in documents prepared or reviewed under this chapter shall have the meaning as set forth:

AGRICULTURAL ACTIVITY

The activity of an active farm including grazing and watering livestock, irrigating crops, harvesting crops, using land for growing agricultural products, and cutting timber for sale, but shall not include the operation of a dude ranch or similar operation, or the construction of new structures associated with agricultural activities.

APPLICANT

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

BUILDING

Any structure, either temporary or permanent, having walls and a roof, designed for the shelter of any person, animal, or property, and occupying more than 100 square feet of area.

CATCH BASIN (DRAIN INLET)

A structure which allows the entry of surface runoff into a storm sewer by connection to the storm sewer.

CHANNEL

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

CLEARING

Any activity that removes the vegetative surface cover.

DEDICATION

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

DETENTION STRUCTURE

A permanent stormwater management structure whose primary purpose is to temporarily store stormwater runoff. A detention structure may be dry during non-storm events or may have a permanent pool of water.

DEPARTMENT

The New York State Department of Environmental Conservation.

DESIGN MANUAL

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

DEVELOPER

A person who undertakes land development activities.

EROSION CONTROL MANUAL

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

FIRST FLUSH

The delivery of a disproportionately large load of pollutants during the early part of storms due to the rapid runoff of accumulated pollutants. The "first flush" is defined as the runoff generated from the first one-half inch of runoff from the entire site from land which has been made less pervious than the predevelopment conditions through land grading and/or construction/development activities.

GRADING

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

IMPERVIOUS COVER

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

INDUSTRIAL STORMWATER PERMIT

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

INFILTRATION

The process of percolating water into the subsoil.

JURISDICTIONAL WETLAND

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

LAND DEVELOPMENT ACTIVITY

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

LANDOWNER

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

MAINTENANCE AGREEMENT

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

NONPOINT SOURCE POLLUTION

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

PHASING

Developing a parcel of land in distinct pieces or parts, with the stabilization of each piece completed before the development of the next.

POLLUTANT OF CONCERN

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

PROJECT

Land development activity.

RETENTION

A practice designed to store stormwater runoff by collection as a permanent pool of water without release except by means of evaporation, infiltration, or attenuated release when runoff volumes exceed the storage capacity of the pool.

RECHARGE

The replenishment of underground water reserves.

SEDIMENT

Solid material, both mineral and organic, that is in suspension, is being transported, or has been removed from its site of origin by erosion.

SEDIMENT CONTROL

Measures that prevent eroded sediment from leaving the site.

SENSITIVE AREAS

Cold-water fisheries, shellfish beds, swimming beaches, groundwater recharge areas, water supply reservoirs, habitats for threatened, endangered or special concern species; Critical Environmental Area designated by the municipality.

SPDES GENERAL PERMIT FOR CONSTRUCTION ACTIVITIES GP-02-01

A permit under the New York State Pollutant Discharge Elimination System (SPDES) issued to developers of construction activities to regulate disturbance of one or more acres of land.

SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM MUNICIPAL SEPARATE STORMWATER SEWER SYSTEMS GP-02-02

A permit under the New York State Pollutant Discharge Elimination System (SPDES) issued to municipalities to regulate discharges from municipal separate storm sewers for compliance with EPA established water quality standards and/or to specify stormwater control standards.

STABILIZATION

The use of practices that prevent exposed soil from eroding.

STOP-WORK ORDER

An order issued which requires that all construction activity on a site be stopped.

STORMWATER

Rainwater, surface runoff, snowmelt and drainage.

STORMWATER HOTSPOT

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

STORMWATER MANAGEMENT

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

STORMWATER MANAGEMENT FACILITY

One or a series of stormwater management practices installed, stabilized and operated for the purpose of controlling stormwater runoff.

STORMWATER MANAGEMENT OFFICER

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

STORMWATER MANAGEMENT PRACTICES (SMPS)

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

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

A plan for controlling stormwater runoff and pollutants from a site during and after construction activities.

STORMWATER RUNOFF

Flow on the surface of the ground resulting from precipitation.

STRIPPING

Any activity which removes or significantly disturbs trees, brush, grass, or any other kind of vegetation.

