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**TOWN OF NATICK  
MASSACHUSETTS**

**CHARLES J. SISITSKY  
DIRECTOR**

April 27, 2005

United States Environmental Protection Agency  
Water Technical Unit  
P.O. Box 8127  
Boston, MA 02114

**Subject: Year End Report NPDES Permit Number: MAR041139 Town of Natick**

Dear Sirs:

Please find enclosed the second annual report from the Town of Natick regarding the above subject NPDES permit.

The documentation provided details the actions taken by the Town during the second year of our permit, as well as our actions to be performed during the up-coming third year. The "Composite BMP Schedule", as shown on page 2 of the enclosure, details the time line of BMP's followed by the Town during the past year. The actions taken and proposed changes to this schedule are discussed in more detail on page 3 through 8 of the enclosure. Any changes are reflected in a "Revised Composite BMP Schedule", as shown on page 9 of the enclosure. These revisions were made after an evaluation of our efforts during the past two years of the permit. It is our opinion that the changes will provide for a more effective program.

We will assume that unless we hear from you in the contrary, that the submitted annual report and the proposed BMP schedule revisions meets with your approval.

Very truly yours,

Mark Coviello, P.E.  
Town Engineer

**Municipality/Organization: Town of Natick**

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**EPA NPDES Permit Number: MAR041139**

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**MaDEP Transmittal Number: W-035570**

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**Annual Report Number  
& Reporting Period: No. 2 March 2005 – March 2006**

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## **NPDES PII Small MS4 General Permit Annual Report**

### **Part I. General Information**

**Contact Person: Mark Coviello, P.E.**

**Title: Town Engineer**

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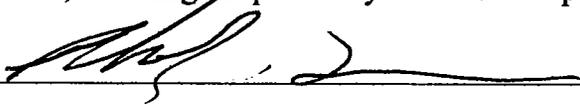
**Telephone #: 508-647-6550**

**Email: [mcoviello@natickma.org](mailto:mcoviello@natickma.org)**

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#### **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:** 

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**Printed Name: Philip Lemnios**

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**Title: Town Administrator**

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**Date: 4/21/05**

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**PERMIT YEAR 2**

**STORMWATER MANAGEMENT  
PROGRAM SUMMARY**

# **YEAR 2 STATUS REPORT & REVISED BMP SCHEDULE**

## **MINIMUM CONTROL MEASURE 1 PUBLIC EDUCATION & OUTREACH**

### **BMP 1-3 Stormwater Lesson Plan for 5<sup>th</sup> Grade (see Appendix B, BMP 1-3)**

- A stormwater lesson plan was developed by the SuAsCo Watershed Community Council (see copy of draft plan in Appendix B). During the past year, the lesson plan was given to all 5<sup>th</sup> grade students in the Natick School System with very positive feedback given by the teachers. As part of this lesson plan a poster contest will be held to engage the 5<sup>th</sup> grade students in understanding stormwater impacts. Due to the timing of when the lesson plan taught in the school year the poster contest will actually be held during year 3 of the permit. The BMP schedule as of 5/1/05 will be revised to reflect this change.

## **MINIMUM CONTROL MEASURE 2 PUBLIC INVOLVEMENT AND PARTICIPATION**

### **BMP 2-1 Stormwater Committee (See Appendix B, BMP 2-1)**

- A committee made up of various Town of Natick staff, to manage and implement the management plan, meet quarterly (see Appendix B for copies of meeting minutes).

### **BMP 2-2 Residents Use of Community Hotline (See Appendix B, BMP 1-1)**

- Contact person and phone # established with information placed on the Town of Natick Stormwater web site (see Appendix B for information on web site). Use of hotline has been minimal; recommend that the Stormwater Committee look into ways to make the community more aware of the hotline.

### **BMP 2-3 Stormwater Traveling Display (See Appendix B, BMP 2-3)**

- The Stormwater traveling display (see Appendix B for photo copy of display) has been on display throughout the year at the DPW Office, as well as on display at Town Meetings and at "Natick Days".

### **BMP 2-4 Stormwater Poster for 5<sup>th</sup> Grade Students (See Appendix B, BMP 1-3)**

- The Stormwater poster contest for the 5<sup>th</sup> grade students is currently ongoing, and was done in conjunction with the Stormwater Lesson Plan given to the 5<sup>th</sup> grade as part of BMP 1-3. The poster contest will be completed in the 1<sup>st</sup> quarter of Permit Year 3. The BMP schedule as of 5/1/05 will be revised to reflect this change.

