
**OVERVIEW OF THE
MUNICIPAL SEPARATE STORM
SEWER SYSTEMS (MS4)
PHASE II STORMWATER PERMIT PROGRAM**

A SUMMARY OF MS4 PHASE II PERMIT REQUIREMENTS

February 2003
Revised August 2003

George E. Pataki, Governor
State of New York



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NYS Dept. of Environmental Conservation

Overview

Federally-mandated Program Controls Runoff and Improves Water Quality

The New York State Department of Environmental Conservation (the Department) has expanded its permitting program to include a new federally-mandated program to control stormwater runoff and protect waterways.

According to the federal law commonly known as Stormwater Phase II, permits will be required for stormwater discharges from Municipal Separate Storm Sewer Systems (MS4s) in urbanized areas and for construction activities disturbing one or more acres. To implement the law, the Department has developed two general permits, one for MS4s in urbanized areas and one for construction activities. The permits are part of the State Pollutant Discharge Elimination System (SPDES). Operators of regulated MS4s and operators of construction activities must obtain permit coverage under either an individual SPDES permit or one of the general permits no later than **March 10, 2003 or prior to commencement of construction.**

Environmental Benefits

New York State has made significant progress in improving the State's water quality. The new federal stormwater control program builds on New York's successful efforts. In spite of our headway, water quality problems remain, and stormwater is one of the major challenges we still face.

Water from rain or melting snow runs off land, carrying litter, soil, bacteria and other pollutants into our bays, rivers and lakes. This pollution results in closed beaches and shellfish beds, spoiled fishing and swimming, excessive weed growth, and destruction of aquatic habitat. Large amounts of stormwater rushing

off paved surfaces can flood yards, streets and basements.

The new stormwater program will help correct these problems, protecting and restoring our valuable environmental resources.

Assistance Available

Under the State's Environmental Protection Fund (EPF), \$3.4 million will be provided this year to assist communities in implementing the new stormwater program, known as the Stormwater Phase II regulations. In addition, \$380,000 from New York's federal nonpoint source grant and \$800,000 in partnership funding has been committed to its implementation. Communities need to apply for these funds.

Workshops, conferences and training sessions are being held throughout the State and guidance material will be made available to help regulated communities and municipalities in understanding and meeting the requirements.

Improving Existing Programs

Many MS4s are already managing stormwater. However, frequently the responsibility is spread out over several programs or departments. The requirements in Phase II can help with planning and coordination efforts. The Department and its partners are setting up support for regulated MS4s, developing manuals and guidance, holding workshops, and providing technical support and access to funding. Watch the mail and the Department's website for more information.

Look Inside For

- Who is regulated and definitions
- What's in a permit's summaries of the MS4 and Construction requirements
- How to obtain coverage

Table of Contents

Overview

Table of Contents

Chapter 1 - Definitions1

Chapter 2 - MS4 Designation3

Chapter 3 - MS4 Stormwater Management Program Requirements7

Chapter 4 - MS4 Notice of Intent (NOI) Form.....16

Resources17

Appendix - MS4 NOI

Chapter 1 - Definitions

Operators of regulated small municipal separate storm sewer systems (MS4s) seeking authorization to discharge stormwater in compliance with the federal Clean Water Act should seek coverage under the State Pollutant Discharge Elimination System (SPDES) General Permit for Municipal Separate Storm Sewer Systems.

To apply for coverage under the general permit, the MS4 must file a completed Notice of Intent (NOI) with the Department five calendar days prior to March 10, 2003 (March 5) to be in compliance by the deadline. Coverage begins five calendar days after receipt of the NOI by the Department. Submitting an NOI is an affirmation that an initial Stormwater Management Program (SWMP), or more developed program if that is the case, has been established and will be implemented. The SWMP can be modified at any time. The SWMP must be fully developed and implemented no later than January 8, 2008.

Definition of a Municipal Separate Storm Sewer System (MS4)

The term MS4 does not solely refer to municipally-owned storm sewer systems, but rather is a term with a much broader application that includes, in addition to local jurisdictions: State departments of transportation, public universities, local sewer districts, public hospitals, military bases and prisons. An MS4 is not always just a system of underground pipes; it can include roads with drainage systems, gutters, and ditches. The regulatory definition of an MS4 is:

According to 40 CFR 122.26(b)(8), “**municipal separate storm sewer** means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- (1) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law)...including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the Clean Water Act that discharges into the waters of the United States.” (Note: “Waters of the United States” refers to surface water only.)
- (2) “Designed or used for collecting or conveying storm water
- (3) Which is not a combined sewer; and
- (4) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2”

According to 40 CFR 122.26(b)(16)iii, small MS4s (population less than 100,000) “includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospitals or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas such as individual buildings.”

Special Requirements for Impaired Waters

Special requirements apply when stormwater is discharged to a water identified on the New York State 303(d) list or a water covered by an EPA-approved Total Maximum Daily Load (TMDL).

303(d) List: The Department prepares this list to meet the requirements of Section 303(d) of the Clean Water Act. Section 303(d) requires states to identify waters where designated uses (identified through the Department's classification process) are not fully supported by existing water quality. These waters (called "303(d) waters") are listed with the pollutant that is the cause of the water quality problem. If stormwater discharges to a 303(d) listed water, the stormwater management program must ensure no increase in the listed pollutant of concern to the 303(d) listed water. The 303(d) list is available on the Department's web site at <http://www.dec.state.ny.us/website/dow/303dcalm.pdf>. The list is updated approximately every two years.

Total Maximum Daily Load (TMDL): A TMDL is a numerical limit on the amount of a particular contaminant that can be discharged to a waterbody from all sources. **If a TMDL requiring reduction of a pollutant associated with stormwater is approved by the EPA for any waterbody or watershed into which the MS4 discharges, the program for the six minimum measures must ensure that reduction of the pollutant of concern specified in the TMDL is achieved.**

Chapter 2 - MS4 Designation

Federal Requirements for Designation

Definition of Small MS4: Under Phase I of the federal stormwater program, the Environmental Protection Agency (EPA) required permit coverage for **Municipal Separate Storm Sewer Systems (MS4s)** located in incorporated places or counties with populations of 100,000 or more. New York City was the only New York State municipality that had to file for a permit. Other cities in New York with a population of over 100,000 were granted a waiver which allowed them to wait to implement their programs under Phase II.

