

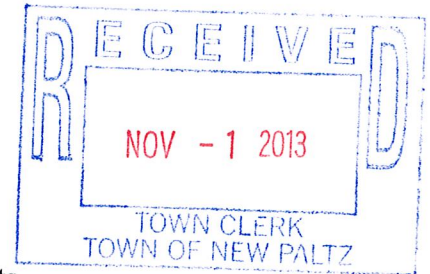
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MEMORANDUM

To: Supervisor Zimet and Members of the Town Board
From: David B. Clouser, PE, LS
Date: October 30, 2013
Re: **Town MS4 Designation**
Stormwater Management Plan and Summary of Requirements



As the Board is aware, the Town of New Paltz has been added to the NYSDEC's most recent list of municipalities designated as a Municipal Separate Storm Sewer (MS4). The MS4 is a federally mandated stormwater regulatory program that is administered in New York by the NYSDEC.

The MS4 designation is based upon population density, impervious surface and other factors that warrant additional regulation of stormwater on the local level. Specifically, it has been found that highly impervious areas and highly populated areas are more likely to contribute pollutants to downstream water bodies in the form of contaminated stormwater runoff and illicit discharges (e.g. septic system failure, unregulated industrial discharge, etc.). The additional municipalities, including the Town of New Paltz, have been designated MS4 communities by the US EPA through the NYSDEC to now require further local regulation and the development of an ongoing stormwater management program to reduce the discharge of these pollutants.

The purpose of this Memorandum is to describe the immediate requirements that accompany the MS4 designation, what has been completed by the Town to date, and a brief summary of what will be required in the upcoming years. As an initial step, a Stormwater Management Plan ("SWMP") is required to be developed in accordance with the General Permit GP 0-10-002 (the NYSDEC permit that the Town will obtain coverage under). Although some of the permit requirements are specific, the Town must decide the different methods and means to achieve the goals associated with the MS4 designation. These MS4 program implementation choices are submitted to the NYSDEC for their agency's review and approval. We have prepared a draft SWMP (attached) for your review that will meet the NYSDEC permit requirements. This Draft SWMP contains proposed program elements to address issues associated with stormwater runoff and illicit discharges.

The enclosed draft SWMP has been fashioned to begin with an educational and public participation aspect to heighten awareness of the value of the program and understand what may be the best approach for the Town and the public to implement a workable program before enacting local legislation that will mandate compliance. There are various methods of program implementation and the goal of our suggested approach of easing into the program's

requirements should allow the final stage of implementation that must occur in the program's third year to be tailored to the specific setting and capabilities of the New Paltz community.

It should be noted that the MS4 designated area in the Town includes the more populated portions of Town that generally surround the Village of New Paltz. An MS4 Boundary map (See Appendix A of the attached SWMP) is provided that shows the MS4 designated area. However, the vast majority of the requirements associated with the MS4 designation apply to the full geographic area of the Town. As examples, the required local laws, construction inspections, enforcement etc. will apply to all areas within the Town's boundaries. The outfall mapping, however, will apply only to the geographic area specifically located within the designated MS4 area, as shown on the MS4 Boundary Map. These requirements are further discussed in detail in the SWMP.

A part of the MS4 program requirements is to enact local laws to regulate stormwater discharges and to curtail illicit pollutant discharges. The Town enlisted the assistance of the Environmental Conservation Commission (now a Board) in 2006 to prepare a stormwater law which remains in Draft form. The SWMP requires that this type of local law be enacted as a program requirement. The NYSDEC has a model Illicit Detection and Discharge local law that can be used as a base for developing this MS4 program required law. The SWMP requires that these local laws are enacted in year 3 of the of the recommended Town's MS4 plan. Significant public involvement and education, as well as training of Town employees in stormwater matters are also required as a part of the plan's implementation.

Compliance with the MS4 Program requires formal annual reporting to the NYSDEC on the progress that is made in implantation of the SWMP. The Annual Report must be certified by the Town Supervisor with regards to how well the Town is maintaining the schedule of implementation that is contained in the SWMP. This annual report is due by June 1st of each year and the Town's program is subject to audit by the NYSDEC to ensure compliance.

Stormwater Management Plan Contents –

The MS4's General Permit contains six (6) Minimum Control Measures ("MCMs") that serve as the framework of the Stormwater Management Plan and Program. The following is a brief summary of each Minimum Control Measure that will need to be developed and implemented in the upcoming years. It should be noted that each MCM is discussed in greater detail in the SWMP, which includes specific tasks, scheduling, etc..