## **MINIMUM CONTROL MEASURE 3 ILLCIT DISCHARGE DETECTION AND ELIMINATION**

### **BMP 3-2 Inspect and Sample Town Discharges (See Appendix B, BMP 3-2)**

- Approximately 170 known discharges have been inspected (see spreadsheet in Appendix B). These outfalls were not all inspected under dry weather conditions. Also, the information collected about the physical condition of each outfall as well as the physical characteristics of the flow was not consistently recorded. A new "Outfall Inspection Field Data Collection Sheet" was created (see form in Appendix B). Starting in Permit Year 3 all known outfalls will be inspected in a dry weather period, and all the noted information will be collected and kept in a separate data base.
- Outfalls indicating potential sewerage contamination or the presence of illicit discharges will be identified and recorded. Dry weather sampling will not be conducted at this time. However, these outfalls will be identified for future follow-up inspection and testing during Permit Years 4 & 5. The BMP schedule as of 5/1/05 will be revised to reflect this change.

### **BMP 3-3 System Mapping Evaluation (See Appendix B, BMP 3-3)**

- Prepare drainage system map (structures, pipe network, and GIS data layers), this goal is spread over the first three years of the Permit. Approximately 90% of the system mapping is complete (see sample drainage panel map in Appendix B).
- Locate all drainage discharges with GPS. This activity is spread over the first three years of the Permit. Approximately 94% of all known outfall have been located (see Outfall Progress Map in Appendix B).
- Hydraulic modeling has been conducted with 5 chronic flood prone areas identified (see master street map with problem areas identified in red, in Appendix B).

- Various land use mapping is an ongoing process of the GIS Division within the DPW, with numerous maps created and is available to the public. When the Soil Conservation Service completes the conversion of their soil mapping from paper to digital format, the Town will import this information and create a soils layer as part of the Town's GIS mapping. It is anticipated that this will be completed during Year 3 of the Permit.
- A preliminary septic system location map has been created (see Draft Copy of Septic Systems Map in Appendix B). The final septic system mapping complete with various data base links is scheduled to be completed in Year 3 of the Permit. The Board of Health is slightly behind schedule in their data entry activities (see BMP 3-5). The BMP schedule as of 5/1/05 will be revised to reflect this change.

**BMP 3-4 Illegal Dumping Education (See BMP 1-1, 1-3, and 2-3)**

- Town of Natick Stormwater Management Plan posted on Town's website.
- Stormwater Lesson Plan taught to all 5<sup>th</sup> grade classes in the Town.
- Stormwater traveling display set up at various Town events and locations.

**BMP 3-5 Septic System Controls (See Appendix B, BMP 3-5)**

- The database to track septic system maintenance activities has been completed, however the Board of Health is experiencing staffing problems and therefore the data entry of all the existing septic system records into the new database is slightly behind schedule (see BoH Memo and samples of the data entry screens in Appendix B).
- The policy to mandate septic system maintenance which was scheduled for years 2 & 3 will be delayed until years 3 & 4. The BoH Director wants the data entry for the pump out history for each septic system to be completed before they try to implement and mandate septic system maintenance. The BMP schedule as of 5/1/05 will be revised to reflect this change.

**MINIMUM CONTROL MEASURE 4  
CONSTRUCTION SITE STORMWATER RUNOFF CONTROL**

**BMP 4-2 Construction Inspections**

- Perform inspections of construction activities for proper erosion and sediment control practices. Various Town departments perform this activity as a normal course of business. Appropriate actions are taken for any known violations. A more formalized inspection criteria, schedule,

and assignment of responsibilities will be created when the Town of Natick establishes a Soil & Erosion Control By-Law (BMP 4-1)

- Need for EPA's General Permit for Stormwater Discharges from Construction Activities has been placed on the Town's web-site (See Appendix B, BMP 1-1).

## **MINIMUM CONTROL MEASURE 5 POST CONSTRUCTION SITE CONTROLS**

### **BMP 5-2 BMP Inspection and Maintenance**

- Original BMP schedule called for all Town owned structural BMPs to be inspected every other year starting in Permit year two. Also, the Town was to document any problems and investigate possible modifications to the BMP to improve their performance. This goal has been revised. The revision calls for the Town to inspect all structural BMPs and to document the performance over a two consecutive period starting in year 3 of the Permit (inspect approximately 50% per year). The original schedule was too aggressive to be completed with the current staffing and projected staff work loads. Further, it is Town's opinion that it would be more effective to have the drainage system mapping almost complete before starting the stated inspections. The BMP schedule as of 5/1/05 will be revised to reflect this change.

## **MINIMUM CONTROL MEASURE 6 POLLUTION PREVENTION AND GOOD HOUSEKEEPING**

### **BMP 6-1 Catch Basin Cleaning (See Appendix B, BMP 6-1)**

- The original BMP schedule called for the Town to clean 25% of their catch basins per year in house with Town equipment. During year two of the Permit the DPW did not meet their goal of cleaning 25% of the catch basins, because of staffing issues and mechanical problems with the basin truck. The DPW has contracted out to have their catch basins cleaned. The contract calls for 1/3 of the basins to be cleaned per year starting in year 3 of the Permit (see contract in Appendix B). The BMP schedule as of 5/1/05 will be revised to reflect this change.

