Municipality/Organization: **City of Newton, MA**

EPA NPDES Permit Number: **MAR 041080**

MaDEP Transmittal Number: **W- W-039247**

Annual Report Number & Reporting Period: **No. 5: April 2007 - March 2008**

NPDES PII Small MS4 General Permit Annual Report April 2008

Part I. General Information

Contact Person: Thomas Daley, P.E Title: Commissioner of Public Works

Telephone #: 617-796-1008 Email: tdaley@newtonma.gov

Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: David B Cohen

Printed Name: David B. Cohen

Title: Mayor

Date: May 2, 2008

Part II. Self-Assessment

The City of Newton, Massachusetts has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions, except for Minimum Control Measure #3 Illicit Discharge Detection and Elimination (IDDE). The City has found bacteria contamination in some of its storm drains and brooks, particularly in areas where sanitary sewer infrastructure is aging, underdrains are co-located, and underground pathways or conduits to our drainage systems exist. Newton is proactively finding and eliminating illicit connections to the storm drainage system. In addition, we feel that our Comprehensive Stormwater Plan presents an effective program to address IDDE in more detail than this permit.

The following is provided to highlight key accomplishments made in Permit Year 5 with respect to MS4 General Permit goals and objectives.

Administrative

- Budgeted $700,000 in FY09 for stormwater management and capital projects.
- Drafted and proposed an Illicit Discharge to Storm Drains Ordinance. A copy of which is provided in Attachment A of this report.

Programmatic & Drainage System

- In October 2007, the City awarded another sanitary sewer / underdrain rehabilitation contract. National Water Main Cleaning Company was awarded the contract which includes heavy sewer and manhole cleaning, joint testing and sealing, short liners, cured-in-place liners and sealing of underdrain access ports.
- In November 2007, an evaluation was completed of the sanitary sewers and storm drainage infrastructure in the Oak Hill neighborhood (Old Farm Rd and vicinity) of Newton. This completion of this study is a critical step in addressing sanitary sewer overflows that occur during heavy rain events.

Pollution Prevention & Good Housekeeping

- Household Hazardous Waste (HHW) collection program resumes on May 21st and continues until mid-October. Last year we collected 518 tons of HHW that may otherwise find its way into the trash. More information available at: *http://www.ci.newton.ma.us/DPW/recycling/default.asp*
- The City of Newton strives for good housekeeping practices at our DPW yards. An internal audit is planned for the Fall 2008 - to document and address any potential housekeeping issues.
- Newton monitors 155 stormwater discharge points to the Charles River, including the many brooks that feed into the Charles, by conducting wet and dry sampling.
- Sections of storm drains are routinely inspected (CCTV) and cleaned for maintenance (i.e., sediment) and water quality issues (based upon bacteria sampling data).

Public Education and Involvement

- Numerous activities and events listed in the following table.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
1.1 Revised	Develop Stormwater Press Release	Engineering, M. Rose	Submit annual press release to newspaper / CATV.	During the weekly Mayor's press conference (April 28th), invited residents to visit the Tips on Reducing Stormwater Pollution exhibit at City Hall. Contributed to Boston Globe West article on "Runoff Remedies" – April 6, 2008.	Record a short segment on Newton's stormwater program as a preview to the "After the Storm" video from the EPA / Weather Channel and air both on Newton's CATV.
1.2 Revised	Develop Stormwater Web Site	Engineering, M. Rose	Prepare web site on stormwater issues.	Complete.	None, BMP complete. Continuance under BMP 1.4
1.3 Revised	Develop Stormwater Brochures	Engineering, M. Rose	Distribute brochures with water/sewer bills	In lieu of reproducing an existing brochure developed by EPA, Newton purchased a customized Year 1 package from the SuAsCo's Stormwater Community Assistance Program. The stormwater brochures and stormwater survey cards are part of the exhibit mentioned in BMP 1.1. This exhibit was displayed at the Newton Library and is currently on display in City Hall for 2 weeks. Copies of the literature are provided in Attachment B.	This BMP will be rolled into BMP 1.7, as they overlap.
1.4 Revised	Provide Stormwater News on City's web site	Engineering, L. Taverna & M. Rose	Prepare/distribute annual newsletter/ report. Post stormwater and/or project news once per year	Incorporated stormwater information and pollution prevention brochures on the Newton DPW's Stormwater web page.	Maintain and update stormwater web page; add project news in 2008.

