



Draft Town of Babylon Stormwater Management Program Plan

Prepared by Richard Groh
Chief Environmental Analyst
Town of Babylon Department of Environmental Control

Victoria A. Russell Commissioner Town of Babylon Department
of Environmental Control

Steven Bellone Supervisor Town of Babylon

February 2009

Town of Babylon Department of Environmental Control
281 Phelps Lane
North Babylon NY 11719
(631) 422-7640
(631) 422-7686 Fax

TOWN OF BABYLON MS4/SPDES ID. NO. NYR20A043

This Stormwater Management Program Plan (SWMPP) has been prepared in accordance with the New York State Department of Environmental Conservation SPDES General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s) Permit No. GP-0-08-002 issued pursuant to Article 17 Titles 7, 8 and Article 70 of the Environmental Conservation Law Part IV.

The Town of Babylon is required by SPDES General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s) Permit No. GP-0-08-002 issued pursuant to Article 17 Titles 7, 8 and Article 70 of the Environmental Conservation Law Part IV to develop, implement, and enforce a Stormwater Management Plan (SWMP) designed to reduce the discharge of pollutants from small MS4s to the maximum extent practicable (“MEP”) in order to protect water quality and to satisfy the appropriate water quality requirements of the ECL and the CWA. The Town of Babylon must, by March 9, 2009 (or at the time of a New York State Department of Environmental Conservation audit of the SWMP), prepare a Stormwater Management Program Plan (SWMPP) documenting their SWMP. This SWMPP is readily available to Town of Babylon staff, the general public, New York State Department of Environmental Conservation and Environmental Protection Agency. The document may be viewed on the Town of Babylon web site at TownofBabylon.com or requested in hard copy from the Department of Environmental Control. The Town of Babylon recognizes that failure to strictly comply with GP-0-08-002 (or the Town’s contractors, subcontractors, agents and/or assigns adhere to any of the permit requirements contained) shall constitute a permit violation and that 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. The Town of Babylon is making every reasonable effort to comply with these State regulations to the best of its ability.

Introduction

Through this Plan the Town of Babylon hopes to reach the important goal of protecting and improving the water quality of its highly valued surface waters and the associated recreational, environmental and economic benefits these resources provide. The Town seeks to maximize its efforts to the greatest extent possible to realize this goal. These efforts require extensive participation and dedication within many levels of Town government. In some cases the Town may also require assistance from other outside agencies. In meeting these goals, the Department has had unprecedented cooperation and assistance from the various Town officials, Departments and their staff. The Town recognizes it must periodically self evaluate the effectiveness of this Plan and when necessary update and modify elements to meet its goals.

"Believe in the best... have a goal for the best, never be satisfied with less than your best, try your best, and in the long run things will turn out for the best."

Henry Ford (1863-1947) American industrialist

Stormwater in Babylon

Non-Point Source Pollution (NPS) pollution occurs after precipitation events or snowmelt when stormwater runoff flowing off the land surface picks up animal waste, oil, grease, fertilizers, pesticides, herbicides, floatable debris, chemicals, road salt, sediment and a number of other pollutants from various sources, enters the storm drain system and discharges directly to a lake, stream, wetland or the Great South Bay. The source of these pollutants may include bacteria from animal wastes (examples; dogs, cats and waterfowl), oils and grease from motor vehicles, and heavy metals and organic chemicals from industrial operations. In other cases this polluted runoff may flow directly off the land surface into surface waters, which is called sheet runoff. A good example of how this type of pollution is generated is from the droppings created by the feeding of waterfowl in parks that is carried directly into surface waters such as a pond by stormwater runoff. In other cases the application of fertilizers, pesticides and herbicides associated with turf or landscape management adjacent to surface waters may carry these pollutants directly into waterways. This type of pollution occurs at numerous parks and institutional uses adjacent to surface waters within the Town of Babylon. These pollutants may also enter the storm drain system as mentioned above.

The volume and concentration of these pollutants in stormwater is dependent on the season, rainfall amounts, frequency and duration, surface water drainage area, topography, manmade environment (especially the amount of impervious surfaces/natural vegetation lost) and soils. For example, areas with steep slopes and poor quality soils may potentially generate more stormwater runoff and sediment than flat areas with well drained soils. Developed areas with a high groundwater table can also be a problem because it is difficult to efficiently recharge stormwater to the ground under these conditions. As impervious surfaces are increased with development in these areas, stormwater impacts subsequently increase.

NPS pollution is not what most people identify as Babylon's major source of water quality degradation. However, it has been well established that NPS pollution is the primary source of pollutants affecting the Town's surface waters. Stormwater runoff that may carry hydrocarbons, oil and grease, fertilizers/nutrients, animal waste, sediment, highway deicing salts, thermal pollution or a number of other contaminants from roadways or the land

surface adversely impact the Town's surface water resources. This may cause bathing beach and shellfish ground closures, degradation of finfish habitat, freshwater and tidal waters habitat, the occurrence of nuisance algal blooms and increased turbidity of the water column and sedimentation of stream beds. These adverse environmental impacts on surface waters and habitats may also result in negative economic effects in connection with the use of the Towns coastal resources and stream corridors. These potential impacts are of great concern to the Town of Babylon.

In addition to these "traditional" stormwater pollutants, thermal pollution may also impact aquatic resources. A common cause of thermal pollution is the heating of stormwater runoff flowing off of large expanses of hot pavement during summer months after a rainfall event. During precipitation events, the heat from the hot pavement is transferred to the stormwater runoff. This heated stormwater is then discharged to surface waters possibly resulting in substantial increases in the temperature to the water body. Presumably, shallow waterways with lower surface water volumes would be more impacted than large water bodies, example; stream versus a large lake. In addition, the clearing of trees and vegetation along stream banks also eliminates the shade necessary to protect the stream from direct sunlight and heating. There is not a great deal of information published on thermal pollution from stormwater runoff. It is believed that significant increases in water temperature of the surface waters may adversely impact aquatic species including finfish species inhabiting streams, especially trout.

Although the State regulations require Babylon to focus on pollutants only affecting surface waters through the municipal stormwater system (MS4), the Town has also included other potential pollutant pathways to surface waters to the extent necessary for this Plan. This includes direct sheet runoff and the introduction of nutrients and pathogens to groundwater resources that impacts surface waters in the Carll's River watershed.

The Town of Babylon has established its long term commitment to protecting and restoring the environmental resources and water quality of the Great South Bay, the Carll's River and all of the tributary streams, surface waters, wetlands and groundwater resources of the Town through a variety of programs. Babylon's watersheds and the portion of Great South Bay within its jurisdiction are part of the vast south shore coastal system identified as the South Shore Estuary Reserve (SSER). The SSER system stretches the entire length of the south shore of Long Island and includes

most all of the land area of the Town of Babylon. The South Shore Estuary Reserve Council was established by the New York State Legislature to protect and prudently manage the Reserve. The Town of Babylon is a dedicated and active member of the SSER council. The SSER Council has completed a Comprehensive Management Plan (CMP) which identifies major issues facing the Reserve and provides recommendations to preserve protect and enhance the system for future generations. Water quality improvement is high on the list of priorities in the SSER CMP for the Reserve. This Plan is consistent with the recommendations of the SSER CMP to protect and improve water quality and wetland habitat and the natural resources of the Reserve.

Stormwater management is especially difficult in the Town of Babylon because of its intensely developed land use found in nearly the entire mainland portion of the Town. This includes all land use categories; residential, commercial, industrial and institutional. There are great challenges here in Babylon because in the past the most convenient and effective means to manage stormwater from the land surface and storm drain system was to discharge this effluent to the nearest waterway. So it will be difficult to eliminate these inputs structurally (by volume) to address these stormwater inputs in the near future in a cost effective manner. In the immediate future, best management practices in the form of public outreach to reduce the concentrations of pollutants in the stormwater discharged to surface waters will be one of number important strategies the Town is undertaking. While this will not reduce the volume of stormwater affecting surface waters, it will reduce the concentration of pollutants typically associated with stormwater.

DEFINITIONS

The following acronyms and definitions are utilized in this document:

ACRONYMS AND DEFINITIONS

A. Acronym List

BMP - Best Management Practice

CFR - Code of Federal Regulations

CWA - Clean Water Act

ECL - Environmental Conservation Law

MCC - Municipal Compliance Certification
MCM - Minimum Control Measure
MEP - Maximum Extent Practicable
MS4 - Municipal Separate Storm Sewer System
NPDES - National Pollutant Discharge Elimination System
POC - Pollutant of Concern
SPDES - State Pollutant Discharge Elimination System
SWMP - Stormwater Management Program
SWMPP - Stormwater Management Program Plan
SWPPP - Stormwater Pollution Prevention Plan
TMDL - Total Maximum Daily Load
TOBSWMP-Town of Babylon Stormwater Management Program Plan
UA - Urbanized Area

B. Definitions

Activities - See best management practice

Additionally Designated Areas - EPA required the Department to develop a set of criteria for designating additional MS4 areas as subject to these regulations. The following criteria have been adopted to designate additional MS4s in New York State:

Criteria 1: MS4s discharging to waters for which and EPA-approved TMDL required reduction of a pollutant associated with stormwater beyond what can be achieved with existing programs (and the area is not already covered under automatic designation as UA).

Criteria 2: MS4s contiguous to automatically designated urbanized areas (town lines) that discharge to sensitive waters classified as AA Special (fresh surface waters), AA (fresh surface waters) with filtration avoidance determination or SA (saline surface waters).

Best Management Practice - 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. BMP is referred to in EPA's fact sheets and other materials. BMPs are also referred to as "activities" or "management practices" throughout this general SPDES 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.

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 - means the New York State Department of Environmental Conservation as well as meaning the Department's designated agent.

Development - period after initial authorization under this general SPDES permit when the permittee creates, designs or develops activities, BMPs, tasks or other measures to include in their SWMP Discharge(s) - any addition of any pollutant to waters of the State through an outlet or point source.

Discharge Authorized by a SPDES Permit - means discharges of wastewater or stormwater from sources listed in the permit, that do not violate ECL Section 17-0501, that are through outfalls listed in the permit, and that are:

1. discharges within permit limitations of pollutants limited in the SPDES permit;
2. discharges within permit limitations of pollutants limited by an indicator limit in the SPDES permit;
3. discharges of pollutants subject to action level requirements in the SPDES permit;
4. discharges of pollutants not explicitly listed in the SPDES permit, but reported in the SPDES permit application record as detected in the discharge or as something the permittee knows or has reason to believe to be present in the discharge, provided the special conditions section of the applicable SPDES permit does not otherwise forbid such a discharge and provided that such discharge does not exceed, by an amount in excess of normal effluent variability, the level of discharge that may reasonably be expected for that pollutant from information provided in the SPDES permit application

record;

5. discharges of pollutants not required to be reported on the appropriate and current New York State SPDES permit application; provided the special conditions section of the permit does not otherwise forbid such a discharge. The Department may, in accordance with law and regulation, modify the permit to include limits for any pollutant even if that pollutant is not required to be reported on the SPDES permit application; or

6. discharges from fire fighting activities; fire hydrant flushings; testing of fire fighting equipment, provided that such equipment is for water only fire suppression; potable water sources including waterline flushings; irrigation drainage; lawn watering; uncontaminated infiltration and inflow; leakage from raw water conveyance systems; routine external building washdown and vehicle washing which does not use detergents or other compounds; pavement washwaters where spills or leaks of toxic or hazardous materials, other than minor and routine releases from motor vehicles, have not occurred (unless such material has been removed) and where detergents are not used; air conditioning and steam condensate; springs; uncontaminated groundwater; and foundation or footing drains where flows are not contaminated with process materials such as solvents provided that the permittee has implemented an effective plan for minimizing the discharge of pollutants from all of the sources listed in this subparagraph.

Environmental Conservation Law - means chapter 43-B of the Consolidated Laws of the State of New York, entitled the Environmental Conservation Law.

General SPDES Permit - means a SPDES permit issued pursuant to 6 NYCRR Part 750-1.21

authorizing a category of discharges.

Green Infrastructure - Green infrastructure approaches essentially infiltrate, evapotranspire or reuse stormwater, with significant utilization 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**.

Groundwater - means waters in the saturated zone. The saturated zone is a subsurface zone in which all the interstices are filled with water under pressure greater than that of the atmosphere. Although the zone may contain gas-filled interstices or interstices filled with fluids other than water, it is still considered saturated.

Illicit Discharges - Any discharge to a municipal separate storm sewer and or the Town of Babylon stormwater drainage system that is not entirely composed of stormwater. Illicit discharges shall include but not be limited to those sources as identified by § 122.26(b) (2) of the Code of Federal Regulations; sanitary wastewater, effluent from septic tanks, commercial car wash wastewater, petroleum products, antifreeze and radiator flush liquid, laundry wastewater, spills from roadway accidents, and household and motor vehicle chemicals, but does not include liquids discharged from fire-fighting activities. An illicit discharge could be any other non-permitted discharge which the Town of Babylon or Department has determined to be a substantial contributor of pollutants to the small MS4.

Implementation - period after development of SWMP, where the permittee puts into effect the practices, tasks and other activities in their SWMP.

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.

Individual SPDES Permit - means a SPDES permit issued to a single facility in one location in accordance with this Part (as distinguished from a general SPDES permit).

Industrial Activity - as defined by the SPDES Multi-Sector General Permit (GP-0-06-002).

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 Application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating that construction activities may occur on a specific plot.

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 - 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 - 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 MS4 operators as they develop their programs.

(40CFR 122.2 See also: Stormwater Phase II Compliance Assistance Guide EPA 833-R-00-002, March 2000). 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 chooses only a few of the least expensive methods, it is likely that MEP has not been met. On the other hand, if a permittee employs all applicable BMPs except those where it can be shown 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 required permittees 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 should reflect the needs and characteristics of the permittee and the areas served by its small MS4. Furthermore, the goals should be chosen using an integrated approach that fully addresses the requirements and intent of the MCM. The assumption is

that the program schedules would be created over a 5 year period and goals would be integrated into that time frame. For example, a larger MS4 could do an outfall reconnaissance inventory for 20% of the collection system every year so that every outfall is inspected once within the permit cycle

Municipal / Municipalities - referred to in the federal rule that describes the Phase II stormwater program includes not only the State's municipal governments (cities, towns, villages and counties), but any publicly funded entity that owns or operates a separate storm sewer system. Examples of other public entities that are included in this program include the State Department of Transportation, State University Campuses, federal and State prisons, State and federal hospitals, Thruway and Dormitory Authorities, public housing authorities, school and other special districts.

Municipal Separate Storm Sewer System - a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

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.

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

Non-traditional MS4s - state and federal prisons, office complexes, hospitals; state: transportation agencies; university campuses, public housing authorities, schools, other special districts.

Open Meetings Law - per Public Officers Law, Article 7, Open Meetings Law, Section 104,

Public notice:

1. Public notice of the time and place of a meeting scheduled at least one week prior thereto shall be given to the news media and shall be conspicuously posted in one or more designated public locations at least seventy two hours before such meeting.

2. Public notice of the time and place of every other meeting shall be given, to the extent practicable, to the news media and shall be conspicuously posted in one or more designated public locations at a reasonable time prior thereto.

3. The public notice provided for by this section shall not be construed to require publication as a legal notice.

4. If videoconferencing is used to conduct a meeting, the public notice for the meeting shall inform the public that videoconferencing will be used, identify the locations for the meeting, and state that the public has the right to attend the meeting at any of the locations.

Operator - the person, persons or legal entity that is responsible for the small MS4, as indicated by signing the NOI to gain coverage for the MS4 under this general SPDES permit. **Outfall** - is defined as any point where a municipally owned and 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.

Permittee - means the holder of this general SPDES permit or an entity required to gain coverage under this general SPDES permit. The owner / operator of the small MS4.

Pollutants of Concern - there are POCs that are primary (comprise the majority) sources of stormwater pollutants and others that are secondary (less likely).- The POCs that are primarily of concern are: nitrogen, phosphorus, silt and sediment, pathogens, and floatables impacting waterbodies on the 303(d) list known to come in contact with stormwater that could be discharged to that water body. The sources of these pollutants are typically: urban runoff; urban / stormwater runoff; erosion; municipal; onsite waste treatment system (WTS); or other various, multiple sources.- The POCs that are secondarily of concern include but are not limited to petroleum hydrocarbons, heavy metals, and polycyclic aromatic hydrocarbons (PAHs), where stormwater or runoff is listed as the source of this impairment. - The primary and secondary POCs can also impair waters not on the 303(d) list. Thus, it is important for the permittee to assess known and potential POCs within the area served by their small MS4. This will allow the permittee to address POCs appropriate to their MS4.

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 New

York State Department of Environmental Conservation 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 NYS 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.

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. Stabilize dirt roads (gravel, stone, water bar, check dam, diversion). 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 abandon buildings to stormwater treatment systems. Retrofit of abandon building 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 to streams. Upgrade of an existing conveyance system to provide water quality and /or quantity control within the drainage structure. Reforestation.

Small MS4 - MS4 system within an urbanized area or other areas designated by the State.

Staff - actual employees of the permittee or contracted entity.

State - means the State of New York.

State Pollutant Discharge Elimination System - means the system established pursuant to Article 17 of the ECL and 6 NYCRR Part 750 for issuance of permits authorizing discharges to the waters of the state.

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

SWPPP - as defined per the NYS DEC SPDES General Permit for Stormwater Discharges from Construction Activity or NYS DEC SPDES Multi-Sector General Permit for Stormwater Associated with Industrial Activity .

Stormwater - means that portion of precipitation that, once having fallen to the ground, is in excess of the evaporative or infiltrative capacity of soils, or the retentive capacity of surface features, which flows or will flow off the land by surface runoff to waters of the state.

Stormwater Management Program - the program implemented by the permittee. 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 small MS4 to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of the ECL and Clean Water Act. The SWMP must address the MCM described in Part VIII.

The SWMP needs to include measurable goals for each of the BMPs. The measurable goals will help the permittees assess the status and progress of their program. The SWMP should:

1. describe the BMP / measureable goal;
2. identify time lines / schedules and milestones for development and implementation;
3. include quantifiable goals to assess progress over time; and
4. describe how the permittee will address POCs.