SURFACE WATERS OF THE STATE OF NEW YORK

Lakes, bays, sounds, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic Ocean within the territorial seas of the state of New York and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the state or within its jurisdiction. Storm sewers and waste treatment systems, including treatment ponds or lagoons, which also meet the criteria of this definition, are not waters of the state. This exclusion applies only to manmade bodies of water, which neither were originally created in waters of the state (such as a disposal area in wetlands) nor resulted from impoundment of waters of the state.

SWALE

A natural depression or wide shallow ditch used to route or filter runoff.

WATERCOURSE

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

WATERSHED

A region or area contributing stormwater ultimately to a particular watercourse or body of water.

WATERWAY

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

§ 171-7. Stormwater Pollution Prevention Plans.

- A. Stormwater Pollution Prevention Plan requirement. No application for approval of a land development activity shall be reviewed until the appropriate board has received a Stormwater Pollution Prevention Plan (SWPPP) prepared in accordance with the specifications in this chapter.
- B. Contents of Stormwater Pollution Prevention Plans.
 - (1) All SWPPPs shall provide the following background information and erosion and sediment controls:
 - (a) Background information about the scope of the project, including location, type and size of project;
 - (b) Site map/construction drawing(s) for the project, including a general location map. At a minimum, the site map should show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); wetlands and drainage patterns that could be affected by the construction activity; existing and final slopes; locations of off-site material, waste, borrow or equipment storage areas; and location(s) of the stormwater discharges(s); site map should be at a scale no smaller than one inch = 100 feet;
 - (c) Description of the soil(s) present at the site;
 - (d) Construction phasing plans describing the intended sequence of construction activities, including clearing and grubbing, excavation and grading, utility and infrastructure installation and any other activity at the site that results in soil disturbance. Consistent

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

- (e) Description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a pollutant source in stormwater runoff;
 - (f) Description of construction and waste materials expected to be stored on-site with updates as appropriate, and a description of controls to reduce pollutants from these materials, including storage practices to minimize exposure of the materials to stormwater, and spill prevention and response;
 - (g) Temporary and permanent structural and vegetative measures to be used for soil stabilization, runoff control and sediment control for each stage of the project, from initial land clearing and grubbing to project close-out;
 - (h) A site map/construction drawing(s) specifying the location(s), size(s) and length(s) of each erosion and sediment control practice;
 - (i) Dimensions, material specifications and installation details for all erosion and sediment control practices, including the siting and sizing of any temporary sediment basins;
 - (j) Temporary practices that will be converted to permanent control measures;
 - (k) Implementation schedule for staging temporary erosion and sediment control practices, including the timing of initial placement and duration that each practice should remain in place;
 - (l) Maintenance schedule to ensure continuous and effective operation of the erosion and sediment control practice;
 - (m) Name(s) of the receiving water(s);
 - (n) Delineation of SWPPP implementation responsibilities for each part of the site;
 - (o) Description of structural practices designed to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable; and
 - (p) Any existing data that describes the stormwater runoff at the site.
- (2) Land development activities as defined in § 171-6 of this chapter and meeting Condition A, B or C below shall also include water quantity and water quality controls (postconstruction stormwater runoff controls) as set forth in Section B(3) below as applicable:
- (a) Condition A: Stormwater runoff from land development activity(ies) discharging a pollutant of concern to either an impaired water identified on the Department's 303(d) list of impaired waters or a Total Maximum Daily Load (TMDL) designated watershed for which pollutants in stormwater have been identified as a source of the impairment.
 - (b) Condition B: Stormwater runoff from land development activity(ies) disturbing five or more acres.
 - (c) Condition C: Stormwater runoff from land development activity(ies) disturbing between one and five acres of land during the course of the project, exclusive of the construction of single-family residences and construction activities at agricultural properties.