Phase II expands the stormwater program to the smaller MS4s. The universe of small MS4s is quite large. However, only a sub-set of small MS4s, referred to as “regulated” small MS4s, are covered by the Federal stormwater regulations. A small MS4 can be designated as a regulated MS4 through automatic designation by EPA or by meeting designation criteria developed by the NPDES permitting authority, the Department of Environmental Conservation (the Department) in New York State.

Automatic Designation Criteria Required by EPA: The EPA’s automatic designation criteria are based strictly on population and density. An area is automatically designated if the population is at least 50,000 and has an overall population density of at least 1,000 people per square mile based on the 2000 Census.

Development of Additional Criteria: EPA requires the Department to develop a set of criteria for designating additional MS4 areas. The following criteria, using a combination of population and environmental factors, have been adopted to designate additional MS4s in New York State:

- Criterion 1: MS4s discharging to waters for which an EPA-approved Total Maximum Daily Load (TMDL) requires reduction of a pollutant associated with stormwater beyond what can be achieved with existing programs (and the area is not already covered under automatic designation).
- Criterion 2: MS4s contiguous to automatically designated urbanized areas (town lines) that discharge to sensitive waters classified as AA Special (fresh surface waters), AA (fresh surface waters) with filtration avoidance determination or SA (saline surface waters).

As of January 2003, Criterion 1 designates MS4s in the entire New York City Watershed East of Hudson, and Criterion 2 designates most of the eastern end of Long Island and all of the eastern portion of Westchester County. As time passes, other MS4s will be designated under these criteria as population and environmental factors change (e.g. additional TMDLs for stormwater pollutants approved).

Cities, towns and villages that are automatically designated MS4s or additionally

designated by the Department, are listed on the next pages.

New York Regulated Areas

New York State Automatically Designated Urbanized Areas

MS4s located wholly or partially within the designated Urbanized Area portion of these listed municipalities will be required to develop Phase II stormwater programs. Municipalities, special districts or “other public entities,” can check the interactive map on the Department’s website (<http://www.dec.state.ny.us/website/imsmaps/urbanmap/viewer.htm> of New York State “Urbanized Areas”) to help determine whether their MS4 is located within the Urbanized Area boundaries. This list below is believed to be reasonably accurate, however, consult the map to be sure.

| | | | |
|------------------------|------------------------|-----------------------|-----------------------|
| ALBANY COUNTY | LA GRANGE(T) | BRIGHTON(T) | KINGS POINT(V) |
| ALBANY(C) | PLEASANT VALLEY(T) | BROCKPORT(V) | LAKE SUCCESS(V) |
| BETHLEHEM(T) | POUGHKEEPSIE(C) | CHILI(T) | LATTINGTOWN(V) |
| COHOES(C) | POUGHKEEPSIE(T) | CLARKSON(T) | LAUREL HOLLOW(V) |
| COLONIE(V) | UNION VALE(T) | E.ROCHESTER(V) | LAWRENCE(V) |
| COLONIE(T) | WAPPINGER(T) | FAIRPORT(V) | LONG BEACH(C) |
| GREEN ISLAND(T)(V) | WAPPINGERS FALLS(V) | GATES(T) | LYNBROOK(V) |
| GUILDERLAND(T) | | GREECE(T) | MALVERNE(V) |
| MENANDS(V) | | HENRIETTA(T) | MANOR HAVEN(V) |
| NEW SCOTLAND(T) | ERIE COUNTY | HILTON(V) | MASSAPEQUA PARK(V) |
| VOORHEESVILLE(V) | ALDEN(T) | IRONDEQUOIT(T) | MATINECOCK(V) |
| WATERVLIET(C) | ALDEN(V) | MENDON(T) | MILL NECK(V) |
| | AMHERST(T) | OGDEN(T) | MINEOLA(T) |
| BRONX COUNTY | ANGOLA(V) | PARMA(T) | MINEOLA(V) |
| BRONX(BORO) | AURORA(T) | PENFIELD(T) | MUNSEY PARK(V) |
| | BLASDELL(V) | PERINTON(T) | MUTTONTOWN(V) |
| BROOME COUNTY | BOSTON(T) | PITTSFORD(T) | N HEMPSTEAD(T) |
| BINGHAMTON(C) | BUFFALO(C) | PITTSFORD(V) | NEW HYDE PARK(V) |
| BINGHAMTON(T) | CHEEKTOWAGA(T) | ROCHESTER(C) | NORTH HILLS(V) |
| CHENANGO(T) | CLARENCE(T) | RUSH(T) | OLD BROOKVILLE(V) |
| CONKLIN(T) | DEPEW(V) | SPENCERPORT(V) | OLD WESTBURY(V) |
| DICKINSON(T) | EAST AURORA(V) | SWEDEN(T) | OYSTER BAY(V)(T) |
| ENDICOTT(V) | EDEN(T) | WEBSTER(T) | OYSTER BAY COVE(V) |
| FENTON(T) | ELMA(T) | WEBSTER(V) | PLANDOME(V) |
| JOHNSON CITY(V) | EVANS(T) | | PLANDOME HGTS(V) |
| KIRKWOOD(T) | GRAND ISLAND(T) | NASSAU COUNTY | PLANDOME MANOR(V) |
| MAINE(T) | HAMBURG(T) | ATLANTIC BEACH(V) | PORT WASH NO(V) |
| PORT DICKINSON(V) | HAMBURG(V) | BAXTER ESTATES(V) | ROCKVILLE CENTER(V) |
| UNION(T) | KENMORE(V) | BAYVILLE(V) | ROSLYN(V) |
| VESTAL(T) | LACKAWANNA(C) | BELLEROSE(V) | ROSLYN ESTATES(V) |
| WINDSOR(T) | LANCASTER(T) | BROOKVILLE(V) | ROSLYN HARBOR(V) |
| | LANCASTER(V) | CEDARHURST(V) | RUSSELL GARDEN(V) |
| CHEMUNG COUNTY | MARILLA(T) | CENTRE ISLAND(V) | SADDLE ROCK(V) |
| ASHLAND(T) | NEWSTEAD(T) | COVE NECK(V) | SANDS POINT(V) |
| BIG FLATS(T) | ORCHARD PARK(T) | EAST HILLS(V) | SEA CLIFF(V) |
| CATLIN(T) | ORCHARD PARK(V) | EAST ROCKAWAY(V) | SO FLORAL PARK(V) |
| ELMIRA(C) | SLOAN(V) | EAST WILLISTON(V) | STEWART MANOR(V) |
| ELMIRA(T) | TONAWANDA(T) | FARMINGDALE(V) | THOMASTON(V) |
| ELMIRA HEIGHTS(V) | TONAWANDA(C) | FLORAL PARK(V) | UPPER BROOKVILLE(V) |
| HORSEHEADS(V) | WEST SENECA(T) | FLOWER HILL(V) | VALLEY STREAM(V) |
| HORSEHEADS(T) | WILLIAMSVILLE(V) | FREEPORT(V) | WESTBURY(V) |
| MILLPORT(T) | | GARDEN CITY(V) | WILLISTON PARK(V) |
| SOUTHPORT(T) | HERKIMER COUNTY | GLEN COVE(C) | WOODSBURGH(V) |
| VETERAN(T) | FRANKFORT(T) | GREAT NECK(V) | |
| WELLSBURG(T) | SCHUYLER(T) | GREAT NECK ESTATES(V) | NEW YORK |
| | | GREAT NECK PLAZA(V) | MANHATTAN(BORO) |
| DUTCHESS COUNTY | KINGS COUNTY | HEMPSTEAD(T) | |
| BEACON(C) | KINGS(BORO) | HEMPSTEAD(V) | NIAGARA COUNTY |
| BEEKMAN(T) | | HEWLETT BAY PARK(V) | CAMBRIA(T) |
| EAST FISHKILL(T) | MADISON COUNTY | HEWLETT HARBOR(V) | LEWISTON(T) |
| FISHKILL(V) | SULLIVAN(T) | HEWLETT NECK(V) | LEWISTON(V) |
| FISHKILL(T) | | ISLAND PARK(V) | NIAGARA(T) |
| HYDE PARK(T) | MONROE COUNTY | KENSINGTON(V) | NIAGARA FALLS(C) |
| NO. TONAWANDA(C) | CLAYVILLE(V) | NEW YORK MILLS(V) | YORKVILLE(V) |
| PENDLETON(T) | CLINTON(V) | ORISKANY(V) | |
| PORTER(T) | DEERFIELD(T) | PARIS(T) | Key: |
| WHEATFIELD(T) | KIRKLAND(T) | UTICA(C) | C = City |
| YOUNGSTOWN(V) | MARCY(T) | WESTMORELAND(T) | T = Town |
| | NEW HARTFORD(T) | WHITESBORO(V) | V = Village |
| ONEIDA COUNTY | NEW HARTFORD(V) | WHITESTOWN(T) | |