Guidance on developing SWMPs is available from the Department on its website. Examples of successful SWMPs and suggested measurable goals are also provided in EPA's Menu of BMPs available from its website. Note that this information is for guidance purposes only.

An MS4 may choose to develop or implement equivalent methods equivalent to those made available by the Department and EPA to demonstrate compliance with the MCMs.

When creating the SWMP, 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.

Permittees can create their SWMP individually, with a group of other individual permittees or a coalition of permittees, or through the work of a third party entity.

Stormwater Management Program Plan- The Town of Babylon Stormwater Management Program Plan (SWMPP)-

Used by the Town of Babylon to document developed, planned and implemented SWMP elements. The SWMPP plan must describe how

pollutants in stormwater runoff will be controlled. For previously unauthorized small MS4s seeking coverage, information included in the NOI should be obtained from the SWMP plan. The

SWMPP plan is a separate document from the NOI and should not be submitted with the NOI or any annual reports unless requested.

The SWMPP plan should include a detailed written explanation of all management practices, activities and other techniques the permittee has developed, planned and implemented for their SWMP to address POCs and reduce pollutant discharges from their small MS4 to the MEP. The SWMP plan shall be revised to incorporate any new or modified BMPs or measurable goals. Permittees can create their SWMPP plan individually, with a group of other individual permittees or a coalition of permittees, or through the work of a third party entity. Documents to include are: applicable local laws, inter-municipal agreements and other legal authorities; staffing and staff development programs and organization charts; program budget;

policy, procedures, and materials for each minimum measure; outfall and small MS4 system maps; stormwater management practice selection and measurable goals; operation and maintenance schedules; documentation of public outreach efforts and public comments; submitted construction site SWPPPs and review letters and construction site inspection reports.

The SWMPP plan shall be made readily available to the permittee's staff and to the public and regulators, such as Department and EPA staff. Portions of the SWMPP plan, primarily policies and procedures, must be available to the management and staff of a permittee that will be called upon to use them. For example, the technical standards and associated technical assistance documents and manuals for stormwater controls should be available to code enforcement officers, review engineers and planning boards. The local laws should be readily available to the town board and planning board. An integrated pest management program would have to be available to the parks department and the stormwater outfall and available sewer system mapping and catch basin cleaning schedule would have to be available to the department of public works.

Section 303(d) Listed Waters - Section 303(d) is part of the federal CWA that requires the Department to periodically to 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.

Total Maximum Daily Load - 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.

Traditional Land Use Control MS4s - means a city, town or village with land use control authority.

Traditional Non-land Use Control MS4s - means any county agency without land use control.

Urbanized Area - is a land area comprising one or more places (central place(s)) and the adjacent densely settled surrounding area (urban fringe) that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile, as defined by the US Bureau of Census. The Town of Babylon meets the definition of an urbanized area based on the US Census 2000 data having a population density of 4050 persons per square mile. Outlines the extent of automatically regulated areas, often do not extend to the political boundaries of a city, town, or village. SWMPs are only required within the UA. However, the Department encourages permittees to voluntarily extend their SWMP programs at least to the extent of the storm sewer shed that flows into the UA or extend further to their entire jurisdiction. For ease of creation and administration of local laws, ordinances or other regulatory mechanisms, these should be

created to apply to the full jurisdictional boundary of municipalities.

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

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.

INTRODUCTION

FRAMEWORK OF THE PROGRAM PLAN: THE SIX MINIMUM CONTROL MEASURES – UNDER TRADITIONAL LAND USE CONTROL IN THE TOWN OF BABYLON

This Town of Babylon Stormwater Management Program Plan (TOBSWMPP) is based on the six minimum control measures identified by the New York State Department of Environmental Conservation regulations to control stormwater and erosion and sediment control impacts to the greatest extent practicable and to also prevent illicit discharges to the MS4 system in the jurisdiction of the Town of Babylon. These MCMs apply to traditional land use control in the Town of Babylon based on the New York State Department of Environmental Conservation definition. The TOBSWMPP is comprised of the 6 MCMs below (at minimum) and any additional strategies the Town determines that is critical to an effective stormwater program. It should be noted that the Town of Babylon has adopted many additional strategies to control stormwater runoff and non-point source pollution that are not necessarily required by the State regulations. This Plan identifies how pollutants associated with stormwater runoff will be controlled, reduced and mitigated to the greatest extent practicable in the Town of Babylon. The six MCMs are as follows:

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

The Town has referred to the guidance documents available from New York State Department of Environmental Conservation and the United States Environmental Protection Agency as well as other technical sources to

prepare this TOBSWMPP. The Town of Babylon was required by GP-02-02 to develop a SWMPP in accordance with the MCM requirements by January 8, 2008. For each of the MCM components that comprise the plan, the Town of Babylon is required to identify the Departments and Divisions that are responsible for implementing the plan elements and any protocols for coordination among such Departments and Divisions necessary for the implementation of the plan elements.

1. Public Education and Outreach - SWMP Development / Implementation

The Town of Babylon is of the opinion that public education and outreach is a critical component of a comprehensive and cost effective stormwater management program for local government. The outreach program identifies best management practices and also identifies pertinent regulations to control stormwater impacts in the Town's jurisdiction and presents those practices in a form geared towards the public. The underlying goals of the Town's stormwater educational programs, is to strive to make a strong connection between stormwater and its associated pollutants and subsequent impacts on surface waters. The Town is faced with significant stormwater issues resulting from intense residential, commercial, industrial and institutional development that occurred Town wide prior to adequate environmental protection regulations. This resulted in substantial areas of impervious surfaces in many portions of the Town that do not have very good ability from a hydrologic perspective to recharge stormwater, capture pollutants and prevent their direct introduction to surface waters. Additional options to minimize the impacts of pollution from large volumes of stormwater runoff that impact surface waters other than stormwater drainage system retrofits and structural solutions are necessary because of this.

The Town of Babylon estimates that it has 55,000 storm drain inlets and 538 miles of hard surface roads in its jurisdiction. This does not include State and County or private roads. A significant portion of the drainage infrastructure in connection with these roadways leads to surface waters. The storm drain inlets create numerous pathways for pollutants to

potentially enter the storm drain system and impact surface waters. Notwithstanding, the Town of Babylon Department of Public Works highway improvement programs are integrating stormwater management upgrades in most all of its road projects. But the difficulty and cost to fully mitigate the impacts of this significant volume of stormwater runoff in the Town of Babylon through structural solutions is daunting. In addition, public education is sometimes the only immediate means to address certain stormwater impacts such as pet waste and waterfowl management, illicit discharges and nutrient management. While in most cases public outreach does not reduce the volume of stormwater runoff, it reduces the concentration of pollutants from this type of non-point source pollution. So if the Town cannot reduce the volume of stormwater in the immediate future, the concentrations of pollutants in the stormwater may be reduced.

Public education and outreach for stormwater education in the Town of Babylon includes a wide variety of programs from the installation of storm drain placards and stenciling at storm drain inlet locations to publications and flyers, posters, web posting, talks, classroom training, events and signs.

Implementation Department(s) and or Division(s) and or Official(s):

Town Board of the Town of Babylon, Town Attorney and Town Attorney's Office, Department of Environmental Control, Supervisor's Office (most importantly Communications), Planning and Development Department, Department of Public Works, Department of Public Works Highway Engineering, Department of Public Works Sign Shop, Information Technology Department and Town Clerks Office. Coordination is necessary between all of these Departments in order to carry out the stormwater education program.

Stormwater Issues to Be Addressed through Public Education

The Pollutants of Concern (POC) identified for this TOBSWMPP are pathogens, nitrogen, phosphorus, silt and sediment, and floatables. Secondary pollutants of concern are petroleum hydrocarbons. The Town believes for example, that public education has reduced the volume of

petroleum hydrocarbons introduced to the storm drain system in recent years, but this needs to be quantified.

The Town of Babylon has 10,065 acres of shellfish grounds in its segment of the Great South Bay/South Shore Estuary Reserve (SSER) of which approximately 2035 acres are closed to shellfishing due to bacterial loading from stormwater runoff. In addition, bay beaches including Venetian Shores Park at Lindenhurst and Tanner Park at Copiague are closed periodically for swimming due to bacterial loading from stormwater runoff and increasing resident waterfowl populations. These water quality problems are of great concern to the Town of Babylon from both an environmental and economic perspective. Through its stormwater program, the Town seeks to prevent any additional shellfishing growing waters closures due to bacterial loading (at minimum), reduce beach closures and to the extent possible improve water quality overall. The Town wants to keep the Great South Bay Town Park beaches open for swimming to the greatest extent possible. The Town wants to insure that its Bay beaches remain open for swimming during the entire bathing season if at all possible. The Town has made significant investment and improvements to its Parks for Town residents to enjoy the coastal resources of the Great South Bay/South Shore Estuary Reserve (GSB/SSER). In summary the Town wants to maintain the water quality of the GSB/SSER system as a whole for the environmental and economic benefits to the region.

Brown Tide algal blooms also appear periodically in the Bay negatively impacting shellfish populations due to unknown causes. However it is perceived that complex interactions between nutrients introduced through stormwater runoff and other sources and environmental conditions may play a role in Brown Tide outbreaks. Brown tide is an important issue but not a topic for full discussion in this Stormwater Management Program Plan.

The Town of Babylon surface waters include Great South Bay, lakes and ponds, numerous stream corridors and one river system, the Carll's River. These surface waters meet the definition of Waters of the State of New York in the NYSDEC stormwater regulations. The entire Town of Babylon is located within the SSER management boundary. Since most all of the Town of Babylon stormwater infrastructure leads to surface waters and the entire Town lies within the SSER, stormwater management for the purpose of protecting surface water quality is important at all locations within the Town of Babylon. There are very limited segments of the Town of Babylon land

area and associated MS4 system that do not eventually discharge to surface waters. Water quality protection is also important outside of the Town's land use MS4 jurisdiction in the three coastal villages of Amityville, Lindenhurst and Babylon. With the exception of the Carll's River system, these watersheds all lie entirely within Zone VII of the hydrogeologic zones as identified by Suffolk County, which discharge shallow groundwater to the Great South Bay. The Carll's River system headwaters extend into Zone I into the Half Hollow Hills area. The contributing stormwater drainage area extends into Wheatley Heights on the west and Deer Park to the east. Watershed areas or drainage basins can be defined by examination of the topographic ridges as indicated on United States Geological Survey Maps.

Babylon's seven major stream corridors and one major river corridor are listed below:

Amityville Creek
Wood's (Ketcham) Creek
Great Neck Creek
Strongs Creek
Neguntatogue Creek
Santapogue Creek
Carll's River
Sumpwams Creek

They are located from the western most portion of the Town to the eastern most portion of the Town, respectively. Within these systems groundwater flows laterally toward each watercourse above the regional groundwater system previously discussed. Each stream corridor is separated by the interstream water table divide. The water table surface elevation may be used to determine the location of the interstream divides. The interstream divides tend to orient north, perpendicular to the water table surface elevation contours. Freshwater wetlands are associated with these watercourses. Closer to Great South Bay, tidal wetlands may be found. Intermingled in these stream corridors is extensive manmade infrastructure, roads commercial residential and institutional development and stormwater drainage systems that in most cases discharge to surface waters. The stream corridors and Carll's River are all extensively impacted by these stormwater discharges.

With the exception of the Carll's River and Sumpwams Creek, all the stream corridors begin below the Southern State Parkway and lie completely within the Southwest Sewer District No. 3. This is of interest in terms of potential land use impacts from sanitary and wastewater discharges to groundwater, which lie within the watershed boundaries of the stream and river corridors and subsequent impacts on surface waters. Extensive high density development occurred by the 1960's in the Town of Babylon. This intensive development, particularly along the coastal zone adjacent to manmade canals, had led to the establishment of a municipal sewer district in Babylon, for the most part south of Southern State Parkway. This was to reduce pollutant loadings to groundwater from failing septic systems and subsequently to the watercourses and the Great South Bay. More recently the Town of Babylon is implementing a sewer district extension for the Wyandanch Central Business District located within the Hamlet of Wyandanch. The Town of Babylon has completed a sewer feasibility study and is currently conducting the final design work for the extension of sewer service to a portion of the commercial and industrial lands in the Hamlet of Wyandanch, Town of Babylon, and County of Suffolk, NY. Currently, with the exception of the Route 110 Business Corridor and a small section of the Town north of Southern State Parkway along NYS Route 231, only the mainland portion of the Town of Babylon south of the NYS Southern State Parkway is sewered. The sewer district that currently serves a major portion of the Town of Babylon is called the Southwest Sewer District 3 and is under the jurisdiction of the County of Suffolk. The proposed Wyandanch Sewer Extension would connect to and become part of the Southwest Sewer District. The connection would run along Straight Path from just south of the Southern State Parkway (current sewer district limit) north to the Wyandanch Central Business District (CBD). Based on the feasibility study, the Town of Babylon proposes to construct gravity sewers within the CBD which will connect to a pump station and then a force main. The force main would end in the vicinity of Booker Avenue along Straight Path and then the wastewater would be conveyed by a gravity line to the an existing manhole within the Southwest Sewer District just south of Southern State Parkway. This gravity line would be jacked under the Southern State parkway or pass under the Southern State Parkway Bridge at Straight Path and would connect to the manhole at 12th Street, West Babylon. A force main from the Town of Babylon Solid Waste Management Facilities would also connect at Edison Avenue to the gravity line that is proposed along Straight Path that is to serve the CBD.

The objective of the proposed extension is to improve the economic and environmental conditions of the Wyandanch area by reducing non-point source pollution by providing sewers and wastewater treatment at a sewage treatment plant as the means of sanitary wastewater disposal. Currently, on-site sanitary wastewater disposal systems are utilized in the central business district which has become problematic because of the high water table that generally characterizes the area. On-site sanitary system construction costs are significant in high groundwater areas. A lower cost means of sanitary wastewater disposal would be an economic benefit to the area. This area has a high groundwater table which has caused releases of sanitary wastewater to the land surface which may enter the storm drain system. In addition, groundwater flow has been observed through segments of the storm drain system in Wyandanch which creates a concern that malfunctioning on-site sanitary systems may be impacting the storm drain system with pollutants in this area. This is evident in the Commonwealth Drive and Brook Street discharge points into Carll's River at Wyandanch. The discharge point from Commonwealth Drive has large quantities of floatables accumulated in the ditch and immediate area. In many cases, the storm drain system in the high groundwater areas of Wyandanch leads directly to surface waters.

The sewer project will have beneficial environmental impacts by reducing non-point source pollution to groundwater resources from sanitary wastewater disposal from on-site systems. In some locations, groundwater contamination has also occurred because of discharges of organic chemicals and heavy metals to on-site sanitary systems. The sewer extension would eliminate potential groundwater contamination from on-site systems in the commercial and industrial areas within the new service area. In some instances older established wet uses such as laundromats and food service businesses have triggered overflowing cesspools. Wastewater flowing over the ground surface in these situations has created public nuisances and serious potential health hazards. These overland releases have the potential to enter the Town of Babylon storm drain system. The Town also believes that there may be infiltration of wastewater into some of the MS4 system in the high groundwater areas of Wyandanch. The area to be sewerred is within a sole source aquifer where drinking water is derived only from groundwater resources. The location of the proposed sewer district expansion lies within Zone VII and I of the hydrogeologic area as identified by the Nassau Suffolk Regional Planning Board 208 Study. Zone VII is characterized as a shallow groundwater recharge zone which ultimately discharges to the Great South Bay. Zone I is a deep recharge area which is important to the regional water

supply. The project's location is also within the boundaries of the South Shore Estuary Reserve (SSER) system. In fact, topographic land features indicate a groundwater and surface water flow regime from the CBD towards the Carll's River. The reduction of non-point source pollution to the system is consistent with the SSER Comprehensive Management Plan. Four reports inclusive of the Town of Babylon, the first dating from 1978 -- the 208 Areawide Waste Treatment Study, Long Island Segment of the Nationwide Urban Runoff Program, Nonpoint Source Handbook, and Suffolk County Water Quality Strategy - - concluded that nonpoint source pollution was a priority concern (SSER CMP). Each of these reports sets forth recommendations to control nonpoint source pollution. These recommendations, however, were never fully implemented. This initiative would be consistent with the recommendations of these plans as well as the SSER CMP. Approximately 1.2 square miles of commercial and industrial properties lie within the proposed new service area. This includes vacant and improved land. The Town of Babylon Solid Waste Management Facilities (TOBSWMFS) will connect to the gravity sewer for the proposed service area. Currently ashfill leachate is transported by truck from the TOBSWMFS to the Southwest Sewer District incurring significant costs to the Town of Babylon annually.

It is anticipated that the project would provide economic benefits to the residents of the Hamlet of Wyandanch by improving and revitalizing local businesses and industry and environmental conditions in the area. A significant reduction in nitrogen loading to the Carll's River and subsequently to the South Shore Estuary Reserve would be anticipated from implementation of this project.

The Nature Conservancy just recently issued a report on nitrogen loading to the Great South Bay entitled: Nitrogen loading to Great South Bay: Land use, sources, and transport from land to Bay. The report includes estimates nitrogen loading from various sources into the waters of the Great South Bay. For Carll's River, the total loading of nitrogen per year has been estimated at 93,410 kilograms (kg) per year. Of this total 17% or 16,036 kg of nitrogen per year is estimated to originate from atmospheric sources, 74% or 69,090 kg from wastewater sources, and 8285 kg or 9% from fertilizers. Carll's River ranks as the second highest contributor of nitrogen from a sub watershed to the Great South Bay, with the Connetquot River in Islip as the highest at 126,777 kg per year and the Carmans River at 81,281 kg per year. These rivers all have large contributing water shed areas. The total loading

including the three mentioned river systems and the remainder of sub watersheds to the Great South Bay totals 791,138 kg of nitrogen per year. The wastewater component is significant and management practices are necessary to address this impact on water quality. And with the high water table in the CBD water quality impacts are increased over areas with more suitable soil conditions. It is believed that the CBD area is a contributor of nitrogen to the SSER system. While this discussion deviates from traditional stormwater issues, it is believed to be important to this Plan because of the potential impact on surface water runoff from malfunctioning systems. These releases could also enter the Town of Babylon storm drain system through overland runoff or infiltration. The Town is also proposing an incentive program for existing on-site sanitary systems upgrades within the Carll's River watershed. Because of the difficulty in upgrading existing antiquated systems to meet the Suffolk County Department of Health Services standard of 2'-3' separation from the bottom of the pools to the water table for leaching pools it is believed that the addition of septic tanks to existing cesspools systems would be a technologically feasible, cost effective approach to reduce pollutants to the Carll's River system. This will create a 50% reduction in nitrogen releases to groundwater resources from each upgraded system. Between the sewerage and the upgrade program the Town is hoping for cumulative beneficial impacts on groundwater and surface water resources in the project area over time.