(3) SWPPP requirements for Conditions A, B and C:

- (a) All information in § 171-7B(1) of this chapter;
- (b) Description of each postconstruction stormwater management practice;
- (c) Site map/construction drawing(s) showing the specific location(s) and size(s) of each postconstruction stormwater management practice;
- (d) Hydrologic and hydraulic analysis for all structural components of the stormwater management system for the applicable design storms;
- (e) Comparison of post-development stormwater runoff conditions with predevelopment conditions;
- (f) Dimensions, material specifications and installation details for each postconstruction stormwater management practice;
- (g) Maintenance schedule to ensure continuous and effective operation of each postconstruction stormwater management practice;
- (h) Maintenance easements to ensure access to all stormwater management practices at the site for the purpose of inspection and repair. Easements shall be recorded on the plan and shall remain in effect with transfer of title to the property;
- (i) Inspection and maintenance agreement binding on all subsequent landowners served by the on-site stormwater management measures in accordance with Article II, § 171-9 of this chapter;
- (j) For Condition A, the SWPPP shall be prepared by a landscape architect, certified professional or professional engineer and must be signed by the professional preparing the plan, who shall certify that the design of all stormwater management practices meets the requirements in this chapter.

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

D. Contractor certification.

- (1) Each contractor and subcontractor who will be involved in soil disturbance and/or stormwater management practice installation shall sign and date a copy of the following certification statement before undertaking any land development activity: "I certify under penalty of law that I understand and agree to comply with the terms and conditions of the Stormwater Pollution Prevention Plan. I also understand that it is unlawful for any person to cause or contribute to a violation of water quality standards."
- (2) The certification must include the name and title of the person providing the signature, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.
- (3) The certification statement(s) shall become part of the SWPPP for the land development activity.

E. Construction permit paperwork to be available and accessible at the construction site at all times, from the date of initiation of construction to the date of final stabilization:

[Amended 4-7-2010 by L.L. No. 3-2010]

- (1) SWPPP, including construction drawings and plans.

- (2) Notice of intent (NOI) signed by the owner and preparer.
- (3) Acknowledgment letter from DEC.
- (4) MS4 SWPPP acceptance form.
- (5) Site log book, including all inspection reports, certifications and SWPPP updates, modifications or addendums.
- (6) Current general permit for stormwater discharges from construction activity.
- (7) For sites that disturb five or more acres, a letter of permission from the DEC or MS4 is required.

F. Contractor training.

[Added 4-7-2010 by L.L. No. 3-2010]

- (1) The owner will identify the contractor(s) responsible for SWPPP implementation.
- (2) The contractor(s) will identify at least one individual trained in erosion and sediment control (E&SC) by April 30, 2010.
- (3) Effective May 1, 2010, contractor(s) trained individual must be on site on a daily basis during soil disturbance activities.
- (4) The trained individual must complete four hours of training in E&SC every three years.
 - (a) Only DEC-endorsed training will be accepted.
 - (b) The trained individual will have proof of training on site.

§ 171-8. Performance and design criteria for stormwater management and erosion and sediment control.

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

- A. Technical standards. For the purpose of this chapter, the following documents shall serve as the official guides and specifications for stormwater management. Stormwater management practices that are designed and constructed in accordance with these technical documents shall be presumed to meet the standards imposed by this law:
 - (1) The New York State Stormwater Management Design Manual (New York State Department of Environmental Conservation, most current version or its successor, hereafter referred to as the Design Manual);
 - (2) New York Standards and Specifications for Erosion and Sediment Control (Empire State Chapter of the Soil and Water Conservation Society, 2004, most current version or its successor, hereafter referred to as the Erosion Control Manual).
- B. Equivalence to technical standards. Where stormwater management practices are not in accordance with technical standards, the applicant or developer must demonstrate equivalence to the technical standards set forth in Article II. A licensed professional shall prepare Subsection A and the SWPPP.
- C. Water quality standards. Any land development activity shall not cause an increase in turbidity that will result in substantial visible contrast to natural conditions in surface waters of the state of New York.

§ 171-9. Maintenance, inspection and repair of stormwater facilities.