ONONDAGA COUNTY

BALDWINSVILLE(V)
 CAMILLUS(V)
 CAMILLUS(T)
 CICERO(T)
 CLAY(T)
 DEWITT(T)
 E. SYRACUSE(V)
 FAYETTEVILLE(V)
 GEDDES(T)
 LAFAYETTE(T)
 LIVERPOOL(V)
 LYSANDER(T)
 MANLIUS(T)
 MANLIUS(V)
 MARCELLUS(V)
 MARCELLUS(T)
 MINOA(V)
 N. SYRACUSE(V)
 ONONDAGA(T)
 POMPEY(T)
 SALINA(T)
 SOLVAY(V)
 SYRACUSE(C)
 VAN BUREN(T)

ONTARIO COUNTY

FARMINGTON(T)
 VICTOR(T)
 VICTOR(V)

ORANGE COUNTY

BLOOMING GROVE(T)
 CHESTER(T)
 CORNWALL(T)
 CORNWALL-ON-HUDSON(V)
 GREENWOOD LAKE(V)
 HAMPTONBURGH(T)
 HARRIMAN(V)
 HIGHLAND FALLS(V)
 HIGHLANDS(T)
 KIRYAS JOEL(V)
 MIDDLETOWN(C)
 MONROE(T)
 MONROE(V)
 MONTGOMERY(T)
 MOUNT HOPE(T)
 NEW WINDSOR(T)
 NEWBURGH(T)
 NEWBURGH(C)
 OTISVILLE(V)
 WALDEN(V)
 WALLKILL(T)
 WARWICK(T)
 WASHINGTONV'LE(V)
 WAWAYANDA(T)
 WOODBURY(T)

OSWEGO COUNTY

CENTRAL SQUARE(V)
 HASTINGS(T)
 PHOENIX(V)
 SCHROEPEL(T)
 WEST MONROE(T)

PUTNAM COUNTY

BREWSTER(V)
 CARMEL(T)

KENT(T)
 PATTERSON(T)
 PHILIPSTOWN(T)
 PUTNAM VALLEY(T)
 SOUTHEAST(T)

QUEENS COUNTY

QUEENS(BORO)

RENSELAER COUNTY

BRUNSWICK(T)
 CASTLETON(V)
 EAST GREENBUSH(T)
 NASSAU(T)
 NO. GREENBUSH(T)
 POESTENKILL(T)
 RENSELAER(C)
 SAND LAKE(T)
 SCHAGHTICOKE(T)
 SCHODACK(T)
 TROY(C)

RICHMOND COUNTY

STATEN ISLAND(BORO)

ROCKLAND COUNTY

AIRMONT(V)
 CHESTNUT RIDGE(V)
 CLARKSTOWN(T)
 GRANDVIEW-ON-HUDSON(V)
 HAVERSTRAW(T)
 HAVERSTRAW(V)
 HILLBURN(V)
 KASER(V)
 MONTEBELLO(V)
 NEW HEMPSTEAD(V)
 NEW SQUARE(V)
 NYACK(V)
 ORANGETOWN(T)
 PIERMONT(V)
 POMONA(V)
 RAMAPO(T)
 SLOATSBURG(V)
 SO. NYACK(V)
 SPRING VALLEY(V)
 STONY POINT(T)
 SUFFERN(V)
 UPPER NYACK(V)
 WEST HAVERSTRAW(V)
 WESLEY HILLS(V)