The POC identified in this TOBSWMPP that impacts Town of Babylon watercourses are pathogens, nitrogen, phosphorus, silt and sediment, and floatables. Secondary pollutants of concern are petroleum hydrocarbons. Stormwater impacts to Town of Babylon surface water bodies vary from moderate to acute. Areas of concern are the 8 watersheds of the Town of Babylon and the Great South Bay. Manmade canals in the coastal zone of the Town are also an area of concern in connection with stormwater management in the Town of Babylon because they lead to natural surface waters, the Great South Bay or creeks or the Carll's River. Two bay front Town Parks; Tanner Park at Copiague and Venetian Shores Park at Lindenhurst are priority areas of concern because of the public bathing beaches located there and the periodic closures due to bacterial loading by the Suffolk County Department of Health Services. The Town Hall Pond is also a focus of attention in connection with waterfowl management. The Town has established a waterfowl control program to address acute problems with resident Canadian geese at Tanner Park and Town Hall Pond. Recently Venetian Shores Park in Lindenhurst was added to the program. A

multifaceted program has been developed to approach the problem using education, a new Town Code that prohibits feeding waterfowl on Town lands, egg oiling and habitat modification. This program is now underway and the Town is realizing success. Already the Town has reduced numbers of Canadian Geese at Tanner Park, the Town Hall Pond and Phelps Lane Park through this program. But the Town still needs to continue to improve the program.

Watershed and shore wide watershed action plans are an important component of the Towns stormwater management program. The Town of Babylon has completed a focused watershed action plan for Ketcham's Creek at Copiague, Town of Babylon and also includes the Village of Amityville entitled the; Ketcham's Woods Creek Stormwater Management and Stormwater Management and Stream Corridor Restoration Plan. This was one of the first watershed plans prepared in Suffolk County. A more generic plan; The Great South Bay Stormwater Plan has also been completed. Essentially this plan addresses stormwater management in the coastal area of the mainland of the Town of Babylon and also the geographic area from Great South Bay north to Sunrise Highway, while the Ketcham's Plan is focused on that particular watershed. Currently a comprehensive focused stormwater plan is being prepared for the Carll's River watershed. The entire Town of Babylon is located within the boundary of the South Shore Estuary Reserve (SSER). With this in mind, considering the 8 tributaries that bisect and flow south in a major portion of the Town, the entire mainland of the Town of Babylon is a valid concern for stormwater management. The Town also recognizes that locations in close proximity to surface waters or certain topographic land features may increase the potential to impact surface waters. Land areas in the coastal zone surrounding manmade canals in most cases generate a significant amount of stormwater runoff since many of these areas are former filled wetlands that do not provide a sufficient depth to groundwater for standard drainage structures. The loss of the wetlands and replacement of these environmental features with impervious structures compounds the impact of stormwater runoff on coastal waters.

Outreach Program

The Town of Babylon has a significant stormwater public outreach program that addresses stormwater impacts on a local level. The South Shore Estuary Reserve Program and the Town stormwater program overlap in their

strategies and goals and therefore compliment one another. This is because the Town's stormwater efforts are consistent with the recommendations of the South Shore Estuary Reserve Comprehensive Management Plan. In fact any stormwater outreach material produced by the Town of Babylon includes; *"Town of Babylon Phase II Program"* and *"South Shore Estuary Reserve Member, Preserve the Reserve"*. Tributary signs that identify Babylon's watercourses have been designed and placed along all of Babylon's watercourses at New York State Route 27A. In addition, the design of the signs was endorsed by the SSER Council and placed by various member communities throughout the south shore of Long Island to raise public awareness of the importance of water bodies that connect to the SSER system.

The Town has been proactive in its stormwater public outreach program. The Town's outreach programs strive to make a strong connection or "nexus" between human activity and the POCs. They are also specific to target audiences. The Town has developed five major descriptive visually appealing stormwater flyers that address:

Stormwater in General

Town of Babylon Pooper Scooper Program

Floatables and Stormwater

Best Management Practices for Homeowners

Waterfowl Management Flyer

The five flyers are posted on the Town of Babylon Web Site at TownofBabylon.com. The Town of Babylon website is an important resource for stormwater education outreach. The Town has also developed an attractive sign to discourage littering at Phelps Lane Park at North Babylon where floatables is impacting the east branch of Carll's River and Elda Lake. This descriptive sign links the action of littering with its impacts to the waterway. This sign also includes young people as part of the target audience and was created accordingly. A Best Management Practices (BMP) pilot was developed at this Park to address floatables. The pilot included waste management, animal management and recycling. The Town has

implemented a recycling program for cans and bottles at all its Parks based on the pilot at Phelps Lane. The Town has observed the significant increase in litter from drinking water bottles especially at its Parks and recreational areas. These bottles either enter waterways directly or through the storm drain system. The recent expansion of the bottle bill by the New York State Legislature which creates .05 cent redemption for water bottles should help address this issue. New outreach products proposed are a Stormwater Home Page to be accessed on the Town of Babylon web site. This will be a one stop location for information on the Town's Stormwater Program.

Waterfowl Control

The Town of Babylon has experienced an overpopulation of resident Canadian Geese in recent years. This problem has been acute at several Town Parks. Their migration patterns have been altered because of local introduction and the availability of artificial food sources; usually from feeding by residents. This situation has caused a number of negative effects which affects the health of the geese, humans, and the environment. Overpopulation of the species increases erosion and sediment problems from overgrazing, the spread of diseases amongst the geese, and water quality problems due to bacteria and nutrients. Waterfowl feces can cause beach closures, shellfish growing area contamination, and algal blooms. Waterfowl feces may enter surface waters directly or through the storm drain system. Therefore the Town of Babylon has decided to implement a comprehensive Waterfowl Management Program, to hopefully reduce the number of Canadian Geese in its jurisdiction. The pilot program includes three locations, Tanner Park in Copiague, Phelps Lane Park at North Babylon, Venetian Shores Park at Lindenhurst and Town Hall Park, in North Lindenhurst. If the program proves to be a success, then it will be expanded to other locations in the Town of Babylon. The first effort made by the Town for managing the Canadian Geese population was passing a law banning the feeding of waterfowl. This law was adopted in October 2008. Under Chapter 106 [Dogs and Other Animals], Article VI [Feeding of Waterfowl] §106-40 states that "No person shall feed or provide food for any domestic or migratory waterfowl on Town property at any time of year". See Appendix III for the actual Town Board resolutions adopting the waterfowl Code. Signs were placed at several Town parks to educate the public with information regarding the negative impacts of feeding waterfowl. Although the Code has penalties, the Town efforts have been still been focused though public education. The Town believes that the existence of a Code will help

discourage feeding. The purpose of this program is to hopefully decrease the number of resident geese in the Town's Parks and therefore improve water quality. Public outreach through the dissemination of literature that includes the negative impacts of feeding by our waterfowl control staff is an important part of this program.

The second part of this effort is the harassment of the geese with dogs. By looking at the management programs from other municipalities, it was clear that in order for the program to be effective it would be necessary that dogs be utilized to harass and chase the geese. The Town of Oyster Bay was very helpful in this respect by arranging a site visit to show case its program and providing much needed information. The dog's main job is to consistently and relentlessly harass and chase the geese until they leave the parks. Geese also will fly into the water to avoid the dogs. Therefore dogs that are able to swim are essential to the program. The dog handlers are also equipped with informational brochures to provide to the public that are interested in the Town's Program.

The third major aspect in the Waterfowl Management Program is egg-oiling, which will be done in a humane manner. By oiling the eggs and placing them back in the nest, the female goose will not think there is anything wrong, and therefore will not produce any additional viable eggs, which will in turn decrease the population. At the end of the incubation period, the eggs will be removed from the nest. Nests locations are determined by a search method, and also from general information from other Town employees who work at the Parks that have observed their behavior for years.

The ultimate goal of this program is to improve water quality and the general cleanliness of the Town of Babylon Parks. The waterfowl program also includes signs at strategic locations in Town parks to discourage waterfowl feeding by the public. Currently the Town employs 10 part time personnel and their dogs.

Target Audiences

The target audiences for the Town's stormwater program are the general public including residents, businesses, development interests, school groups, volunteer groups, environmental organizations, individuals/businesses suspected of illicit discharges. The Pollutants of Concern (POCs) identified

in the flyers in accordance with this TOBSWMPP are pathogens, nitrogen, phosphorus, silt and sediment, and floatables. These flyers can be viewed on TownofBabylon.com. The Town has submitted several articles on stormwater issues for local publication in magazines.

Participating Groups include:
South Shore Estuary Reserve Office
Save the Beaches
Girl Scouts of America
Boy Scouts of America

Stop Throwing Out Pollutants

The Town of Babylon Recycling Calendar contains important information on the Town's Stop Throwing Out Pollutants (STOP) days. Babylon's full service Recycling Center includes a waste oil and battery drop off and information on the various jurisdictions of roadways within the Town of Babylon. The Town has observed many toxic compounds delivered on its STOP days that could have been potentially dumped down storm drains. The STOP program is twice a year, once in the spring and once in the fall. The Town believes that this program will help prevent illicit discharges to the storm drain system by encouraging proper disposal of household chemicals. Advertising includes the Town calendar, web site and flyers.

Storm Drain Placard and Stenciling

The Town has developed a storm drain placard program and completed its first pilot project in the Carll's River watershed. The placards currently carry one of three messages, No Dumping Drains to Bay, No Dumping Drains to River or Only Rain Down the Storm Drain. The Town has established significant public outreach surrounding this program. Volunteers have been utilized to carry out the program. The Town uses either placards or stenciling depending on the location of the storm drain inlet. The placards are manufactured by a firm from Florida and applied next to the storm drain inlets with a construction adhesive. A tremendous amount of work has been carried out by Girl Scout Troop 1110 North Babylon in the Carll's River watershed. Illicit discharges to the storm drain system were discovered during this work which further reinforced the educational value of the

program to the volunteers. These volunteers were given awards by the Town of Babylon and South Shore Estuary Reserve Office for their work. The program has been developed to discourage illicit discharges to the Town of Babylon storm drain system and includes floatables as a POC. The Town finds this especially important for its stormwater management program because some residents still believe the storm drain system may lead to a sewage treatment plant. This can lead to illicit discharges to the Town of Babylon storm drain system. The Town believes that the program is working very well and intends to create a localized storm drain placard that includes a blue claw crab. The Town believes many residents can relate to a popular local marine and food species depicted on the logo. The three Town of Babylon Stormwater Flyers have been distributed to residents interested in the placard program by volunteers in the field. Volunteers have been educated on the impacts of stormwater runoff prior to participating in the program and been given awards in recognition of their efforts. The Town of Babylon has also created a number of different signs ranging from South Shore Estuary signs for all the Town's tributaries, watershed protection signs for Ketcham's Creek and the Carll's River and floatable signs for Phelps Lane Park. This program is continuous.

The Town has developed the first pooper scooper program of its kind in Suffolk County where the Town provides Pooper Scoopers free of charge to its residents. The POC for this program is pathogens and nutrients. The Town also has a Code Section that addresses dog waste on public land:

§ 106-10.1. Control of Wastes; penalties for offenses. [Added 7-3-1984 by Res. No. 629]

A. No person owning, harboring, keeping or in charge of any dog shall cause, suffer or allow such dog to soil, defile, urinate, defecate on or commit any nuisance on any common thoroughfare, sidewalk, passageway, bypath, play area, park or any place where people congregate or walk, or on any public property whatsoever, or on any private property without the permission of the owner of said property. The restriction in this section shall not apply to that portion of street lying between the curblines which shall be used to curb such dog under the following conditions:

(1) The person who so curbs such dog shall immediately remove, in a

suitable container, all feces deposited by such dog.

- (2) The feces removed from the aforementioned designated area shall be disposed of in a sanitary manner by the person owning, harboring, keeping or in charge of any dog curbed. Disposal of feces in street storm collection systems is prohibited.
 - (3) The provisions of this section shall not apply to any blind person accompanied by a guide dog.
- B. Any person violating any provision of this section shall be guilty of a violation and, upon conviction thereof, shall be subject to a fine of not less than \$25 but not to exceed \$250 or 10 days in jail, or by both.

The information flyer is provided along with the free pooper scooper. Pooper Scoopers are provided with adoptions at the Town of Babylon Animal Adoption Center or may be requested by Town residents. They are also given out free of charge at the Town's Annual Environmental Fair. The Town also showcases its environmental programs including stormwater management at this fair.

Illicit discharge education material is distributed to commercial and industrial properties through the Town of Babylon Commercial Garbage District mailings. This is a convenient, cost effective means for the Town to disseminate information to local businesses on proper stormwater management. The Town of Babylon periodically reassesses its goals with regards to stormwater management. One example is the issue of floatables. Floatables have been added to the list of POCs in connection with public education activities. While this has been a problem at public beaches in the past, the Town has recently revisited this issue at a local Park and determined that floatables should be a POC in its stormwater program. In addition the Town has worked with adjacent MS4s on this issue because in many cases stormwater pollution discerns no municipal boundaries.

The Town also recently recognized serious water quality problems at two public bathing beaches; Venetian Shores at Lindenhurst and Tanner Park at Copiague due to waterfowl overpopulation. There is also a significant conflict with human use of the Town Park at town hall at Sunrise Highway, North Lindenhurst and residents primarily because of waterfowl feces on the grassy areas. The Town is undertaking Best Management Practices for Pathogen Control, a POC at these two public

beaches. The major segment of this program is a newly launched waterfowl control program utilizing dogs and egg oiling. The program includes public outreach flyers on the basis of the program and also extensive posting of signs to discourage the feeding of waterfowl at Town Parks. The Town of Babylon believes that it already has caused a significant reduction in waterfowl populations at Town Hall Park at North Lindenhurst and Tanner Park at Copiague. But the program needs to continue and the Town hopes to improve its effectiveness through additional gained experience. The Town of Babylon measurable goals for Public Education and Outreach - SWMP Development / Implementation is progressing very well and most expectations have been fulfilled. Notwithstanding the Town recognizes that there is always a need to self assess, update and refine its stormwater program on a periodic basis. As mentioned previously an important new program proposed is the creation of a video identifying stormwater impacts, illicit discharges and best management practices for residents. This video will be produced in house with Town staff.

2. Public Involvement / Participation - SWMP Development / Implementation

Department of Environmental Control

The Town has to the best of its ability reached out to groups both public and private that may be impacted by its stormwater program. The following groups and organization and government agencies have been involved with the Town's Stormwater Program.

Villages of Amityville, Babylon and Lindenhurst

Members of the NYS Sea Grant NEMO Stormwater Discussion Group

Local Volunteer Organizations such as the Girl Scouts of America

South Shore Estuary Reserve Office

Soil Conservation Service

New York State Department of State

New York State Department of Environmental Conservation

United States Environmental Protection Agency

Since the three villages do not have as extensive staffing as the Town, Babylon makes every possible effort to share information and resources. This includes the Town of Babylon Stormwater Management and Erosion and Sediment Control Code; Chapter 189 in electronic format, invitations to

any training sessions the Town may be hosting and some technical assistance.

The NYS Sea Grant NEMO Stormwater Discussion Group (list serve) has been very successful since its inception. The discussion group allows for an exchange of information, postings on stormwater events and provides great interaction between the Long Island MS4s and the private sector. Babylon has been provided with a great deal of assistance from members and in turn has also provided much assistance to other members of the group. This assistance has included model codes, information on the Town's stormwater programs and technical assistance.

Local volunteer groups have assisted the Town of Babylon in carrying out its stormwater programs especially the storm drain placard program. With any of the programs the Town provides a strong educational background on why it's doing a particular stormwater program. One group installed placards at all the storm drain inlets in a significant portion of the Carll's River watershed, the Town largest stream corridor. Other programs include stewardship of the stream corridors such as cleanups and maintenance of wetland restoration and stormwater management sites.

The South Shore Estuary Reserve Office has been a tremendous help to the Town's stormwater program providing support and public outreach. This has included press conferences, web postings and awards for exceptional volunteer activities.

The Soil Conservation Service has recently reached out to the Town to assist in some of educational programs. The SCS recently assisted the Town with its training of its local construction site operators.

The Town is developing a Stormwater Management Home page to provide greater public access to its Stormwater Management program. The Stormwater Management Home page will include a number to call for information on the stormwater program, a hotline for illicit discharges, an interactive components to evaluate the effectiveness of the program, all of the Towns stormwater management flyers, the Annual Report and information on Chapter 189 Stormwater Management and Erosion and Sediment Control and the proposed Chapter 190 Illicit Discharges. The website will identify a local point of contact for public concerns regarding stormwater management and compliance with this general SPDES permit.

The name or title of this contact and the telephone number must be published in public outreach and public participation materials and kept updated with the NYSDEC. The Home Page will create a central location and site for public interaction of the Town's its stormwater program. The Town hopes that the web site will assist the Town in helping to further develop and implement a public involvement/participation program that identifies key individuals and groups both public and private that are interested in, or affected by the Town's stormwater program. It will also identify types of input the Town of Babylon will seek from the key individuals and groups, public and private, to support development and implementation of the stormwater program.

