

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
State Pollutant Discharge Elimination System (SPDES)
DISCHARGE PERMIT



Industrial Code:	4952	SPDES Number:	NY-0287890
Discharge Class (CL):	16	DEC Number:	2-6500-00058/00001
Toxic Class (TX):	T	Effective Date (EDP):	August 1, 2015
Major Drainage Basin:	17	Expiration Date (ExDP):	July 31, 2020
Sub Drainage Basin:	01, 02	Modification Dates: (EDPM)	
Water Index Number:	All NYC Waters		
Compact Area:	IEC		

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. §1251 et.seq.) (hereinafter referred to as "the Act").

PERMITTEE NAME AND ADDRESS

Name:	City of New York	Attention:	Pinar Balci, Director, Bureau of Environmental Planning and Analysis, NYCDEP	
Street:	59-17 Junction Boulevard			
City:	Flushing	State:	NY	Zip Code: 11373

is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESS

Name:	Municipal Separate Storm Sewer Systems of New York City			
Location (C,T,V):	New York(C)	County:	Bronx, Kings, New York, Queens, Richmond	
Facility Address:	N/A			
City:	New York	State:	N/A	Zip Code: N/A
From Outfall No.:		at Latitude:	° ' "	& Longitude: ° ' "
into receiving waters known as:				Class:

and (list other Outfalls, Receiving Waters & Water Classifications)

in accordance with: effluent limitations; monitoring and reporting requirements; other provisions and conditions set forth in this permit; and 6 NYCRR Part 750-1 and 750-2.

DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS

Mailing Name:	N/A			
Street:	N/A			
City:	N/A	State:	N/A	Zip Code: N/A
Responsible Official or Agent:	N/A	Phone:	N/A	

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal not less than 180 days prior to the expiration date shown above.

DISTRIBUTION:

- CO BWP - Permit Coordinator
- RWE
- EPA Region II - Michelle Josilo
- NYSDOH District Office
- NYSEFC
- IEC

Acting Permit Administrator: Stephen A. Watts III	
Address: NYS Department of Environmental Conservation Division of Environmental Permits - Region 2 47-40 21 st Street Long Island City, NY 11101	
Signature:	Date: 07/31/2015

Table of Contents

I. PERMIT COVERAGE AND LIMITATIONS.....	4
A. Permit Application.....	4
B. Non-Stormwater Discharges.....	5
C. Unauthorized Discharges.....	6
D. Exemption Criteria.....	6
E. Exclusion.....	6
II. SPECIAL CONDITIONS.....	7
A. Discharge Compliance with Water Quality Standards.....	7
B. Impaired Waters.....	7
III. LEGAL AUTHORITY AND STORMWATER PROGRAM ADMINISTRATION.....	9
A. Requirement to Develop and Implement a Stormwater Management Program.....	9
B. Requirement to Develop Adequate Legal Authority to Implement and Enforce Stormwater Management Program.....	9
C. Enforcement Measures and Tracking.....	10
D. Requirement to Ensure Adequate Resources to Comply with the MS4 Permit.....	11
E. Notification of Entities regulated under the MS4 Permit.....	12
IV. STORMWATER MANAGEMENT PROGRAM (SWMP) REQUIREMENTS.....	12
A. Public Education and Outreach.....	13
B. Public Involvement/Participation.....	13
C. Mapping.....	15
D. Illicit Discharge Detection and Elimination (IDDE).....	16
E. Construction Site Stormwater Runoff Control.....	18
F. Post-Construction Stormwater Management.....	20
G. Pollution Prevention/Good Housekeeping For Municipal Operations and Facilities.....	23
H. Industrial and Commercial Stormwater Sources.....	25
I. Control of Floatable and Settleable Trash and Debris.....	28
J. Monitoring and Assessment of Controls.....	29
K. Reliance on Third Parties.....	30
L. Recordkeeping.....	31
M. Annual Reporting.....	31
N. Annual Report Certification.....	35
O. Program Development Compliance Schedule.....	35

V. STANDARD PERMIT CONDITIONS.....	37
A. Duty to Comply	37
B. Enforcement	38
C. Technology Standards	38
D. Need to Halt or Reduce Activity Not a Defense	38
E. Duty to Mitigate	38
F. Duty to Provide Information	38
G. Other Information.....	38
H. Signatory Requirements	38
I. Penalties for Falsification of Reports.....	40
J. Oil and Hazardous Substance Liability	40
K. Property Rights	40
L. Severability	40
M. Other State Environmental Laws	40
N. Proper Operation and Maintenance	40
O. Inspection and Entry	41
P. Retention of Records	41
Q. Permit Actions.....	41
R. Anticipated Noncompliance	41
VI. ACRONYMS AND DEFINITIONS	42
A. Acronym List.....	42
B. Definitions	43
VII. APPENDICES	49
APPENDIX 1 – IMPAIRED WATERS IN AND AROUND NEW YORK CITY.....	49
APPENDIX 2 – IMPAIRED WATER SEGMENTS AND POLLUTANTS OF CONCERN	50
APPENDIX 3 – TABLE OF SWMP COMPONENTS	51

I. PERMIT COVERAGE AND LIMITATIONS

A. Permit Application

This State Pollutant Discharge Elimination System (“SPDES”) permit authorizes discharges of stormwater from the large municipal separate storm sewer systems (“MS4s”) as defined in 40 Code of Federal Regulations (CFR) 122.26(b)(4), currently existing within the jurisdictional boundaries of the City of New York (“urbanized area”), and limited to those MS4 outfalls owned or operated by New York City (“Permittee”), provided all of the eligibility provisions are met. The intent of this SPDES permit is to manage urban sources of stormwater runoff to protect overall water quality and improve water quality in impaired waters as part of a comprehensive integrated planning approach that considers non-MS4 sources and planned controls for those sources. The provisions in this permit acknowledge current and future planned improvements as part of New York City’s Combined Sewer Overflow (CSO) Long Term Control Plan process and the impact of non-MS4 sources and planned controls for those sources. Requirements for stormwater discharges from specified construction and industrial activities within MS4 drainage areas in New York City are also included in this permit.

As stated in 33 USC section 1342(p)(3)(B) “Permits for discharges from municipal storm sewers (iii) shall require controls to reduce the discharge of pollutants to the maximum extent practicable [(“MEP”)] including management practices, control techniques and system design and engineering methods.” This permit meets this statutory requirement by requiring the design, selection, and implementation of controls to reduce the discharge of pollutants of concern to the MEP and the elimination of illicit discharges of pollutants. Table 1 identifies areas that are regulated by this SPDES permit.

Table 1. Areas that are regulated by this SPDES Permit for New York City’s MS4s

Regulated by the NYC MS4 Permit	Not regulated by the NYC MS4 Permit
Separate storm sewers owned or operated by NYC that ultimately discharge to waters of New York State through MS4 outfalls or that connect to combined sewer overflow pipes downstream of the regulator owned or operated by NYC	Combined sewers or sewers draining to the wastewater treatment plants. Storm sewers that ultimately discharge to combined sewers or sewers draining to the wastewater treatment plants
High Level Storm Sewers and Bluebelts that ultimately discharge to waters of New York State through MS4 outfalls owned or operated by NYC ¹	SPDES individual permitted, SPDES general permitted non-traditional MS4s, and concentrated animal feeding operation (CAFO) facilities that discharge directly and wholly to waters of New York State, including discharge through the NYC MS4 system

¹ Facilities that are sited near High Level Storm Sewers but discharge to combined sewers are not regulated by the MS4 permit.

SPDES general permitted construction and industrial stormwater facilities that ultimately discharge to waters of New York State through MS4 outfalls and through combined sewer overflow pipes downstream of the regulator owned or operated by NYC	Facilities and operations that drain directly to waters of New York State through pipes or open channel conveyances, which are not storm sewers owned or operated by NYC
NYC municipal operations and facilities that drain by overland flow to waters of New York State	Facilities and operations, which are not NYC municipal facilities and operations, which drain by overland flow to waters of New York State

B. Non-Stormwater Discharges

The following non-stormwater discharges are authorized under this SPDES permit unless the Permittee or the Department has determined them to be significant contributors of pollutants to the Permittee’s MS4. If the Permittee determines that one or more of the discharges listed below is a significant contributor of pollutants to the Permittee’s MS4, the identified discharges will be considered illicit. In that event, the Permittee must eliminate such discharges by following the illicit discharge control measure requirements (See Part IV.D.4 or Part IV.D.9 where applicable).

1. water line flushing
2. landscape irrigation
3. diverted stream flows
4. rising ground waters
5. ground water infiltration to separate storm sewers (as defined at 40 CFR 35.2005(20))
6. pumped ground water
7. discharges from potable water sources
8. foundation drains
9. air conditioning condensate
10. irrigation water
11. springs
12. water from crawl space and basement sump pumps
13. footing drains
14. lawn and landscape watering runoff provided that all pesticides and fertilizers have been applied in accordance with the manufacturer’s product label
15. water from individual residential car washing
16. flows from riparian habitats and wetlands that directly discharge to navigable waters (that are outside the Bluebelt Program)
17. dechlorinated swimming pool discharges
18. residual street wash water
19. discharges or flows from fire-fighting activities
20. dechlorinated water reservoir discharges
21. any SPDES permitted discharge

Even if the non-stormwater discharges are determined not to be significant contributors of pollutants, the Permittee's stormwater management program ("SWMP") must include public education and outreach activities directed at reducing pollution from these discharges, as appropriate.

C. Unauthorized Discharges

The following are not authorized by this permit:

1. Stormwater discharges whose unmitigated, direct, indirect, interrelated, interconnected, or interdependent impacts would jeopardize a listed endangered or threatened species or adversely modify designated critical habitat, unless the Permittee is in compliance with requirements of the Endangered Species Act and has coordinated with the appropriate state and federal agencies regarding any activities necessary to avoid or minimize impacts;
2. Stormwater discharges or implementation of the Permittee's SWMP, which adversely affect properties listed or eligible for listing in the National Register of Historic Places, unless the Permittee is in compliance with requirements of the National Historic Preservation Act and has coordinated with the appropriate State Historic Preservation Office any activities necessary to avoid or minimize impacts;
3. Stormwater discharges, the permitting of which is prohibited under 40 CFR 122.4 and/or the Environmental Conservation ("ECL").

D. Exemption Criteria

For stormwater discharges from the permitted MS4 that are mixed with non-stormwater or stormwater associated with industrial activity, the Department may determine them to be exempt from the requirements of this permit if the discharges are:

1. Effectively addressed by and in compliance with a general SPDES permit or an individual SPDES permit. The Permittee must request such exemptions from the Department's Region 2 Office

E. Exclusion

The Permittee is excluded from administering and monitoring the SPDES General Permit for Stormwater Discharges from Construction Activity and the SPDES Multi-Sector General Permit (MSGP) for Stormwater Discharges Associated with Industrial Activity for: 1) facilities and operations that drain directly to waters of New York State through pipes or open channel conveyances, which are not NYC owned or operated separate storm sewers; and 2) facilities and operations, which are not NYC municipal facilities and operations, that drain by overland flow to waters of New York State (See Table 1 in Part I.A for additional information about areas not regulated by this permit). The Permittee is excluded from its obligations with respect to these Permits set forth in Parts IV.E, IV.F, and IV.H.

II. SPECIAL CONDITIONS

A. Discharge Compliance with Water Quality Standards

Pursuant to Clean Water Act (“CWA”) 402(p)(3)(B)(iii), this permit requires controls to reduce the discharge of pollutants to the MEP. The requirements found in this Part and Part II.B constitute the water quality based effluent limits of this permit. The Department expects that compliance with the conditions of this permit will control discharges necessary to meet applicable water quality standards. Requirements to reduce the discharge of pollutants to the MEP are set forth in Parts IV.A through IV.J.

The Permittee must take all necessary actions to ensure future discharges comply with the terms of this permit and do not directly or indirectly cause or contribute to the violation of a water quality standard, and the Permittee must document these actions in the SWMP Plan. Where a discharge is already authorized under this SPDES permit and is later determined to directly or indirectly cause or have the reasonable potential to cause or contribute to the violation of an applicable water quality standard, the Department will notify the Permittee of such violation(s) and may take enforcement actions for such violations. Compliance with this requirement does not preclude, limit, or eliminate any enforcement activity as provided by the Federal and/or State law for the underlying violation.

B. Impaired Waters

1. Impaired Waters Without Total Maximum Daily Loads (TMDLs)

For stormwater discharges to impaired waters identified in Appendix 2 of this permit, the Permittee must, in addition to the minimum control measures described in Parts IV.A through IV.J, ensure no net increase of the POC causing the impairment from non-negligible land use changes or changes to stormwater management practices within the MS4 area draining to the impaired waters.

- a. The Permittee shall continue to implement stormwater management practices (i.e. street sweeping, catch basin cleaning, post construction maintenance, etc.).
- b. For non-negligible changes in land use within the MS4 area draining to impaired waters (i.e., land disturbances greater than or equal to 1 acre where there is an increase in impervious cover), the Permittee shall incorporate a pollutant load analysis in the Stormwater Pollution Prevention Plan (SWPPP) review process to demonstrate that adequate controls are installed such that the change will not result in a net increase in the POC, with the following exceptions:
 - i. Post construction treatment practices designed, constructed and installed in accordance with the New York State (NYS) Stormwater Management Design Manual (January 2015) will satisfy the no-net increase requirement for discharges to waterbodies impaired for Floatables, except when the floatables-impaired waterbodies have other impairments.
 - ii. For Phosphorus limited waterbodies, compliance with Chapter 10 of the NYS Stormwater Management Design Manual (January 2015) will satisfy the no-net increase requirement.