SARATOGA COUNTY

BALLSTON(T)
 BALLSTON SPA(V)
 CHARLTON(T)
 CLIFTON PARK(T)
 GREENFIELD(T)
 HALFMOON(T)
 MALTA(T)
 MILTON(T)
 MOREAU(T)
 ROUND LAKE(V)
 S. GLENS FALLS(V)
 SARATOGA(T)
 SARATOGA SPRINGS(C)
 WATERFORD(T)
 WATERFORD(V)
 WILTON(T)

SCHENECTADY COUNTY

GLENVILLE(T)
 NISKAYUNA(T)
 PRINCETOWN(T)
 ROTTERDAM(T)
 SCHENECTADY(C)
 SCOTIA(V)

SUFFOLK COUNTY

AMITYVILLE(V)
 ASHAROKEN(V)
 BABYLON(T)
 BABYLON(V)
 BELLE TERRE(V)
 BELLPORT(V)
 BRANCH(V)
 BRIGHTWATERS(V)
 BROOKHAVEN(T)
 HEAD OF HARBOR(V)
 HUNTINGTON(T)
 HUNTINGTON BAY(V)
 ISLANDIA(T)
 ISLIP(T)
 LAKE GROVE(V)
 LINDENHURST(V)
 LLOYD HARBOR(V)
 NISSEQUOGUE(V)
 NORTHPORT(V)
 OLD FIELD(V)
 PATCHOGUE(V)
 POQUOTT(V)
 PORT JEFFERSON(V)
 QUOGUE(V)
 RIVERHEAD(T)
 SHINNECOCK BAY
 SHOREHAM(V)
 SMITHTOWN(T)
 SOUTHAMPTON(T)
 SOUTHAMPTON(V)

SULLIVAN COUNTY

MAMAKATING(T)

TIOGA COUNTY

OWEGO(T)

TOMPKINS COUNTY

CAROLINE(T)
 CAYUGA HEIGHTS(V)
 DRYDEN(T)
 ITHACA(C)
 ITHACA(T)
 LANSING(V)(T)
 NEWFIELD(T)
 ULYSSES(T)

ULSTER COUNTY

ESOPUS(T)
 HURLEY(T)
 KINGSTON(T)
 KINGSTON(C)
 LLOYD(T)
 MARBLETOWN(T)
 MARLBOROUGH(T)
 PLATTEKILL(T)
 ROSENDALE(T)
 SAUGERTIES(T)

SAUGERTIES(V)
 SHAWANGUNK(T)
 ULSTER(T)

WARREN COUNTY

GLENS FALLS(C)
 QUEENSBURY(T)

WASHINGTON COUNTY

FORT EDWARD(T)
 FORT EDWARD(V)
 HUDSON FALLS(V)
 KINGSBURY(T)

WAYNE COUNTY

MACEDON(T)
 MACEDON(V)
 ONARIO(T)
 WALWORTH(T)

WESTCHESTER COUNTY

ARDSLEY(V)
 BEDFORD(T)
 BRIARCLIFF MANOR(V)
 BRONXVILLE(V)
 BUCHANAN(V)
 CORTLANDT(T)
 CROTON-ON-HUDSON(V)
 DOBBS FERRY(V)
 EASTCHESTER(T)
 ELMSFORD(V)
 GREENBURGH(T)
 HARRISON(T)(V)
 HASTINGS-ON-HUDSON(V)
 IRVINGTON(V)
 LARCHMONT(V)
 LEWISBORO(T)
 MAMARONECK(V)
 MAMARONECK(T)
 MOUNT KISCO(V)(T)
 MOUNT PLEASANT(T)
 MOUNT VERNON(C)
 NEW CASTLE(T)
 NEW ROCHELLE(C)
 NORTH CASTLE(T)
 NORTH SALEM(T)
 NORTH TARRYTOWN(V)
 SLEEPY HOLLOW(V)
 OSSINING(T)
 OSSINING(V)
 PEEKSKILL(C)
 PELHAM(T)
 PELHAM MANOR(V)
 PLEASANTVILLE(V)
 PORT CHESTER(V)
 POUND RIDGE(T)
 RYE(T)
 RYE BROOK(V)
 SCARSDALE(V)(T)
 SOMERS(T)
 TARRYTOWN(V)
 TUCKAHOE(V)
 WHITE PLAINS(C)
 YONKERS(C)
 YORKTOWN(T)

Key:

C = City
 T = Town
 V = Village

New York State Additionally Designated Areas (as of January 2003)

Criterion 1 - Entire NYC Watershed East of Hudson

(any portion(s) of these municipalities that lie within the NYC Watershed)

PUTNAM COUNTY

Brewster (V)
Carmel(T)
Kent(T)
Patterson(T)
Putnam Valley(T)
Southeast(T)

DUTCHESS COUNTY

Beekman(T)
East Fishkill(T)
Pawling(V)
Pawling(T)

WESTCHESTER COUNTY

Bedford(T)
Cortlandt(T)
Lewisboro(T)
New Castle(T)
North Salem(T)
Pound Ridge(T)
Somers(T)
Yorktown(T)

Criterion 2 -Eastern Long Island and Eastern Westchester County

(coverage extended to town lines)

LONG ISLAND

Brookhaven(T)
Quogue (V)
Riverhead(T)
Sag Harbor(V)
Southampton(T)
Westhampton Beach (V)

WESTCHESTER COUNTY

Lewisboro(T)
Pound Ridge(T)
North castle(T)

Chapter 3 - MS4 Stormwater Management Program Requirements ¹

MS4s must develop, implement, and enforce a stormwater management program (SWMP) designed to reduce the discharge of pollutants from small MS4s to the maximum extent practicable (MEP) to protect water quality and to satisfy the appropriate water quality requirements of the Environmental Conservation Law and the Clean Water Act. “**Maximum Extent Practicable**” (MEP) is a technology-based standard established by Congress in the Clean Water Act. Since no precise definition of MEP exists, it allows for maximum flexibility on the part of MS4 operators as they develop their programs. (40CFR 122.2; See also Stormwater Phase II Compliance Assistance Guide EPA 833-R-00-002, March 2000)

Six Minimum Control Measures

SWMPs must include six minimum control measures. For each of these six minimum measures, MS4s must identify measurable goals and select and implement management practices to achieve those measurable goals. The six minimum measures include:

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

The SWMP must be fully developed and implemented within five years of the issuance date of the permit: January 8, 2008.