For the purpose of the MS4 annual report the Town of Babylon has utilized the following procedures: A public hearing was held at the Town of Babylon Planning Board meeting on the Final Report in accordance with the State Open Meetings Law and local public notice requirements. In the past the Town of Babylon has held the hearing after the submission of the Annual Report to the NYSDEC. This was not in conformance with past and current regulations. For the 2009-2010 Annual Report the Town will begin posting the draft annual report prior to submission of the final report to the NYSDEC. This could not be accomplished for the 2008-2009 reporting Period because of the timeframe the Town encountered in receiving the new Report Form from the NYSDEC. The new form included data collection needs that was not previously carried out by the Town. Prior to submitting the final annual report to the NYSDEC, by June 1 of each reporting year the Town of Babylon must 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. This can be done at a meeting that is open to the public, where the public attendees are able to ask questions about and make comments on the report. This may be a regular meeting of an existing board, such as planning, zoning or the town board. It may also be a separate meeting, specifically for stormwater. The other option is that the draft Annual Report may also be posted on the internet by making the document available to the public on a website and providing the public the opportunity to provide comments on the internet. It must include the opportunity for the public to request an open Meeting to ask questions about and make comments on the report. If a Public Meeting is requested by 2 or more persons, the Town must hold such a Meeting. However, the Town of Babylon only needs to hold a public meeting once to satisfy this requirement.

3. Illicit Discharge Detection and Elimination (IDDE) - SWMP Development /Implementation

Illicit discharge detection is a very important part of the Town's stormwater program. Releases of chemicals and petroleum hydrocarbons to the Town of Babylon MS4 system pose a potential serious threat to surface and groundwater resources of the Town. The following Town of Babylon Departments is involved with illicit discharge detection in the Town of Babylon:

Department of Environmental Control, Department of Public Works Highway and Highway Engineering, Department of Planning And Development Planning Division, Town Attorneys Office, Fire Prevention and Ordinance Enforcement, Department of Performance Management and Department of Information Technology.

The roles vary from environmental analysis utilizing Global Positioning Technology and the Town's Arc Info geographic information system to code enforcement. The following are the different roles that are identified for the various Departments and Divisions:

Illicit discharge detection (IDDE) is an ongoing program for the Town of Babylon. The Town of Babylon Highway Engineering is continuously working out in the field in connection with the management and inspection of Town drainage projects and frequently detects illicit discharges to the storm drain system which the Department of Environmental Control provides fast response. If the discharge is determined to be non-hazardous and/or not an oil or hydrocarbon discharge the Town will address the corrective action in house. Illegal cross connections are routinely eliminated from the Town's MS4 system. Once discovered, the party is notified of illegal connection in writing and advised that the pipe must be disconnected and if it is not, the Town will remove and assess costs. When discharges by cross connection or directly into an inlet are believed to be hazardous or petroleum hydrocarbons the Town of Babylon will contact either the Suffolk County Department of Health Services or the New York State Department of Environmental Conservation. For serious violations, the Town will sometimes contact the District Attorneys Section, Environmental Crime Bureau, Suffolk County Police Department for their assistance. If the discharge is known to be hydrocarbons the Town will contact the New York

State Department of Environmental Conservation Oil Spill Division. Concurrently the Town of Babylon Fire Prevention Office also responds to road spills and works with the New York State Department of Environmental Conservation for remediation of these spills. In some cases the United States Coast Guard may be involved.

Section 189-10 of the Town of Babylon Stormwater Management and Erosion and Sediment Control Code specifically prohibits illicit discharges to the Town of Babylon storm drain system. The specific code language is as follows: “Illicit discharge prohibited. No person or entity may create or cause an illicit discharge to flow, to infiltrate or in any manner or form to enter into the Town of Babylon storm drainage system in violation of this chapter and/or Suffolk County Department of Health Services and/or the New York State Department of Environmental Conservation and/or the United States Coast Guard and/or the United States Environmental Protection Agency regulations. Illicit discharges discovered by the Town of Babylon may constitute a violation of this chapter to the limit of authority of the Town of Babylon as provided in § 213-270.1, Water disposal, or shall be referred by the Town of Babylon to the appropriate enforcement agency, such as the Suffolk County Department of Health Services and/or the New York State Department of Environmental Conservation and/or the United States Coast Guard and/or the United States Environmental Protection Agency.”

Notwithstanding the Town’s existing Section 189-10 of Chapter 189 of the Code of the Town of Babylon, Illicit Discharges, the Town has determined that it must adopt a new “stand alone code” Chapter 190 Prohibition Against Illicit Discharges, Activities And Connections to the Town of Babylon Separate Storm Sewer System that will be based on the model State code. The purpose of this Chapter will be to provide for the health, safety, and general welfare of the citizens of the Town of Babylon through the regulation of non-stormwater discharges to the municipal separate storm sewer system (MS4) to the maximum extent practicable as required by federal and state law. This law will establish additional regulation for controlling the introduction of pollutants into the MS4 in order to comply with requirements of the SPDES General Permit for Municipal Separate Storm Sewer Systems. The objectives of this law will be:

- (1) To meet the requirements of the SPDES General Permit for Stormwater Discharges from MS4s, Permit no. GP-02-02 or as amended or revised;
- (2) To regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process or discharge non-stormwater wastes;
- (3) To prohibit Illicit Connections, Activities and Discharges to the MS4;
- (4) To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this law; and
- (5) To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the MS4.

Once codified this new local law will be included in the appendix of this document.

The Town of Babylon has developed and maintained drainage maps within the Town's jurisdiction showing the location of all outfalls and the names and location of all surface waters of the State that receive discharges from those outfalls. Linen maps of the drainage infrastructure along with specific project maps are stored in the Town of Babylon Department of Public Works Highway Engineering Office and cover the entire unincorporated portion of the Town of Babylon. These maps are updated as necessary. In addition, all outfalls south of New York State Route 27 Sunrise Highway, the Carll's River Watershed and the Sumpwams Creek Watershed north of the Deer Lake Dam have been scanned into digital format. The stormwater drainage area (sewer sheds) have been mapped for the Ketcham's Creek Watershed, Stream Corridors/Great South Bay south of New York State Route 27 and the Carll's River. The Town applied for in 2008 to digitally map the remainder of its stormwater drainage infrastructure through the New York State Environmental Protection Fund and was approved for funding. The Town expects this work to be completed by March 9, 2010. For illicit

discharge activities the Town relies on *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments* created by Center for Watershed Protection. The Center for Watershed Protection's comprehensive manual outlines practical, low cost, and effective techniques for stormwater program managers and practitioners. This manual provides valuable guidance for communities and others seeking to establish Illicit Discharge Detection and Elimination (IDDE) programs.

For practical matters and as required by the NYSDEC regulations the Town of Babylon will map new outfalls as they are constructed or newly discovered.

Priority areas of concern for illicit discharges are those areas constructed in high groundwater areas and other areas include older industrial commercial and residential areas that were constructed prior to modern regulations addressing environmental protection and stormwater management. Areas that the MS4 system discharge directly to surface waters are of special concern. However, the Town is concerned about illicit discharges throughout the Town because of the Town's extensive MS4 system and the fact that they may occur anywhere in the Town because of human behavior. Geographically, the stream corridors are a priority concern because of the potential rapid direct impact on surface waters of pollutants illegally introduced to the nearby storm drain system. Staffing in the Department of Environmental Control for the Program are the Chief Environmental Analyst, Principal Environmental Analyst, Waterways Management Supervisor, Assistant Waterways Management Supervisor and environmental interns. Funding for the entire stormwater program which includes illicit discharge detection is \$30,000 per year not including staff salaries. Equipment includes seven computers with geographic information system capability, hand held field global positioning units (GPS) and a Department boat for use in the coastal area. In the coastal area outfalls can be examined for dry weather discharge by boat. In the watershed and inland areas waders and boots may be utilized to walk the streams and Carll's River where locations cannot be inspected on foot. Public outreach materials for residents include flyers, notably the Best Management Practices Flyer for Homeowners and storm drain placards. For commercial and industrial land owners a flyer has also been created which is sent out with the solid waste billing. For illicit discharge activities track down procedures the Town relies on: *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments* and also the Town's

long term experience in dealing with these situations. Recording keeping includes GIS, computers programs such as Excel and hard copy folders. Employee training is provided by the Storm watch Municipal Stormwater Pollution Prevention Video, in house training of interns by professional staff, attendance by staff at various NYSDEC training and internet/literature review by professional staff.

The Town is addressing the categories of non-stormwater discharges or flows listed in Part I.A.2 of the NYSDEC regulations. The Town of Babylon has two sections of code that may address some of these discharges:

213-270. Pool water disposal.

[Amended 9-21-2004 by L.L. No. 29-2004]

All water either overflowing or emptying from a swimming pool shall be disposed of on the lot whereon it is located, and the requisite plans submitted to the Building Department Editor's Note: Local Law No. 15-1976 created the Department of Planning and Development, in which Department the Division of Building replaced the former Building Department. For the text of this local law, see Ch. 49. shall show provisions made for preventing such water from flowing onto the land of any adjoining property owner or into any abutting street

213-270.1 Water disposal. [Added 9-21-2004 by L.L. No. 29-2004]

All water either overflowing, emptying, being pumped or running from any property shall be disposed of on the lot whereon the water is located or beginning. Failure to prevent such water from flowing onto the land of any adjoining or another property or into any abutting street shall be a violation of this section. Nothing in this section shall prohibit the washing of motor vehicles and the watering of lawns, flowers, plants, etc.

§ 213-270.1, Water disposal, or shall be referred by the Town of Babylon to the appropriate enforcement agency, such as the Suffolk County Department of Health Services and/or the New York State Department of Environmental Conservation and/or the United States Coast Guard and/or the United States Environmental Protection Agency.”

The Town has created a flyer: BEST MANAGEMENT PRACTICES FOR THE DISPOSAL OF CHLORINATED WATER FROM SWIMMING POOLS & HOT TUBS that indicates: “water from swimming pools and hot tubs often contain high levels of chlorine. Discharging chlorinated pool/spa water into storm drains (storm sewers), that in many cases lead to waterways is potentially harmful to fish and other aquatic life. This fact sheet was developed by the Town of Babylon, Department of Environmental Control to provide you with information on management practices that will minimize the impact of chlorinated water discharged from swimming pools and hot tubs. The following “Best Management Practices” apply to water discharged from swimming pools.

Chlorinated water from pools and hot tubs may be disposed on the ground or irrigated on your property under the following circumstances:

1. Discharge or irrigate the water on your property and ensure that it does not flow off your property.
2. Discharge or irrigate the water in a manner that will prevent nuisance conditions (such as creation of odors, and fly and mosquito breeding conditions). Nuisance conditions occur when water is ponded for a prolonged period.
3. Discharge or irrigate the water in an area where the water will not flow into a stream or storm drain (storm sewer).
4. If possible prior to disposing or irrigating the water, shut off the chlorination system if you have one, or stop adding chlorine.

Please be aware that pursuant to Chapter 213 of Town of Babylon Code, all water either overflowing or emptying from a swimming pool shall be disposed of on the lot whereon it is located, and shall show provisions made for preventing such water from flowing onto the land of any adjoining property owner or into any abutting street. Failure to prevent such water from flowing onto the land of any adjoining or another property or into any abutting street shall be a violation of this section.

NOTE: Water from back-flushing pool filters should not also be discharged to storm drains sewers, stream, or other waterways.”

The Department utilizes Environmental Interns that have been trained in illicit discharge detection and global positioning systems (GPS) technology for illicit discharge reconnaissance on an annual basis (although not done in

2008). This work is carried out in conformance with the United States Environmental Protection Agency publication; *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessment*.

Outfall locations are overlaid on Arc Info geographic information system map technology to create and update mapping of all discharge points. The Town of Babylon believes that it has mapped 99% of its discharge points to surface waters, 545 outfalls. To aid in all facets of its stormwater management program as well as illicit discharge detection, the Town of Babylon recently applied for and was approved for Environmental Protection Fund monies to map the remainder of its drainage infrastructure on GIS. Currently 33% of its drainage infrastructure is mapped on GIS due to the Call's River watershed action plan work. This information is critical to the Towns stormwater management program.

Department of Environmental Control-Program development and administration, public outreach, geographic information map (GIS) development and funding and global positioning system (GPS) field verification, illicit discharge inspection for illegal discharges and inspection of outfalls. The Department recently was approved for a New York State Environmental Protection Fund Grant to digitally map the remainder of the storm drain system in the Town of Babylon. This initiative will be implemented with assistance from the Town of Babylon Information Technology Department.

Department of Public Works Highway and Highway Engineering Divisions –Construction, maintenance and inspection of the storm drain system, illicit discharge and cross connection detection, mapping of the storm drain system. These divisions are critical as “eyes” out in the field to find illicit discharges to the Town of Babylon storm drain system.

Department of Planning and Development Planning Division and Ordinance Enforcement, Illicit discharge and cross connection detection, through site plan review, mapping of the storm drain system.

Department of Performance Management Central complaint Department for the Town of Babylon. Receives complaints including illicit discharges and refers over to the appropriate Department.

Department of Information Technology. Assists in program development through geographic information map (GIS) development of the stormwater drainage system and funding and global positioning system (GPS) technology purchase assistance/technical support.

Town Attorneys Office Adoption of Local Laws and Code changes

4. Construction Site Stormwater Runoff Control - SWMP Development Implementation

The Town of Babylon at minimum must develop, implement, and enforce a program that provides equivalent regulation to either GP-02-01 or GP-0-08-001), unless more stringent requirements are contained within this general SPDES permit (GP-(Part VII.A.4.a.) that addresses stormwater runoff to its MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Control of stormwater discharges from construction activity disturbing less than one acre must be included in the program if: that construction activity is part of a larger common plan of development or sale that would disturb one acre or more; or- if controlling such activities in a particular watershed is required by the New York State Department of Environmental Conservation. The Town of Babylon adopted Local Law No. 10-2006 entitled Chapter 189 Stormwater Management and Erosion and Sediment Control on March 7, 2006. The effective date of the Code was March 15; 2006. In its findings the Town Board of the Town of Babylon determined that:

1. Land development activities and associated increases in site impervious cover often alter the hydrologic response of local watersheds and increase stormwater runoff rates and volumes, flooding, stream channel erosion, or sediment transport and deposition. This stormwater runoff contributes to increased quantities of water-borne pollutants, including siltation of aquatic habitat for fish and other desirable species. The Great South Bay and its tidal tributaries within the Town of Babylon have been placed on the New York State Department of Environmental Conservation (NYSDEC) Priority Water Bodies List. The NYSDEC identified urban runoff and storm drain systems as the major source/contributors to their impairment.

2. Clearing and grading during construction tends to increase soil erosion and add to the loss of native vegetation necessary for terrestrial and aquatic habitat.
3. Improper design and construction of stormwater management practices can increase the velocity of stormwater runoff, thereby increasing stream bank erosion and sedimentation.
4. Impervious surfaces allow less water to percolate into the soil, thereby decreasing groundwater recharge and stream base flow.
5. Substantial economic losses can result from these adverse impacts to the waters of the Town of Babylon.
6. Stormwater runoff, soil erosion and nonpoint source pollution can be controlled and minimized through the regulation of stormwater runoff from land development activity.
7. The regulation of stormwater runoff discharges from land development activities in order to control and minimize increases in stormwater runoff rates and volumes, soil erosion, stream channel erosion, and nonpoint source pollution associated with stormwater runoff is in the public interest and will minimize threats to public health and safety
8. Regulation of land development activities by means of performance standards governing stormwater management and site design will result in development compatible with the natural functions of a particular site or an entire watershed and thereby mitigate the adverse effects of erosion and sedimentation from development.

The Town Board of the Town of Babylon established Chapter 189 to apply to all land development activities within the Town of Babylon to provide reasonable guidance for the regulation of stormwater runoff and erosion and sediment control for the purpose of protecting local water resources from degradation. It was determined that the regulation of stormwater runoff and sediment discharges from land development projects and other construction activities is in the public interest in order to control and minimize increases in stormwater runoff rates and volumes, soil erosion, stream channel erosion, and nonpoint source pollution associated with stormwater runoff and will prevent threats to public health and safety and enhance and improve the environmental and economic conditions within the Town of Babylon. This Code is consistent with the Comprehensive Management Plan for the South Shore Estuary Reserve to reduce nonpoint source pollution of the estuary and its tributaries.

The Code was a milestone for the Town of Babylon Stormwater Management Program since in addition to standard drainage requirements associated with site development the Town of Babylon would now take a hard look at all development proposals in terms of erosion and sediment control for all land development activities as defined in the Code. A land development activity is defined in Chapter 189 as follows:

***LAND DEVELOPMENT ACTIVITY — Construction activity including clearing, grading, excavating, soil disturbance or placement of fill.
[Amended 4-11-2007 by L.L. No. 8-2007]***

The definition is simple and to the point. There are several exemptions to the Code for minor projects that have been determined not to have any significant impact in connection with stormwater or sediment generation. However Chapter 189 is more restrictive than the State minimum requirement to address stormwater management and erosion and sediment impacts from development of sites of one acre in two ways. All projects under an acre that are not exempt are subject to the Code, but can meet the requirements of the regulation through a Construction Activity Agreement (In Appendix 3). The Town of Babylon with its heavily developed land area (little vacant buildable is available) reviews many projects under an acre on an annual basis. The Town had determined that these small projects, especially single family homes in moderate to high groundwater areas may have major impacts in terms of potential stormwater and sediment releases to waters of the Town of Babylon. The important component to this Code is that these projects may meet the requirements of the law, however if a full stormwater pollution plan is warranted, the Town may request that one be prepared for a site under an acre. The way the code was promulgated is that any land development activity is subject to the Code and it has become an integral part of site plan/building permit review. Although not recited in every portion of the various land use codes as in the State Model Code, it is a stand alone requirement that subjects virtually any land development activity to its standards.

Although Chapter 189 is not a mirror image the State “NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control” equivalence was documented using the NYSDEC Gap Analysis Workbook. Chapter 189 contains requirements for construction site operators to implement erosion and sediment control management practices, imposes sanctions to ensure compliance to the extent allowable by State or local law, contains requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality, describes procedures for SWPPP review that incorporate consideration of potential water quality impacts and review of individual pre-construction SWPPPs to ensure consistency with State and local sediment and erosion control requirements, ensures that the individuals performing the reviews are adequately trained and understand the State and local sediment and erosion control requirements, all SWPPPs are reviewed for sites where the disturbance is one acre or greater, after review of the SWPPPs, the Town utilizes the “SWPPP Acceptance Form” created by the NYSDEC and required by the SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-08-001) when notifying construction site owner / operators that their plans have been accepted and approved by the permittee, includes procedures for site inspections and enforcement of erosion and sediment control measures including steps to identify priority sites for inspection and enforcement based on the nature of the construction activity, topography, and the characteristics of soils and receiving water and the Town of Babylon has ensured that the individual(s) performing the 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.