MCM 1 - Public Education and Outreach on Stormwater Impacts

The Public Education and Outreach MCM focuses on the development of educational materials and events designed to inform the public about the impacts that stormwater discharges have on local water bodies. The educational materials contain specific actions as to how the public, as individuals or collectively as a group, can participate in reducing pollutants and their impact on the environment. The target pollutant sources are construction site runoff, impacts from new and re-development projects, illicit discharges, homeowner activities, and

local/regional pollutants of concern. To meet this MCM, the Stormwater Management Plan proposes Best Management Practices (“BMPs”) that include but are not limited to public education courses, educational brochures, development of a web page and household hazardous waste collection days.

MCM 2 - Public Involvement / Participation

The Public Involvement and Participation MCM emphasizes getting members of the local community involved in the MS4’s stormwater management program. This includes a number of practices designed to seek public input on the SWMP and Town accomplishments, also including specific activities that encourage public participation. For this MCM, proposed BMP’s for the Town include identifying key stakeholders in the Town, public presentations, ensuring public access to programs and documentation and identifying a contact person to coordinate public involvement.

MCM 3 - Illicit Discharge Detection and Elimination

The Illicit Discharge and Elimination (IDDE) MCM includes the detection and elimination of illicit discharges located within the Town. The program will include storm sewer outfall mapping, a dry weather screening program, procedures for tracking down and locating the source of any illicit discharges, and procedures for removing the sources of the illicit discharges. The Town already has most of the stormwater outfalls mapped, so the Town will be ahead of schedule on that requirement. A local law must be adopted (IDDE law) as part of this MCM, that will serve as the legal authority mechanism to effectively prohibit illicit discharges and provide enforcement authority to regulate them. The NYSDEC provides a Model Ordinance that can be modified to meet the Town’s specific needs.

MCM 4 - Construction Site Stormwater Runoff Control

The Construction Site Runoff MCM focuses on the reduction of pollutants to the Town from construction activities. Although it is current policy for a proposed project’s Stormwater Pollution Prevention Plan (SWPPP) to be reviewed as part of the Planning Board approval process, it will now be a requirement for the Town to “sign off” on each SWPPP in the form of an Acceptance Form. The inspection of construction sites to ensure that the SWPPP requirements are being met will also be a requirement. A local stormwater law must be adopted that meets the minimum requirements of NYSDEC’s Sample Local Law and the latest technical standards as specified by the NYSDEC. The proper preparation and implementation of the SWPPP is key because that report will include requirements with regard to erosion and sediment controls, controlling waste such as discarded building materials, concrete truck washout, chemicals, litter and sanitary waste at the construction site. The Town’s Subdivision and Site Plan Code must also be revised to formally require the review of the SWPPP as part of the Planning Board approval process.

MCM 5 - Post-Construction Stormwater Management

The Post-Construction Stormwater Management MCM keys in on the prevention or minimization of water quality impacts from both new and re-development projects after construction is complete. The local stormwater law must include procedures and methods for ensuring proper maintenance and function of stormwater practices for proposed developments. Also proposed are the development and distribution of brochures and other education materials that focus on, for example, the overuse of lawn fertilizers and misconceptions of homeowners living next to stormwater ponds and other practices (e.g. mosquito breeding). Training for Town Employees, local contractors and local developers with regard to Green Infrastructure Practices, better site design concepts and low impact development is planned.

A formal procedure for ongoing inspection and maintenance of these practices must be developed. The Town already utilizes Stormwater Management Districts for proposed developments, which is an excellent method to ensure proper maintenance of stormwater practices.

MCM 6 - Pollution Prevention / Good Housekeeping for Municipal Operations

The Pollution Prevention/Good Housekeeping MCM is a key element of the Town stormwater management program. This measure requires the Town to examine and subsequently alter their own actions where necessary to help ensure a reduction in the amount and type of pollution that collects on streets, parking lots, open spaces, and storage and vehicle maintenance areas and is discharged into local waterways. The proposed program elements include training for applicable Town staff with regard to impacts on stormwater that relate to their daily activities, a schedule for sweeping roads and cleaning out catch basins and reduce salt usage to the greatest extent possible. Also proposed is a program for posting “no dumping” signs near storm drains and developing a formal program for proper disposal of recycling materials at Town facilities.

Available Resources to Assist in the Implementation –

Although the Town of New Paltz may be unfamiliar with this process, many local municipalities have already gone through this process (including Plattekill, Lloyd, Rosendale, Poughkeepsie, etc.), and therefore there are many resources available from other municipalities and organizations to make the process less overwhelming. The NYSDEC publishes useful educational information and the Center for Watershed Protection is another source of helpful information regarding research, suggested stormwater standards and educational materials. In the past few years, the Ulster County Department for the Environment has provided assistance and training workshops to help MS4 communities meet their program goals. As an example, many brochures regarding stormwater exist and likely can be used instead of recreating these documents and the NYSDEC offers model local laws that can be modified to meet the Town’s needs.