The following pages summarize each minimum measure and outline the required measures and some activities and/or practices that can be used to fulfill the minimum measure.

¹ *This is a synopsis of the permit and does not include all the information MS4s will need. Regulated MS4s should check the final permit to understand all they are responsible for and/or required to do.*

Minimum Control Measure 1 : Public Education and Outreach

Why: People appreciate their local waterways. They use them for swimming, boating, fishing and shellfishing. Implementing this minimum measure will help them understand what they can do to protect and restore the health of their waterbodies. Well-planned public education and outreach programs will support and help achieve the goals of the other minimum control measures.

| Requirements: | Activities/Practices: |
|--|--|
| <p>Plan and conduct an ongoing public education and outreach program that describes:</p> <ul style="list-style-type: none"> • the impacts of stormwater discharges on waterbodies, • the pollutants of concern and their sources, and • steps contributors of stormwater and non-stormwater discharges can take to reduce the pollutants. <p>Develop measurable goals and select appropriate education and outreach activities to ensure the reduction of all pollutants of concern in stormwater discharges to the maximum extent practicable.</p> | <p>A program for this measure <u>might</u> include activities such as:</p> <ul style="list-style-type: none"> ✓ speakers to community groups and schools, ✓ utility bill inserts, ✓ news articles or radio spots, ✓ posters, ✓ refrigerator magnets, ✓ displays at events or malls, ✓ sponsoring an event, and ✓ providing training. |

The activities and management practices chosen will be determined from the program goal, identified pollutants, the audience to reach, information to convey and what the audience should do as a result.

MS4s do not have to do it all themselves. They can work with other municipalities who have the same goals and target audiences to produce materials useful to all and/or get permission to use existing materials that meet the MS4's needs. Another resource is the County Water Quality Coordinating Committees or County Soil and Water Conservation Districts.

Minimum Control Measure 2: Public Involvement/Participation

Why: MS4s can reap the benefit of a stronger program and higher levels of compliance if they involve people in planning and implementing the SWMP right from the beginning. Important partnerships can be cultivated for planning and implementing the program through the public involvement activities.

| Requirements: | Activities/Practices: |
|---|--|
| <p>Comply with State and local public notice requirements when implementing a public involvement/participation program.</p> <p>Comply with public participation and involvement provisions of the Clean Water Act as applicable.</p> <p>Design and conduct a public involvement/participation program that:</p> <ul style="list-style-type: none"> • identifies key individuals and groups who are interested in or affected by the stormwater permitting program, • identifies the type of input the MS4 will seek from them, and • describes activities the MS4 will undertake to provide program access and gather needed input. <p>Identify and publish the name of a contact person for the Stormwater Management Program.</p> <p>Prior to submitting the annual report, present the draft annual report at a meeting that is open to the public. Make public the agenda of the meeting, the opportunity for public comment, the date and time of the meeting, and the availability of the draft report for prior review.</p> <p>Include a summary of comments and intended responses in the annual report and make the final report available for public inspection.</p> <p>Develop measurable goals and select appropriate public involvement activities to ensure the reduction of all pollutants of concern in stormwater discharges to the maximum extent practicable.</p> | <p>A program for this measure <u>might</u> include activities such as:</p> <ul style="list-style-type: none"> ✓Forming an advisory committee(s) within the municipality and in cooperation with other regulated municipalities. ✓Seeking out and establishing a list of stakeholders who would like to be apprised of milestones and give input to decisions. ✓Encouraging citizen volunteer programs for activities like beach cleanups, picking up litter, stream monitoring and field surveys, and storm drain stenciling. |

Minimum Control Measure 3: Illicit Discharge Detection and Elimination

Why: A significant portion of flows from MS4s are not directly attributable to precipitation runoff. They are due to illicit and/or inappropriate discharges and connections to the MS4. Illicit discharges enter the system through direct or indirect connections. The result is inadequately treated discharges that contribute high levels of pollutants, including heavy metals, toxics, oil and grease, viruses, and bacteria to receiving waterbodies.

What is an “Illicit Discharge”?

Federal regulations define an illicit discharge as “...any discharge to an MS4 that is not composed entirely of stormwater...” with some exceptions. These exceptions include discharges from NPDES-permitted industrial sources and discharges from fire-fighting activities. Illicit discharges are considered “illicit” because MS4s are not designed to accept, process, or discharge such non-stormwater wastes.

Sources of illicit discharges include: sanitary wastewater, effluent from septic tanks, car wash wastewaters, improper oil disposal, radiator flushing disposal, laundry wastewaters, spills from roadway accidents, and improper disposal of auto and household toxics.

| Requirements: | Activities/Practices: |
|---|--|
| <p>Develop, implement and enforce a program to detect and eliminate illicit discharges into the MS4.</p> <p>Develop and maintain a map showing the location of all outfalls and the names and location of all waters of the U.S. (defined as surface waters) that receive discharges from those outfalls. (<i>An outfall is defined as any point where an MS4 discharges to either the waters of the U.S. or to another MS4. Outfalls include discharges from pipes, ditches, swales, and other points of concentrated flow.</i>)</p> <p>Prohibit, through an ordinance or other regulatory mechanism, illicit discharges into the storm sewer system and implement appropriate enforcement procedures and actions.</p> <p>Develop and implement a program to detect and address non-stormwater discharges to the system.</p> <p>Inform public employees, businesses and the general public of hazards associated with illegal discharges and improper disposal of waste.</p> | <p>A program for this measure <u>might</u> include activities such as:</p> <ul style="list-style-type: none"> ✓conducting shoreline surveys, ✓conducting dye testing, ✓inspecting storm sewers, ✓establishing citizen watch groups, and ✓developing information brochures for specific audiences. |

| Requirements: | Activities/Practices: |
|--|------------------------------|
| <p>Address the following categories of non-stormwater discharge flows as necessary (if determined to be a substantial contributor of pollutants):</p> <ul style="list-style-type: none"> • Water line flushing • Landscape irrigation • Diverted stream flows • Rising groundwaters • Uncontaminated groundwater infiltration • Uncontaminated pumped groundwater • Discharges from potable water sources • Foundation drains • Air conditioning condensation • Irrigation water • Springs • Water from crawl space and basement sump pumps • Footing drains • Lawn watering • Individual residential car washing • Flows from riparian habitats and wetlands • De-chlorinated swimming pool discharges • Street wash water • Fire fighting activities <p>Develop measurable goals and select appropriate management practices to ensure the reduction of all pollutants of concern from illicit discharges to the stormwater system to the maximum extent practicable.</p> | |