- iii. For sewer upgrade and extension projects constructed by or on behalf of the Permittee, the pollutant load analysis is not required for projects that do not result in an increase in impervious area or a change in land use that increases the pollutant load. To the extent a pollutant load analysis is performed as part of the City Environmental Quality Review (CEQR) process for sewer upgrade and extension projects, such analysis may be used to meet the pollutant load analysis requirement to demonstrate that the project will not result in a net increase in the POC. Sewer projects designed, constructed, and installed in accordance with NYC sewer and catch basin design criteria will satisfy the no-net increase for floatables.
 - c. As part of the SWMP development, the Permittee must propose the procedures that will be used to ensure SWPPPs contain adequate control measures to meet the no net increase including but not limited to pollutant specific land use coefficients and pollutant removal efficiencies for the different stormwater management practices that will be required for developers as part of the pollutant load analysis.
 - d. Within two and a half years of the effective date of the Permit (“EDP”), the Permittee shall submit a draft of the procedures detailed in Part II.B.1.c.
2. Impaired Waters with Approved Combined Sewer Overflow Long Term Control Plans (CSO LTCPs)
- a. For *Priority MS4 Waterbodies*, the City shall, for each control measure in Part IV.A thru Part IV.I, consider whether additional or customized non-structural BMPs are warranted to address the POCs causing the impairment identified in the CSO LTCPs and shall submit as part of the SWMP approval (by three years of EDP) the following information:
 - i. A listing of all Priority MS4 Waterbodies;
 - ii. A preliminary qualitative source categorization that identifies priority source categories² that will be targeted including the general location or area based on available land use information, and a description of how the Permittee made the preliminary qualitative determination regarding whether a source category is contributing significant levels of POCs to the regulated MS4 areas identified in Table 1 of this permit;
 - iii. A listing of the additional or customized non-structural BMPs and a schedule to commence implementation within the shortest reasonable time;
 - iv. A description of opportunities for implementing green infrastructure pilot projects and other structural retrofits in *Priority MS4 Waterbodies* that are cost-effective and feasible.
 - b. Consistent with the requirements of Part IV.M.2 of this permit, each annual report submitted following SWMP plan approval shall include:
 - i. Information regarding the progress in implementing the additional or customized non-structural BMPs identified pursuant to Part II.B.2.a.iii above;

² Source categories are general watershed based categories, based on available land use information, and may include but are not limited to: 1) Fertilizer Use, 2) Illicit Discharges, 3) Leaf Litter, 4) Pet Waste, 5) Industrial Areas, 6) Construction, 7) Highly Impervious Area.

- ii. Information regarding the progress on the opportunities for green infrastructure pilot projects and other structural retrofits in *Priority MS4 Waterbodies* identified pursuant to Part II.B.2.a.iv above.

III. LEGAL AUTHORITY AND STORMWATER PROGRAM ADMINISTRATION

A. Requirement to Develop and Implement a Stormwater Management Program

1. Requirement to Develop a SWMP – The Permittee must submit its written SWMP plan to the Department for review and approval within three years of EDP.
2. Contents of the SWMP plan document – At a minimum, the Permittee must include the following information in its SWMP plan:
 - a. A list of citations to ordinances, or other regulatory mechanisms, that provide the legal authority necessary to implement and enforce the requirements of this permit (see Part III.B.2);
 - b. Statement by the NYC Corporation Counsel or his or her designee certifying to adequacy of legal authority (see Part III.B.3);
 - c. Written procedures describing how the Permittee will implement all provisions described in Part IV.
3. Requirement to Implement a SWMP –The Permittee must implement approved components of the SWMP plan, upon approval.
4. Modification to the SWMP plan document – The Permittee is required to keep the SWMP plan document up to date during the term of the permit. The Department may notify the Permittee of the need to modify the SWMP plan document to be consistent with the permit, in which case the Permittee will have 90 days to identify such changes to the program, along with an implementation schedule. Where the Permittee determines that modifications are needed to address any procedural, protocol, or programmatic change, the Permittee must identify such changes to the program within 90 days after the need for such changes is determined, and implement such changes as soon as practicable.

B. Requirement to Develop Adequate Legal Authority to Implement and Enforce Stormwater Management Program

1. The Permittee must demonstrate it has adequate authority to control pollutant discharges into and from its MS4 and to meet the requirements of this permit in accordance with the following schedule:
 - a. Within six months of EDP, the Permittee must provide a description of existing legal authority to control discharges to the MS4. If existing legal authority is not sufficient to meet the criteria provided in Part III.B.2, the description shall list additional authorities that will be necessary and shall contain a schedule for adoption of the necessary authorities with interim milestone dates not to exceed nine month intervals;
 - b. Within two years of EDP, the Permittee shall provide a written certification statement prepared by its NYC Corporation Counsel or his designee that the Permittee has developed adequate legal authority and is in compliance with Part III.B.1 of this permit.

2. To be considered adequate, the legal authority must, at a minimum, address the following:
 - a. Authority to Prohibit Illicit Discharges & Connections (Part IV.D)
 - b. Allowable Non-Stormwater Discharges (Part IV.D.1)
 - c. Authority to Prohibit Spills or Other Releases (Part IV.D)
 - d. Authority to Require Compliance & Take Enforcement Action (Part III.C)
 - i. Cease & Desist Orders
 - ii. Clean up & Abate discharges
 - iii. Require notification of spills or pollutant releases
 - iv. Monetary Penalties
 - v. Notice of Violation
 - vi. Recovery and Remediation costs
 - vii. Civil & Criminal Penalties
 - e. Authority to Require Installation, Implementation and Maintenance of Control Measures (Parts IV.E, IV.F, IV.G, IV.H, II.B), including those to control water runoff, construction materials and debris, and erosion during construction or demolition activities, in discharges to the MS4.
 - f. Authority to Receive and Collect Information (Parts IV.E, IV.F, IV.H, IV.J)
 - g. Authority to Inspect (Parts IV.D, IV.E, IV.F, IV.G, IV.H)
3. The SWMP plan must include the following documentation:
 - a. Signed certification of full authority (Part III.B.1.b)
 - b. Identification of all agencies within the Permittee's jurisdiction that conduct stormwater-related activities and their roles and responsibilities under this permit. An up-to-date organizational chart specifying the agencies, key personnel and contact information must be included.
 - c. Identification of the local administrative procedures and laws available to mandate compliance with stormwater requirements set forth in this permit.
 - d. A description of whether the Permittee can issue administrative orders and injunctions, or whether it must go through the court system.

C. Enforcement Measures and Tracking

1. Within three years of EDP, the Permittee must develop an enforcement response plan (ERP), which sets out the Permittee's potential responses to violations and addresses repeat and continuing violations through progressively stricter responses as needed to achieve compliance for the requirements of Parts IV.D, IV.E, IV.F, and IV.H of this Permit. The ERP must describe how the Permittee will use each of the following types of enforcement responses based on the legal authority described in Part III.B.2 and on the type of violation:
 - a. Verbal Warnings – Verbal warnings are primarily consultative in nature. At a minimum, verbal warnings must specify the nature of the violation and required corrective action.
 - b. Written Notices – Written notices of violation (NOVs) must stipulate the nature of the violation and the required corrective action, with deadlines for taking such action.
 - c. Escalated Enforcement Measures – The Permittee must have the legal ability to employ any combination of the following enforcement actions (or their functional equivalent),

and to escalate enforcement responses where necessary to address persistent non-compliance, repeat or escalating violations, or incidents of major environmental harm:

- i. Citations (with Fines) – The ERP must indicate when the Permittee will assess monetary fines, which may include civil and administrative penalties.
 - ii. Stop Work Orders – The Permittee must have the authority to issue stop work orders that require construction activities to be halted, except for those activities directed at cleaning up, abating discharge, and installing appropriate control measures.
 - iii. Withholding of Plan Approvals or Other Authorizations – Where a facility is in non-compliance, the ERP must address how the Permittee’s own approval process affecting the facility’s ability to discharge to the MS4 can be used to abate the violation.
 - iv. Additional Measures – The Permittee may also use other escalated measures provided under local legal authorities. The Permittee may perform work necessary to improve erosion control measures and collect the funds from the responsible party in an appropriate manner, such as collecting against the project’s bond or directly billing the responsible party to pay for work and materials.
2. Enforcement Tracking – The Permittee must track instances of non-compliance either in hard-copy files or electronically. The enforcement case documentation must include, at a minimum, the following:
- a. Name of owner/operator of facility or site of violation
 - b. Location of stormwater source (i.e., construction project, industrial facility)
 - c. Description of violation
 - d. Required schedule for returning to compliance
 - e. Description of enforcement response used, including escalated responses if repeat violations occur or violations are not resolved in a timely manner
 - f. Accompanying documentation of enforcement response (e.g., notices of noncompliance, notices of violations)
 - g. Any referrals to different departments or agencies
 - h. Date violation was resolved.
3. Recidivism Reduction – The Permittee is required to identify chronic violators of any SWMP component and reduce the rate of noncompliance recidivism. The Permittee must summarize inspection results by these chronic violators and include incentives, disincentives, or an increased inspection frequency at the operator’s sites.

D. Requirement to Ensure Adequate Resources to Comply with the MS4 Permit

1. Secure Resources – The Permittee must secure the resources necessary to meet all requirements of this permit.
2. Fiscal Analysis – Within three years of the EDP, the Permittee must conduct an analysis of the capital and operation and maintenance expenditures necessary to meet the requirements of this permit during the permit term, including any development, implementation, and enforcement activities required. The analysis must include a description of the source of funds that are proposed to meet the necessary expenditures, including legal restrictions on the use of such funds.

E. Notification of Entities regulated under the MS4 Permit

1. Within three months of the Permittee's submission of the SWMP plan to the Department, the Permittee must notify existing owners or operators and have a notification procedure for future owners or operators of industrial facilities subject to the SPDES MSGP for Stormwater Discharges Associated with Industrial Activity of the local requirements for controlling stormwater discharges from these facilities to the MS4.
2. Within three months of the Permittee's submission of the SWMP plan to the Department, the Permittee must notify existing owners or operators and have a notification procedure for future owners or operators of construction activities subject to the SPDES General Permit for Stormwater Discharges from Construction Activity of the local requirements and procedures for control of stormwater from these activities to the MS4 including the SWPPP review and acceptance process.

IV. STORMWATER MANAGEMENT PROGRAM (SWMP) REQUIREMENTS

The Permittee shall, by three years of EDP, prepare and submit a written SWMP plan for the duration of the permit including a comprehensive integrated planning approach which involves public participation and, where appropriate, intergovernmental coordination, to reduce the discharge of POCs and specified pollutants to the MEP, using management practices, control techniques and systems, design and engineering methods, and such other provisions which are appropriate. When creating the SWMP plan, the Permittee should assess activities already being performed that could help meet, or be modified to meet, permit requirements and be included in the SWMP plan.

The SWMP plan must include measurable goals for each of the best management practices (BMPs). The SWMP plan shall: 1) describe the BMP; 2) identify time lines for implementation; 3) include measurable goals to assess progress over time; and 4) describe how the Permittee will address POCs. The SWMP plan shall be kept current and revised as necessary to incorporate any new or modified BMPs, timelines for implementation or measurable goals.

For each of the elements of the SWMP plan, (i) the Permittee must identify the agencies and/or offices that would be responsible for implementing the plan element; and (ii) the Permittee must develop a communication and coordination procedure among all responsible parties related to MS4 discharges.

The SWMP plan shall be made readily available to Permittee's staff, the public and the Department and U.S. Environmental Protection Agency (USEPA) staff. Portions of the SWMP plan, primarily policies and procedures, must be available to the management and staff that will be called upon to use them.

The Permittee is to develop the required elements in Part II.B and Parts IV.A through IV.J in the SWMP plan (see Appendix 3 for a detailed list of SWMP components). The Permittee

shall submit progress reports on the development of the SWMP at the end of each of the first two years after EDP. The Permittee shall meet with the Department at least semi-annually to discuss the progress of the development of the SWMP.

The Permittee is to demonstrate progress toward implementation of the SWMP plan during semi-annual meetings with the Department and as part of its annual reporting requirements in Part IV.M and by meeting the schedule of deliverables in Part IV.O.

The SWMP plan shall describe how the required elements described in Part II.B.2 and Parts IV.A through IV.J are prioritized and implemented based on the following requirements:

A. Public Education and Outreach

At a minimum, the Permittee must:

1. Identify POCs, waterbodies of concern and related sewersheds, and target audiences;
2. Develop and implement an ongoing public education and outreach program designed to describe to the general public and target audiences:
 - a. the impacts of stormwater discharges on waterbodies;
 - b. the POCs and their sources;
 - c. the steps they can take to reduce pollutants in stormwater runoff;
 - d. the steps they can take to reduce pollutants from non-stormwater discharges listed in Part I.B of this SPDES permit; and
 - e. the hazards associated with illicit discharges and improper disposal of waste to the MS4 pursuant to Part IV.D.
3. Select and assess appropriate education and outreach activities and measurable goals to ensure the reduction of pollutants in stormwater discharges to the MEP;
4. Describe a program to promote, publicize, and facilitate public reporting of the presence of illicit discharges or water quality impacts associated with discharges from the MS4; and
5. Describe educational activities, public information activities, and other appropriate activities to facilitate the proper management and disposal of used oil, toxic materials, pharmaceuticals, household cleaners, pet wastes, and other POCs.

B. Public Involvement/Participation

At a minimum, the Permittee must:

1. Comply with Article 7 of the New York State Public Officers Law (Open Meetings Law) and any applicable local public notice requirements, when implementing a public involvement/participation program;
2. Develop and implement a public involvement/participation program that:
 - a. identifies key individuals and groups, public and private, who are interested in or affected by the SWMP;

- b. identifies types of input the Permittee 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;
 - c. describes the public involvement/participation activities the Permittee will undertake to provide program access to those who want it and to gather the needed input. Such activities may include, but are not limited to, a water quality hotline (report spills, dumping, construction sites of concern, etc.), stewardship activities like beach cleanups, wetland restorations and volunteer water quality monitoring;
 - d. provides the opportunity for the public to participate in the development, implementation, review, and major revision of the SWMP plan; and
 - e. provides the public the opportunity to comment on the SWMP development by presenting the progress reports at a meeting and on the internet in advance of submittal to the Department. The SWMP progress reports and the final draft SWMP plan shall include a summary of comments received and shall describe to the Department how the SWMP development was influenced by the public input received.
3. Identify a mechanism for the public to report and request stormwater-related information. Identify a contact process to receive and respond to public concerns regarding stormwater management and compliance with the MS4 requirements under this SPDES individual permit. The contact process must be published in public outreach and public participation materials and kept updated with the Department;
 4. Prepare and publicly present the annual report that describes the implementation of the SWMP. The requirements for the annual report presentation³ are as follows:
 - a. By July 1 following each reporting year, and prior to submitting the final annual report to the Department, the Permittee shall 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;
 - i. Presentation of the draft annual report shall be done at a meeting that is open to the public. This may be a regular meeting of an existing board, such as planning, zoning or other board. It may also be a separate meeting specifically for stormwater or if requested by the public; and
 - ii. Presentation of the draft annual report shall be done on the internet by making the annual report available to the public on a website; and providing the public the opportunity to provide comments on the internet or otherwise.
 - b. The Permittee shall provide public notice about the presentation of the draft annual report at an open meeting and on a website and shall include the following information in accordance with Article 7 of the New York State Public Officers Law (Open Meetings Law) or other local public notice requirements:
 - i. The placement of the draft annual report on the agenda of this meeting or location on the internet;
 - ii. The opportunity for public comment. Comments received after the final annual report is submitted shall be reported with the following year's draft annual report.