Submittal Requirements –

As mentioned above, the Stormwater Management Report is in Draft form and is subject to revision or additions by the Board before submitting the document to the NYSDEC. Submission of the Stormwater Management Program to the NYSDEC for review and approval is

due in November. The Board should review the enclosed SWMP, and if acceptable, it will be forwarded to the NYSDEC for their review. After approval of the SWMP by the NYSDEC, a completed Notice of Intent (i.e., required to formally obtain coverage under the MS4 General Permit GP 0-10-002) is required which will begin the MS4 plan implementation process.

Please feel free to call our office at your convenience with any questions or comments.

Encl.: DRAFT *Stormwater Management Program*

cc: Chris Marx, Town Highway Superintendent
Rhett Weires, Environmental Conservation Board Chair
Stacy Delarede, Building Inspector
Michael Calimano, Chair Planning Board Chair
Laura Petit, Recycling Director

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STORMWATER MANAGEMENT PROGRAM



IN CONFORMANCE WITH REQUIREMENTS FOR
MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4)

TOWN BOARD
TOWN OF NEW PALTZ, ULSTER COUNTY, NY
OCTOBER 29, 2013

Prepared by:
David Clouser & Associates
Civil Engineering & Land Surveying



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Appendix A – MS4 Boundary Map

Appendix B – General Definitions and Requirements

Appendix C – List of Commonly Used Abbreviation

The Town of New Paltz will develop, implement, and enforce a Stormwater Management Program (SWMP) to reduce the discharge of pollutants from small Municipal Separate Stormwater Sewer Systems (MS4s) to the maximum extent practicable. The Stormwater Management Program will function to protect surface water and groundwater quality and to satisfy the appropriate water quality requirements of the Environmental Conservation Law and the Clean Water Act. The Stormwater Management Program will include the minimum control measures, as described in the Small MS4 General Permit, and as further detailed herein.

The MS4 designated area in the Town includes the more populated portions of Town that generally surround the Village of New Paltz. An MS4 Boundary map (See Appendix A) is provided that shows the designated area. It should be noted that the vast majority of the requirements associated with the MS4 designation apply to the full geographic area of the Town. As examples, the IDDE law, stormwater local law, construction inspections, etc. will apply to all areas within the Town's boundaries. The outfall mapping, however, will apply only to the geographic area specifically located within the designated MS4 area, as shown on the MS4 Boundary Map. These requirements are further discussed below.

I) Purpose of the Stormwater Management Program

The purpose of this Stormwater Management Program ("SWMP") is to provide methods, measurable goals and means of enforcement that will be utilized to meet the water quality and quantity needs of the community while satisfying the requirements of the MS4 General Permit GP-0-10-002 ("General Permit"). This Program will emphasize the protection of the Town's water resources, improve water quality where State water quality standards are not met, manage stormwater quantity to reduce the risk of property damage by flooding, and minimize groundwater removal through water conservation efforts. There are six program elements designed to reduce the discharge of pollutants to the maximum extent practicable. 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 must be implemented to maintain compliance with the current NYSDEC General Permit for Stormwater Discharges from MS4's. This SWMP 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 current NYSDEC General Permit.

- ii) Develop and implement an ongoing public education and outreach program designed to describe to the general public and target audiences;
 - (1) The impacts of stormwater discharges on waterbodies;
 - (2) POC's and their sources;
 - (3) Steps that contributors of these pollutants can take to reduce pollutants in stormwater runoff; and
 - (4) Steps that contributors of non-stormwater discharges can take to reduce pollutants (non-stormwater discharges are listed in Part 1.A.2 of the General Permit);
- iii) Develop, record, periodically assess, and modify as needed, measurable goals and;
- iv) Select and implement appropriate education and outreach activities and measurable goals to ensure the reduction of all POC's in stormwater discharges to the maximum extent practicable.

SWMP Reporting Requirements

- i) List (and describe if necessary) POC's;
- ii) List education and outreach programs and activities for the general public and target or priority audiences that address POC's, geographic areas of concern, and / or discharges to 303(d) TMDL waterbodies.
- iii) Report on effectiveness of program and progress towards measurable goals.