Minimum Control Measure 4: Construction Site Runoff Control

Why: Though most communities welcome a certain level of development, construction sites can present a risk to water quality. Proper stormwater management at construction sites will prevent loose soil and other pollution in stormwater runoff from causing significant degradation of our waterbodies.

| Requirements: | Activities/Practices |
|---|---|
| <p>Develop, implement, and enforce a program to reduce pollutants in any stormwater runoff to the small MS4 from construction activities that result in a land disturbance of one acre or more.</p> <p>Include construction activities on less than one acre in the program if: 1) it 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 Department.</p> <p>Develop a program that, at a minimum, provides equivalent protection to the NYS SPDES General Permit for Stormwater Discharges from Construction Activities. The program must include the development and implementation of:</p> <ul style="list-style-type: none"> • an ordinance or other regulatory mechanism to require erosion and sediment controls; • requirements for construction site operators to implement erosion and sediment control management practices; • sanctions to ensure compliance; • requirements for construction site operators to control waste (i.e., discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste) at the construction site that may cause adverse impacts to water quality; • procedures for site plan review that incorporate consideration of potential water quality impacts and review of individual pre-construction site plans to ensure consistency with local sediment and erosion control requirements; • procedures for receipt and consideration of information submitted by the public; • procedures for site inspections and enforcement of control measures; and | <p>Read and understand the requirements in the General Permit for Construction. (See next section, <i>Construction Activities Within a Regulated MS4</i>)</p> <p>Examples of activities a program for this measure <u>must</u> include are:</p> <ul style="list-style-type: none"> ✓ Establish an ordinance or other regulatory mechanism (unless there is already something in place). ✓ Develop and implement training measures for construction site operators about state and local requirements. ✓ Establish procedures for site inspections and enforcement. ✓ Establish a procedure to receive and consider information from the public. |

| Requirements: | Activities/Practices |
|---|----------------------|
| <ul style="list-style-type: none"> • education and training measures for construction site operators about requirements. <p>Develop measurable goals and select appropriate management practices to ensure the reduction of all pollutants of concern in construction stormwater discharges tributary to the MS4's system to the maximum extent practicable.</p> | |

Construction Activities within a Regulated MS4

According to the federal Phase II stormwater regulations, regulated MS4s must address stormwater runoff from construction activities. Construction activities that disturb greater than one acre are also subject to state requirements and must be covered under an individual or general permit.

MS4s are advised to become familiar with the *SPDES General Permit For Stormwater Discharges from Construction Activity* because their program must, at a minimum, provide equivalent protection to this permit. The Department's technical standards for this permit are contained in the *New York State Stormwater Management Design Manual* and the *New York Standards and Specifications for Sediment and Erosion Control*. MS4s should use these documents in developing their programs. See the Resources section for how to obtain these documents.

Minimum Control Measure 5: Post-Construction Runoff Control

Why: As runoff flows over areas altered by development, it picks up pollutants such as oil and grease, pesticides, and heavy metals. Strategies and management practices should be implemented to reduce the amount of pollutants that run off from existing development. Prior planning and design for minimization of pollutants in post-construction stormwater discharges is a cost-effective approach to stormwater quality management for new development and redevelopment.

| Requirements: | Activities/Practices |
|---|--|
| <p>Develop and implement a program that :</p> <ul style="list-style-type: none"> • includes a combination of management practices that will reduce the discharge of pollutants to the maximum extent practicable; • uses an ordinance or other regulatory mechanism to address post-construction runoff from development and redevelopment; and • ensures adequate long-term operation and maintenance of management practices, including monitoring. <p>Develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb one or more acres of land that discharge into the small MS4.</p> <p>Include projects of less than one acre in the program if: 1) it is part of a larger common plan of development or sale, or 2) if it has been designated by the Department to protect water quality and to control water quantities that discharge into a small MS4.</p> <p>Ensure that controls are in place to protect water quality and reduce the discharge of pollutants to the maximum extent practicable.</p> <p>Develop, implement, and provide adequate resources for a program to inspect development and re-development sites and to enforce and penalize violators</p> <p>Develop measurable goals and select appropriate management practices to ensure the reduction of all pollutants of concern in the post-development stormwater discharges to the maximum extent practicable.</p> | <p>Examples of activities the program for this measure <u>must</u> include are:</p> <ul style="list-style-type: none"> ✓Develop and implement structural and non-structural practices to reduce pollutants from existing development. ✓Develop post-construction strategies that include structural and/or non-structural management practices for new development and redevelopment. ✓Develop and/or use zoning ordinances or other kinds of regulatory mechanisms. ✓Inspect sites. |

Minimum Control Measure 6: Pollution Prevention/Good Housekeeping

Why: Municipal operation and maintenance activities can become sources of the pollutants that need to be minimized through the SWMP. Good housekeeping measures for municipal operations will reduce or prevent this pollution from entering nearby waterbodies with stormwater runoff.