Training

Construction site operator and employee training are crucial to this program. Training must occur at varying levels of expertise depending on the position of the employee in the organization. Higher levels of training are required for greater levels of responsibility and technical review. The Town is

routinely setting up training as courses are available. Town of Babylon employees have received the following training in recent years:

1. Intro Level/Refresher: Municipal Phase II GP-0-08-002

Thursday - September 25, 2008. 9:30am-11:30am

DEC Region 1 Office, Stony Brook Instructor : Eileen Keenan

NY Sea Grant NEMO Program Manager

NYS DEC Division of Water

50 Circle Road

SUNY Stony Brook

Stony Brook, NY 11790-3409

Tele:631-444-0422

Fax:631-444-0407

Staff trained were trained from the following Departments:

Planning and Development and Building,

Department of Public Works and

Environmental Control

The course was for anyone with responsibility for planning, implementing, or reporting on any aspect of a municipal stormwater program in connection with New York SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems Number GP-0-08-002.

2. Erosion and Sediment Control Construction Activity Training 4 Hour Course in accordance with the

New York State Department of Environmental Conservation

Permit No.: GP-0-08-001

Held February 5, 2009 at the Town of Babylon

Town Hall Annex Auditorium

281 Phelps Lane

North Babylon, New York 11703 Sponsored by the Town of Babylon Department of Environmental Control and the Department of Planning & Development and Suffolk County Soil Conservation District.

This course was geared towards contractors who carry out land development activities in the Town of Babylon. Land development activity is defined as construction activity including clearing, grading, excavation, soil disturbance, or placement of fill. The course satisfied the required training in order to comply with the contractors' responsibilities under the New York State Department of Environmental Conservation Construction Activity Permit No. GP-0-08-001. Renowned Stormwater Instructor Donald W. Lake, Jr., P.E., CPESC, and CPWQ conducted the course. Attendees all received a NYSDEC GP-0-08-001 Erosion and Sediment Control Card Certificate. In addition, training on Chapter 189 the Town of Babylon's Erosion and Sediment Control Law was provided by the Town of Babylon Chief Environmental Analyst. Opening remarks were provided by Ann Marie Jones, Commissioner, Planning & Development, Town of Babylon. In attendance at the workshop were contractors (primarily from the Town of Babylon), architects, engineers, environmental consultants and design professionals. In addition, attending were employees who conduct reviews in connection with stormwater issues from the following Departments:

Planning and Development, Building and Engineering,

Department of Public Works, Highway Engineering

Environmental Control

4. Certified Professional in Erosion and Sediment Control Exam Review

Course conducted by Don Lake, PE CPESC, CPSWQ SUNY-ESF Program held on October 20, 2006 at Fishkill, NY. This is the preparatory course for New York State certification as a Certified Professional in Erosion and Sediment Control. This course was attended by technical staff from the Town of Babylon. Departments as follows:

Planning and Development, Engineering,

Environmental Control

The Town of Babylon intends to continue and also improve its educational program in the area of stormwater management and erosion and sediment

control for its employees. Additional training is required for new employees at all levels as well as increasing the knowledge for employees who have already undergone training.

Stormwater Pollution Prevention Plan Review Procedures

The program must also include a regulatory mechanism to require a Stormwater Pollution Prevention Plan (SWPPP) for each applicable land disturbing activity that includes erosion and sediment controls that meet the State's most up-to-date technical standards. Chapter 189 meets these State requirements and the Town significantly strengthened its SWPPP review during 2008. On September 25 2008 Town Supervisor authorized the Town's Chief Environmental Analyst to act as a duly authorized representative for the Town of Babylon in connection with the review and certification of final Stormwater Pollution Prevention Plans (SWPPPs) for construction projects reviewed by the Town of Babylon pursuant to Chapter 189 of the Code of the Town of Babylon, Stormwater Management and Erosion and Sediment Control and in accordance with the New York State Department of Environmental Conservation SPDES General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s) Permit No. GP-0-08-002 issued pursuant to Article 17 Titles 7, 8 and Article 70 of the Environmental Conservation Law Part IV and any amendments to these regulations. This was in anticipation of the NYSDEC control date of September 30, 2008 whereby Notice of Intents submitted to the NYSDEC must include a SWPPP Acceptance Form approved by the local municipality also reviewing the land development activity. So in addition to meeting the Town's own Chapter 189, essentially the local MS4 become responsible for the quality of the SWPPP submitted to the NYSDEC. Town of Babylon procedures involve the distribution of the proposed land development activity to each Department; review by Planning Environmental, Engineering and Highway Engineering and when all Departments have approved the SWPPP it is certified by the Chief Environmental Analyst.

Employee Education

The Town of Babylon has a very extensive program with regards to educational programs of employees in relation to stormwater management. It

is recognized that there is varying levels of education, training and a diversity of duties in connection with employees involved with the stormwater management program. The variety of staff positions from Department of Public Works field workers to building inspectors to planners and staff interns require different areas of stormwater education. Professional staff has received training in Certified Professional in Erosion and Sediment Control October 20, 2006 through SUNY ESF Outreach. Entry level employee training was also completed on September 25, 2008 through New York State Sea Grant/New York State Department of Environmental Conservation: New York State General Permit for Stormwater Discharges from Municipal Stormwater Discharges Separate Stormwater Sewer Systems GP-0-08-002. Construction site operators training was sponsored by the Town of Babylon in cooperation with the local Soil and Water Conservation District and New York State Department of Environmental Conservation on February 5, 2009. The training day also included compliance with Chapter 189 of the Code of the Town of Babylon Stormwater Management and Erosion and Sediment Control. The Town of Babylon hosted a seminar by Geese Peace on invasive waterfowl problems and control in March 2009. Higher level training for stormwater and erosion and sediment control for professional staff is proposed for 2009. Education for Town of Babylon employees and construction site operator training is a critical and important part of the Town's stormwater management program. The Town has found that in addition to the technical aspects of training, employee awareness and interest in the program in greatly increased by education. This creates a strong supporting base for the program and aids enforcement efforts of Chapter 189 of the Code of the Town of Babylon Stormwater Management and Erosion and Sediment Control. As education events are scheduled by the Town of Babylon, Babylon makes available these programs to the three villages to assist them in their stormwater program and promote inter municipal cooperation. The Town of Babylon Public Works Department provided training for its employees by viewing the video training film Storm Watch. This video focuses on municipal employees to utilize pollution prevention/good housekeeping/best management practices for municipal operations. The video was created by Excal Visual, 5721 Arapahoe Avenue, Suite A2 Boulder, CO 80303-1363. The Town has made this video available as a loaner to the three villages in the Town of Babylon: Amityville, Lindenhurst and Babylon. Nassau County, Long Island, NY provided Babylon with the idea to utilize this video for Department of Public Works employee training.

The Town has ensured that construction site operators have received erosion and sediment control training before they do work within the Town's jurisdiction. Contractor training included posting of the training on the New York State Sea Grant list serve site, posting in the building department and planning department. The Town is establishing an inventory of active construction sites that includes the location of the site and owner / operator contact information. This information will be recorded on an Excel worksheet for annual reporting.

In terms of measurable goals regarding its construction site operators the Town will develop a program to assess measurable goals for compliance with the Town's Chapter 189 Stormwater Management regulations. The Town's goals in this regard are to attain the highest level of compliance possible for construction operators in the Town of Babylon.

Construction Site Best Management Practices

The Town has developed Best Management Practices (BMPs) for Construction Activity Agreements for land development activities under an acre below:

I agree to comply with the following:

- ✓ *I will have available on-site this agreement and related plans during entire construction process. I will explain the requirements to all construction personnel and subcontractors. I take responsibility for full compliance with this agreement and Chapter 189 regulations for all persons working in the vicinity of the construction site.*
- ✓ *No vegetation and/or trees may be cleared without first receiving a mark-out or authorization from Planning, Building and/or Engineering Inspectors. Only vegetation, topsoil, and trees specifically in the path of construction activity may be removed.*
- ✓ *No earth, fill or construction material shall be allowed to migrate off site from this project on to the Town of Babylon roadway and or storm drain system or an adjacent property.*
- ✓ *No fill shall be brought into a site without the express approval of a Building or Engineering inspector. File piles will only be allowed in location designated on plan, or authorized by Building/Engineering Inspector(s). Piles of fill shall be stabilized and/or contained with*

- grass seed, silt fences, hay bales, or other approved methods.*
- ✓ *At the end of each workday the adjacent roadway and or storm drain system shall be inspected by owner or his/her designee for soil or other matter. All construction sites and adjacent roadways shall be cleared of soil and other material at the end of each day.*
 - ✓ *All construction and demolition debris and materials, including wet concrete, shall be disposed of at an appropriate facility in accordance with all TOB and NYSDEC waste management regulations. Dumping any liquid, semi-liquid, or other materials from a construction site into storm drains, roadways, or vacant property is grounds for a violation.*
 - ✓ *Litter shall be picked up on a daily basis from the site, adjacent properties and/or the road system.*
 - ✓ *Toilet facilities shall be available to all workers on site during the construction period.*
 - ✓ *A temporary stable construction entrance shall be constructed utilizing recycled concrete aggregate (RCA) or a similar material, unless a suitable constructed entrance already exists on the site.*
 - ✓ *All municipal or private drainage inlets adjacent to area of construction shall be protected from dirt/matter/pollutants through the use of products/sponges designed for this purpose.*
 - ✓ *On areas of steep slopes and areas cleared of vegetation, suitable stabilization methods, as shown on approved site plans and stormwater pollution prevention plan (SWPPP), shall be employed to prevent soil migration and stormwater runoff.*
 - ✓ *All exposed expanses of soil shall be stabilized with annual grass seed as soon as areas will no longer be needed for construction staging, or if areas will remain undisturbed for six weeks or longer.*
 - ✓ *Prior to tree, shrub, or other plantings, soil shall be suitably tilled and prepared.*

For projects involving a SWPPP the following BMPs are included in SWPPP:

1. All erosion and sediment control measures shall be put in place prior to the start of any ground disturbances. The installation of the temporary control devices will be completed in accordance with both the information and details shown on the SWPPP Erosion and Sedimentation Control Plan ST-8 and civil-site plans for the project.
2. Install in accordance with the Manual of New York Guidelines for Urban Erosion and Sediment Control, any required additional erosion control devices that may be required by the Engineer,.
3. Temporarily stabilize all landscaping areas by seeding and provide silt fencing along the bottom of all slopes.
4. Temporarily stabilize all stockpiled materials by seeding and/or constructing straw bale dikes or silt fences around the base of the stockpiled materials
5. Complete final stabilization of disturbed areas.
6. Maintain all erosion control devices for the duration of the construction work by cleaning, repairing and/or replacing the control measures as may be necessary or as directed by the engineer.
7. Immediately cleanup all materials spilled, dropped, washed or tracked onto any paved surfaces beyond the limits of the project.
8. The applicant or developer or his or her representative shall be on site at all times when construction or grading activity takes place and shall inspect and document the effectiveness of all erosion and sediment control practices. Inspection reports shall be completed every seven days and within 24 hours of any storm event producing 0.5 inches of precipitation or more. The reports shall be delivered to the Engineering Division and also copied to the site log book.
9. For purposes of TOB Code compliance, town personnel, including but not

limited to Building Inspectors, Ordinance Inspectors, Engineering inspectors,

Highway/DPW personnel, Planning personnel, and/or representatives from the

Department of Environmental Control, are authorized to access construction site.

10. The SWPPP will be available on-site at all times along with related plans. The

project sponsor shall explain the SWPPP requirements to all construction

personnel and subcontractors. A sign shall be placed on the site indicating where

the SWPPP can be viewed.

11. No vegetation and/or trees may be cleared without first receiving a mark-out from Planning and/or Engineering Inspectors. Existing vegetation and trees shall remain in place until after construction is complete. Only vegetation and trees specifically in the path of construction activity may be removed.

12. No earth, fill or construction material shall be allowed to migrate off site from this project on to the Town of Babylon roadway and or storm drain system or an adjacent property.

13. No fill shall be brought into a site without the express approval of a Building or Engineering inspector. Piles of fill shall be stabilized and/or contained with grass seed, silt fences, hay bales, or other approved methods.

14. At the end of each workday the adjacent roadway and or storm drain system shall be self inspected for material. All construction sites and adjacent roadways shall be cleared of soil and other material at the end of each day.

15. All construction and demolition debris and materials, including wet concrete, shall be disposed of at an appropriate facility in accordance with all TOB and NYSDEC solid waste management regulations. The discharge of any liquid, semi-liquid, or other materials from a construction site into storm drains, roadways, or vacant property is grounds for a violation.

16. Litter shall be picked up on a daily basis from the site, adjacent properties and/or the road system.
17. Toilet facilities (either portable or existing) shall be provided for the workers on the site during the construction period.
18. All municipal or private drainage inlets adjacent to area of construction shall be protected from pollutants through the use of products/sponges designed for this purpose.
19. On areas of steep slopes and areas cleared of vegetation, suitable stabilization methods, as shown on approved site plans and stormwater pollution prevention plan (SWPPP), shall be employed to prevent soil migration and stormwater runoff.
20. All exposed expanses of soil shall be stabilized with annual grass seed as soon as areas will no longer be needed for construction staging, or if areas will remain undisturbed for six weeks or longer.
21. The applicant or developer of the land development activity shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the applicant or developer to achieve compliance with the conditions of this chapter. Sediment shall be removed from stormwater structures whenever their design capacity has been reduced by 50%. Street sweeping by broom or machine or other suitable means of cleanup shall be conducted daily as necessary for any sediment or material that has inadvertently migrated off site. Litter shall also be removed on a daily basis from the site or off site.

The foregoing BMPs are appropriate to ensure the reduction of all POCs in stormwater discharges to the MEP.

To fulfill the requirements of the regulations and for the stormwater annual report the Town of Babylon has created record keeping procedures for the following:

Number of SWPPPs reviewed

Number and type of enforcement actions

Percent of active construction sites inspected once

Percent of active construction sites inspected more than once

Number of construction sites authorized for disturbances of one acre or more and the development of procedures to determine the effectiveness of the program, BMP and measurable goal assessment.

The Town is developing procedures for Post-Construction Stormwater Management Implementation. The Town has developed Covenants and Restrictions to be adopted following the approval of SWPPPs that address post construction stormwater management. Language developed for SWPPPs to implement post construction management is as follows:

COVENANTS AND RESTRICTIONS FOR ACCESS AND
MAINTENANCE

In accordance with Section 189-8 of the Code of the Town of Babylon, Maintenance

and Repair of Stormwater Facilities, the following Covenants and Restrictions will

be

filed:

1. Maintenance access. The applicant or developer must execute a maintenance access agreement for the stormwater infrastructure on site that shall be binding on all subsequent landowners. The agreement shall provide for access to the stormwater infrastructure facility at reasonable times for periodic inspection by the Town of Babylon and its officers to ensure that the infrastructure is maintained in proper working condition to meet design standards and any other provisions established by this Chapter 189. The agreement shall be recorded by the grantor in the Office of the Suffolk County Clerk after approval by the Town of Babylon Planning Board.
2. Maintenance after construction. Stormwater management practices installed in accordance with Chapter 189 shall be operated and maintained to ensure that the goals of Chapter 189 are fully achieved. Agreement of the foregoing shall be recorded by the grantor in the Office of the Suffolk County Clerk after approval by the Town of

Babylon Planning Board. Proper operation and maintenance includes, as a minimum, the following:

- A. A preventive/corrective maintenance program for all critical facilities and systems of treatment and control (or related appurtenances) which are installed or used by the owner or operator to achieve the goals of Chapter 189.
- B. Written procedures for operation and maintenance and training new maintenance personnel.
- C. Discharges from the SMPs shall not exceed design criteria or contribute to water quality standard violations in accordance with § 189-8B of the Code of the Town of Babylon.
- D. Upon completion of construction, any stormwater control structures impacted during construction shall be cleaned by the owner or operator.
- E. Maintenance agreements. The applicant must submit a formal maintenance agreement for stormwater management facilities binding on all subsequent landowners to be approved by the Town of Babylon Planning Board and recorded by the applicant in the Office of the Suffolk County Clerk as a deed restriction on the property once the final plan is approved or at which time the Town of Babylon Planning Board deems appropriate.

In addition the Town of Babylon requires covenants and restrictions to maintain drainage on virtually all projects that undergo site plan review.

Department of Planning and Development Planning Division and Ordinance Enforcement, Illicit discharge and cross connection detection, through site plan review, mapping of the storm drain system

6. Pollution Prevention/Good Housekeeping For Municipal Operations - SWMP

As part of its Stormwater Management Program the Town of Babylon must develop and implement a pollution prevention / good housekeeping program for municipal operations and facilities that addresses municipal operations and facilities that contribute or potentially contribute POCs to the small MS4 system. The operations and facilities include, but are not limited to: street

and bridge maintenance; winter road maintenance; stormwater system maintenance; vehicle and fleet maintenance; park and open space maintenance; municipal building maintenance; solid waste management; new construction and land disturbances; right-of-way maintenance; marine operations, hydrologic habitat modification and other areas of concern. Specific self assessment requirements include:

A. At a minimum frequency of once every three years, the Town of Babylon performs a self assessment of all municipal operations addressed by the SWMP to:

1. Determine the sources of pollutants potentially generated by the Town of Babylon operations and facilities; and
 2. Identify the municipal operations and facilities that will be addressed by the pollution prevention and good housekeeping program, if it is not done already;
 3. Determines management practices, policies, procedures, etc. that will be developed and implemented to reduce or prevent the discharge of (potential) pollutants.
 4. Utilize management practices identified in the ***“NYS Pollution Prevention and Good Housekeeping Assistance Document”*** and other guidance materials available from the EPA, State, or other organizations;
 5. Prioritize pollution prevention and good housekeeping efforts based on geographic area, potential to improve water quality, facilities or operations most in need of modification or improvement, and permittee’s capabilities;
 6. addresses pollution prevention and good housekeeping priorities;
 7. Includes employee pollution prevention and good housekeeping training program and ensures that staff receive and utilize training;
 8. Requires third party entities performing contracted services, including but not limited to street sweeping, snow removal, lawn / grounds care, etc., to meet permit
- The Town of Babylon Department of Public Works has hired its stormwater drainage consultant; Pavement Services Inc. for Stormwater Pollution Prevention activities. The Town has also implemented Best Management Practices at the Town of Babylon Recycling Center. The Town has purchased two new waste oil tanks for the Town of Babylon Recycling Center during 2008 with full containment and fill protection in accordance with Suffolk County Department of Health Services requirements to replace a dilapidated waste oil tank. The new tanks will help prevent surface spills of hydrocarbons at this facility. The Town has also purchased Pig oil spill pads and rolls to contain releases of oils especially hydraulic fluids from

heavy equipment. Employees were trained to utilize these absorbent materials.