Best Management Practices to be Implemented

The outreach practices that will be used by the Town of New Paltz to reach appropriate audiences will include:

- i) Plan and conduct an ongoing public education and outreach Program. The focus of these public meetings will be to solicit input on the Stormwater Management Program and to provide education to local residents, commercial and agricultural business owners, and local building contractors.
- ii) Prepare printed materials to be distributed in the tax bills sent to the owners of the properties located in the MS4 designated area and available to Town residents through distribution at Town Hall and the Town Library. The printed materials will describe trash disposal options and general property maintenance with an emphasis on the impacts that these activities have on wetlands and streams. These printed materials will describe options for these common business and household activities that will reduce these impacts.
- iii) Publicize the details and success of the Stormwater Management Program at various Town-wide community meetings and events throughout the year.
- iv) Create a link on the Town's website dedicated to providing the public with information regarding the MS4 program, water quality impacts of stormwater runoff into local water bodies, steps the public can take to reduce stormwater pollution and public involvement programs.
- v) Offer speakers, such as Town Officials and volunteers, to community groups (e.g., scout troops, garden clubs, business organizations, etc.).
- vi) Participate with the school districts to provide printed materials that give basic information about sources and effects of runoff pollution to school programs.
- vii) Cooperate with the Ulster County Resource Recovery Agency (UCRRA) to schedule household hazardous waste collection days.

may have an interest in the particular BMPs as well as the general public located within the permitted boundary.

Public involvement and participation activities will concentrate particularly on involving those residents who own property within the MS4 designated areas, in addition to encouraging all residents of the Town to participate in the SWMP development and implementation process. Program participation will also include members of the Town Building Department and the Town Highway Department, who will be trained to assist in the implementation of the SWMP.

Minimum General Permit Requirements

- i) Comply with State Open meetings Law and local public notice requirements, such as Open Meetings Law, when implementing a public involvement / participation program;
- ii) Develop a Public Involvement / Participation Program that;
 - (1) Identifies key individuals and groups, public and private, who are interested in or affected by the SWMP;
 - (2) Identifies types of input the Town will seek from the key individuals and groups, public and private, to support development and implementation of the SWMP and how the input will be used; and
 - (3) Describes the public involvement /Participation activities the Town will undertake to provide program access to those who want it and to gather the needed input. The activities include, but are not limited to a water quality hotline (report spills, dumping, construction sites of concern, etc.), stewardship activities like stream cleanups, storm drain marking, and volunteer water quality monitoring;
 - (4) Provide the opportunity for the public to participate in the development, implementation, review, and revision of the SWMP.
- iii) Identify a local point of contact for public concerns regarding stormwater management and compliance with the general SPDES Permit. The name of title of this contact and the telephone number must be published in the public outreach and public participation materials and kept updated with the Department on the Municipal Compliance Certification form.
- iv) Prior to submitting the final annual report to the Department, by June 1 of each reporting year, present the draft annual report in a format that is open to the public, where the public can ask questions about and make comments on the report.
- v) Develop, record, periodically assess and modify as needed measurable goals; and
- vi) Select appropriate public involvement / participation activities and measurable goals to ensure the reduction of pollutants of concern in stormwater discharges to the maximum extent practicable.

SWMP Reporting Requirements

- i) Annual report presentation information provided (date, time, attendees at the annual meeting will be provided);
- ii) Comments received and intended responses provided (as an attachment).
- iii) After a 3 year period, specific achievements in implementing the Public Involvement and Participation must be provided in sufficient detail in accordance with the requirements of the General Permit.

C. Illicit Discharge Detection and Elimination -

The Illicit Discharge and Elimination (IDDE) MCM consists of BMPs that focus on the detection and elimination of illicit discharges located within the Town. The BMP's describe outfall mapping and update procedures, the legal authority mechanism that will be used to effectively prohibit illicit discharges, enforcement procedures and actions to ensure that the regulatory mechanism is implemented, the dry weather screening program, procedures for tracking down and locating the source of any illicit discharges, procedures for locating priority areas, and procedures for removing the sources of the illicit discharges.

The primary method used to detect and eliminate Illicit discharges into the Town's water resources will be through monitoring activities of the Town employees (i.e., Town Highway Department, Town Water and Sewer Department and Town Building Department) and enforcement of new ordinances that will be adopted which prohibit these illegal discharges and assess penalties for violations.