| Requirements: | Activities/Practices: |
|---|---|
| <p>Develop and implement an operation and maintenance program that is designed to reduce and prevent the discharge of pollutants to the maximum extent practicable from activities such as park and open space maintenance, fleet and building maintenance, roadway maintenance, hydrologic habitat modification, and marine operations.</p> <p>Include a training component in the program</p> <p>Follow management practices identified in the <i>NYS Management Practices Catalogue for Nonpoint Source Pollution Prevention</i> or other equivalent guidance materials available from the EPA, New York State, Tribe or other organization</p> <p>Develop measurable goals and select appropriate management practices to ensure the reduction of all pollutants of concern in stormwater discharges to the maximum extent practicable.</p> | <p>A program for this measure <u>might</u> include activities such as:</p> <ul style="list-style-type: none"> ✓Examine municipal operations and alter actions where needed for pollution prevention. ✓Develop maintenance schedules for structural and non-structural controls. ✓Develop long-term inspection procedures for structural and non-structural controls. ✓Develop procedures for proper waste disposal and transfer. ✓Coordinate with flood control managers to identify and address environmental impacts from flood management projects. ✓Protect hazardous material storage areas. |

The *NYS Management Practices Catalogue for Nonpoint Source Pollution Prevention* explains pollution prevention measures for many types of municipal activities such roadway maintenance, marine operations, and hydrologic habitat modification. See the References Section in the back of this booklet for information on obtaining a copy of the *Management Practices Catalogue*.

Chapter 4 - MS4 Notice of Intent (NOI) Form

A Notice of Intent (NOI) is a four-page form that asks for information about the MS4 and the Stormwater Management Program (SWMP). The NOI is an opportunity to pull together the many strands of stormwater management that the MS4 is doing or needs to do and put them in one cohesive program.

To prepare the NOI, take stock of what stormwater management activities are already being done; the quality of waterbodies; and what activities need to be modified or changed because they are contributing pollutants to stormwater. Then, identify initial management practices and goals to reduce pollutants in stormwater. What is submitted in the NOI represents an initial identification of management practices and measurable goals. The annual report will provide a place for updating the selection of management practices and measurable goals as the SWMP is developed and fully implemented within a five-year period.

Steps for Filing an NOI

Filling out the NOI form will help MS4s formulate initial thinking about what kind of Stormwater Management Program they will have. The SPDES General Permit and NOI form are on the Department's website at: <http://www.dec.state.ny.us/water/stormwater>.

1. Read the permit to know what is expected.
2. Develop and certify the NOI:
 - a. Owner/operator information: Give the name, address and telephone number of the operator that controls the MS4's operation.
 - b. Location information: Describe the exact location of the MS4 and whether it discharges stormwater into any receiving water(s) or watershed(s) which is/are on the Department's 303(d) list, or for which a TMDL has been approved.
 - c. Identification of the Initial Management Practices: Identify which management practices will be used in the stormwater management program. The required practices are in bold face type on the form.
 - d. Identification of Initial Goals: Describe the measurable goals that will be used for each of the six minimum control measures. Identify the person(s) who will be responsible for implementing or coordinating the stormwater management program.
 - e. Cooperating MS4s: Identify MS4 partners who will be assisting in carrying out the SWMP.
 - f. Certification: A principal executive officer or ranking elected official must sign and date the certification section of the NOI.
3. Submit the NOI to the Department's Central Office. The NOI must be sent to the following address:

Storm Water Notice of Intent
NYSDEC
625 Broadway
Albany NY 12233

See MS4 NOI form in the Appendix

RESOURCES

There is a great deal of information and resources available to help MS4s and construction operators develop effective Stormwater Management Programs and Stormwater Pollution Prevention Plans. Below are some suggestions on where to start.

Web Sites

<http://www.dec.state.ny.us/water/stormwater> - The Department of Environmental Conservation (DEC) web site. It has a wealth of information about the federal regulation and how it is being implemented in New York State.

<http://www.epa.gov/npdes/stormwater> - This is the EPA's website on stormwater.

Stormwater Reference Manuals

Title: The following NYS Management Practice Catalogs pertain to the control or prevention of nonpoint source pollution from stormwater runoff:

- **Construction**
- **Roadway and Right-Of-Way Maintenance**
- **Urban/Stormwater Runoff**

Useful to: Planners, engineers, local officials, MS4s, contractors, land developers, property owners

Purpose: Structural, vegetative or operational practices that can be used as appropriate to control or prevent pollution from runoff

Format: Printed copies are available for free.

Availability: NYSDEC-Division of Water, Telephone: (518) 402-8250.
E-mail: thboekel@gw.dec.state.ny.us

Title: New York State Standards and Specifications for Erosion and Sediment Control
(Previously titled, *New York Guidelines for Urban Erosion and Sediment Control*, and known as the "Blue Book")

Useful to: Planners, engineers, local officials, MS4s, contractors, land developers, property owners

Purpose: Provides the Department's standards and specifications for the design of erosion and sediment control practices.

Availability: The first version is currently available for purchase. The order form can be downloaded at: http://www.dec.state.ny.us/website/dow/swmanual/swcsorderform_v1.pdf.
Or, call Lisa Miller at the Cayuga County Soil and Water Conservation District: (315) 252-4171.

Title: New York State Stormwater Management Design Manual

Useful to: Planners, engineers, local officials, MS4s, contractors, land developers, property owners

Purpose: Contains the Department's standards and specifications for the design of post-construction water quantity and quality controls.

Availability: To order a CD or a printed copy, or to download for free, visit the NYSDEC website at: <http://www.dec.state.ny.us/website/dow/swmanual/swmanual.html>. Or, for a printed copy, call Lisa Miller, Cayuga County SWCD: (315) 252-4171.

Title: **New York Contractor's Erosion and Sediment Control Field Notebook**

Useful to: Contractors

Purpose: A pocket-sized document that provides contractors with a quick, handy guide for the installation and maintenance of the erosion and sediment control practices most frequently used in construction.

Availability: Printed copies available for purchase. Print an order form from the NYSDEC website at: <http://www.dec.state.ny.us/website/dow/swmanual.html>. Or, call Lisa Miller at the Cayuga County Soil and Water Conservation District: (315) 252-4171.

Conferences and Workshops

There are and will be numerous conferences, workshops and other training on implementing the stormwater Phase II regulations. Check with local regional planning boards, soil and water conservation districts, business and local government organizations for sessions nearby. Also, check the DEC stormwater on-line calendar for a listing of stormwater management training courses and workshops at: <http://www.dec.state.ny.us/website/dow/calendar.html>.