The Town of Babylon Department of Public Works is investigating eliminating sand as a component of its highway deicing procedures. The Town currently follows Best Management practices originally recommended by the County of Suffolk to minimize the amount of highway deicing materials from an environmental and economic standpoint. One potential beneficial impact of using exclusively salt will be the elimination of large amounts of sand annually contributed to the area roadways and potentially the stormwater system and surface waters.

Recordkeeping in connection with municipal operations in the Town of Babylon include acres of parking lot swept, miles of street swept, number of catch basins inspected and where necessary, cleaned, post-construction control stormwater management practices inspected and, where necessary cleaned, pounds of phosphorus applied in chemical fertilizer, pounds of nitrogen applied in chemical fertilizer, pounds of pesticides / herbicides applied as pure product, staff training events and number of staff trained and report on effectiveness of program, BMP and measurable goal assessment. Implementation Departments include:

Department of Environmental Control
Department of Public Works
Department of Information Technology

Third Party certification applies when the Town of Babylon relies upon any third party entity to develop or implement any portion of its SWMP. Examples include, but are not limited to a non-government, commercial entity that receives payment from the Town of Babylon for services provided (for example businesses that create policies or procedures for the Town of Babylon to perform illicit discharge identification and track down, maintain roads, remove snow, clean the stormwater drainage system, sweep streets, etc.

The Town of Babylon 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.

Example certification language is provided below:
Contracted Entity Certification Statement:

“I certify under penalty of law that I understand and agree to comply with the terms and conditions of the Town of Babylon stormwater management program and agree to implement any corrective actions identified by the Town of Babylon or designated representative.

I also understand that the Town of Babylon must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System (“SPDES”) general permit for stormwater discharges from the Municipal Separate Storm Sewer Systems (“MS4s”) and that it is unlawful for any person to directly or indirectly cause or contribute to a violation of water quality standards. Further, I understand that any noncompliance by Town of Babylon will not diminish, eliminate, or lessen my own liability.”

Dated _____

The following information must be included with the Certification:

1. Identify the activities that the third party entity will be responsible for and include the name and title of the person providing the signature;
2. The name, address and telephone number of the third party entity;
3. An identifying description of the location of the work performed; and
4. Per above, the date the certification statement, contract or other agreement is signed.

The Department of Environmental Control is currently assisting the Department of Public Works in applying for a New York Ste Department of Environmental Conservation Generic tidal wetlands permit in the coastal area of the Town of Babylon. This permit will insure that road projects which include drainage upgrades that reduce stormwater will be carried out in a timely manner.

The Town Board of the Town of Babylon adopted Chapter 189: STORMWATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL on March 7, 2006 by Local Law Number 10-2006 to address three of the MCMs (illicit discharge detection and elimination, construction site stormwater runoff control and post-construction stormwater management) to ensure successful implementation of these MCMs..

The Town Board in its findings determined that:

- (1) Land development activities and associated increases in site impervious cover often alter the hydrologic response of local watersheds and increase stormwater runoff rates and volumes, flooding, stream channel erosion, or sediment transport and deposition. This stormwater runoff contributes to increased quantities of water-borne pollutants, including siltation of aquatic habitat for fish and other desirable species. The Great South Bay and its tidal tributaries within the Town of Babylon have been placed on the New York State Department of Environmental Conservation (NYSDEC) Priority Water Bodies List. The NYSDEC identified urban runoff and storm drain systems as the major source/contributors to their impairment.
- (2) Clearing and grading during construction tends to increase soil erosion and add to the loss of native vegetation necessary for terrestrial and aquatic habitat.
- (3) Improper design and construction of stormwater management practices can increase the velocity of stormwater runoff, thereby increasing stream bank erosion and sedimentation.
- (4) Impervious surfaces allow less water to percolate into the soil, thereby decreasing groundwater recharge and stream base flow.
- (5) Substantial economic losses can result from these adverse impacts to the waters of the Town of Babylon.
- (6) Stormwater runoff, soil erosion and nonpoint source pollution can be controlled and minimized through the regulation of stormwater runoff from land development activity.

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

And further that the purpose of this chapter is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the residents of the Town of Babylon and to address the findings of fact and statutory authority in § 189 This chapter seeks to meet those purposes by achieving the following objectives:

- A. Establish minimum stormwater and erosion and sediment control requirements in order to protect and safeguard the general health, safety, and welfare of the public and businesses located within the Town of Babylon by implementation of a stormwater management program (SWMP) that meets or exceeds the following six minimum control measures:
 - (1) Public education and outreach on stormwater impacts;
 - (2) Public involvement/participation;
 - (3) Illicit discharge detection and elimination;
 - (4) Construction site stormwater runoff control;
 - (5) Postconstruction stormwater management;
 - (6) Pollution prevention/good housekeeping for municipal operations consistent with the New York State Department of Environmental Conservation SPDES general permit for stormwater discharges from municipal separate stormwater sewer systems (MS4s) GP-02-02, issued pursuant to Article 17, Titles 7 and 8, and Article 70 of

the New York State Environmental Conservation Law (ECL) and the federal Clean Water Act (CWA) regulations for small municipal separate storm sewer systems (MS4s) or as amended or revised.

- B. Require land development activities to conform to the substantive requirements of the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) general permit for construction activities GP-02-01 or as amended or revised.
- C. Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and stream bank erosion and to maintain the integrity of stream channels.
- D. Minimize increases in pollution caused by stormwater runoff from land development activities that would otherwise degrade local water quality.
- E. Minimize the total annual volume of stormwater runoff that flows from any specific site during and following development to the maximum extent practicable (MEP).
- F. Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety.

The Town of Babylon local regulation is more stringent than required by NYS GP-0-08-002. The Town defines a **LAND DEVELOPMENT ACTIVITY** — Construction activity including clearing, grading, excavating, soil disturbance or placement of fill. [Amended 4-11-2007 by L.L. No. 8-2007]. Most all development projects are subject to Chapter 189. However projects under one acre can meet the requirements of Chapter 189 by meeting certain standards. The Town handles projects less than one acre with a construction activity agreement. The elements of the agreement are included on the site plan for the project and the sponsor also has to sign an agreement indicating that these standards will be followed. However it is discretionary, and the Town has the ability to require a full Stormwater Pollution Prevention Plan (SWPPP) for virtually any project with the potential of generating stormwater runoff and or sediment contributions to

waters of the State. The vast majority of development projects reviewed by the Town of Babylon fall under one acre. In light of this, the Town feels that its regulation is highly effective because it addresses stormwater management erosion and sediment control on numerous projects that would not be regulated because they are under an acre. And the Town feels that the conditions contained in the Construction Activity Agreement are reasonable and only incur minimal costs. Inspections of construction activity are conducted by Planning and Development, Planning, Engineering and Building Divisions, Environmental Control and the Department of Public Works Highway Engineering. Post construction management is addressed through the preparation of SWPPPs and the adoption of Covenants and Restrictions. The Town also frequently requires adoption Covenants and Restrictions for maintenance of stormwater drainage infrastructure on private sites. Maintenance of stormwater facilities is essential to long term stormwater management objectives in the Town of Babylon. An example of typical language required in connection with SWPPPs reviewed by the Town of Babylon is provided below:

*COVENANTS AND RESTRICTIONS FOR ACCESS AND
MAINTENANCE*

*In accordance with Section 189-8 of the Code of the Town of
Babylon, Maintenance*

*and Repair of Stormwater Facilities, the following Covenants
and Restrictions will*

be

filed:

- 3. Maintenance access. The applicant or developer must execute a maintenance access agreement for the stormwater infrastructure on site that shall be binding on all subsequent landowners. The agreement shall provide for access to the stormwater infrastructure facility at reasonable times for periodic inspection by the Town of Babylon and its officers to ensure that the infrastructure is maintained in proper working condition to meet design standards and any other provisions established by this Chapter 189. The agreement shall be recorded by the grantor in*

the Office of the Suffolk County Clerk after approval by the Town of Babylon Planning Board.

- 4. Maintenance after construction. Stormwater management practices installed in accordance with Chapter 189 shall be operated and maintained to ensure that the goals of Chapter 189 are fully achieved. Agreement of the foregoing shall be recorded by the grantor in the Office of the Suffolk County Clerk after approval by the Town of Babylon Planning Board. Proper operation and maintenance includes, as a minimum, the following:*
 - A. A preventive/corrective maintenance program for all critical facilities and systems of treatment and control (or related appurtenances) which are installed or used by the owner or operator to achieve the goals of Chapter 189.*
 - B. Written procedures for operation and maintenance and training new maintenance personnel.*
 - C. Discharges from the SMPs shall not exceed design criteria or contribute to water quality standard violations in accordance with § 189-8B of the Code of the Town of Babylon.*
 - D. Upon completion of construction, any stormwater control structures impacted during construction shall be cleaned by the owner or operator.*
 - E. Maintenance agreements. The applicant must submit a formal maintenance agreement for stormwater management facilities binding on all subsequent landowners to be approved by the Town of Babylon Planning Board and recorded by the applicant in the Office of the Suffolk County Clerk as a deed restriction on the property once the final plan is approved or at which time the Town of Babylon Planning Board deems appropriate.*

The Code also includes a section on Illicit Discharges; Section 189-10 Illicit Discharges. Although the Town did not adopt a stand alone Code the Town determined that the regulation of illicit discharges must be enforced pursuant to local laws, regulation by the Suffolk County Department of Health Services and other agencies and also the Towns ability to conduct laboratory analysis and other investigatory factors. The pertinent section of Code is as follows. Illicit discharge prohibited. No person or entity may create or cause an illicit discharge to flow, to infiltrate or in any manner or form to enter into the Town of Babylon storm drainage system in violation of this chapter

and/or Suffolk County Department of Health Services and/or the New York State Department of Environmental Conservation and/or the United States Coast Guard and/or the United States Environmental Protection Agency regulations. Illicit discharges discovered by the Town of Babylon may constitute a violation of this chapter to the limit of authority of the Town of Babylon as provided in § 213-270.1, Water disposal, or shall be referred by the Town of Babylon to the appropriate enforcement agency, such as the Suffolk County Department of Health Services and/or the New York State Department of Environmental Conservation and/or the United States Coast Guard and/or the United States Environmental Protection Agency.

The Town also included application review fees as a means of supplying revenue to fund the Town of Babylon Stormwater Management Program. This aspect of the Code has been very successful in helping to carry out the program.

The complete Code is attached as Appendix I or it may viewed on the Town of Babylon web site at townofbabylon.com under the Town Code.

Technology Standards

The Town of Babylon recognizes that with written notification by the New York State Department of Environmental Conservation, it must comply with all applicable technology-based effluent standards or limitations promulgated by EPA pursuant to Sections 301 and 304 of the CWA. If an effluent standard or limitation more stringent than any effluent limitation in the general 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.

Pathogen Impaired Watershed MS4s

Pathogen Impaired Watershed MS4s are mapped in Appendix 6 and 7 of New York State Department of Environmental Conservation Municipal Separate Storm Sewer Systems (MS4s) Permit No. GP-0-08-002 issued pursuant to Article 17 Titles 7, 8 and Article 70 of the Environmental Conservation Law Part IV.) The Town of Babylon is not in a mapped area and therefore not subject to these requirements. However, the Town of Babylon is voluntarily carrying out a number of the requirements to further the effectiveness of its stormwater program and some requirements overlap

with other requirements of GP-0-08-002 or are a part of the implementation of a watershed action plan.

The Town of Babylon has two programs that specifically target animal waste, The Pooper Scooper Program and also the Waterfowl Control Program. Both of these programs target animal waste as a pollutant of concern. Included in the program are ongoing public education and outreach program designed to describe the impacts of Pathogens (the POC) on waterbodies. The program identifies the potential sources of Pathogens in stormwater runoff and describes steps that contributors can take to reduce the Pathogens in stormwater runoff. The program must also describe steps that contributors of non-stormwater discharges can take to reduce Pathogens. Educational materials addressing the sources of Pathogens in stormwater and pollutant reduction practices have been developed by the Town of Babylon.

Nitrogen Watershed MS4s

Nitrogen Watershed MS4s are mapped in Appendix 8 of New York State Department of Environmental Conservation Municipal Separate Storm Sewer Systems (MS4s) Permit No. GP-0-08-002 issued pursuant to Article 17 Titles 7, 8 and Article 70 of the Environmental Conservation Law Part IV.) The Town of Babylon waters are not included in this mapping. However the Town is fulfilling many of the requirements under this designation voluntarily.

Appendix I

Chapter 189: STORMWATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL

[HISTORY: Editor's Note: Former Ch. 189, Solid Waste Management, adopted 12-17-1985 by L.L. No. 5-1985, was superseded 9-25-1987 by L.L. No. 7-1987. For current provisions, see Ch. 133, Solid Waste Management. Adopted by the Town Board of the Town of Babylon 3-7-2006 by L.L. No. 10-2006. Amendments noted where applicable.]

GENERAL REFERENCES

Environmental Conservation Commission — See Ch. 18.

Department of Environmental Control — See Ch. 20.

Environmental quality review — See Ch. 114.

Flood damage control — See Ch. 125.

Freshwater wetlands — See Ch. 128.

Zoning — See Ch. 213.

§ 189-1. Findings of fact; statutory authority.

A. It is hereby determined by the Town Board of the Town of Babylon that:

- (1) Land development activities and associated increases in site impervious cover often alter the hydrologic response of local watersheds and increase stormwater runoff rates and volumes, flooding, stream channel erosion, or sediment transport and deposition. This stormwater runoff contributes to increased quantities of water-borne pollutants, including siltation of aquatic habitat for fish and other desirable species. The Great South Bay and its tidal tributaries within the Town of Babylon have been placed on the New York State Department of Environmental Conservation (NYSDEC) Priority Water Bodies List. The NYSDEC identified urban runoff and storm drain systems as the major source/contributors to their impairment.
- (2) Clearing and grading during construction tends to increase soil erosion and add to the loss of native vegetation necessary for terrestrial and aquatic habitat.
- (3) Improper design and construction of stormwater management practices can increase the velocity of stormwater runoff, thereby increasing stream bank erosion and sedimentation.
- (4) Impervious surfaces allow less water to percolate into the soil, thereby decreasing groundwater recharge and stream base flow.
- (5) Substantial economic losses can result from these adverse impacts to the waters of the Town of Babylon.
- (6) Stormwater runoff, soil erosion and nonpoint source pollution can be controlled and minimized through the regulation of stormwater runoff from land development activity.
- (7) The regulation of stormwater runoff discharges from land development activities in order to control and minimize increases in stormwater runoff rates and volumes, soil erosion, stream channel erosion, and nonpoint source pollution associated with stormwater runoff is in the public interest and will minimize threats to public health and safety.

(8) Regulation of land development activities by means of performance standards governing stormwater management and site design will result in development compatible with the natural functions of a particular site or an entire watershed and thereby mitigate the adverse effects of erosion and sedimentation from development.

B. Therefore, the Town Board of the Town of Babylon hereby establishes this policy applicable to all land development activities within the Town of Babylon to provide reasonable guidance for the regulation of stormwater runoff and erosion and sediment control for the purpose of protecting local water resources from degradation. It is determined that the regulation of stormwater runoff and sediment discharges from land development projects and other construction activities is in the public interest in order to control and minimize increases in stormwater runoff rates and volumes, soil erosion, stream channel erosion, and nonpoint source pollution associated with stormwater runoff and will prevent threats to public health and safety and enhance and improve the environmental and economic conditions within the Town of Babylon. This chapter is adopted pursuant to the requirements of the New York State Environmental Conservation Law (ECL) and the federal Clean Water Act (CWA) for small municipal separate storm sewer systems (MS4s) to develop, implement and enforce a stormwater management program (SWMP) designed to reduce the discharges of pollutants to the waters of the United States within the Town of Babylon to the maximum extent practicable (MEP) in order to protect water quality. This chapter is consistent with the Comprehensive Management Plan for the South Shore Estuary Reserve to reduce nonpoint source pollution of the estuary and its tributaries.

§ 189-2. Purpose.

The purpose of this chapter is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the residents of the Town of Babylon and to address the findings of fact and statutory authority in § 189-1. This chapter seeks to meet those purposes by achieving the following objectives:

A. Establish minimum stormwater and erosion and sediment control requirements in order to protect and safeguard the general health, safety, and welfare of the public and businesses located within the Town of

Babylon by implementation of a stormwater management program (SWMP) that meets or exceeds the following six minimum control measures:

- (1) Public education and outreach on stormwater impacts;
 - (2) Public involvement/participation;
 - (3) Illicit discharge detection and elimination;
 - (4) Construction site stormwater runoff control;
 - (5) Postconstruction stormwater management;
 - (6) Pollution prevention/good housekeeping for municipal operations consistent with the New York State Department of Environmental Conservation SPDES general permit for stormwater discharges from municipal separate stormwater sewer systems (MS4s) GP-02-02, issued pursuant to Article 17, Titles 7 and 8, and Article 70 of the New York State Environmental Conservation Law (ECL) and the federal Clean Water Act (CWA) regulations for small municipal separate storm sewer systems (MS4s) or as amended or revised.
- B. Require land development activities to conform to the substantive requirements of the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) general permit for construction activities GP-02-01 or as amended or revised.
- C. Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and stream bank erosion and to maintain the integrity of stream channels.
- D. Minimize increases in pollution caused by stormwater runoff from land development activities that would otherwise degrade local water quality.
- E. Minimize the total annual volume of stormwater runoff that flows from any specific site during and following development to the maximum extent practicable (MEP).
- F. Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety.