Minimum General Permit Requirements

- i) Develop, implement and enforce a program to detect and eliminate illicit discharges into the Town;
- ii) Develop and maintain a map, at a minimum within the Town's jurisdiction in the urbanized area and additionally designated area, showing;
 - (1) The location of all outfalls and the names and location of all surface waters of the State that receive discharges from those outfalls;
 - (2) The preliminary boundaries of the Town's storm sewersheds have been determined using GIS or other tools, even if they extend outside of the urbanized area (to facilitate trackdown), and additionally designated area within the Town's jurisdiction; and
 - (3) When grant funds are made available or for sewer lines surveyed during an illicit discharge trackdown, the Town's storm sewer system will be restored as appropriate in accordance with available State and EPA guidance.
- iii) Field verify outfall locations;
- iv) Conduct an outfall reconnaissance inventory, as described in the EPA publication entitled *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessment*, addressing every outfall within the urbanized area and additionally designated area within the Town's jurisdiction at least once every five years, with reasonable progress each year;
- v) Map new outfalls as they are constructed or newly discovered within the urbanized area and additionally designated area;
- vi) Prohibit, through a law, ordinance, or other regulatory mechanism, illicit discharges into the Town and implement appropriate enforcement procedures and actions. This mechanism must be equivalent to the State's model IDDE local law "NYSDEC Model Local Law to Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer Systems". The mechanism must be certified by the attorney representing the Town as being equivalent to the State's model illicit discharge local law.
- vii) Develop and implement a program to detect and address non-stormwater discharges, including illegal dumping, to the Town in accordance with current assistance and guidance document from the State and EPA. The program must include: procedures for identifying priority areas of concern (geographic, audiences, or otherwise) for the IDDE program; description of priority areas of concern, available equipment, staff, funding, etc.; procedures

<u>By the end of:</u>	<u>The following will be complete:</u>
Year 1	Develop procedures for identifying areas of concern (geographic, audiences, or otherwise) for IDDE program; describe priority areas of concern, available equipment, staff, funding, etc.; begin preparation of IDDE law;
Year 2	Fully develop IDDE program to locate, eliminate, enforce against and document illicit discharges; program will inform employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste; begin mapping of outfalls;
Year 3	Adopt IDDE law, complete outfall mapping.

D. Construction Site Stormwater Runoff Control -

The Construction Site Runoff MCM consists of BMPs that focus on the reduction of pollutants to the Town 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 the legal authority mechanism that will be used to require erosion and sediment controls, enforcement procedures and actions to ensure compliance, requirements for construction site operators to implement appropriate erosion and sediment control BMPs, requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter and sanitary waste at the construction site, procedures for site plan review which incorporate the consideration of potential water quality impacts, procedures for receipt and consideration of information submitted by the public, and procedures for site inspection and enforcement of control measures.

A proposed development's construction stormwater control management practices will be specified as a part of the project design and as a condition of site plan and subdivision approval by the Planning Board. The Planning Board will require that the minimum practices stipulated by the required SPDES Stormwater General Permit (GP-0-10-001) will be strictly adhered to, including site-specific soil erosion practices conforming to the *NYS Standards and Specifications for Erosion and Sediment Control*.

The Town Building Department will require appropriate soil erosion and sediment control measures installed at construction sites requiring a building permit but not under the jurisdiction of a Planning Board approval (i.e., home construction) in compliance with the above referenced NYS Standards. Noncompliance with these Town standards will result in penalties assessed to the construction site contractor and/or property owner.

Minimum General Permit Requirements

At a minimum, the Town must Develop, implement and enforce a program that:

(construction where the Erosion and Sediment Control Plan is developed in accordance with Appendix E of the “New York Standards and Specifications for Erosion and Sediment Control”) is exempt from the requirements below:

- (1) Training may be provided by the NYSDEC or other qualified entities (such as Soil and Water Conservation Districts, County Department of the Environment, etc.);
 - (2) The Town is not expected to perform such training, but they may cosponsor training for construction site operators in their area;
 - (3) The Town may ask for a certificate of completion or other such proof of training; and
 - (4) The Town may provide notice of upcoming sediment and erosion control training by posting in the building department or distribute with building permit application.
- xii) Establishes and maintains an inventory of active construction sites, including the location of the site, owner / operator contact information;
- xiii) Develop, record, periodically assess and modify as needed measurable goals; and
- xiv) Select appropriate construction stormwater BMPs and measurable goals to ensure the reduction of all POCs in stormwater discharges to the MEP.

SWMP Reporting Requirements

- i) Define procedures, activities and identify personnel to educate and train construction site operators about requirements to develop and implement a SWPPP and any other requirements that must be met within the Town’s jurisdiction;
- ii) Describe procedures for the receipt and consideration of information submitted by the public. Identify the responsible personnel;
- iii) Provide certification that Local Law meets the minimum requirements of the NYSDEC Sample Law;
- iv) Describe procedures for SWPPP review that incorporate consideration of potential water quality impacts and ensure consistency with local sediment and erosion control requirements;
- v) Describe procedures for construction site inspections;
- vi) Describe procedures for enforcement of control measures and sanctions to ensure compliance.