³ The Department recommends that announcements be sent directly to individuals (public and private) known to have a specific interest in the Permittee's SWMP.

- The Permittee must take into account those comments in the following year, if applicable;
- iii. The date and time of the meeting or the date the draft annual report becomes available on the internet; and
 - iv. The availability of the draft annual report for review prior to the public meeting or duration of availability of the draft annual report on the internet.
- c. The Permittee shall include a summary of the public comments received and responses with the final annual report, including a description of the changes that will be made to the SWMP plan; and
 - d. The Permittee shall ensure that copies of the final annual report and SWMP plan, upon submittal to the Department, are available for public inspection.
5. Select and assess appropriate public involvement/participation activities and measurable goals to ensure the reduction of POCs in stormwater discharges to the MEP.

C. Mapping

1. The Permittee must develop a GIS-based map of its MS4 drainage areas and its MS4 outfalls. At a minimum, the map and/or supportive documentation shall include the following information:
 - a. The location of Permittee-owned or operated MS4 outfalls discharging to surface waters of the State;
 - b. A description of the zoning districts and related land uses within the drainage area served by the MS4 and estimates of average runoff coefficients or impervious surface coverage;
 - c. The location and activities of each currently operating or closed municipal landfill or other treatment, storage, or disposal facility for municipal waste;
 - d. The location and the permit number of any discharge to the MS4 that has an active SPDES permit as provided by the Department;
 - e. The location of major structural controls for storm water discharge (retention basins, detention basins, major infiltration devices, etc.) that ultimately discharge to the MS4 outfalls owned or operated by the Permittee and on property owned or operated by the Permittee;
 - f. The identification of publicly owned parks, recreational areas, and other open lands;
 - g. The map shall be accompanied by an explanation of the roles and responsibilities of different city agencies within the MS4 areas (e.g. streets, curbs, inlets, sewer pipes, outfalls and public swales); and
 - h. For the MS4 areas within New York City limits, the map shall contain annotations that clearly define blocks and lots within separate storm sewer system areas, pursuant to 40 CFR 122.26(d)(1)(iii)(B).
2. The Permittee shall make steady progress in developing a final MS4 map that meets the requirements specified in Part IV.C.1. For each progress report on the SWMP development, the Permittee shall include information detailing the progress made towards completion of the final map and outlining work remaining.

Within 3 years of EDP, the Permittee shall submit a preliminary map depicting the information completed to date. For those areas of the MS4 not shown on the map due to security reasons, the Permittee shall: provide a general description of each area not shown; the status of mapping of that area; the security risk preventing inclusion of the details of the MS4 location; and, a description of how the information will be made available to the Department for inspection.

Within 5 years of EDP, the Permittee shall submit a final map with all information outlined in Part IV.C.1. For areas of the MS4 not shown due to security reasons, the Permittee shall certify that the final mapping for that area has been completed and is available to the Department for inspection.

3. Provide an updated version of the MS4 map once in every five calendar years from EDP.
 - a. The map shall include any additions or deletions to the MS4 drainage areas and all non-negligible changes to land use within the MS4 drainage areas for the previous five years;
 - b. The map shall be updated to include newly constructed outfalls or newly discovered outfalls through the outfall reconnaissance inventory in Part IV.D.2.

D. Illicit Discharge Detection and Elimination (IDDE)

The Permittee must develop, implement and enforce a program to detect and eliminate illicit discharges [as defined at 40 CFR 122.26(b)(2)] into the MS4, and the program must:

1. Provide a description of a program, including an ordinance, orders or similar means to prevent illicit discharges and illicit connections to the MS4. This program description shall address all types of illicit discharges. The program shall also address the categories of allowable non-storm water discharges or flows listed in Part I.B where such discharges to the MS4 are identified by the Permittee as a significant contributor of pollutants to surface waters of the State. Program descriptions shall address discharges or flows from firefighting only where such discharges or flows are identified by the Permittee as significant contributors of pollutants to surface waters of the State. The program shall include a process or procedure for determining whether non-stormwater discharges are significant contributor of pollutants to surface waters of the State;
2. Conduct an outfall reconnaissance inventory (ORI), as described in the “Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments” (Center for Watershed Protection and Robert Pitt, October 2004) and as per the Shoreline Survey and Outfall Identification requirements in SPDES permits for the New York City Department of Environmental Protection’s (NYCDEP) wastewater treatment plants⁴. The ORI shall address 50% of the outfalls within the urbanized area and the Permittee’s jurisdiction at least once every five years, with reasonable progress each year.

⁴ The SPDES Permits for the NYCDEP’s wastewater treatment plants are Bowery Bay (NY 002 6158); Coney Island (NY 002 6182); Hunts Point (NY 002 6191); Jamaica (NY 002 6115); Newtown Creek (NY 002 6204); North River (NY 002 6247); Oakwood Beach (NY 002 6174); Owls Head (NY 002 6166); Port Richmond (NY 002 6107); Red Hook (NY 002 7073); Rockaway (NY 002 6221); Tallman Island (NY 002 6239); 26th Ward (NY 002 6212); Wards Island (NY 002 6131).

The Permittee shall submit an updated outfall list every year as a spreadsheet that includes all MS4 outfalls;

3. Prohibit, through a law, ordinance, or other regulatory mechanism, illicit discharges into the Permittee's MS4 and implement appropriate enforcement procedures and actions per Part III.C. This mechanism must be equivalent to the State's model IDDE local law "New York State Department of Environmental Conservation (NYSDEC) Model Local Law to Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer Systems" (April 2005). The Permittee must include a certification by the NYC Corporation Counsel or his or her designee that the mechanism is equivalent to the State's model illicit discharge local law in its certification statement under Part III.B.1.b;
4. Detect and eliminate illicit discharges, including illegal dumping, to the Permittee's MS4, in accordance with the "Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments" (Center for Watershed Protection and Robert Pitt, October 2004). Such programs may include: sampling procedures for constituents such as fecal coliform, fecal streptococcus, ammonia, surfactants, residual chlorine, fluorides and potassium; testing with fluorometric dye; or conducting in storm sewer inspections where safety and other considerations allow. The program must include: procedures for identifying priority areas of concern (receiving waters and related sewersheds, audiences, or otherwise) for IDDE program; description of priority areas of concern, available equipment, procedures for identifying and locating illicit discharges (trackdown); procedures for eliminating illicit discharges; and procedures for documenting actions. The Permittee may utilize existing programs required by the SPDES permits for the NYCDEP's wastewater treatment plants, including the Shoreline Survey, Dry Weather Discharge, and Sentinel Monitoring Programs to satisfy this requirement. To the extent such programs do not satisfy the requirements of this Permit, the Permittee shall include appropriate modifications or additions in the SWMP plan. Within 30 days of the discovery of an illicit discharge in MS4 areas, the Permittee shall provide the Department with a schedule in writing (Phase I Schedule) for conducting the necessary investigative work to determine the source of the discharge and for proposing an abatement program. On or before the end of the schedule in Phase I, the Permittee shall submit to the Department in writing an abatement program, with milestone dates (Phase II Schedule), to abate the illicit discharge. Unless the Department disapproves of the Phase I or II schedule in writing within 15 days of receipt of the schedules, or unless the Department informs the Permittee in writing that it will require a specified additional period of time to complete its review, the schedules shall be deemed approved by the Department;
5. Waterbodies that are shown through sampling activities required in IV.D.4 to have fecal coliform levels over 200 colonies/100ml should be prioritized for mini-shoreline investigation similar to the procedure in the "Sentinel Monitoring Program" required under the NYCDEP's wastewater treatment plants' individual SPDES permits. The Permittee must prepare a report within three years of EDP, and an annual report thereafter, of the locations and ownership of illicit discharges to the MS4 and a schedule to eliminate those discharges where the MS4 discharges to waterbodies are shown to have over 200 colonies/100 ml of fecal coliform. A separate report that includes unauthorized non-stormwater discharges to

NYC's MS4 or CSO outfalls downstream of the regulator must also be prepared within three years of EDP and annually thereafter;

6. Inform public employees, businesses, and the general public of the hazards associated with illegal discharges and improper disposal of waste to the MS4;
7. Select and assess appropriate IDDE BMPs and measurable goals to ensure the reduction of pollutants in stormwater discharges to the MEP;
8. Describe procedures to prevent, contain, and respond to spills that may discharge into MS4s;
9. Describe controls to limit infiltration of seepage from municipal sanitary sewers to MS4s where necessary;
10. Apply the above IDDE requirements to the categories of non-stormwater discharges listed under Part I.B if determined by Permittee to be significant contributors; and
11. Implement a training program for all staff whose job duties include implementing the IDDE program and/or performing IDDE operations. The training must include identification of an illicit discharge or connection, and the proper procedures for reporting and responding to the illicit discharge or connection. Follow-up training must be provided as needed to address changes in procedures, techniques, or staffing. The Permittee must document and maintain records of the training provided and the staff trained.

E. Construction Site Stormwater Runoff Control

This part (Part IV.E) applies to runoff to the Permittee's MS4 from construction activities that result in a land disturbance of greater than or equal to one acre, or construction activity disturbing less than one acre if the construction activity is part of a larger common plan of development or sale that would disturb one acre or more.

At a minimum, the Permittee must:

1. Develop, implement, and enforce a program that:
 - a. provides protection equivalent to the NYS SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002);
 - b. addresses stormwater runoff to the Permittee's MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Control of stormwater discharges from construction activity disturbing less than one acre must be included in the program if construction activity is part of a larger common plan of development or sale that would disturb one acre or more;
 - c. includes a law, ordinance or other regulatory mechanism to require a SWPPP for each applicable land disturbing activity that includes erosion and sediment controls that meet the NYS Standards and Specifications for Erosion and Sediment Control (most current version or its successor). The Permittee must include a certification by the NYC Corporation Counsel or his or her designee that the Permittee has the legal authority necessary to implement and enforce the most current version of the technical standard;

- d. contains requirements for construction managers/site operators to implement erosion and sediment control management practices;
- e. allows for sanctions to ensure compliance to the extent allowable by State or local law;
- f. contains appropriate pollution prevention and good housekeeping requirements for construction managers/site operators to minimize exposure and control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;
- g. describes procedures for SWPPP review by the Permittee that incorporate controls for expected water quality improvements and ensures consistency with State and local sediment and erosion control requirements. These procedures shall require that:
 - i. the individuals performing reviews are adequately trained and understand the State and local sediment and erosion control requirements;
 - ii. all SWPPPs are reviewed for sites where the disturbance is one acre or greater and for sites where the disturbance is less than one acre if the construction activity is part of a larger common plan of development or sale that would disturb one acre or more; and
 - iii. after review of SWPPPs, the Permittee will use the "MS4 SWPPP Acceptance Form" or most current version, created by the Department and required by the SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002) to notify the applicant that reviewed plans have been accepted by the Permittee.
- h. describes procedures for receipt and follow up on complaints or other information submitted by the public regarding construction site storm water runoff;
- i. describes procedures for site inspections and enforcement of erosion and sediment control measures including steps to identify priority sites for inspection and enforcement based on the size and nature of the construction activity, topography, the characteristics of soils, and receiving water. These procedures should require that:
 - i. the individual(s) performing inspections are adequately trained and understand the State and local sediment and erosion control requirements. Adequately trained means receiving inspector training by a Department sponsored or approved training;
 - ii. training is completed every three years, unless the inspector is a qualified professional, as defined in Part V.B. For a qualified professional, only initial training is required. The Permittee may ask for a certificate of completion or other such proof of training; and
 - iii. the Permittee determine whether it is acceptable for the owner or operator of a construction project to submit the Notice of Termination (NOT) to the Department by performing a site inspection or by accepting the owner/operator's Qualified Inspector final inspection certification(s) required by the SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002). The Permittee shall document its determination by signing the "MS4 Acceptance" statement on the NOT or most current version of the NOT.
- j. educates qualified professionals, municipal staff and other individuals, to whom these regulations apply about the Permittee's construction stormwater requirements, when construction stormwater requirements apply, to whom they apply, the procedures for submission of SWPPPs, construction site inspections, and other procedures associated with control of construction stormwater;

- k. verifies that construction managers/site operators have received erosion and sediment control training before they do work within the Permittee's jurisdiction and maintain records of that training. Completion of training must occur every three years unless the inspector is a qualified professional, as defined in Part VI.B. For a qualified professional, only initial training is required;
 - i. training may be provided by the Department or other qualified entities (for example, Soil and Water Conservation Districts);
 - ii. the Permittee may ask for a certificate of completion or other such proof of training; and
 - iii. the Permittee may provide notice of upcoming sediment and erosion control training by posting in the building department or local sewer offices, or distribute with building or sewer connection permit applications.
- l. establishes and maintains an inventory of active construction sites, including the location of the site, owner/operator contact information; and
- m. selects and assesses appropriate construction stormwater BMPs and measurable goals to ensure the reduction of POCs in stormwater discharges to the MEP.

F. Post-Construction Stormwater Management

This part (Part IV.F) applies to construction activities that result in a land disturbance of greater than or equal to one acre, or construction activity disturbing less than one acre if the construction activity is part of a larger common plan of development or sale that would disturb one acre or more.