Appendix

MS4 NOI



Notice of Intent (“NOI”)
New York State Department of Environmental Conservation

Division of Water
 625 Broadway, 4th Floor
 Albany, New York 12233-3505

**NOTICE OF INTENT for Stormwater Discharges Associated with
 Construction Activity UNDER SPDES GENERAL PERMIT #GP-02-01**
 NYR — (for DEC use only) —

IMPORTANT: All sections must be completed unless otherwise noted. Failure to complete all items may result in this form being returned to you, thereby delaying your coverage under this general permit. Applicants must read and understand the conditions of the permit and prepare a Stormwater Pollution Prevention Plan (SWPPP) prior to completing and submitting this NOI. Applicants are responsible for identifying and obtaining other DEC permits that may be required.

Section I. Applicant/Activity Information

| | | | |
|--|---|-------------------------------|---------|
| 1. Owner/Operator Name: | | | |
| 2a. Mailing Address: | 2b. City | 2c. State | 2d. Zip |
| 3. Contact Person: 3a. First Name: 3b. Last Name: | 3c. Phone: | 3d. E-mail: | |
| 4a. Site/Project Name: | | 4b. Existing use of the site: | |
| 5a. Street Address: | 5b. City: | State: NY | 5c. Zip |
| 6. County: | 7. Site Location: 7a. X Coordinates: _____ 7b. Y coordinates: _____ | | |

Section II. Disturbance Activity/Discharge Characteristics

| | |
|--|--|
| 8. Future use of the site: | 9. Duration of disturbance activity: from 9a. ___/___/___ to 9b. ___/___/___ |
| 10. Total site acreage: (acres) | 11. Total amount of disturbed area of overall plan of development or sale: (acres) |
| 12. Soil (Hydrologic Soil Group): | 13. What is the maximum slope of disturbed area: % |
| 14. What is the percentage of impervious area of the site? 14a. <u>before</u> commencement of the project % 14b. <u>after</u> completion of the project % | |
| 15. Will there be permanent stormwater management practices? <input type="checkbox"/> yes <input type="checkbox"/> no | 16. Is this a phased project? <input type="checkbox"/> yes <input type="checkbox"/> no |

Section III. Receiving System(s)

17. Does any part of the project lie within a regulated 100-year flood plain? yes no

18. Does the site/activity lie within the boundaries of the New York City watershed? yes no

19. Does runoff from site enter a storm sewer or ditch maintained by a local, Federal or State governmental unit (MS4)? yes no
 If the answer to 19 is no, skip to question 20.

19a. Provide the name of the government owning the storm sewer system: _____

19b. Is the MS4 a "Regulated MS4" as defined under 40 CFR Section 122.32? yes no don't know

19c. Does the MS4 have a SPDES permit for their storm sewer system? yes no don't know

19d. Is the runoff from the site tributary to a Combined Sewer Overflow (CSO)? yes no

20. What is the name of the nearest surface water body into which the runoff will enter?: _____

21. Does the runoff discharge to a receiving water identified as 303(d) listed segment , or "TMDL" water , or neither ?

Section IV. Stormwater Pollution Prevention Plan (SWPPP):

22. What components are required for the SWPPP? (Consult the SWPPP and Stormwater Permit Process flow chart and check all that apply):
 22a. Erosion and Sediment Control Plan 22b. Water Quality and Quantity Controls

23. Is the Construction Sequence Schedule for the planned management practices prepared? yes no

Will the Stormwater Pollution Prevention Plan be in conformance with:
 24a. local government requirements? yes no 24b. NYSDEC requirements? yes no
 If the answer to 24b. is yes, skip to Section VI.

Section V. Supplemental Information (only if you answered “no” to question 24.b.)

25. **Before submitting this NOI, you must have your SWPPP certified by a licensed Professional.**
 This certification must state that the SWPPP has been developed in a manner which will ensure compliance with water quality standards and with the substantive intent of this permit (see general permit for additional information).
 Is your plan certified by a licensed Professional? yes no

- Do not submit your SWPPP to DEC unless requested.
- A copy of your SWPPP must be submitted to the local jurisdiction(s) as required under Part III, subsection B.2 (also see question #29 below).
- State each deviation from the Department’s Technical Standards, reasons supporting each deviation request and an analysis of the water quality impacts in your SWPPP.
- Use Section VII below to summarize the justification statement in one paragraph.
- Allow sixty (60) days from the receipt of your completed application for permit coverage to provide DEC an opportunity to review the application and supporting information.

Section VI. Reviews and Approvals

Has your SWPPP been reviewed by: 26a. local Soil and Water Conservation District 26b. Professional Engineer
 26c. Certified Professional Erosion Control Specialist 26d. Licensed Landscape Architect. 26e. None

27. Are there other DEC permits required or already obtained for this project? yes no
 28. If the answer to 27 is no, skip to question 29.
 28a. If this NOI is submitted for the purpose of continuing previous coverage under the general permit for stormwater runoff from construction activities (GP-93-06), please indicate the SPDES reference number assigned under GP-93-06: NYR1 _____
 28b. If there is another SPDES permit, please indicate the permit number: NY _____
 28c. If there are other DEC permits, please provide one of the permit numbers: _____

29. Has a copy of your SWPPP been submitted to the governing jurisdiction as required by the permit? yes no

Section VII. Details (use this space , maximum 100 words or 600 characters, to further explain answers where necessary).

Section VIII. Certification

I have read or been advised of the permit conditions and believe that I understand them. I also understand that, under the terms of the permit, there may be reporting requirements. I also certify under penalty of law that this document and the corresponding documents were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person(s) who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further understand that coverage under the general permit will be identified in the acknowledgment that I will receive as a result of submitting this NOI and can be as long as sixty (60) days as provided for in the general permit. I also understand that, by submitting this NOI, I am acknowledging that the SWPPP has been developed and will be implemented as the first element of construction. and agreeing to comply with all the terms and conditions of the general permit for which this NOI is being submitted.

| | | |
|--------------------|----------------------|-------------|
| 30a. Printed Name: | 30b. Title/Position: | 30c. Phone: |
| Signature: | 30d. E-mail: | 30e. Date: |