Best Management Practices to be Implemented

- i) Adopt a stormwater ordinance meeting the minimum requirements of the NYSDEC Model Ordinance that addresses:
 - (1) Erosion and Sediment Control
 - (2) Stormwater Management Design Requirement;
 - (3) Construction Requirements; and
 - (4) Enforcement and penalties.
- ii) Develop criteria that the Town can use to verify construction plan compliance with local, state, and/or federal construction stormwater regulations.
- iii) Provide the public with an opportunity to review and comment on the proposed design plans and construction sites;
- iv) Develop procedures for the public to request information, and to relay concerns to the representative of the municipality.
- v) Prepare a checklist of items for the review to utilize during construction plan review. Make checklist available to the public, developers and design professionals.
- vi) Provide training for reviewing staff.

In addition to project designs that must accommodate construction site runoff, management practices selected for each project shall be developed by evaluating existing conditions in the MS4 designated areas and identify appropriate practices that will reduce pollutant discharges to the maximum extent practicable. These practices will be structural and non-structural management practices that address the pollutants of concern and shall be incorporated in the Planning Board approved project plans and/or Building Department approved building permit application.

Ongoing monitoring of these management practices will be provided as an additional responsibility of Town employees (i.e., Highway Department personnel and Building Department personnel) as they perform their customary duties (i.e., roadway maintenance and roadway inspection, building Department inspections, etc.).

Minimum General Permit Requirements

At a minimum, the Town must Develop, implement and enforce a program that:

- i) Provides equivalent protection to the NYS SPDES General Permit for Stormwater Discharges from Construction Activities per the requirements of general SPDES permit (GP-0-10-002);
- ii) Addresses stormwater runoff from new development and redevelopment projects to the small MS4 from projects that result in a land disturbance of greater than or equal to one acre. Control of stormwater discharges from projects of less than one acre must be included in the program if:
 - (1) That project is part of a larger common plan of development or sale; or
 - (2) If controlling such activities in a particular watershed is required by the NYS DEC.
- iii) Includes a law, ordinance or other regulatory mechanism to require post-construction runoff controls from new development and re-development projects to the extent allowable under State or Local law that meet the State's most up-to-date technical standards:
 - (1) The mechanism must be equivalent to one of the versions of the "NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control"; and
 - (2) Equivalence must be documented using the NYSDEC *Gap Analysis Workbook* or certified by the attorney representing the Town as being equivalent to one of the sample laws if one of those sample laws is not adopted or if a modified version of one of the sample laws is adopted.
- iv) Includes a combination of structural management practices (including, but not limited to practices from the *NYS Stormwater Management Design Manual* or equivalent) and / or non-structural management practices (including, but not limited to comprehensive plans, open space preservation programs, Low Impact Development (LID), Better Site Design (BSD) and other Green Infrastructure practices, land use regulations) appropriate for the Town that will reduce the discharge of pollutants to the MEP. Towns are encouraged to implement Green Infrastructure practices at a site level and to review, and revise where appropriate, local codes and laws that include provisions that preclude construction that minimizes or reduces pollutant loadings;
 - (1) If a stormwater management practice is designed and installed in accordance with the *NYS Stormwater Management Design Manual* or has been demonstrated to be equivalent and is properly operated and maintained, then MEP will be assumed to be met for post-construction stormwater discharged by the practice.

Best Management Practices to be Implemented

- i) Adopt a stormwater ordinance meeting the minimum requirements of the NYSDEC Model Ordinance that addresses:
 - (1) Erosion and Sediment Control
 - (2) Stormwater Management Design Requirements;
 - (3) Construction Requirements; and
 - (4) Enforcement and Penalties;
- ii) Assess existing conditions throughout the MS4 designated areas and, over time, in other parts of the Town, and identify appropriate management practices to reduce pollutant discharges to the maximum extent practicable. These practices shall include, but not be limited to:
 - (1) Buffer zones;
 - (2) Conservation easements;
 - (3) Grassed swales;
 - (4) Grassed filter strips
 - (5) Bioretention;
 - (6) Open space design;
- iii) Regulate post-construction runoff from new development through both an ordinance and through the Planning Board approval process; and
- iv) Develop stormwater management practice review program that insures that all practices meet the state technical standards;
- v) Develop an inspection and maintenance program to ensure practices are constructed properly and function as designed through their lifespan.
- vi) Develop procedures for enforcement and penalization of violators.
- vii) 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 was taken.
- viii) Utilizes available trained resources to develop Town policies on the use of Green Infrastructure practices, better sight design approach and low impact development principles.
- ix) Develop educational materials outlining acceptable maintenance practices for areas adjacent to stormwater management facilities to ensure their proper function. Materials to focus on landscaping and property maintenance companies, as well as homeowners living adjacent to stormwater management facilities.