At a minimum, the Permittee must:

1. Develop, implement, and enforce a program that:
 - a. provides protection equivalent to the NYS SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002);
 - b. addresses stormwater runoff from new development and redevelopment projects to the Permittee's 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 that project is part of a larger common plan of development or sale that will result in a land disturbance of greater than or equal to one acre;
 - c. includes a law, ordinance or other regulatory mechanism to require a SWPPP for each land disturbing activity that includes post-construction runoff controls that meets the NYS Stormwater Management Design Manual (most current version or its successor). The Permittee must include a certification by the NYC Corporation Counsel or his or her designee that the Permittee has the legal authority necessary to implement the requirements of this Part and that there are adequate provisions to allow the Permittee to implement and enforce the most current version of the technical standard;
 - d. describes procedures for SWPPP reviews by the Permittee that incorporate controls for expected water quality improvements and review of individual pre-construction SWPPPs to ensure consistency with State and local post-construction stormwater requirements. These procedures shall require that:

- i. the individuals performing the reviews for SWPPPs as determined necessary by the Permittee are adequately trained and understand the State and local post construction stormwater requirements that include post-construction stormwater management practices are qualified professionals or under the supervision of a qualified professional;
 - ii. all SWPPPs are reviewed for sites where the disturbance is one acre or greater and for sites where the disturbance is less than one acre if the construction activity is part of a larger common plan of development or sale that would disturb one acre or more;
 - iii. after review of SWPPPs, the Permittee will use the “MS4 SWPPP Acceptance Form” or most current version, created by the Department and required by the SPDES General Permit for Stormwater Discharges from Construction Activity when notifying the applicant that its plans have been accepted by the Permittee;
 - iv. ensure that all SWPPPs that are subject to post-construction stormwater management requirements comply with the sizing criteria as listed in the SPDES General Permit for Stormwater Discharges from Construction Activity;
 - v. if a stormwater management practice is designed and installed in accordance with performance standards in the NYS Stormwater Management Design Manual (January 2015) or has been demonstrated to be equivalent⁵ and is properly operated and maintained, then MEP will be assumed to be met for post-construction stormwater discharged by the practice; and
 - vi. ensure that SWPPPs for proposed flood management projects⁶ assess the impacts on the water quality of receiving waters.
- e. within three years of EDP, establish and annually update an inventory of post-construction stormwater management practices within the Permittee’s MS4 storm sewer shed area. Include practices discharging to the MS4 authorized by the Department since March 10, 2003 (based on data provided by the Department), all practices owned by the MS4, and those practices found by the Permittee to discharge a pollutant through the MS4 to a water body impaired by that pollutant;
- i. the inventory shall include at a minimum: location of practice (street address or coordinates); type of practice; SWPPP, or other documentation provided by the Department;
- f. the SWPPPs prepared for major maintenance or rehabilitation of structural flood control devices in flood management projects shall, if feasible and cost-effective, incorporate the recommended controls resulting from the facility assessment conducted as required under Part IV.G.1.d.v;

⁵ In this context, Equivalent means that the practice or measure meets all of the performance, longevity, maintenance, and safety objectives of the technical standard and will provide an equal or greater degree of water quality protection.

⁶ Flood management projects, referenced in Parts IV.F.1.d.vi, IV.F.1.f, and IV.G.1.d.v of this Permit, refers exclusively to projects designed and functioning to capture, detain, or convey overland flow from a large drainage area to prevent downstream flooding associated with a 100-year or greater storm event. This excludes projects, such as installation and maintenance of storm sewers, high level storm sewers, Bluebelt storm sewers, and drainage inlets, and other projects to improve drainage, alleviate localized flooding, or reduce coastal flooding.

- g. requires adequate long-term operation and maintenance of stormwater management practices by trained individuals, including inspections to ensure that practices are performing properly;
 - i. The inspections shall include items identified in the maintenance plan [NYS Stormwater Management Design Manual (January 2015), SWPPP, or other maintenance information] for the practice. The Permittee is not required to collect stormwater samples or perform specific chemical analysis;
 - ii. The inspection and maintenance records of post-construction stormwater management practices must be documented; and
 - iii. Implement a training program for all individuals whose job duties include inspection of long-term operation and maintenance of post-construction stormwater management practices. Follow-up training must be provided as needed to address changes in procedures, techniques, or staffing. The Permittee must document and maintain records of the training provided and the individuals trained.
 - h. The Permittee may include in the SWMP plan provisions for development of a banking and credit system that would allow for offsite alternative stormwater management in lieu of or in addition to on-site stormwater management in development projects. Use of a banking and credit system for new development is only acceptable in impaired watersheds to achieve the no-net increase requirement. In order to be considered approvable, a banking and credit system must at minimum ensure that:
 - i. Pollutant reductions are achieved through retrofit or redevelopment that includes structural water quality treatment devices;
 - ii. Combination of on- and off-site stormwater management practice pollutant reductions exceeds standard reduction by factor of at least 2;
 - iii. Off-site stormwater management practice pollutant reduction is implemented within the same watershed;
 - iv. Proposed pollutant reduction of on- and off-site stormwater management practices addresses the waterbody-specific POCs as identified in Appendix 2 of this Permit;
 - v. Tracking system is established for the watershed to accurately account for off-site stormwater management practices and ensure that they are not credited for more than one project;
 - vi. Offsite stormwater management practice project is completed prior to beginning the proposed construction; and
 - vii. A legal mechanism is established to implement the banking and credit system.
2. Develop, implement, and provide adequate resources for a program to ensure the continued efficacy of post-construction stormwater BMPs, and to enforce and penalize violators;
 3. Select and assess appropriate post-construction stormwater BMPs and measurable goals to ensure the reduction of POCs in stormwater discharges to the MEP;
 4. Lot Size Soil Disturbance Threshold Study for Construction and Post-Construction Stormwater Management: Conduct a study to determine the appropriate reduction in lot size soil disturbance threshold for triggering the applicability of construction and post-construction stormwater management requirements at new development and

redevelopment sites, taking into consideration water quality improvements, compliance costs, local site conditions, number of affected public and private properties, type of development/zoning, total lot area managed, impervious surface coverage, and any other relevant factors. The study may consider and recommend adjustments to the required ratio for the banking/credit system described in Part IV.F.1.h., above. The study recommendations on the appropriate lot size soil disturbance threshold for New York City's construction and post-construction stormwater management requirements shall be submitted as part of the SWMP plan, that is due three years after EDP. The SWMP shall also include a plan for developing adequate legal authority to implement any recommended revisions to the lot size soil disturbance threshold for triggering the applicability of construction and post-construction stormwater management requirements at new development and redevelopment sites, and shall identify any feasible steps that could be implemented during the remainder of the permit term.

G. Pollution Prevention/Good Housekeeping For Municipal Operations and Facilities

At a minimum, the Permittee must:

1. Develop and implement a pollution prevention/good housekeeping program for municipal operations and facilities in New York City. The pollution prevention/good housekeeping plan shall:
 - a. address municipal operations and facilities that contribute or potentially contribute POCs to the Permittee's MS4 and to the waters of the State through direct drainage. The operations and facilities shall include, but are not limited to: street and bridge maintenance; winter road maintenance including de-icing activities; road salt storage facilities; stormwater system catch basin inspection and maintenance program; vehicle and fleet maintenance; park and open space maintenance; municipal building maintenance; solid waste management (i.e. operating or closed municipal landfills or other exposed treatment, transfer, storage or disposal facilities for municipal waste); new construction and land disturbances; right-of-way maintenance; marine operations; and hydrologic habitat modification;
 - b. include a program to control and reduce to the MEP, pollutants in discharges from the Permittee's MS4 and to waters of the State through direct drainage associated with the application of pesticides, herbicides, and fertilizers from municipal operations and facilities, which will include, as appropriate, controls such as educational activities, permits, certifications and other measures for commercial applicators and distributors, and controls for application in public right-of-ways and at municipal facilities;
 - c. prepare an inventory of municipal operations and facilities with initial prioritization of operations and facilities into high, medium and low categories on the basis of the potential for water quality impact using criteria such as discharges of POCs to impaired waters, pollutant sources on site, proximity to a waterbody and history of problems that would impact water quality of the facility;
 - d. prepare a procedure for self-assessment of municipal operations and facilities that:

- i. describes the assessment frequencies based on the priority ranking, with the highest priority operations and facilities identified in Part IV.G.1.c receiving an initial assessment within 3 years of EDP;
 - ii. determines the sources of POCs potentially generated by the Permittee's operations and facilities;
 - iii. evaluates the adequacy of the pollution prevention and good housekeeping practices to minimize the discharge of pollutants;
 - iv. provides recommendations and time frames for modification when pollution prevention and good housekeeping practices are determined to be inadequate;
 - v. describes how existing structural flood control devices in flood management projects owned or operated by the Permittee will be evaluated for cost-effectiveness and feasibility of retrofitting the device to provide additional pollutant removal from stormwater. Consideration of feasibility should include public safety, need for future maintenance, and the continued efficacy of the flood control device;
 - vi. includes provisions for follow-up to ensure recommendations are implemented within the specified time frames; and
 - vii. describes how the priority assigned to any one operation or facility may be modified based on the assessment results or potential to discharge pollutants.
- e. identify management practices, policies, and procedures that will be implemented to reduce or prevent the discharge of POCs to the MEP. The Permittee may refer to management practices identified in the "NYS Pollution Prevention and Good Housekeeping Assistance Document" and other guidance materials available from the USEPA, State, or other organizations;
- f. prioritize pollution prevention and good housekeeping efforts based on receiving waters and related sewersheds, facilities or operations most in need of modification or improvement;
- g. include an employee pollution prevention and good housekeeping training program and ensures that staff receive and use training;
- h. require third party entities performing municipal operations as contracted services, including but not limited to street sweeping, snow removal, and lawn / grounds care, to meet permit requirements as the requirements apply to the activity performed; and
- i. indicate whether municipal operations and facilities, that would otherwise be subject to the SPDES MSGP, will instead be covered under this NYC MS4 Permit through appropriate SWMP provisions that require such facilities to comply with Parts III.A, III.C, III.D, III.E, and III.F of the SPDES MSGP, or whether such facilities will continue to obtain coverage under the SPDES MSGP. If covered under this NYC MS4 Permit, the covered entity must also perform monitoring and record keeping in accordance with Part IV of the SPDES MSGP, utilize annual certification report and discharge monitoring report forms provided by the Department, and continue to submit pre-printed annual certification reports and discharge monitoring reports to the Department. If the Permittee elects to cover such facilities under this NYC MS4 Permit, once the Permittee's SWMP plan is approved, the annual certification reports and discharge monitoring reports will also be attached to this NYC MS4 annual report, and these operations or facilities will not be required to gain coverage under the SPDES MSGP. Implementation of the above-noted provisions of the SWMP will ensure that the MEP is met for discharges from these facilities.

2. Consider and if feasible and cost-effective incorporate, runoff reduction techniques and green infrastructure during planned municipal upgrades including municipal rights of way. Some examples include bioswales, green streets, replacement of closed drainage with grass swales, replacement of the existing islands in the parking lots with rain gardens, or curb cuts to route the flow through below-grade infiltration areas or other low cost improvements that provide runoff treatment or reduction. Consideration of feasibility should include type of land use or municipal operation, suitability of soils, presence of utilities, potential for exacerbating existing contamination problems, safety issues, maintenance requirements, and expected lifespans of available technologies.
3. Select and assess appropriate pollution prevention and good housekeeping BMPs and measurable goals to ensure the reduction of POCs in stormwater discharges to the MEP.

H. Industrial and Commercial Stormwater Sources

1. Facility Inventory
 - a. Source Identification
 - i. The Permittee must prepare and maintain an inventory of all industrial and commercial sites/sources within its jurisdiction (regardless of ownership), within three years of EDP, that could discharge POCs in stormwater to the MS4. The inventory must be updated *every five years* and available for review by the permitting authority upon request.
 - ii. The inventory, organized by drainage area, must include the following minimum information for each industrial and commercial site/sources:
 - Name
 - Address
 - Facility contact information
 - Physical location of storm drain receiving discharge
 - Name of receiving water
 - Pollutants potentially generated by the site/source
 - Identification of (1) whether the site/source is tributary to an impaired water segment and (2) whether it generates POCs for which the water segment is impaired
 - A narrative description including North American Industry Classification System standard industrial classification (NAICS) and standard industrial classification (SIC) codes, which best reflects the principal products or services provided by each facility.
 - Indicate whether these industrial and commercial sites/sources are already regulated by the Permittee's Industrial Pretreatment Program.
The use of a geo-locational database system is highly recommended.
 - iii. At a minimum, the following sites/sources must be included in the inventory. The sites/sources that are owned or operated by the Permittee and/or where structural stormwater controls are maintained by the Permittee, but where the sites/sources are not used for municipal operations, must also be included in the inventory:
 - (1) Industrial Sites/Sources:

- (a) Industrial Facilities, as defined at 40 CFR § 122.26(b)(14)(i-ix and xi), including those subject to the SPDES MSGP or individual SPDES permit;
 - (b) Facilities subject to Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA), that process, store, or handle hazardous or toxic chemicals or substances exposed to stormwater;
 - (c) Hazardous waste treatment, disposal, storage and recovery facilities.
 - (2) Other industrial or commercial sites/sources tributary to an impaired water segment, where the site/source generates significant amount of POCs for which the water segment is impaired.
 - (3) Other industrial or commercial sites/sources that the Permittee determines may contribute a significant pollutant load to the MS4.
2. Stormwater Control Measures for Unpermitted Industrial and Commercial Facilities
 - a. Within three years of EDP, the Permittee must develop a plan to inspect and assess industrial and commercial facilities to determine if they generate significant contributions of POCs to impaired waters included in its Part IV.H.1 inventory and are not covered under the SPDES MSGP or individual SPDES Permit. If the facility is a significant contributor of POCs to impaired waters, the inspection plan must include a procedure for referring to the Department for permitting those facilities under a SPDES Permit including the reason or justification to permit the facility. Illicit discharges from the facility must be eliminated. The Permittee must describe the unpermitted industrial and commercial facility inspection plan in the SWMP plan.
3. SPDES Industrial Stormwater Multi-Sector General Permit (MSGP) Facility Inspections
 - a. Development of Inspection Program
 - i. The Permittee must develop a program to inspect the facilities covered under the SPDES MSGP (GP-0-12-001) and submit the inspection program plan to the Department within three years of EDP as part of the SWMP plan. An interim report demonstrating progress in the development of the inspection program plan must be submitted to the Department as part of the progress reports on the development of the SWMP required to be submitted at the end of each of the first two years after EDP. The Permittee must implement the SPDES MSGP inspection program upon obtaining approval of the program from the Department.
 - ii. The inspection program must:
 - (1) Prioritize facilities into high, medium, and low categories on the basis of the potential for water quality impact using criteria such as discharges of POCs to impaired waters, pollutant sources on site, proximity to a water body, and violation history of the facility. The different priority categories will be assigned different inspection frequencies, with the highest priority facilities receiving more frequent inspections. The program must describe the process for prioritizing inspections and frequency of inspections in the SWMP plan.
 - (2) Explain how the priority assigned to any one facility may be modified based on the site inspection findings and the facility's potential to discharge pollutants.
 - b. Minimum Inspection Requirements
 - i. Inspection Frequency – The Permittee is required to conduct inspections at the following frequencies, at a minimum:

- (1) Facilities with high potential for water quality impact must be inspected annually.
 - (2) Facilities with medium potential for water quality impact must be inspected at least once every three years.
 - (3) Facilities with low potential for water quality impact must be inspected at least once every five years.
 - (4) Facilities with a written violation by the Permittee occurring in the previous year must be inspected within a year of the violation or as per the conditions in the enforcement action until compliance is achieved.
 - (5) For facilities with no exposure of industrial activities to stormwater, no inspections are required. However, the Permittee must continue to track these facilities for significant change in the exposure of their operations to stormwater.
- ii. Scope of Inspection – Inspections must at a minimum:
- (1) Evaluate the facility’s compliance with the SPDES MSGP requirements.
 - (2) Conduct a visual observation for evidence of unauthorized discharges, illicit connections, and potential discharges of pollutants to stormwater.
 - (3) Evaluate the facility’s compliance with any other relevant local stormwater requirements.
- iii. Documentation Requirements – At a minimum, the Permittee must document the following for each inspection:
- (1) The inspection date and time;
 - (2) The name(s) and signature(s) of the inspector(s);
 - (3) Weather information;
 - (4) A description of any discharges occurring at the time of the inspection;
 - (5) Any previously unidentified discharges of pollutants from the site;
 - (6) Any control measures needing maintenance or repairs;
 - (7) Any failed control measures that need replacement;
 - (8) Any incidents of noncompliance observed; and
 - (9) Any additional control measures needed to comply with the Permit requirements.
- iv. Track Inspections – Inspection findings must be tracked to ensure inspections are conducted at the frequency specified in Part IV.H.3.b.i, highlight and document the recidivism of noncompliant facilities, and aid follow up and enforcement activities.
- c. Enforcement – The Permittee must ensure that all follow up and enforcement activities are conducted as necessary to require implementation and maintenance of the applicable control measures described in the SPDES MSGP or Part IV.H.2. The Permittee is required to use the approved Enforcement Response Plan per Part III.C of this permit for all enforcement actions.
4. Staff Training
- The Permittee must ensure that all staff whose primary job duties are implementing the industrial stormwater program is trained to conduct facility inspections. The training must

cover what is required under this permit in terms of stormwater control measures, the requirements of other applicable Industrial Stormwater general permits or other related local requirements, the Permittee's site inspection and documentation protocols, and enforcement procedures. Follow-up training must be provided every other year to address changes in procedures, techniques, or staffing. The Permittee must document and maintain records of the training provided and the staff trained.

I. Control of Floatable and Settleable Trash and Debris

The Permittee shall develop a floatable and settleable trash and debris management program as part of the Stormwater Management Program Plan. The objectives of the floatable and settleable trash and debris management program shall be to develop a methodology to determine the loading rate of floatable and settleable trash and debris, including land-based sources, from the MS4 to waterbodies listed as impaired for floatables in the MS4 areas, and to assess and implement strategies to reduce floatable and settleable trash and debris to waterbodies listed as impaired for floatables in the MS4 areas. The program may prioritize waterbodies and/or drainage areas for floatable and settleable trash and debris control strategies based on the relative significance of the MS4 contribution to floatable and settleable trash and debris loads.

The program included in the SWMP in the first permit cycle shall be designed to accomplish the following:

1. Evaluate the Permittee's existing programs including best management practices and structural and non-structural control measures for floatable and settleable trash and debris, and their efficacy, based on existing information, and compare them with the best available technologies identified for control of floatable and settleable trash and debris to waterbodies listed as impaired for floatables in the MS4 areas;
2. Identify technological advancements and best available technologies for floatable and settleable trash and debris capture employed in other municipalities and assess their applicability to New York City; and
3. Propose a methodology for selecting, sizing and siting the best management practices and controls that will be implemented to reduce floatable and settleable trash and debris for Department review and approval.

Within two (2) years of EDP, the Permittee shall submit a draft workplan to determine the loading rate of floatable and settleable trash and debris discharged, including land-based sources, from the MS4 to waterbodies listed as impaired for floatables for Department review and approval. The draft workplan shall include a literature search of methods employed by other municipalities, as well as a discussion as to why the selected method is best for conditions in New York City. The final workplan to determine the loading rate of floatable and settleable trash and debris discharged, including land-based sources, from the MS4 to waterbodies listed as impaired for floatables shall be included in the SWMP plan to be submitted to the Department within three (3) years of EDP.

Within three (3) months of the Department's approval of the final workplan, the Permittee shall propose a schedule to determine the loading rate of floatable and settleable trash and

debris from the MS4 to waterbodies listed as impaired for floatables in the MS4 areas with a completion date from commencement of study not to exceed three (3) years. If the Permittee is unable to complete the floatable and settleable trash and debris loading rate study in three (3) years from commencement, the Permittee shall request an extension from the Department and provide justification for the extension.

Within two (2) years of the Department's approval of the final workplan, the Permittee shall commence a study to determine the loading rate of floatable and settleable trash and debris from the MS4 to waterbodies listed as impaired for floatables in the MS4 areas, using the approved workplan.

The Permittee shall continue to implement existing or improved controls to reduce floatable and settleable trash and debris from the MS4 areas to waterbodies with the goal of achieving elimination of trash, debris, and floatables in the receiving waters. The Permittee shall continue to inspect each catch basin in the NYCDEP MS4 system a minimum of once every 36 months. Catch basins in the NYCDEP MS4 system will be cleaned as required based on these inspections and in accordance with the Permittee's criteria for catch basin cleaning. The Permittee shall replace missing or damaged catch basin hoods in the NYCDEP MS4 system within 90 days after the date of inspection for basins known to be hooded upon completion of the catch basin hooding program. For all future catch basins in the NYCDEP MS4 system found by inspection to require extensive repairs before a hood can be installed, the Permittee shall repair and install a hood within 24 months.

The Permittee shall implement an interim floatable and settleable trash and debris reduction media campaign to further educate the public on trash and debris control issues. Within three (3) months of EDP, the Permittee shall develop a campaign theme and an implementation schedule. Within six (6) months of EDP, the Permittee shall begin implementation of the campaign. The campaign shall run from six (6) months of EDP to submission of the SWMP plan, which is due within three (3) years of EDP. The Permittee may incorporate elements of the media campaign into the SWMP, as warranted.

J. Monitoring and Assessment of Controls

1. Consolidated Information Tracking System Framework
Within three years of EDP, the Permittee must develop a tracking system framework to track the information required in the permit as well as the information required to be reported in the annual report (see Part IV.M). The Permittee must certify in writing to the Department that such a tracking system framework has been developed.
2. Development of Monitoring & Assessment Program
 - a. The Permittee must develop within three years of EDP, and revise as necessary, a monitoring and assessment program. The monitoring and assessment program shall describe the location of outfalls or field screening points to be sampled, why the location is selected, the frequency of sampling, parameters to be sampled, and a description of sampling equipment. The monitoring and assessment program must be designed to meet the following objectives:

- i. Assess compliance with this permit;
 - ii. Measure the effectiveness of the Permittee's stormwater management program;
 - iii. Characterize and assess the quality of stormwater discharges at representative MS4 outfalls;
 - iv. Identify sources of specific pollutants;
 - v. Detect and eliminate illicit discharges and illegal connections to the MS4; and
 - vi. Evaluate long-term trends in receiving water quality after considering the impact of non-MS4 sources and planned controls for those sources.
- b. The monitoring and assessment program should be customized to the specific waterbodies, impairments, and pollutant sources of the MS4, and must include assessment of impaired waters required under Part II.B of this Permit, if applicable. In developing the monitoring and assessment program, the Permittee may review the Permittee's existing monitoring programs (including shoreline survey, sentinel monitoring, harbor survey, and beach sampling) to determine how data from existing programs can be utilized in characterizing receiving water quality and stormwater discharges from the MS4 outfalls.
3. Implementation of Monitoring & Assessment Program
Within five years of EDP, the Permittee must implement the monitoring and assessment program in order to assess potential sources of discharge of stormwater POCs, identify potential additional reduction measures for POCs, and evaluate its progress in addressing the POCs. The Permittee must evaluate the SWMP with respect to the MS4's effectiveness in ensuring control of stormwater discharges to impaired waters to the MEP.

K. Reliance on Third Parties

This subpart applies to activities for which the Permittee relies upon any third party entity to develop or implement any portion of its SWMP. Examples of such entities include, but are not limited to a non-government, commercial entity that receives payment from the Permittee for services provided (for example, businesses that create policies or procedures for the Permittee, perform illicit discharge identification and track down, maintain roads, remove snow, clean storm sewer systems, and sweep streets) as contracted by the Permittee.

The Permittee must, through a signed certification statement, contract or agreement provide adequate assurance that the third parties will comply with permit requirements applicable to the work performed by the third party. The certification statement, contract or other agreement must:

- provide adequate assurance that the third party will comply with permit requirements;
- identify the activities that the third party entity will be responsible for and include the name and title of the person providing the signature;
- the name, address and telephone number of the third party entity;
- an identifying description of the location of the work performed; and
- the date the certification statement, contract or other agreement is signed.

L. Recordkeeping

The Permittee must keep records required by this permit (records that document the SWMP plan, records included in the SWMP plan, other records that verify reporting required by the permit, past annual reports, and comments from the public and the Department) for at least five years after they are generated. Records must be submitted to the Department within 25 business days of receipt of a Department request for such information. The Permittee shall keep duplicate records (either hard copy or electronic or online version), to have one copy for public observation and a working copy where the Permittee's staff, other individuals responsible for the SWMP and regulators, such as the Department and USEPA staff, can access them. Records, including the annual reports and the SWMP plan, must be available to the public at reasonable times during regular business hours.

M. Annual Reporting

The annual reporting period ("reporting year") ends December 31 of each year after Permittee's submission of the SWMP plan, except that if the SWMP plan is submitted later in the calendar year than November 15, the first annual reporting period shall end on December 31 of the following year. The Permittee shall comply with the requirements of Part IV.B.4 concerning an annual report presentation. The final annual report must be received in the Department's Central and Regional Offices, electronic or hard copy, no later than September 30 following each reporting year. The Annual Report shall be sent to the following addresses:

NYS DEC
Chief, Stormwater Permits Section
Bureau of Water Permits
625 Broadway, 4th Floor
Albany, NY 12233-3505

and

Regional Water Engineer, Region 2
1 Hunters Point Plaza
47-40 21st Street
Long Island City, NY 11101-5407
Phone: (718) 482-4933

The annual report shall summarize the activities performed throughout the reporting period (January 1 to December 31) and must include at a minimum:

1. The status of compliance with permit conditions;
2. The status of compliance with the no-net increase or additional requirements in *Priority MS4 Waterbodies*, if applicable and as required by Parts II.B.1 and II.B.2 of this Permit. These results may be submitted as an attachment;
3. Notice that the Permittee is relying on another jurisdictional entity to satisfy some or all of its permit obligations (if applicable);
4. Specific reporting requirements for each of the SWMP requirements as stated in the following subsections:

- a. Public Education and Outreach
 - i. The Permittee shall list education and outreach activities performed for the general public and target audiences and provide any results (for example, number of people attended, amount of materials distributed, effectiveness of message);
 - ii. After performing the education and outreach activities required by this permit, the Permittee shall report on those activities under Part IV.A, and shall provide the following information applicable to their program;
 - iii. IDDE educational activities planned or completed for the general public, as required under the permit requirement, Part IV.D;
 - iv. Information on the effectiveness of the program, BMP and measurable goal assessment, including any change in identified BMPs or measurable goals and justification for those changes; and
 - v. Goals for the stormwater activities planned to be undertaken during the next reporting cycle (including a time line for development and implementation).

- b. Public Involvement/Participation
 - i. annual report presentation information (date, time, attendees) or information about how the annual report was made available for comment;
 - ii. summary of the public comments received on this annual report, how the MS4 responded to comments, and, as appropriate, modified the program in response to the comments;
 - iii. statement that the final report and the SWMP plan are available for public review and the location where they are available;
 - iv. public involvement/participation activities (for example beach cleanups including the number of people participating, the number of calls to a water quality hotline, means of engaging key stakeholders in program development and implementation);
 - v. report on effectiveness of program, BMP and measurable goal assessment , including any change in identified BMPs or measurable goals and justification for those changes; and
 - vi. goals for the stormwater activities planned to be undertaken during the next reporting cycle (including a time line for development and implementation).

- c. Mapping
 - i. number and percent of MS4 outfalls mapped;
 - ii. status of the MS4 drainage map.