1.5 Revised	Establish Volunteer Database	Environmental, M. Rose	Solicit volunteer educators to promote awareness of water quality.	Volunteer database established and is used mostly to encourage participation in Annual Charles River Clean-up and for storm drain marking.	None, BMP complete.
1.6 Revised	Partner with Schools	Environmental, M. Rose	Obtain and distribute educational resources to schools.	Several new school education programs were introduced this year and are being offered to all Newton public and private schools. See School Education Programs in Attachment A. During this permit period, the Water Cycle lesson was brought to two 5th grade classes and DPW partnered with eight HS students for various environmental service projects.	Continue with implementation of various school education and partnering programs.
1.7 Revised	Develop Education Program	Environmental, M. Rose	Implement stormwater pollution prevention seminar	In addition to exhibit discussed in BMP 1.3, Newton DPW hosted a program: Ultimate Green Lawns in March 2008. March is proclaimed the Annual Alternatives to Pesticides Month by Mayor Cohen. Green Decade Newton Coalition also hosts related programs (see Attachment B). In April 2007, DPW offered rain barrels to residents at a discount (made possible by a state grant). Residents picking up rain barrels are given a stormwater brochure.	Continue promoting water conservation, organic and environmentally-friendly lawn care methods and fertilizer efforts.
1.8 Revised	Partnering with Watershed Associations	Engineering, L. Taverna M. Rose	Promote meetings with Charles River Watershed Association (CRWA).	Newton DPW actively supports CRWA programs and initiatives including the "Find and Fix It", technical workshops and Annual Charles River Clean-up. M. Rose serves on the Charles River Clean-up Steering Committee for the past 2 years.	Maintain active participation in CRWA programs.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
2.1	Establish Stormwater Citizen Advisory Committee	Engineering, L. Taverna	Committee to meet once per year, publish results	Stormwater/wastewater citizen advisory committee has been on a hiatus since 2006. This group was initially formed to discuss Infiltration/Inflow (I/I) issues in the City.	Evaluate purpose and future use of this group.
Revised		F. Russell			
2.2	Implement Public Meetings for Citizen Input	DPW, R. Rooney M. Rose	Hold meetings once per year, publish results.	Prior to introducing the main speaker for the March lawn program, M. Rose briefly presented some of the City's stormwater initiatives at this public forum.	Host a public meeting / presentation on a stormwater topic.
Revised		T. Daley M. Rose			
2.3	Encourage Citizen Communication and Reporting	Engineering, L. Taverna	Establish stormwater hotline for illicit discharges.	Customer service center and phone number established at City Hall. All stormwater questions and comments directed to Engineering or Utilities.	BMP Complete. Continue with current citizen communication and reporting.
Revised					
2.4	Network with Local Community Groups	Engineering, M. Rose	Observe outfalls, report illicit discharges & stream clean-up.	Friends of Crystal Lake recently formed. Friends of Hemlock Gorge currently work independently to protect this natural resource area. DPW supports these groups' efforts with trash collection, storm drain marking and other needs as they arise.	Continue to provide support to these groups and foster communication and a partnership approach with the City.
Revised		add T. Daley			
2.5	Implement Storm Drain Marking Program	Utilities, T. Jerdee	Volunteers mark catch basins with decals.	A total of 500 permanent storm drain markers were purchased in the Fall of 2007. This spring and early summer the markers are being installed. The Utilities Division, with help from local HS students, is completing this.	Continue permanent storm drain marking program.
Revised					
2.6	Promote Community Clean-Up day	Engineering, L. Taverna M. Rose	Promote annual community clean-up day	Newton Serves held April 29, 2007. Volunteer groups target specific areas of the City for clean-up. See link for more information: http://www.ci.newton.ma.us/Human%20Services/NewtonServes/default.html	Continue with annual community clean-up day.
Revised		Human Services B. Droz			