§ 189-3. Definitions.

The terms used in this chapter or in documents prepared or reviewed pursuant to this chapter shall have the meanings as set forth in this section.

ACCESSORY BUILDING — A building or a detached private garage subordinate to the main building on a lot, used for purposes customarily incidental to those of the main building, not used for habitation and which does not exceed the size of the main building. This shall not include trailers, mobile homes or like structures, with or without wheels.

ACCESSORY STRUCTURE — A structure subordinate to the buildings on a lot, used for purposes customarily incidental to those of the buildings, having no foundation or permanent attachment to the land other than a simple slab, not used for habitation, swimming pool enclosures or garage purposes and which does not exceed the size of the main building. This shall not include trailers, mobile homes or like structures, with or without wheels.

ACRE — Forty-three thousand, five hundred sixty square feet of land area.

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

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

BUILDING — A combination of any materials, whether portable or fixed, having a roof to form a structure affording shelter for persons, animals or property. The word "building" shall be construed, when used herein, as though followed by the words "or part or parts thereof" unless the context clearly requires a different meaning. The term "building" shall also mean "factory manufactured home" and "mobile home."

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

CLEARING — Any activity that removes the vegetative surface cover.

COMMERCIAL OR INDUSTRIAL AGREEMENT — An agreement signed by a landowner, applicant or builder to implement any reasonable

requirements needed as determined by the Town of Babylon necessary to prevent erosion and sediment loss in lieu of an erosion and sediment control plan for construction on a commercial or industrial site on less than one acre of land.

DEDICATION — The deliberate transfer of real property by its owner for general public use.

DEPARTMENT OF PUBLIC WORKS — The Town of Babylon Department of Public Works.

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

DEVELOPER — A person who undertakes land development activities.

ENGINEERING DIVISION — The Engineering Division of the Town of Babylon Department of Planning and Development. This Division is also the designated Stormwater Management Office for the Town of Babylon.

ENVIRONMENTAL CONTROL — The Town of Babylon Department of Environmental Control.

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

GRADING — Excavating, filling and/or any movement of material at a site, including the resulting conditions thereof.

HIGHWAY ENGINEERING — The Highway Engineering Division of the Town of Babylon Department of Public Works.

ILLICIT DISCHARGE — Any discharge to a municipal separate storm sewer and or the Town of Babylon stormwater drainage system that is not entirely composed of stormwater. Illicit discharges shall include but not be limited to those sources as identified by § 122.26(b)(2) of the Code of Federal Regulations; sanitary wastewater, effluent from septic tanks, commercial car wash wastewater, petroleum products, antifreeze and radiator flush liquid, laundry wastewater, spills from roadway accidents, and household and motor vehicle chemicals, but does not include liquids discharged from fire-fighting activities.

IMPERVIOUS COVER — Those surfaces, improvements and structures

that cannot effectively infiltrate rainfall, snowmelt and water (e.g., building rooftops, pavement, sidewalks, driveways, etc.).

INDUSTRIAL STORMWATER PERMIT — A state pollutant discharge elimination system permit issued to a commercial industry or group of industries which regulates the pollutant levels associated with industrial stormwater discharges or specifies on-site pollution control strategies.

INFILTRATION — The process of percolating stormwater into the subsoil.

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

LAND DEVELOPMENT ACTIVITY — Construction activity including clearing, grading, excavating, soil disturbance or placement of fill.
[Amended 4-11-2007 by L.L. No. 8-2007]

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

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

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

PHASING — Clearing a parcel of land in distinct pieces or parts, with the stabilization of each piece completed before the clearing of the next.

PLANNING AND DEVELOPMENT — The Town of Babylon Department of Planning and Development.

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

PROJECT — Land development activity.

RECHARGE — The replenishment of underground water reserves.

SEDIMENT CONTROL — Measures that prevent eroded sediment from leaving the site.

SENSITIVE AREAS — Cold-water fisheries, shellfish beds, swimming beaches, groundwater recharge areas, water supply reservoirs, and habitats for threatened, endangered or special-concern species.

SINGLE-FAMILY AGREEMENT — An agreement signed by a landowner, applicant or builder to implement any reasonable requirements needed, as determined by the Town of Babylon, to prevent erosion and sediment loss in lieu of an erosion and sediment control plan for the construction of a single-family home.

SPDES GENERAL PERMIT FOR CONSTRUCTION ACTIVITIES GP-02-01 — A permit under the New York State Pollutant Discharge Elimination System (SPDES) issued to developers of construction activities to regulate disturbance of one or more acres of land.

SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM MUNICIPAL SEPARATE STORMWATER SEWER SYSTEMS GP-02-02 — A permit under the New York State Pollutant Discharge Elimination System (SPDES) issued to municipalities to regulate discharges from municipal separate storm sewers for compliance with EPA-established water quality standards and/or to specify stormwater control standards.

STABILIZATION — The use of practices that prevent exposed soil from eroding.

STOP-WORK ORDER — An order issued which requires that all construction activity on a site be stopped.

STORMWATER — Rainwater, surface runoff, snowmelt and drainage.

STORMWATER DRAINAGE SYSTEM — The Town of Babylon stormwater drainage system, which accepts, captures and conveys stormwater from the Town's highway and roadway system.

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

STORMWATER MANAGEMENT — The use of structural or nonstructural practices that are designed to reduce stormwater runoff and

mitigate its adverse impacts on property, natural resources and the environment.

STORMWATER MANAGEMENT FACILITY — One or a series of stormwater management practices installed, stabilized and operating for the purpose of controlling stormwater runoff.

STORMWATER MANAGEMENT OFFICE — The Town of Babylon Engineering Division is designated by the Town of Babylon as the Stormwater Management Office to accept and conduct the primary review of stormwater pollution prevention plans and inspect stormwater management practices. The Town of Babylon Planning and Development Department, the Highway Engineering Division and the Department of Environmental Control shall also review the SWPPPs submitted by applicants to the extent possible and necessary to insure that applicants meet the requirements of this chapter.

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

STORMWATER MANAGEMENT PROGRAM — A stormwater management program implemented by the Town of Babylon consistent and in no case less protective than the New York State Department of Environmental Conservation SPDES general permits for stormwater discharges from municipal separate stormwater sewer systems (MS4s) and from construction activity GP-02-02 and GP-02-01, respectively, issued pursuant to Article 17, Titles 7 and 8, and Article 70 of the New York State Environmental Conservation Law (ECL) and the federal Clean Water Act (CWA) regulations for small municipal separate storm sewer systems (MS4s).

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) — A plan for controlling stormwater runoff and pollutants from a site during and after construction activities.

STORMWATER RUNOFF — Flow on the surface of the ground, resulting from precipitation.

SURFACE WATERS OF THE STATE OF NEW YORK — Lakes, bays, sounds, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic Ocean within the

territorial seas of the State of New York and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the state or within its jurisdiction. Storm sewers and waste treatment systems including treatment ponds or lagoons which also meet the criteria of this definition are not waters of the state. This exclusion applies only to man-made 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.

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

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

§ 189-4. Applicability.

- A. This chapter shall be applicable to all land development activities identified and defined in § 189-3 unless otherwise exempted under § 189-5 of this Code. No person, landowner or entity shall undertake a land development activity without first meeting all the requirements of this chapter. The development of commercial and industrial sites and single-family homes on less than one acre of land may meet the requirements of this chapter with an approved commercial, industrial or single-family agreement, respectively.
- B. The Planning and Development Department shall accept and review and distribute all stormwater pollution prevention plans (SWPPPs) and forward such plans to the applicable municipal Town of Babylon departments and boards. The SWPPPs' information shall be added to and shown on the site development plans for each project submitted to the Town of Babylon. The SWPPPs shall become an integral part of the review process for each project submitted to the Town of Babylon. The requirements of this chapter and the Town of Babylon Planning Board site improvement and subdivision specifications shall be followed for all land development activity in the Town of Babylon. Such SWPPPs shall be shown on the site plans and/or the subdivision plats for the land development activity. The Stormwater Management Office may:
 - (1) Review the plans;

- (2) Under special circumstances and upon approval by the Town Board of the Town of Babylon, engage the services of a registered professional engineer to review the plans, specifications and related documents at a cost to be paid by the applicant;
- (3) Accept the certification of a licensed professional that the plans conform to the requirements of this chapter.

§ 189-5. Exemptions.

The following activities are exempt from review under this chapter:

- A. Agricultural activity as defined in this chapter.
- B. The construction of additions, fences, accessory buildings and structures, sheds, sidewalks, walkways, driveways or modifications to existing one- or two-family structures and sites, including those that may require variances, maintenance or repair involving no substantial changes in an existing structure or facility.
- C. Routine landscape maintenance and horticultural activities such as lawn cutting, tree trimming, the installation of piped mechanical sprinkler or irrigation systems, the planting of trees, shrubs and vegetation in connection with an existing site that does not cause any major soil disturbance, or minor excavations for driveways, walks or sidewalks that generally maintain the existing grade of the land.
- D. Repairs to any stormwater management practice or facility deemed necessary by the Town of Babylon Department of Public Works or any work done under contract for the Town of Babylon. Nothing contained in this chapter with regards to land development activity shall be applicable to the Town of Babylon or any of its departments, agencies or contractors.
- E. The development of any part of a subdivision if the plat for the subdivision has been approved by the Town of Babylon Planning Board on or before the effective date of this chapter.
- F. Land development activities for which a building permit has been approved on or before the adoption of this chapter.
- G. Cemetery graves.
- H. Installation of fence, sign, telephone, and electric poles and other kinds

of posts or poles; construction of minor additions, accessory structures or modifications to existing single-family or two-family structures.

- I. Emergency activity immediately necessary to protect life, property or natural resources.
- J. Activities of an individual engaging in home gardening by growing flowers, vegetables and other plants primarily for use by that person and his or her family.
- K. The installation of aboveground and below-ground fuel oil storage tanks equal to or below a total capacity of 1,100 gallons.
- L. The construction of docks and installation of poles and other similar structures, refacing existing bulkheading, but not new bulkheading.
- M. Street openings and right-of-way openings for the purpose of repair of existing utility facilities.
- N. The extension of utility distribution facilities, including gas, electric and telephone, cable, water and sewer connections, to serve existing approved sites or underwater lands.

§ 189-6. Stormwater pollution prevention plans.

- A. Stormwater pollution prevention plan requirement. No application for approval of a land development activity shall be approved until the Town of Babylon has received an acceptable stormwater pollution prevention plan (SWPPP) prepared in accordance with the specifications in the chapter. An SWPPP shall be required consistent with the requirements of this chapter. Any land development activity conducted without an approved SWPPP shall be in violation of this chapter.
- B. Contents of stormwater pollution prevention plans. All SWPPPs shall provide the following background information and erosion and sediment controls:
 - (1) Background information about the scope of the project, including location, type and size of the project.
 - (2) A site map/construction drawing(s) at an appropriate scale for the project, including a general location map. At a minimum, the site map should show the total site area, all improvements, areas of disturbance, and areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s), wetlands

and drainage patterns that could be affected by the construction activity; existing and final slopes; locations of off-site material, waste, borrow or equipment storage areas; and location(s) of the stormwater discharges(s).

- (3) A description of the soil(s) present at the site based on the Suffolk County Soil Survey, United States Department of Agriculture, Soil Conservation Service.
- (4) A construction phasing plan describing the intended sequence of construction activities, including clearing and grubbing, excavation and grading, utility and infrastructure installation and any other activity at the site that results in soil disturbance. Consistent with the New York Standards and Specifications for Erosion and Sediment Control (Erosion Control Manual), not more than five acres shall be disturbed at any one time unless pursuant to an approved SWPPP.
- (5) A description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a pollutant source in stormwater runoff.
- (6) A description of construction and waste materials expected to be stored on site with updates as appropriate, and a description of controls to reduce pollutants from these materials, including storage practices to minimize exposure of the materials to stormwater, and spill prevention and response.
- (7) Temporary and permanent structural and vegetative measures to be used for soil stabilization, runoff control and sediment control for each stage of the project from initial land clearing and grubbing to project closeout.
- (8) A site map/construction drawing(s) specifying the location(s), size(s) and length(s) of each erosion and sediment control practice.
- (9) Dimensions, material specifications and installation details for all erosion and sediment control practices, including the siting and sizing of any temporary sediment basins.
- (10) Temporary practices that will be converted to permanent control measures.
- (11) An implementation schedule for staging temporary erosion and sediment control practices, including the time of initial placement

and duration that each practice should remain in place.

- (12) A maintenance schedule to ensure continuous and effective operation of the erosion and sediment control practice.
 - (13) Name(s) of the receiving water(s).
 - (14) A clear and concise delineation of the SWPPP implementation responsibilities for each part of the site.
 - (15) A description of structural practices designed to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree available.
 - (16) Any existing data that describes the stormwater runoff at the site.
- C. Land development activities as defined in %'entity-sect'% § 189-3 and meeting Condition A, B, or C below shall also include water quantity and water quality controls and mitigation measures (postconstruction stormwater runoff controls) as set forth below as applicable:
- (1) Condition A: Stormwater runoff from land development activities discharging a pollutant of concern to either impaired water identified on the Department's 303(d) list of impaired waters or a total maximum daily load (TMDL) designated watershed for which pollutants in stormwater have been identified as a source of the impairment.
 - (2) Condition B: Stormwater runoff from land development activities disturbing five or more acres.
 - (3) Condition C: Stormwater runoff from land development activity disturbing between one and five acres of land during the course of the project, exclusive of the construction of single-family residences and construction activities at agricultural properties.
- D. SWPPP requirements for Conditions A, B and C:
- (1) All information in § 189-6B of this chapter.
 - (2) A description of each postconstruction stormwater management practice.
 - (3) A site map/construction drawing(s) showing the specific location(s) and size(s) of each postconstruction stormwater management practice.

- (4) A hydrologic and hydraulic analysis for all structural components of the stormwater management system for the applicable design storms.
 - (5) A comparison of postdevelopment stormwater runoff conditions with predevelopment conditions.
 - (6) Dimensions, material specifications and installation details for each postconstruction stormwater management practice.
 - (7) A maintenance schedule to ensure continuous and effective operation of each postconstruction stormwater management practice.
 - (8) Maintenance easements to ensure access to all stormwater management practices at the site for the purpose of inspection and repair. Easements shall be recorded on the plan and shall remain in effect with transfer of title to the property.
 - (9) An inspection and maintenance agreement binding on all subsequent landowners served by the on-site stormwater management measures in accordance with § 189-8 of this chapter.
- E. Plan certification. The SWPPP shall be prepared by an architect, certified environmental professional or professional engineer and must be signed by the architect, certified environmental professional, or professional engineer preparing the plan, who shall certify that the design of all stormwater management practices meet the requirements in this chapter.
- F. Other environmental permits. The applicant shall provide evidence of proper submittal for all applicable environmental and health permits prior to approval of the final stormwater design plan. In certain instances, an approval of the environmental and/or health permits may be required by the Town of Babylon prior to approval of the final stormwater design plan.
- G. Contractor certification.
- (1) Each contractor and subcontractor identified in the SWPPP who will be involved in soil disturbance and/or stormwater management practice installation shall sign and date a copy of the following certification statement before undertaking any land development activity: "I certify under penalty of law that I understand and agree to comply with the terms and conditions of the Stormwater Pollution Prevention Plan. I also understand that it is unlawful for

any person to cause or contribute to a violation of water quality standards." This certification statement shall be shown on the site plan for the land disturbance activity.

- (2) The certification must include the name and title of the person providing the signature, the address and telephone number of the contracting firm, the address (or other identifying description) of the site, and the date the certification is made.
- (3) The certification statement(s) shall become part of the SWPPP for the land development activity.

H. A copy of the SWPPP shall be retained at the site of the land development activity during construction from the date of initiation of construction activities to the date of final stabilization.

§ 189-7. Performance and design criteria.

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

- A. Technical standards. For the purpose of this chapter, the following documents shall serve as official guides and specifications for stormwater management. Stormwater management practices that are designed and constructed in accordance with these technical documents shall be presumed to meet the standards imposed by this chapter.
 - (1) The New York State Stormwater Management Design Manual (New York State Department of Environmental Conservation, the most current version or its successor, hereafter referred to as the Design Manual).
 - (2) New York Standards and Specifications for Erosion and Sediment Control (Empire State Chapter of the Soil and Water Conservation Society, 2004, most current version or its successor, hereafter referred to as the Erosion Control Manual).
 - (3) The most current version of the Town of Babylon Planning Board site improvement and subdivision specifications.
 - (4) United States Environmental Protection Agency's best management practices (BMPs).
- B. Water quality standards. Any land development activity shall not cause

an increase in turbidity or in a substantial visible contrast to natural conditions in surface waters of the State of New York.

§ 189-8. Maintenance and repair of stormwater facilities.

A. Maintenance during construction.

(1) The applicant or developer of the land development activity shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the applicant or developer to achieve compliance with the conditions of this chapter. Sediment shall be removed from stormwater structures whenever their design capacity has been reduced by 50%. Street sweeping by broom or machine or other suitable means of cleanup shall be conducted daily as necessary for any sediment or material that has inadvertently migrated off site. Litter shall also be removed on a daily basis from the site or off site.

(2) The applicant or developer or his or her representative shall be on site at all times when construction or grading activity takes place and shall inspect and document the effectiveness of all erosion and sediment control practices. Inspection reports shall be completed every seven days and within 24 hours of any storm event producing 0.5 inches of precipitation or more. The reports shall be delivered to the Engineering Division and also copied to the site log book.