Measurable Goals

By the end of:

The following will be complete:

Year 1

Initiate development of stormwater local law that is equivalent to the NYSDEC Sample Local Law; develop strategies that include structural and/or non-structural management practices to address water quality problems and pollutants of concern from existing, new development and redevelopment; develop required zoning amendments and new ordinances that mandate the installation and maintenance of stormwater management practices.

Year 2

Initiate procedures for SWPPP review to ensure post-construction practices meet the most current version of state technical practices;

- iii) Determines management practices, policies, procedures, etc. that will be developed and implemented to reduce or prevent the discharge of (potential) pollutants. Refer to management practices identified in the “NYS Pollution Prevention and Good Housekeeping Assistance Document” and other guidance materials available from the EPA, State, or other organizations;
- iv) Prioritizes pollution prevention and good housekeeping efforts based on geographic area, potential to improve water quality, facilities or operations most in need of modification or improvement, and Town’s capabilities;
- v) Addresses pollution prevention and good housekeeping priorities;
- vi) Includes an employee pollution prevention and good housekeeping training program and ensures that staff receive and utilize training;
- vii) Requires third party entities performing contracted services, including but not limited to street sweeping, snow removal, lawn / grounds care, etc., to meet permit requirements as the requirements apply to the activity performed ; and
- viii) Requires municipal operations and facilities that would otherwise be subject to the *NYS Multisector General Permit* (MSGP, GP-0-06-002) for industrial stormwater discharges to prepare and implement provisions in the SWMP that comply with Parts III. A, C, D, J, K and L of the MSGP. The permittee must also perform monitoring and record keeping in accordance with Part IV. of the MSGP. Discharge monitoring reports must be attached to an MS4s annual report. For those operations or facilities that are not required to gain coverage under the MSGP, implementation of the above noted provisions of the SWMP will ensure that MEP is met for discharges.

The Town must also:

Develop, record, periodically assess and modify as needed Measurable Goals.

Select and implement appropriate pollution prevention and good housekeeping BMPs and Measurable Goals to ensure the reduction of all POCs in stormwater discharges to the MEP.

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

SWMP Reporting Requirements

- i) Describe the pollution prevention and good housekeeping program priorities (geographic area, potential to improve water quality; facilities or operations most in need of modification or improvement);
- ii) Describe management practices, policies, procedures, etc. that will be developed or modified;
- iii) Describe employee pollution prevention and good housekeeping program training program;
- iv) Report on number of staff trained;
- v) Describe development management practices.