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
3.1	Establish Stormwater System Map	Engineering, T. Jerdee	Update GIS information, locate all outfalls.	BMP Complete.	BMP Complete.
Revised					
3.2	Establish Stormwater Database Management System	Utilities, T. Jerdee	Add stormwater information to Hansen database.	Hansen database management system established. Stormwater system attributes added into database, by Weston & Sampson Engineers, 100% complete.	BMP Complete.
Revised					
3.3	Locate and Inspect all Outfalls	Utilities, T. Jerdee & Engineering M. Rose	Collect outfall data for Hansen database.	The City's stormwater outfalls have been located and inspected. See **Attachment C** for inspection and sampling data collected.	Continue with monitoring and sampling program.
Revised					
3.4	Review existing Ordinances and determine whether they adequately prevent Illicit Discharges	Engineering, L. Taverna	Propose to BOA revisions to stormwater ordinance/ policies, as appropriate	A Draft IDDE Ordinance has been prepared and is provided in Attachment A.	Mayor Cohen will review, edit and docket the proposed Ordinance for consideration by Board of Aldermen.
Revised					
3.5	Identify Illicit Discharge Sources	Utilities, T. Jerdee	Identify bacteria sources via visual and CCTV inspections, dye and/or pressure tests.	DPW continually monitors and investigates potential indirect and direct illicit discharges to our storm drainage infrastructure. During this permit period, approx. 8,000 LF of storm drains were inspected by CCTV. A construction contract for a Sanitary Sewer / Underdrain Rehab Project was awarded in the Fall 2007 to further these efforts.	Continue efforts to find and remove indirect (underdrains) and direct illicit discharges.
Revised		Add F. Russell			

3.6	Establish Illicit Discharge Hotline	Engineering, L. Taverna	Receive and track citizen reports of illicit discharges.	Hotline established (customer service center). One call received regarding an oil sheen observed on Cheesecake Brook.	BMP Complete. Continue to encourage citizen reporting of illicit discharges.
Revised		M. Rose			
3.7	Train Employees	Utilities, T. Jerdee	Employees to help identify illicit discharges.	3 Utilities Division employees trained for outfall inspections.	BMP Complete.
Revised					
3.9	Monitor City's infrastructure for illicit discharges and non-point source pollution	Utilities, T. Jerdee Engineering M. Rose	Observe major outfall discharges.	Each outfall location in the City has been inspected at least once. A field screening form is completed during inspection. See Attachment C for sampling data and dry weather inspection dates.	Continue with dry and wet weather inspection / sample events for all pipes and outlet points leaving the City.
Revised					

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
4.1	Review existing Ordinances and determine whether they adequately regulate construction site stormwater runoff	Engineering, L. Taverna	Obtain Law Dept's opinion regarding existing practice and appropriateness of regulating construction site stormwater runoff.	Currently, there are numerous mechanisms through which new construction site runoff is prevented and controlled. These mechanisms include: an existing Ordinance (Sec 30-5c and 5d), DPW / Eng. Division Policy and the Special Permit approval process. Nearly all construction projects regardless of size are required to soil erosion control measures. See Attach A. DPW has two inspectors who ensure the measures shown on Approved Site Plans are implemented.	Collaborate with Planning Department, Conservation Commission and DPW to determine if a new ordinance is necessary to further enhance our current practices.
Revised					
4.2	Implement Review of Construction Documents	Engineering, J. Daghlian	Establish policy for submittal of erosion control plans.	BMP Complete. Continue with plan reviews for building permits.	BMP Complete. Continue with plan reviews for building permits.
Revised					
4.3	Implement Construction Inspection Program	Engineering, J. Daghlian	Develop guidelines, training, inspection of construction sites > 1 acre.	All construction sites inspected by Engineering. BMP guidelines followed. Engineering requires the use of stormwater BMPs for all construction sites.	Continue with inspection of all construction sites. Develop training for construction inspectors.
Revised					
4.4	Educate Developers on Proper Erosion Control Techniques	Engineering, J. Daghlian / M. Rose	Distribute erosion control procedures to all applicants.	Engineering requires erosion control BMPs for all construction. Wall poster of proper erosion control techniques posted at permit application counter.	Develop "Tips to prevent soil erosion" card and distribute with building and street opening permits.
Revised					
4.5	Provide opportunity for citizen review and input on construction projects	Engineering, J. Daghlian	Ensure citizen review procedures for construction projects > 1 acre.	Citizen input of construction projects occurs during Conservation Commission, Land Use, and Board of Survey public hearings. Citizen review also occurs when Environmental Impact Reports are required.	BMP Complete. Continue with implementation.
Revised					

4.6 Revised	Establish Information Management System	Engineering, J. Daghlian	Track construction reviews and construction inspections.	An inspector is assigned to all construction projects over 1 acre (as well as many <1acre). This person maintains a personal field log book of key events.	BMP complete. Continue with implementation.
4.7 Revised	Establish Standards for Erosion and Sedimentation Controls	Engineering, J. Daghlian	Establish adaptation of MADEP SWMP Standard 8	Engineering requires implementation of MADEP SWMP Standard 8 for all construction projects > 1 acre.	BMP Complete. Continue with implementation.