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

C. Maintenance after construction. The owner or operator of permanent stormwater management practices installed in accordance with this chapter shall be operated and maintained to ensure that the goals of this

chapter are fully achieved. Proper operation and maintenance also includes, as a minimum, the following:

- (1) A preventive/corrective maintenance program for all critical facilities and systems of treatment and control (or related appurtenances) which are installed or used by the owner or operator to achieve the goals of this chapter.
- (2) Written procedures for operation and maintenance and training new maintenance personnel.
- (3) Discharges from the SMPs shall not exceed design criteria or contribute to water quality standard violations in accordance with § 189-8B.
- (4) Upon completion of construction, any stormwater control structures impacted during construction shall be cleaned by the owner or operator.

D. Maintenance agreements. The applicant must submit a formal maintenance agreement for stormwater management facilities binding on all subsequent landowners to be approved by the Town of Babylon and recorded by the applicant in the Office of the Suffolk County Clerk as a deed restriction on the property once the final plan is approved or at which time the Town of Babylon deems appropriate.

§ 189-9. Construction inspection; guarantees; reports; enforcement and penalties for offenses.

A. Erosion and sediment control inspection.

- (1) A preconstruction meeting may be conducted between the applicant and Town of Babylon Engineering Division as required. At minimum, the following criteria shall be included in the construction inspections:
 - (a) Start of construction.
 - (b) Installation of sediment and erosion control measures.
 - (c) Completion of site clearing.
 - (d) Completion of rough grading.
 - (e) Completion of final grading.
 - (f) Close of the construction season (as applicable).

- (g) Completion of final landscaping.
 - (h) Successful establishment of landscaping in public areas.
- (2) The applicant and developer shall notify the Town of Babylon Engineering Division 24 hours in advance for inspection of items in Subsection A(1)(a) through A(1)(h). The Town of Babylon Engineering Division shall determine the inspection schedule and add any other inspection requirements as deemed necessary. The applicant and developer shall be notified in writing of any violations and the required corrective actions. No further work shall be conducted except for site stabilization until any violations are corrected.
- B. Stormwater management practice inspections. The Town of Babylon Engineering Division is responsible for conducting inspections of stormwater management practices (SMPs). All applicants are required to submit as-built plans for any stormwater management practices located on site after final construction is completed. The plan must show the final design specifications for all stormwater management facilities and must be certified by a professional engineer.
- C. Submission of reports. The Town of Babylon may require monitoring and reporting from entities subject to this chapter as are necessary to determine compliance with this law.
- D. Construction completion guarantee. In order to ensure the full and faithful completion of all land development activities related to compliance with all conditions set forth by the Town of Babylon in its approval of the stormwater pollution prevention plan, the Town of Babylon Planning Board may require the applicant or developer to provide, prior to construction, a performance bond, cash escrow, or irrevocable letter of credit from an appropriate financial or surety institution which guarantees satisfactory completion of the project and names the Town of Babylon as the beneficiary. The security shall be in an amount to be determined by the Town of Babylon based on submission of final design plans, with reference to actual construction and landscaping costs. The performance guarantee shall remain in force until the surety is released from liability by the Town of Babylon, provided that such period shall not be less than one year from the date of final acceptance or such other certification that the facility(ies) have been constructed in accordance with the approved plans and specifications and

that a one-year inspection has been conducted and the facilities have been found to be acceptable to the Town of Babylon. Per annum interest on cash escrow deposits shall be reinvested in the account until the surety is released from liability.

- E. Maintenance guarantee. Where stormwater management and erosion and sediment control facilities are to be operated and maintained by the developer or by a corporation that owns or manages a commercial or industrial facility, the developer, prior to construction, may be required to provide the Town of Babylon with an irrevocable letter of credit from an approved financial institution or bond or surety to ensure proper operation and maintenance of all stormwater management and erosion control facilities both during and after construction and until the facilities are removed from operation. If the developer or landowner fails to properly operate and maintain stormwater management and erosion and sediment control facilities, the Town of Babylon may draw or foreclose upon the account or on the bond to cover the costs of proper operation and maintenance, including engineering and inspection costs.
- F. Recordkeeping. The Town of Babylon Stormwater Management Office may require entities subject to this chapter to maintain records demonstrating compliance with this chapter.
- G. Violations.
 - (1) Any person who shall violate any of the provisions of this chapter or who shall fail to comply therewith or with any of the requirements thereof or who shall build or alter or use any building or land in violation of any detailed statement or plan submitted and approved hereunder shall be guilty of a violation, and upon conviction thereof, a fine of not less than \$250 nor more than \$1,000 must be imposed and a term of imprisonment for a period not to exceed six months may be imposed, or both, for conviction of a first offense; for conviction of a second offense, both of which were committed within a period of five years, shall be guilty of a violation, and upon conviction a fine not less than \$1,000 nor more than \$2,500 must be imposed and a term of imprisonment for a period not to exceed six months may be imposed, or both; and, upon conviction for a third or subsequent offense, all of which were committed within a period of five years, shall be guilty of a violation and a fine not less than \$2,500 nor more than \$5,000 must be imposed and a term of imprisonment for a period not to exceed

six months, or both. Each day's continued violation shall constitute a separate additional violation.

- (2) Upon application of the Town Attorney's office a violation of this chapter may be reduced to an "attempted violation" as established by the New York State Penal Law § 110.00. Penalties for the reduced charge of attempt shall be:
 - (a) Any person who shall attempt to violate any of the provisions of this chapter shall be guilty of a violation, and upon conviction thereof, a fine of not less than \$100 nor more than \$500 must be imposed and a term of imprisonment for a period not to exceed six months, or both, for conviction of a first offense; for conviction of a second offense, both of which were committed within a period of five years, a fine not less than \$500 nor more than \$1,000 must be imposed and a term of imprisonment for a period not to exceed six months may be imposed, or both; and, upon conviction for a third or subsequent offense, all of which were committed within a period of five years, a fine not less than \$1,000 nor more than \$2,500 must be imposed and a term of imprisonment for a period not to exceed six months may be imposed, or both. Each day's continued violation shall constitute a separate additional violation.

- H. Stop-work orders. The Town of Babylon may issue a stop-work order for violations of this chapter. Persons receiving a stop-work order shall be required to halt any land development activities, except those activities that address the violations leading to the stop-work order. The stop-work order shall be in effect until the Town of Babylon confirms that the land development activity is in compliance and the violation has been satisfactorily addressed. Failure to address a stop-work order in a timely manner may result in civil, criminal, or monetary penalties in accordance with the enforcement measures authorized in this chapter.
- I. Injunctions. Any land development activity that is commenced or is conducted contrary to this chapter may be restrained by injunction or otherwise abated in a manner provided by law.
- J. Withholding of certificate of occupancy. If any building or land development activity is installed or conducted in violation of this chapter, the Town of Babylon may withhold the issuance of the

certificate of occupancy and/or compliance to prevent the occupancy of said building or land until corrections to all stormwater facilities have been made.

- K. Restoration of lands. In connection with any violation of this chapter, the Town of Babylon may require complete restoration of a site within 60 days to return such land to its undisturbed condition. In the event that reasonable progress towards restoration of a site is not observed by the Town of Babylon within 30 days of a violation of this chapter, the Town of Babylon may undertake the necessary corrective action and assess the cost of the restoration to the real property tax for the subject location.

§ 189-10. Illicit discharges.

- A. Illicit discharge prohibited. No person or entity may create or cause an illicit discharge to flow, to infiltrate or in any manner or form to enter into the Town of Babylon storm drainage system in violation of this chapter and/or Suffolk County Department of Health Services and/or the New York State Department of Environmental Conservation and/or the United States Coast Guard and/or the United States Environmental Protection Agency regulations. Illicit discharges discovered by the Town of Babylon may constitute a violation of this chapter to the limit of authority of the Town of Babylon as provided in § 213-270.1, Water disposal, or shall be referred by the Town of Babylon to the appropriate enforcement agency, such as the Suffolk County Department of Health Services and/or the New York State Department of Environmental Conservation and/or the United States Coast Guard and/or the United States Environmental Protection Agency.

§ 189-11. Application review fees.

An application fee shall be required for review of all land development activities; SWPPPs; commercial, industrial and single-family agreements; inspections; or SMP maintenance performed by the Town of Babylon or performed by a third party for the Town of Babylon. The fee schedule shall be established by the Town Board of Town of Babylon by resolution. All fees generated by this program shall be credited to a revenue line identified as the Phase II stormwater revenue line, Town of Babylon Department of Environmental Control. Monies accumulated by the revenue line will be utilized to support the Town of Babylon stormwater management and

erosion and sediment control program. The Town Board of the Town of Babylon may amend the fee schedule by resolution as deemed necessary from time to time.

Appendix II Town of Babylon Construction Activity Agreement

WHY YOU HAVE TO SIGN THIS FORM:

Every time it rains, the runoff created (i.e. stormwater) carries pollutants such as oils, greases, detergents, sediment (i.e. soil or sand) and land fertilizer into storm drains, creeks, and other waterbodies. Within the Town of Babylon, most of these pollutants eventually end up in the Great South Bay, affecting shellfish, birds, and recreation such as swimming. Construction Activity makes these conditions worse, and increases the likelihood of pollution.

As mandated by the Federal Clean Water Act, the Town of Babylon has passed Chapter 189, Stormwater Management and Erosion and Sediment Control. All associated construction activity fees and plan requirements are necessary to fulfill the mandates of the Federal and State Governments.

WHAT YOU HAVE TO DO:

In lieu of a Stormwater Pollution Prevention Plan (SWPPP) for the construction, I agree to implement any reasonable requirements necessary as determined by the Town of Babylon necessary to prevent soil and/or pollutants from leaving construction site, and ultimately entering the Great South Bay and/or its tributary creeks and rivers.

Furthermore, I shall adhere of the Code of the Town of Babylon in reference to the requirements of Chapter 189 Stormwater Management and Erosion and Sediment Control. I understand that failure to comply the requirements of Chapter 189 Storm water Management and Erosion and Sediment Control will result in violations being issued by the Town of Babylon.

For purposes of TOB Code compliance, town personnel, including but not limited to Building Inspectors, Ordinance Inspectors, Engineering inspectors, Highway/DPW personnel, Planning personnel, and/or

representatives from the Department of Environmental Control, are authorized to access construction site.

I agree to comply with the following:

- ✓ I will have available on-site at all times this agreement and related plans. I will explain the requirements to all construction personnel and subcontractors. I take responsibility for full compliance with this agreement and Chapter 189 regulations for all persons working in the vicinity of the construction site.
- ✓ No vegetation and/or trees may be cleared without first receiving a mark-out from Planning and/or Engineering Inspectors. Existing vegetation and trees shall remain in place until after construction is complete. Only vegetation and trees specifically in the path of construction activity may be removed.
- ✓ No earth, fill or construction material shall be allowed to migrate off site from this project on to the Town of Babylon roadway and or storm drain system or an adjacent property.
- ✓ No fill shall be brought into a site without the express approval of a Building or Engineering inspector. Piles of fill shall be stabilized and/or contained with grass seed, silt fences, hay bales, or other approved methods.
- ✓ At the end of each workday the adjacent roadway and or storm drain system shall be self inspected for material. All construction sites and adjacent roadways shall be cleared of soil and other material at the end of each day.
- ✓ All construction and demolition debris and materials, including wet concrete, shall be disposed of at an appropriate facility in accordance with all TOB and NYSDEC waste management regulations. Dumping any liquid, semi-liquid, or other materials from a construction site into storm drains, roadways, or vacant property is grounds for a violation.
- ✓ Litter shall be picked up on a daily basis from the site, adjacent properties and/or the road system.
- ✓ Toilet facilities (either portable or existing) shall be provided on site during the construction period.
- ✓ A temporary stable construction entrance shall be constructed utilizing recycled concrete aggregate (RCA) or a similar material, unless a

suitable constructed entrance already exists on the site.

- ✓ All municipal or private drainage inlets adjacent to area of construction shall be protected from pollutants through the use of products/sponges designed for this purpose.
- ✓ On areas of steep slopes and areas cleared of vegetation, suitable stabilization methods, as shown on approved site plans and stormwater pollution prevention plan (SWPPP), shall be employed to prevent soil migration and stormwater runoff.
- ✓ All exposed expanses of soil shall be stabilized with annual grass seed as soon as areas will no longer be needed for construction staging, or if areas will remain undisturbed for six weeks or longer.

APPENDIX III

A Local Law adding to the Code of the Town of Babylon, Chapter 106, Article VI, in RESOLUTION NO. 747 OCTOBER 21, 2008
TOWN BOARD ENVIRONMENTAL DETERMINATION
CHAPTER 106, ARTICLE VI OF THE BABYLON TOWN CODE
(DOGS AND OTHER ANIMALS)

The following resolution was offered by Councilwoman
McVeety

and seconded by Councilman Henry:

WHEREAS, the Town Board of the Town of Babylon is considering adding to Chapter 106, Article VI of the Babylon Town Code (Dogs and Other Animals) in reference to the feeding of waterfowl on Town property which is defined as any land which is owned, maintained, leased, or managed by the Town of Babylon for any purpose whatsoever, including but not limited to parks, preserves, beaches and drains; and

WHEREAS, the proposed addition to Chapter 106, Article VI of the Babylon Town Code (Dogs and Other Animals) Waterfowl constitutes an Unlisted Action in accordance with the Town of Babylon Environmental Quality Review Act (TOBEQRA); and

WHEREAS, the Town Board of the Town of Babylon has reviewed the proposed addition to the Code of the Town of Babylon, Waterfowl, in accordance with Chapter 114-10 TOBEQRA Criteria for Determining Significance, and determined the following:

The artificial feeding of waterfowl is actually harmful to these animals and can cause: poor nutrition, increased hybridization, water pollution and beach closures and contamination of shellfish growing areas, delayed natural migration, high concentrations of waterfowl at unnatural sites, overcrowding, spread of disease, costly management efforts, unnatural behavior and cumulative negative environmental impacts on the South Shore Estuary Reserve. The adoption of a prohibition on the feeding of waterfowl on Town lands is consistent with the Comprehensive Management Plan for the South Shore Estuary Reserve; and

WHEREAS, the Town Board of the Town of Babylon has determined that the proposed Town of Babylon Code addition Waterfowl will not have a significant adverse impact on the environment.

NOW, THEREFORE, be it

RESOLVED, that the Town Board of the Town of Babylon hereby adopts a Negative Declaration for the proposed Town of Babylon Code addition Waterfowl in accordance with the State Environmental Quality Review Act (SEQRA).

VOTES: 4 YEAS: 4 NAYS: 0

The resolution was thereupon declared duly adopted.

RESOLUTION NO. 718 OCTOBER 21, 2008
ADOPTING LOCAL LAW NO. 25 OF 2008 ADDING TO THE CODE
OF
THE TOWN OF BABYLON, CHAPTER 106, ARTICLE VI
DOGS AND OTHER ANIMALS

The following resolution was offered by Councilwoman
McVeety

and seconded by Councilman Martinez:

WHEREAS, the Town Board of the Town of Babylon having
duly called and held a Public Hearing at Babylon Town Hall, 200 East Sunrise
Highway, Lindenhurst, New York, on the 21st day of October, 2008 upon the
question of enactment of Local Law No. 25 of 2008 of the Town of
Babylon, Suffolk County, New York, being a Local Law adding to the Code
of the Town of Babylon, Chapter 106, Article VI, Dogs and Other Animals,
and

WHEREAS, in accordance with Section 617.5 (c) (27) State
Environmental Quality Review (SEQR), the Town Board of the Town of
Babylon has determined that the proposed local law involves an action that
has been determined not to have a significant adverse impact on the
environment and no further action with regards to the State Environmental
Quality Review Act (SEQRA) is required by the Town Board of the Town
of Babylon,

NOW, THEREFORE, be it

RESOLVED AND

ORDAINED, by the Town Board of the Town of Babylon that Local Law No. 25 of 2008, of the Town of Babylon, Suffolk County, New York, is hereby enacted as follows and effective upon its filing with the New York State

Department of State: LOCAL LAW NO. 25 of 2008

A Local Law adding to the Code of the Town of Babylon, Chapter 106, Article VI, in reference to Dogs and Other Animals.

ADD: ARTICLE VI

WATERFOWL

§ 106-38. Findings of Fact

Whereas, the Town Board of the Town of Babylon has determined that artificial feeding of waterfowl is actually harmful to these animals and can cause: poor nutrition, increased hybridization, water pollution and beach closures and contamination of shellfish growing areas, delayed natural migration, high concentrations of waterfowl at unnatural sites, overcrowding, spread of disease, costly management efforts, unnatural behavior and cumulative negative environmental impacts on the South Shore Estuary Reserve.

{Note Source: New York State Department of Environmental Conservation Stormwater Web site.}

§ 106-39. Definitions

Unless otherwise expressly stated in this article, the following terms shall have the following meanings:

DOMESTIC WATERFOWL -- Those species of birds commonly know as white ducks, barnyard geese, Muscovy ducks and any other geese and ducks

bred by man but not any other waterfowl falling under the jurisdiction of the United States Fish and Wildlife Service and or the New York State Department of Environmental Conservation.

FEED -- Shall mean to give, place, expose, deposit, distribute, or scatter any edible material with the intention of feeding, attracting, or enticing migratory or domestic waterfowl.

MIGRATORY WATERFOWL -- Those species of birds commonly known as swans, geese, and ducks, and any other waterfowl falling under the jurisdiction of the United States Fish and Wildlife Service.

PERSON -- Any individual, company, partnership, corporation, limited partnership, joint venture, or other legal entity.

TOWN PROPERTY -- Any land which is owned, maintained, leased, or managed by the Town of Babylon for any purpose whatsoever, including, but not limited to parks, preserves, beaches and drains.

§ 106-40. Prohibition

No person shall feed or provide food for any domestic or migratory waterfowl on Town property at any time of the year.

§ 106-41. Penalties for offenses

A violation of this article shall be punishable by a fine of not less than \$100, nor more than \$500. Any subsequent violation occurring within five years of the date of such first violation shall be punishable by a fine of not less than \$250, nor more than \$750.

§ 106-42. Applicability

The provisions of this article shall not apply to property owned by or under the jurisdiction of other municipal authorities, the State of New York, and any agency thereof or the government of the United States of America, or privately owned property.

VOTES: 4 YEAS: 4 NAYS: 0

The resolution was thereupon declared duly adopted.