- d. Illicit Discharge Detection and Elimination (IDDE)
 - i. number of illicit discharges detected and eliminated;
 - ii. number and type of enforcement actions and penalties issued;
 - iii. report of the locations and ownership of illicit discharges to the MS4 where the MS4 discharges to waterbodies are shown to have over 200 colonies/100 ml of fecal coliform;
 - iv. report that includes unauthorized non-stormwater discharges from NYC's MS4 or CSO outfalls downstream of the regulator;
 - v. percent of MS4 outfalls for which an outfall reconnaissance inventory has been performed;

- vi. IDDE education activities planned or completed for public employees and businesses;
 - vii. regulatory mechanism status - certification that law is equivalent to the State's model IDDE law;
 - viii. number of staff trained;
 - ix. report on effectiveness of program, BMP and measurable goal assessment, including any change in identified BMPs or measurable goals and justification for those changes; and
 - x. goals for the stormwater activities planned to be undertaken during the next reporting cycle (including a time line for development and implementation), as applicable.
- e. Construction Site Stormwater Runoff Control
- i. number of active construction sites within MS4 authorized by the Department based on Department permit data;
 - ii. number of SWPPPs reviewed;
 - iii. percent of active construction sites inspected once;
 - iv. percent of active construction sites inspected more than once;
 - v. number and type of enforcement actions and penalties issued;
 - vi. construction site stormwater control training planned or completed;
 - vii. report on effectiveness of program, BMP and measurable goal assessment, including any change in identified BMPs or measurable goals and justification for those changes; and
 - viii. goals for the stormwater activities planned to be undertaken during the next reporting cycle (including a time line for development and implementation).
- f. Post-Construction Stormwater Management
- i. number of SWPPPs reviewed;
 - ii. number and type of enforcement actions and penalties issued;
 - iii. number of post-construction stormwater management practices, including the type of practice and the contributing impervious area managed by each practice within the MS4 areas for disturbances of one acre or more;
 - iv. number and type of post-construction stormwater management practices inspected;
 - v. number and type of post-construction stormwater management practices maintained based on inspections program;
 - vi. number of flood management projects and existing structural flood control devices evaluated;
 - vii. number of individuals trained in inspection of long-term operation and maintenance of post-construction stormwater management practices;
 - viii. report on effectiveness of program, BMP and measurable goal assessment, including any change in identified BMPs or measurable goals and justification for those changes; and
 - ix. goals for the stormwater activities planned to be undertaken during the next reporting cycle (including a time line for development and implementation).
- g. Pollution Prevention/Good Housekeeping for Municipal Operations and Facilities

The Permittee must report on all municipal operations and facilities served by the Permittee's MS4 for the following items; this list may be modified to reflect the specific pollution prevention management practices, policies and procedures developed for municipal operations and facilities in the SWMP plan, which will specify items to be included in the annual report:

- i. inventory of municipal operations and facilities;
 - ii. acres of parking lot swept;
 - iii. miles of street swept;
 - iv. number of catch basins inspected and, where necessary, cleaned or maintained;
 - v. miles of storm sewers inspected and miles of storm sewers cleaned;
 - vi. number of self-assessments conducted at municipal operations and facilities;
 - vii. pollution prevention/good housekeeping training for municipal employees planned or completed;
 - viii. number of municipal upgrade projects where green infrastructure or runoff reduction techniques were incorporated;
 - ix. upon approval of the SWMP plan, if the Permittee elects to cover municipal operations and facilities that would otherwise be subject to the SPDES MSGP under this NYC MS4 permit, the annual report must attach annual certification reports and discharge monitoring reports from such facilities;
 - x. report on effectiveness of program, BMP and measurable goal assessment, including identification of changes as a result of the self-assessments and schedules for making the changes; and
 - xi. goals for the stormwater activities planned to be undertaken during the next reporting cycle (including a time line for development and implementation).
- h. Industrial and Commercial Stormwater Sources
- The Permittee must report on industrial and commercial activities identified under Part IV.H.1 for the items below:
- i. number of SPDES MSGP facilities inspected;
 - ii. number of noncompliant SPDES MSGP facilities;
 - iii. number of repeat noncompliant SPDES MSGP facilities;
 - iv. number and type of enforcement actions and penalties issued;
 - v. report on inspection program for unpermitted industrial and commercial facilities;
 - vi. report on stormwater controls for unpermitted industrial and commercial facilities;
 - vii. report on effectiveness of program, BMP and measurable goal assessment; and
 - viii. goals for the stormwater activities planned to be undertaken during the next reporting cycle (including a time line for development and implementation).
- i. Floatable and Settleable Trash and Debris Control
- i. number of catch basins inspected;
 - ii. number of catch basins cleaned;
 - iii. number of catch basin hoods repaired;
 - iv. number of catch basin hoods installed/replaced;
 - v. number of catch basins retrofitted;
 - vi. report on floatable containment boom and netting program;
 - vii. report on public education and outreach program;
 - viii. report on effectiveness of program, BMP and measurable goal assessment; and

- ix. goals for the stormwater activities planned to be undertaken during the next reporting cycle (including a time line for development and implementation).
- j. Monitoring and Assessment of Controls
 - i. The Permittee must provide an Annual Effectiveness Assessment that evaluates: (a) the appropriateness of significant BMPs; (b) the effectiveness of implementation of each major component of the Stormwater Management Program [Public Education and Outreach, Public Involvement/Participation, Mapping, Illicit Discharge Detection and Elimination, Construction Stormwater Runoff Control, Post-Construction Stormwater Management, Pollution Prevention/Good Housekeeping for Municipal Operations/Facilities, Industrial and Commercial Stormwater Sources, and Floatable and Settleable Trash and Debris Control] and (c) progress towards achieving the statutory goal of reducing the discharge of POCs to the MEP. To the extent practicable, the Permittee should identify and use measurable goals, assessment indicators, and assessment methods for each of the items listed in this paragraph;
 - ii. The Permittee must provide results of information collected and analyzed as part of the Monitoring and Assessment Program, including surveys and monitoring data, during the reporting period. This assessment may be submitted as an attachment;
 - iii. Based on the results of the Annual Effectiveness Assessment, the Permittee must annually review its activities or control measures to identify modifications and improvements needed to maximize SWMP effectiveness, as necessary to achieve compliance with this permit, and a plan to implement the identified modifications and improvements.

N. Annual Report Certification

A signed original hard copy of the Municipal Compliance Certification (MCC) form must be submitted to the Department no later than September 30 of each reporting year. If the annual report is mailed, the MCC form must be submitted with the annual report.

The MCC form, provided by the Department, certifies that all applicable permit conditions are being developed, implemented and complied with. It must be signed by an individual as described in Part V.H. The certification provided by the MCC form does not affect, negate, or replace the certification required under Changes to Authorization subsection in Part V.H. If compliance with any requirement cannot be certified to on the MCC form, a complete explanation with a description of corrective measures must be included as requested on the MCC form.

O. Program Development Compliance Schedule

In addition to the annual report outlined in Part IV.M, Table 2 lists the deliverables and the schedule that the Permittee must implement, submit to the Department, or present to the public. The requirements of each deliverable and related update cycles are described in the appropriate Parts of this permit. Pursuant to New York State Administrative Procedure Act §401, 6 NYCRR 621.11(b)(2), and 6 NYCRR 750-1.16(a), the Permittee must apply for permit renewal 180 days prior to the expiration of the permit.

Table 2. Deliverables in the NYC MS4 Permit and Schedule

Deliverable	Schedule
II.B Impaired Waters	
Development of draft of land use coefficients and pollutant removal efficiencies for practices required for developers as part of pollutant load analysis (Part II.B.1.d)	2 ½ years after EDP
III.B Legal Authority	
Description of existing legal authority to control discharges to the MS4 (Part III.B.1.a)	6 months after EDP
Development of written certification statement (Part III.B.1.b)	2 years after EDP
III.E Stormwater Program Administration	
Notification to entities regulated under MS4 permit (Part III.E)	3 months after SWMP Plan submission
IV.B Stormwater Management Program Plan	
Progress reports on the development of the SWMP Plan, including public involvement/ participation components (Part IV. Introduction)	1 and 2 years after EDP
Submission of the complete draft SWMP Plan, including all components identified in Parts II.B, III.A through D, and IV. Introduction and IV.A through J (Part IV. Introduction)	3 years after EDP
IV.C MS4 Drainage Map	
Preliminary map with information completed to date (Part IV.C.2)	3 years after EDP
Final map with information outlined in Part IV.C.1 (Part IV.C.2)	5 years after EDP
Updated MS4 Drainage Map (Part IV.C.3)	Every 5 years after EDP
IV.D Illicit Discharge Detection and Elimination	
Updated outfall list (Part IV.D.2)	Every year after EDP
Illicit discharge trackdown (Phase I) schedule (Part IV.D.4)	Within 30 days of discovery of discharge
Illicit discharge abatement program (Phase II) schedule (Part IV.D.4)	On or before end date of Phase I schedule
Report of the location and ownership of illicit discharges to the MS4 where the MS4 discharges to waterbodies that are shown to have over 200 colonies/100 ml of fecal coliform and a schedule to eliminate those discharges (Part IV.D.5)	3 years after EDP and every year thereafter
Report on the unauthorized non-stormwater discharges to NYC's MS4 or CSO outfalls downstream of the regulator (Part IV.D.5)	3 years after EDP and every year thereafter
IV.F Post-Construction Stormwater Management	
Establish and annually update an inventory of post-construction stormwater management practices within the MS4 storm sewershed area (Part IV.F.1.e)	3 years after EDP and every year thereafter

IV.G Municipal Operations & Facilities Pollution Prevention	
Perform an initial self-assessment of highest priority municipal operations and facilities (Part IV.G.1.d.i)	3 years after EDP
IV.H Industrial and Commercial Stormwater Sources	
Update inventory of industrial/commercial facilities that are possible sources (Part IV.H.1.a.i)	Every 5 years after preparation of initial inventory
Develop interim reports on the development of the SPDES MSGP inspection program (Part IV.H.3.a.i)	1 and 2 years after EDP
Submit certification that training to inspectors to conduct industrial stormwater facility inspections has been completed (Part IV.H.4)	Every 2 years after SPDES MSGP inspection program approval
IV.I Floatable and Settleable Trash and Debris Control	
Submit certification that an interim floatable and settleable trash and debris reduction media campaign has been developed with implementation schedule (Part IV.I.3)	3 months after EDP
Submit draft work plan for determining the amount of floatable and settleable trash and debris discharged from the MS4 to floatables impaired waterbodies (Part IV.I.3)	2 years after EDP
Submit a schedule for loading rate study for floatable and settleable trash and debris from the MS4 to waterbodies impaired for floatables (Part IV.I.3)	3 months after final work plan approval
Commence study to determine loading rate of floatable and settleable trash and debris from the MS4 to waterbodies impaired for floatables (Part IV.I.3)	2 years after final work plan approval
IV.J Monitoring and Assessment of Controls	
Submit certification that Program has been implemented (Part IV.J.3)	5 years after EDP
IV.M, IV.N, & IV.O Annual Reporting	
Public presentation of draft annual report (Part IV.B.4.a)	Every July 1st after every annual reporting year
Annual Report submission (Part IV.M) and MCC Form (Part IV.N)	Every September 30th after every annual reporting year
Annual effectiveness assessment (included in Annual Reporting Part IV.M.4.j.i) and associated review of activities or control measures (Part IV.M.4.j.iii)	4 years after EDP and annually thereafter
Apply for Permit Renewal (Part IV.O)	180 days prior to permit expiration

V. STANDARD PERMIT CONDITIONS

A. Duty to Comply

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the CWA and the ECL and is grounds for enforcement action.

B. Enforcement

Failure of the Permittee, its contractors, subcontractors, agents and/or assigns to strictly adhere to any of the SPDES permit requirements contained herein shall constitute a permit violation. There are substantial criminal, civil, and administrative penalties associated with violating the provisions of this permit. Fines of up to \$37,500 per day for each violation and imprisonment for up to fifteen (15) years may be assessed depending upon the nature and degree of the offense.

C. Technology Standards

The Permittee, in accordance with written notification by the Department, must comply with all applicable technology-based effluent standards or limitations promulgated by USEPA pursuant to Sections 301 and 304 of the CWA. If an effluent standard or limitation more stringent than any effluent limitation in the SPDES permit or controlling a pollutant not limited in the permit is promulgated or approved after the permit is issued, the SWMP plan shall be promptly modified to include that effluent standard or limitation. In addition, the Department may direct the Permittee to apply to modify the permit or the Department may initiate modification of the permit itself, if appropriate.

D. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this SPDES permit.

E. Duty to Mitigate

The Permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this SPDES permit which has a reasonable likelihood of adversely affecting human health or the environment.

F. Duty to Provide Information

The Permittee shall, within twenty-five (25) business days, make available for inspection and copying or furnish to the Department or an authorized representative of the Department any information that is requested to determine compliance with this SPDES permit. Failure to provide information requested shall be a violation of the terms of this SPDES permit and 6 NYCRR 750-2.5(c)(4).

G. Other Information

If the Permittee becomes aware of a failure to submit any relevant facts or have submitted incorrect information in any report to the Department, the Permittee must promptly submit such facts or information.

H. Signatory Requirements

1. All permit applications shall be signed by either a principal executive officer or ranking elected official. Principal executive officer includes (1) the chief executive officer of the

municipal entity agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

2. All reports, plans, annual reports, MCC forms, discharge monitoring reports, certifications or information submitted to the Department, or that this SPDES permit requires be maintained by the Permittee, shall be signed by a person described in Part V.H.1 or by a duly authorized representative⁷. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Part V.H.1 and submitted to the Department; and
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or well field, superintendent, or position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the Permittee (a duly authorized representative may thus be either a named individual or any individual occupying a named position); and
 - c. The written authorization shall include the name, title and signature of the authorized representative, and be attached to the MCC form submitted to the Department per Part IV.M.

Changes to authorization: If an authorization to discharge is no longer accurate because a different entity has responsibility for the overall operation of another entity's program, these changes must be indicated on the MCC form.

Initial signatory authorization or changes to signatory authorization: The initial signatory authorization must be submitted to the Department with any reports to be signed by a signatory representative. If a signatory authorization under Part V.H is no longer accurate because a different individual, or position, has responsibility for the overall operation of the facility, a new signatory authorization satisfying the requirements of Part V.H must be submitted to the Department with any reports to be signed by an authorized representative.

Certification: Any person signing documents under paragraph Part V.H shall make the following certification: "I certify under penalty of law that this document and its attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons 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."

Under Part V.H (Signatory Requirements), it shall constitute a permit violation if an incorrect and/or improper signatory authorizes any required forms, and/or reports.

⁷ Positions that must be duly authorized include, but are not limited to, Environmental Directors, Deputy Supervisors, Safety and Environmental Managers, Assistant Directors, and Chief Health and Safety Officers.

I. Penalties for Falsification of Reports

Article 71 of the ECL provides a civil penalty of \$37,500 per day per violation of this permit. Articles 175 and 210 of the New York State Penal Law provide for a criminal penalty of a fine and/or imprisonment for falsifying reports required under this permit.

J. Oil and Hazardous Substance Liability

Nothing in this SPDES permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties to which it is or may be subject under Section 311 of the CWA or Section 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

K. Property Rights

The issuance of this SPDES permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations, nor does it limit, diminish and/or stay compliance with any terms of this permit.