Best Management Practices to be Implemented

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

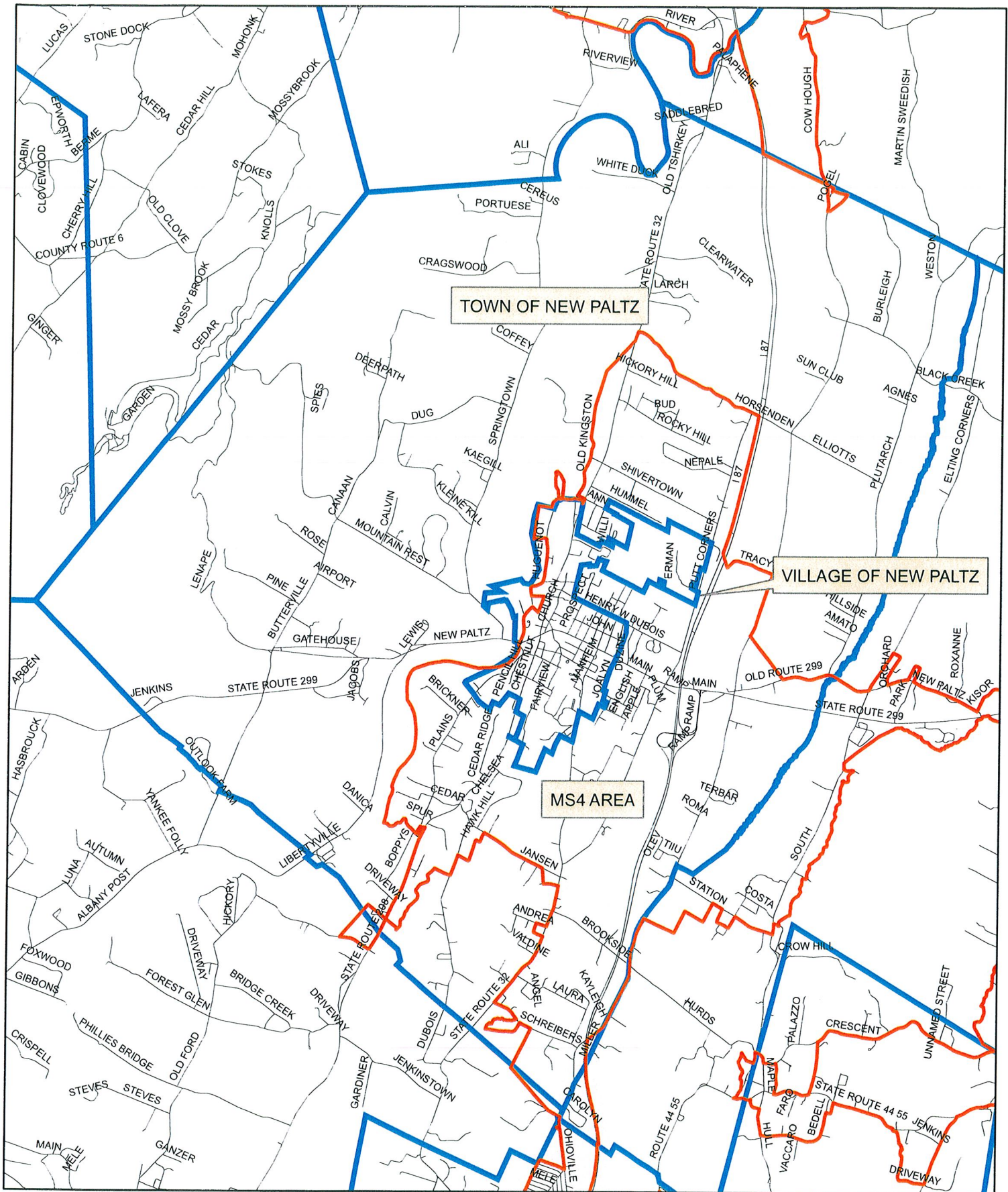
- Year 2 Begin staff training; develop vehicle and equipment maintenance program; develop hazardous waste and materials management program; develop roadway and bridge maintenance program; develop catch basin and storm drain cleaning program.
- Year 3 Fully develop vehicle and equipment maintenance program; Finalize hazardous waste and materials management program; finalize roadway and bridge maintenance program; finalize catch basin and storm drain cleaning program.

IV) Program Modifications and Updates

The Town of New Paltz may modify and update this Initial Stormwater Management Program as conditions change to continue to meet water quality and quantity needs of the community.

These modifications and updates will be described in the program's annual report.

Appendix A: MS4 BOUNDARY MAP



TOWN OF NEW PALTZ MS4 BOUNDARY MAP
 PREPARED BY DAVID CLOUSER & ASSOCIATES



Legend

- MS4 Boundary
- Municipal Boundaries
- Roads

Appendix B: General Definitions and Requirements

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

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

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

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

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

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

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

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

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

Industrial Waste – Unwanted materials from an industrial operation, this may include liquids, sludge, solids, or hazardous waste.

Maintain or Improve Water Quality – This statement is to mean that no MS4 shall allow for an increase in turbidity to local waters that will cause a substantial visible contrast to natural conditions; the MS4s shall not allow suspended, colloidal and settleable solids from sewage, industrial wastes or other

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

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

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

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

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

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

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

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

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

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

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

Surface Runoff – Is the flow of water across the land surface that occurs when the rainfall rate exceeds the ability of the soil to absorb the water. This is of primary concern when dealing with impervious surfaces, such as parking lots, roofs, roads, or driveways where water cannot infiltrate at all.

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

Appendix C: List of Commonly Used Abbreviations

BMPs – Best Management Practices

CWA – Clean Water Act

EPA – U.S. Environmental Protection Agency

MCC – Municipal Compliance Certification form

MCM – Minimum Control Measure

MEP – Maximum Extent Practicable

MS4 - Municipal Separate Storm Sewer System

NOI – Notice of Intent

NPS – Non-Point Source Pollutants

NPDES – National Pollution Discharge Elimination System

NYSDEC – New York State Department of Environmental Conservation

POC – Pollutants of Concern

SMO – Stormwater Management Officer

SOP – Standard Operating Procedures

SPCC – Spill Prevention and Control Countermeasures

SPDES – State Pollution Discharge Elimination System

SWMP – Stormwater Management Program

SWPP – Stormwater Pollution Prevention

SWPPP – Stormwater Pollution Prevention Plan

TMDL – Total Maximum Daily Load

USEPA – United States Environmental Protection Agency