A. Maintenance and inspection during construction.

- (1) The applicant or developer of the land development activity shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the applicant or developer to achieve compliance with the conditions of this chapter. Sediment shall be removed from sediment traps or sediment ponds whenever their design capacity has been reduced by 50%.
- (2) For land development activities as defined in § 171-6 of this chapter and meeting Condition A, B or C in § 171-7B(2), the applicant shall have a qualified professional conduct site inspections and document the effectiveness of all erosion and sediment control practices every seven days for sites with five acres or less exposed and twice every seven days, separated by two full days, for sites with more than five acres exposed or in accordance with the current general permit for stormwater discharges from construction activity. Inspection reports shall be maintained in a site logbook.
[Amended 4-7-2010 by L.L. No. 3-2010]

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

C. Maintenance after construction. The owner or operator of permanent stormwater management practices (SMPs) installed in accordance with this chapter shall ensure they are operated and maintained to achieve the goals of this chapter. Proper operation and maintenance also includes, as a minimum, the following: [Amended 4-7-2010 by L.L. No. 3-2010]

- (1) A preventive/corrective maintenance program for all critical facilities and systems of treatment and control (or related appurtenances) which are installed or used by the owner or operator to achieve the goals of this chapter;
- (2) Written procedures for operation and maintenance training of new maintenance personnel;
- (3) Discharges from the SMPs shall not exceed design criteria or cause or contribute to water quality standard violations in accordance with Article II, § 171-8C.

D. Maintenance agreements. The Town of Union shall approve a formal maintenance agreement for stormwater management facilities binding on all subsequent landowners and recorded in the office of the County Clerk as a deed restriction on the property prior to final plan approval. The maintenance agreement shall be consistent with the terms and conditions of **Schedule B** of this chapter entitled Sample Stormwater Control Facility Maintenance Agreement.^[1] The Town of Union, in lieu of a maintenance agreement, at its sole discretion, may accept dedication of any existing or future stormwater management facility, provided such facility meets all the requirements of this chapter and includes adequate and perpetual access and sufficient area, by easement or otherwise, for inspection and regular maintenance.

[1] *Editor's Note: **Schedule B** is included at the end of this chapter.*

Article III. Administration and Enforcement

§ 171-10. Construction inspection.

A. Erosion and sediment control inspection.

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

- (a) Start of construction;
- (b) Installation of sediment and erosion control measures;
- (c) Completion of site clearing;
- (d) Completion of rough grading;
- (e) Completion of final grading;
- (f) Close of the construction season;
- (g) Completion of final landscaping;
- (h) Successful establishment of landscaping in public areas.

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

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

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

- D. Submission of reports. The Town of Union Stormwater Management Officer may require monitoring and reporting from entities subject to this chapter as are necessary to determine compliance with this chapter.
- E. Right-of-entry for inspection. When any new stormwater management facility is installed on private property or when any new connection is made between private property and the public stormwater system, the landowner shall grant to the Town of Union the right to enter the property at reasonable times and in a reasonable manner for the purpose of inspection as specified in Subsection C.

§ 171-11. Performance guarantee.

A. Construction completion guarantee.

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

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

§ 171-12. Recordkeeping.

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

§ 171-13. Enforcement; violations and penalties.

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

- (1) The name and address of the landowner, developer or applicant;
- (2) The address when available or a description of the building, structure or land upon which the violation is occurring;
- (3) A statement specifying the nature of the violation;
- (4) A description of the remedial measures necessary to bring the land development activity into compliance with this chapter and a time schedule for the completion of such remedial action;
- (5) A statement of the penalty or penalties that shall or may be assessed against the person to whom the notice of violation is directed;
- (6) A statement that the determination of violation may be appealed to the municipality by filing a written notice of appeal within 15 calendar days of service of notice of violation.

B. Stop-work orders.

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

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

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

E. Withholding of certificate of occupancy. If any building or land development activity is installed or conducted in violation of this chapter, the Stormwater Management Officer may prevent the occupancy of said building or land.

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

§ 171-14. Fees for services.

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

Appendix F: Stormwater Outfall map and locations

Appendix G: Catchbasin Map

Appendix H: Employee Training

Date	Employee	Signature	Dept	IDDE a Grate of Concern	Municipal Storm Water Pollution Prevention

[illegible]

Appendix I: 2010 Facility Installations, NOI's/ Acceptance letters

Appendix J: Stormwater Facility Inspections

Appendix K: Illicit Discharge Letters

Appendix L: Public Involvement

<http://btsc.gobroomecounty.com/resources>