L. Severability

The provisions of this SPDES permit are severable, and if any provision of this SPDES permit, or the application of any provision of this SPDES permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

M. Other State Environmental Laws

1. Nothing in this SPDES permit shall be construed to preclude the institution of any legal action or relieve a Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the CWA.
2. No condition of this SPDES permit releases the Permittee from any responsibility or requirements under other environmental statutes or regulations.

N. Proper Operation and Maintenance

The Permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the covered entity to achieve compliance with the conditions of this SPDES permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by the Permittee only when necessary to achieve compliance with the conditions of the SPDES permit.

O. Inspection and Entry

The Permittee shall allow the Commissioner of the NYSDEC, the Regional Administrator of the USEPA, the applicable county health department, or their authorized representatives, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this SPDES permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, including records required to be maintained for purposes of operation and maintenance; and
3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment), practices, or operations regulated or required under the permit.

P. Retention of Records

The Permittee shall continue to retain records of all documents pertaining to this permit not otherwise required herein, including but not limited to copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least five (5) years after they are generated. This period may be extended by request of the Department at any time.

Q. Permit Actions

At the Department's sole discretion, this SPDES permit may be modified, revoked, suspended, or renewed for cause at any time.

R. Anticipated Noncompliance

The Permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. Notification of planned changes or anticipated noncompliance does not limit, diminish and/or stay compliance with any terms of this permit.

VI. ACRONYMS AND DEFINITIONS

A. Acronym List

BMP – Best Management Practice
BSD – Better Site Design
CAFO – Concentrated Animal Feeding Operations
CEQR – City Environmental Quality Review
CFR – Code of Federal Regulations
CSO – Combined Sewer Overflows
LTCPs – Long Term Control Plans
CWA – Clean Water Act
ECL – Environmental Conservation Law
EDP – Effective Date of Permit
ERP – Enforcement Response Plan
IDDE – Illicit Discharge Detection and Elimination
LID – Low Impact Development
MCC – Municipal Compliance Certification
MEP – Maximum Extent Practicable
MS4 – Municipal Separate Storm Sewer System
MSGP – Multi-Sector General Permit
NAICS – North American Industry Classification System
NOT – Notice of Termination
NOVs – Notice of Violations
NPDES – National Pollutant Discharge Elimination System
NYC – New York City
NYS – New York State
NYCDEP – New York City Department of Environmental Protection
NYSDEC – New York State Department of Environmental Conservation
ORI – Outfall Reconnaissance Inventory
PAHs – Poly Aromatic Hydrocarbons
POCs – Pollutants of Concern
POTWs – Publicly-Owned Treatment Works
SARA – Superfund Amendments and Reauthorization Act
SIC – Standard Industrial Classification
SPDES – State Pollutant Discharge Elimination System
SWMP – Stormwater Management Program
SWPPP – Stormwater Pollution Prevention Plan
TMDL – Total Maximum Daily Load
USEPA – United States Environmental Protection Agency

B. Definitions

Activities – See best management practice.

Best Management Practice (BMP) – means schedules, activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements (if determined necessary by the Permittee), operating procedures, and practices to control runoff, spillage and leaks, sludge or waste disposal, or drainage from areas that could contribute pollutants to stormwater discharges. BMPs are referred to in EPA’s fact sheets and other materials. BMPs are also referred to as “activities” or “management practices” throughout the MS4 requirements under this SPDES individual permit.

Better Site Design (BSD) – Better Site Design incorporates non-structural and natural approaches to new and redevelopment projects to reduce impacts on watersheds by conserving natural areas, reducing impervious cover and better integrating stormwater treatment. Better site design is a form of Green Infrastructure and is similar to Low Impact Development (LID). See also Green Infrastructure and Low Impact Development.

Chronic Violator – a person or facility that has continuing or repeated violations of the applicable stormwater requirements.

Construction Activity(ies) – as defined by the SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002). Construction activity(ies) means any clearing, grading, excavation, demolition or stockpiling activities that result in soil disturbance. Clearing activities can include but are not limited to logging equipment operation, the cutting and skidding of trees, stump removal and/or brush root removal. Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

Department – New York State Department of Environmental Conservation (NYSDEC)

Development – period after EDP under this SPDES individual permit when the Permittee creates, designs or develops activities, BMPs, tasks or other measures to include in its SWMP plan.

Green Infrastructure – Green infrastructure approaches essentially infiltrate, evapotranspire or reuse stormwater, with significant use of soils and vegetation rather than traditional hardscape collection, conveyance and storage structures. Common green infrastructure approaches include green roofs, trees and tree boxes, rain gardens, vegetated swales, pocket wetlands, infiltration planters, vegetated median strips, reforestation, and protection and enhancement of riparian buffers and floodplains. See also Low Impact Development and Better Site Design.

Illicit Discharges – shall have the same meaning as set forth in 40 CFR § 122.26(b)(2). Examples of illicit discharges are unauthorized sanitary sewage, garage drain effluent, and waste motor oil. However, an illicit discharge could be any other unauthorized discharge which

the Permittee or Department has determined to be a significant contributor of pollutants to the MS4.

Impaired Water – a water is impaired if it does not meet its designated use(s). For purposes of this permit ‘impaired’ refers to impaired waters for which TMDLs have been established, for which existing controls such as permits are expected to resolve the impairment, and those needing a TMDL. Impaired waters compilations are also sometimes referred to as 303(d) lists; 303(d) lists generally include only waters for which TMDLs have not yet been developed. States will generally have associated, but separate lists of impaired waters for which TMDLs have already been established.

Industrial Activity – as defined by the SPDES Multi-Sector General Permit (MSGP) for Stormwater Discharges Associated with Industrial Activity (GP-0-12-001).

Larger Common Plan of Development or Sale – means a contiguous area where multiple separate and distinct construction activities are occurring, or will occur, under one plan. The term “plan” in “larger common plan of development or sale” is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, State Environmental Quality Review Act (SEQRA) or City Environmental Quality Review (CEQR) Application, zoning request, computer design, or physical demarcation (including boundary signs, lot stakes, and surveyor markings) indicating that construction activities may occur on a specific plot, but does not include area-wide rezonings or projects discussed in general planning documents.

For discrete construction projects that are located within a larger common plan of development or sale that are at least 1/4 mile apart, each project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same “common plan” is not concurrently being disturbed.

Low Impact Development (LID) – is a site design strategy with a goal of maintaining or replicating the predevelopment hydrologic regime through the use of design techniques to create a functionally equivalent hydrologic landscape. Hydrologic functions of storage, infiltration, and ground water recharge, as well as the volume and frequency of discharges are maintained through the use of integrated and distributed micro-scale stormwater retention and detention areas, reduction of impervious surfaces, and the lengthening of flow paths and runoff time. Other strategies include the preservation / protection of environmentally sensitive site features such as riparian buffers, wetlands, steep slopes, valuable (mature) trees, flood plains, woodlands and highly permeable soils. LID principles are based on controlling stormwater at the source by the use of microscale controls that are distributed throughout the site. This is unlike conventional approaches that typically convey and manage runoff in large facilities located at the base of drainage areas. See also Green Infrastructure and Better Site Design.

Management Practices – See best management practices

Maximum Extent Practicable (MEP) – is a technology-based standard established by Congress in the Clean Water Act §402(p)(3)(B)(iii). Since no precise definition of MEP exists, it allows for maximum flexibility on the part of the MS4 operators as they develop their

programs (40 CFR 122.2; See also: Stormwater Phase II Compliance Assistance Guide EPA 833-R-00-002, March 2000). When trying to reduce pollutants to the MEP, there must be a serious attempt to comply, and practical solutions may not be lightly rejected. If a Permittee employs all applicable BMPs except those where it can be shown, if requested, that they are not technically feasible in the locality, or whose cost would exceed any benefit to be derived, it would have met the standard. MEP requires the permittee to choose effective BMPs, and to reject applicable BMPs only where other effective BMPs will serve the same purpose, the BMPs would not be technically feasible, or the cost would be prohibitive.

Measurable Goals – are the goals of the SWMP that reflect the needs and characteristics of the Permittee and the areas served by its MS4. Furthermore, the goals should be chosen using an integrated approach that fully addresses the requirements and intent of the MS4 requirements of this SPDES permit. Goals may be qualitative or quantitative.

Municipal Operations and Facilities – means any operation or facility serving a New York City governmental purpose and over which New York City has operational control.

Municipal Separate Storm Sewer System (MS4) – 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, village, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under Section 208 of the CWA, that discharges to surface waters of the State;
2. designed or used for collecting or conveying stormwater;
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.

New Development – Any construction or disturbance of a parcel of land that is currently undisturbed or unaltered by human activities and in a natural state.

New York City (NYC) – means the municipal corporation constituting the city of New York, including all offices, administrations, departments, boards, commissions, bureaus, divisions or agencies of such city organized or created by the New York City Charter. For purposes only of this Permit, New York City shall also be deemed to include the New York City Department of Education.

National Pollutant Discharge Elimination System (NPDES) – means the national system for the issuance of wastewater and stormwater permits under the Federal Water Pollution Control Act (Clean Water Act).

Outfall – is defined as any point where a municipally owned or operated separate storm sewer system discharges to either surface waters of the State or to another MS4. Outfalls include discharges from pipes, ditches, swales, and other points of concentrated flow. However, areas of non-concentrated (sheet) flow which drain to surface waters of the State or to another MS4's system are not considered outfalls and should not be identified as such on the system map.

Pollutants of Concern (POC) – means a pollutant that might reasonably be expected to be present in stormwater in quantities that may cause or contribute to a water quality violation in waters of the State. These pollutants include but are not limited to nitrogen, phosphorus, silt and sediment, pathogens, floatables, petroleum hydrocarbons, heavy metals, and polycyclic aromatic hydrocarbons (PAHs).

Pollutants – mean dredged spoil, filter backwash, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand and industrial, municipal, and agricultural waste discharged into water; which may cause or might reasonably be expected to cause pollution of the waters of the State in contravention of the standards or guidance values adopted as provided in 6 New York Code of Rules and Regulations (“NYCRR”) Part 750-1.2a.

Priority MS4 Waterbodies – mean those water bodies for which an approved CSO LTCP does not predict compliance with applicable water quality standards and where stormwater contributions from the Permittee's MS4 are expected to be a significant contributor of the impairment identified in the CSO LTCP.

Qualified Professional – means a person that is knowledgeable in the principles and practices of stormwater management and treatment, such as a licensed Professional Engineer, licensed Landscape Architect or other Department endorsed individual(s). Individuals preparing SWPPPs that require the post-construction stormwater management practice component must have an understanding of the principles of hydrology, water quality management practice design, water quantity control design, and, in many cases, the principles of hydraulics in order to prepare a SWPPP that conforms to the Department's technical standard. All components of the SWPPP that involve the practice of engineering, as defined by the New York State Education Law (see Article 145), shall be prepared by, or under the direct supervision of, a professional engineer licensed to practice in the State of New York.

Redevelopment – Reconstruction or modification to any existing previously developed land such as residential, commercial, industrial, institutional or road/highway, which involves soil disturbance. Redevelopment is distinguished from development or new development in that new development refers to construction on land where there had not been previous construction. Redevelopment specifically applies to constructed areas with impervious surface or urban fill.

Retrofit – means modifying or adding to existing infrastructure for the purpose of reducing pollutant loadings. Examples, some of which may not be effective for all pollutants, include:

- Better site design approaches such as roof top disconnection, diversion of runoff to infiltration areas, soil de-compaction, riparian buffers, rain gardens, cisterns

- Rehabilitation of existing storm sewer system by installation of standard stormwater treatment systems (ponds, wetlands, filtering, infiltration) or proprietary practices
- Conversion of dirt parking lots to pervious pavement, grassed or stone cover
- Conversion of dry detention ponds to extended detention or wetland treatment systems
- Retrofit by converting abandoned buildings to stormwater treatment systems
- Retrofit of abandoned buildings to open space
- Retrofit road ditches to enhance open channel design
- Control the downstream effects of runoff from existing paved surfaces resulting in flooding and erosion in receiving waters
- Control stream erosion by plunge pool, velocity dissipaters, and flow control devices for discharges from conveyance systems
- Upgrade of an existing conveyance system to provide water quality and/or quantity control within the drainage structure
- Reforestation

Section 303(d) Listed Waters – Section 303(d) is part of the federal Clean Water Act that requires the Department to periodically prepare a list of all surface waters in the State for which beneficial uses of the water such as for drinking, recreation, aquatic habitat, and industrial use are impaired by pollutants. These are water quality-limited estuaries, lakes, and streams that fall short of state surface water quality standards, and are not expected to improve within the next two years. Refer to impaired waters for more information.

Staff – actual employees of the Permittee or contracted entity.

Storm sewershed – the catchment area that drains into the storm sewer system based on the surface topography in the area served by the storm sewer. Adjacent catchment areas that drain to adjacent outfalls are not separate storm sewersheds.

Stormwater Management Program (SWMP) – means the program developed and implemented by the Permittee which provides a comprehensive integrated planning approach involving public participation and, where necessary, intergovernmental coordination, to reduce the discharge of POCs and specified pollutants to the MEP, using management practices, control techniques and systems, design and engineering methods, and other appropriate provisions. Permittees are required at a minimum to develop, implement and enforce a SWMP designed to address POCs and reduce the discharge of pollutants from the MS4 to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of the ECL

and the Clean Water Act. The SWMP must address all MS4 requirements in Part II and IV of this SPDES Permit.

Stormwater Management Program Plan (SWMP Plan) – used by the Permittee to document developed, planned and implemented SWMP elements. The SWMP plan must describe how pollutants in stormwater runoff will be controlled.

Stormwater Pollution Prevention Plan (SWPPP) – as defined per the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity or the NYSDEC SPDES Multi-Sector General Permit (MSGP) for Stormwater Discharges Associated with Industrial Activity.

Surface Waters of the State – shall be construed to include lakes, bays, sounds, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic ocean within the territorial seas of the state of New York and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the state or within its jurisdiction. Waters of the State are further defined in 6 NYCRR Parts 800 to 941.

Storm sewers are not waters of the State unless they are classified in 6 NYCRR Parts 800 to 941. Nonetheless, a discharge to a storm sewer shall be regulated as a discharge at the point where the storm sewer discharges to waters of the State. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Act and Environmental Conservation Law [other than cooling ponds as defined in 40 CFR 423.11(m) (see Section 750-1.24) which also meet the criteria of this definition are not waters of the State]. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the state (such as a disposal area in wetlands) nor resulted from impoundment of waters of the State.

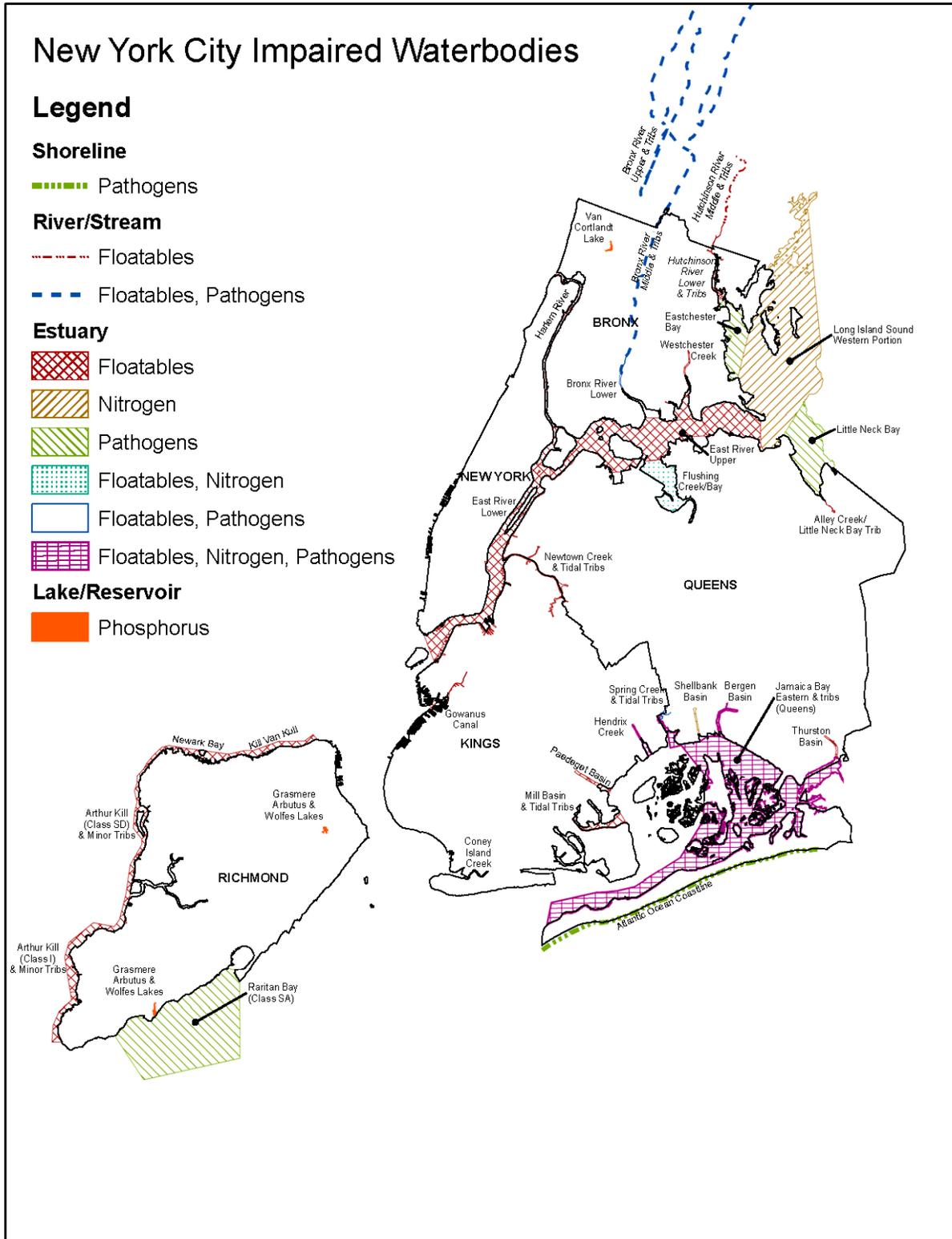
Total Maximum Daily Load (TMDL) – A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. It is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL stipulates wasteload allocations for point source discharges, load allocations for nonpoint sources, and a margin of safety.

Urbanized Area – for the purposes of this permit, the urbanized area includes only the five boroughs of New York City.

Water Quality Standard – means such measures of purity or quality for any waters in relation to their reasonable and necessary use as promulgated in 6 NYCRR Part 700 et seq.

VII. APPENDICES

APPENDIX 1 – IMPAIRED WATERS IN AND AROUND NEW YORK CITY



APPENDIX 2 – IMPAIRED WATER SEGMENTS AND POLLUTANTS OF CONCERN

COUNTY	WIN	WATERBODY NAME	POLLUTANT
Bronx	(MW2.4) ER-3	Bronx River, Lower	Floatables
Bronx	(MW2.4) ER-3	Bronx River, Lower	Pathogens
Bronx	(MW2.4) ER-3	Bronx River, Middle, and tribs	Floatables
Bronx	(MW2.4) ER-3	Bronx River, Middle, and tribs	Pathogens
Bronx	(MW2.6) LIS (portion 1a)	Eastchester Bay	Pathogens
Bronx	(MW3.2) LIS- 2	Hutchinson River, Lower, and tribs	Floatables
Bronx	(MW2.6) LIS (portion 1)	Long Island Sound, Western Portion	Nitrogen
Bronx	(MW3.2) LIS- 2-P1075	Reservoir No.1/Lake Isle	Phosphorus
Bronx	(MW2.3) ER-1-5-P1043	Van Cortlandt Lake	Phosphorus
Bronx	(MW2.4) ER-4	Westchester Creek	Floatables
Kings	(MW1.1) LB/GB-253	Coney Island Creek	Floatables
Kings	(MW1.1) LB/GB-253	Coney Island Creek	Pathogens
Kings	(MW1.3) UB-EB- 1	Gowanus Canal	Floatables
Kings	(MW8.6a) JB-249a	Hendrix Creek	Floatables
Kings	(MW8.6a) JB-249a	Hendrix Creek	Nitrogen
Kings	(MW8.6a) JB-249a	Hendrix Creek	Pathogens
Kings	(MW8.6a) JB-250b	Mill Basin and tidal tribs	Floatables
Kings	(MW8.6a) JB-250a	Paerdegat Basin	Floatables
New York	(MW2.1) ER (portion 1)	East River, Lower	Floatables
New York	(MW2.3) ER-1	Harlem River	Floatables
Queens	(MW2.5) ER/LIS-LNB-19 thru 20	Alley Creek/Little Neck Bay Trib	Floatables
Queens	(MW0.0) AO (portion 1)	Atlantic Ocean Coastline	Pathogens
Queens	(MW8.5a) JB-247	Bergen Basin	Floatables
Queens	(MW8.5a) JB-247	Bergen Basin	Nitrogen
Queens	(MW8.5a) JB-247	Bergen Basin	Pathogens
Queens	(MW2.3) ER (portion 2)	East River, Upper	Floatables
Queens	(MW2.3) ER (portion 3)	East River, Upper	Floatables
Queens	(MW2.5) ER-LI-12	Flushing Creek/Bay	Floatables
Queens	(MW2.5) ER-LI-12	Flushing Creek/Bay	Nitrogen
Queens	(MW8.5) JB	Jamaica Bay, Eastern, and tribs (Queens)	Floatables
Queens	(MW8.5) JB	Jamaica Bay, Eastern, and tribs (Queens)	Nitrogen
Queens	(MW8.5) JB	Jamaica Bay, Eastern, and tribs (Queens)	Pathogens
Queens	(MW2.5) ER/LIS-LNB	Little Neck Bay	Pathogens
Queens	(MW2.1) ER-LI- 4	Newtown Creek and tidal tribs	Floatables
Queens	(MW8.5a) JB-248a	Shellbank Basin	Nitrogen
Queens	(MW8.5a) JB-249	Spring Creek and tribs	Floatables
Queens	(MW8.5a) JB-249	Spring Creek and tribs	Pathogens
Queens	(MW8.5a) JB-241a	Thurston Basin	Floatables
Richmond	(MW1.2) SI (portion 1)	Arthur Kill (Class I) and minor tribs	Floatables
Richmond	(MW1.2) SI (portion 2)	Arthur Kill (Class SD) and minor tribs	Floatables
Richmond	(MW1.2) SI..P1039,P1051,P1053	Grasmere, Arbutus and Wolfes Lakes	Phosphorus
Richmond	(MW1.2) SI (portion 4)	Kill Van Kull	Floatables
Richmond	(MW1.2) SI (portion 3)	Newark Bay	Floatables
Richmond	(MW1.2) RB (portion 1)	Raritan Bay (Class SA)	Pathogens

APPENDIX 3 – TABLE OF SWMP COMPONENTS

Permit Section	Description of SWMP Component
II	Special Conditions
II.B.1.c	Propose the procedures that will be used to ensure SWPPPs contain adequate control measures to meet the no net increase including but not limited to pollutant specific land use coefficients and pollutant removal efficiencies for the different SW management practices that will be required for developers as part of the pollutant load analysis.
II.B.2.a	Report for Priority MS4 Waterbodies on additional or customized non-structural BMPs to address the POCs causing the impairments identified in the CSO LTCPs
III	Legal Authority and Stormwater Program Administration
III.A.2	Minimum contents of the SWMP plan document: a. A list of citations to ordinances that provide the legal authority necessary to implement and enforce the requirements of this permit; b. Statement by legal counsel certifying to adequacy of legal authority; c. Written procedures for implementation of provisions in Part IV.
III.B.3	The SWMP plan must include the following documentation: a. Signed certification of full authority b. Identification of all agencies within the Permittee’s jurisdiction that conduct SW-related activities and their roles and responsibilities under permit, with up-to-date organizational chart. c. Identification of the local administrative procedures and laws available to mandate compliance with stormwater requirements in permit.
III.C.1	Develop an enforcement response plan (ERP)
III.D.2	Fiscal Analysis of the capital and operation and maintenance expenditures necessary to meet the requirements of permit during the permit term
IV	Stormwater Management Program (SWMP) Requirements
IV. Introduction (General Requirements)	1. Include measurable goals for each of the best management practices (BMPs) to reduce or prevent the discharge of POCs to the MEP 2. For each of the elements of the SWMP plan, identify the agencies and/or offices responsible for implementing the element and a communication and coordination procedure among all responsible parties. 3. Description of how minimum control measures are prioritized and implemented.
IV.A	Public Education and Outreach
IV.A.1	Identify POCs, waterbodies of concern and related sewersheds, and target audiences
IV.A.2-5	Develop an ongoing public outreach and education program with the elements listed in Part IV.A.2-5
IV.B	Public Involvement/Participation
IV.B.2, 3 and 5	Develop a public involvement program with the elements listed in Part IV.B.2, 3 & 5
IV.B.4	Prepare and publicly present the annual report

IV.C	Mapping
IV.C.2	Submit a preliminary map of MS4 drainage areas and MS4 outfalls information completed to date
IV.D	Illicit Discharge Detection and Elimination (IDDE)
IV.D.1, 4 and 6-11	Develop a program to prevent illicit discharges and illicit connections to the MS4
IV.D.5	Prepare a report of the locations and ownership of illicit discharges to the MS4 where the MS4 discharges to waterbodies are shown to have over 200 colonies/100 ml of fecal coliform, and a separate report on unauthorized non-SW discharges to NYC's MS4 or CSO outfalls downstream of the regulator
IV.E	Construction Site Stormwater Runoff Control
IV.E.1	Develop a program that provides protection equivalent to the NYS SPDES GP for Stormwater Discharges from Construction Activity (GP-0-15-002)
IV.F	Post-Construction Stormwater Management
IV.F.1	Develop a program that provides protection equivalent to the NYS SPDES GP for Stormwater Discharges from Construction Activity (GP-0-15-002)
IV.F.1.d	Describe procedures for SWPPP reviews by the Permittee that incorporate controls for expected water quality improvements and review of individual pre-construction SWPPPs to ensure consistency with local post-construction stormwater requirements
IV.F.1.f	Describe procedures to assess the impacts of flood management projects on the water quality of the receiving waters and evaluate existing structural flood control devices for feasibility of providing pollutant removal
IV.F.1.h	If Permittee determines to include a banking and credit system, include provisions for development of a banking and credit system that would allow for offsite alternative stormwater management in lieu of or in addition to on-site stormwater management in development projects
IV.F.4	Study and recommendations regarding the appropriate lot size threshold for triggering the applicability of construction and post-construction stormwater management requirements at new development and redevelopment sites, a plan for developing adequate legal authority to implement any recommended revisions to the lot size threshold, and identification of any feasible steps that could be implemented during the remainder of the permit term
IV.G	Pollution Prevention/Good Housekeeping For Municipal Operations and Facilities
IV.G.1 and 3	Develop a program for pollution prevention / good housekeeping for municipal operations and facilities in New York City
IV.H	Industrial and Commercial Stormwater Sources
IV.H.1	Prepare and maintain an inventory of all industrial and commercial sites/sources within its jurisdiction (regardless of ownership) that could discharge POCs in stormwater to the MS4

IV.H.2	Develop a plan to inspect and assess inventoried industrial and commercial facilities to determine if they generate significant contributions of POCs to impaired waters and are not covered under SPDES MSGP or individual SPDES Permit
IV.H.3	Develop a program to inspect the facilities covered under the SPDES MSGP (GP-0-12-001)
IV.I	Control of Floatable and Settleable Trash and Debris
IV.I	Develop a floatable and settleable trash and debris management program; propose a methodology for selecting, sizing and siting the best management practices and controls that will be implemented to reduce floatables and settleable trash and debris; and submit a final proposed work plan that identifies a methodology to determine the loading rate of and assesses strategies to reduce floatable and settleable trash and debris from the MS4 to waterbodies listed as impaired for floatables
IV.J	Monitoring and Assessment of Controls
IV.J.1	Develop and certify development of a tracking system framework to track information required in the permit and required to be in the annual report
IV.J.2	Develop a monitoring and assessment program to assess compliance with permit and measure the effectiveness of the SWMP