### **BMP 6-2 Predictive Catch Basin Cleaning Program**

- The original BMP schedule called for the Town to monitor the amount of material collected from each basin cleaned and to develop a program to predict which catch basins (out of the Towns approximately 4000 basins) will need more frequent cleaning. The Town is proposing to eliminate this BMP completely. It is our opinion that this BMP would be very difficult to monitor, and the final results of a questionable value to the Town. We feel that this is not an effective use of the Town's limited resources. The BMP schedule as of 5/1/05 will be revised to reflect this change.

### **BMP 6-3 Street Cleaning (See Appendix B, BMP 6-3)**

- All Town streets and Town owned parking lots swept once per year.
- Downtown streets swept once per month (April through November).
- The amount of sand and salt dispensed during the winter 2004-2005 was documented. DPW will document the amount of street sweepings and catch basin sediment collected in the spring of 2005. The sweeping and catch basin cleaning operations for the sand and salt materials dispensed during the past winter is presently ongoing, therefore the amount of material collected is not available for this report (See Appendix B for the amount of material dispensed).

### **BMP 6-5 Municipal Employee Training (See Appendix B, BMP 6-5)**

- The following training is provided to all DPW employees on an annual basis. New hires are trained within 30 days (see copies of training slides and list of employees trained in Appendix B).

#### Hazard Communication:

Provides employees with the basic of understanding what a hazardous waste is and how to properly handle it. The DPW has several locations for properly storing hazardous waste and the procedures are setup for proper labeling and manifests.

#### SPCC- Spill Prevention Control and Countermeasures:

Explains to the employees why we have SPCC plans and their responsibilities. They are instructed on what to do in the event of a spill and how to properly notify the appropriate response personnel.

#### Storm Water Management:

Employees are instructed on what storm water is and what they can do in their daily activities. For example; washing vehicles in the proper washing facilities, reducing the

amount of herbicides and fertilizers on public fields, not overfilling fuel tanks. We also discussed what they can do at home.

Stage II Vapor Recovery:

Instructs employees on the proper operation of the gas dispensing pump located at the central fueling depot. Reminds them not to “top off” their vehicles and to report any malfunctions of the equipment.

Right to Know:

Required under Massachusetts Law. We inform employees of their rights under the law and the Town’s responsibility to provide a safe work environment. We spend a good amount of time explaining what a MSDS sheet is and where they are located within the DPW.



# **YEAR 3 SCHEDULED ACTIVITIES**

## **MINIMUM CONTROL MEASURE 1 PUBLIC EDUCATION & OUTREACH**

### **BMP 1-3 Stormwater Flyer to Community Businesses**

- Send out stormwater flyer to all Businesses.

## **MINIMUM CONTROL MEASURE 2 PUBLIC INVOLVEMENT AND PARTICIPATION**

### **BMP 2-1 Stormwater Committee**

- Committee will continue to meet on an as needed basis to manage and implement The Stormwater Management Plan.
- Meetings are held and minutes kept.

### **BMP 2-2 Establish Community Hotline**

- Phone calls and emails indicating suspicious activities and/or other drainage problems will be tracked with follow up action taken.

### **BMP 2-3 Stormwater Traveling Display**

- Traveling display will continue to be set up at various community events.

### **BMP 2-4 Stormwater Poster Contest for Fifth Grade Students**

- As part of the 5<sup>th</sup> grade lesson plan (see BMP 1-3) a poster contest will be held, with entries judged and awards given.

### **BMP 2-5 Stormwater Photo Contest for High School Students**

- Hold a stormwater photo contest for high school students, with entries judged and awards given.

## **MINIMUM CONTROL MEASURE 3 ILLICIT DISCHARGE DETECTION AND ELIMINATION**

### **BMP 3-1 Illicit Discharge By-Law**

- Form committee and prepare by-law to be presented to Town Meeting for approval in permit year 3.

### **BMP 3-2 Inspect And Sample Town Discharges**

- Perform dry weather inspections on all town discharges located by GPS.

- Identify outfalls that indicate potential sewerage contamination and illicit discharges.

#### **BMP 3-3 System Mapping Development**

- Complete work on drainage system map (structures, pipe network, and GIS coverage's).
- Complete the location of all known Town of Natick discharges with GPS.
- Conduct hydraulic modeling of various flood prone areas.
- Add soils and land use coverage's to Town GIS mapping.

#### **BMP 3-4 Illegal Dumping Education**

- Continue to implement SuAsCo's planned activities (see BMP 1-4, 2-2, 2-3, 2-4, and 2-5).

#### **BMP 3-5 Septic System Controls**

- Board of Health to create policy/regulations to mandate septic system maintenance.
- Complete work on the septic system data base linked to the GIS parcel mapping to locate all known onsite septic systems, and to track septic maintenance system activities.
- Up-date septic system database.

### **MINIMUM CONTROL MEASURE 4 CONSTRUCTION SITE STORMWATER RUNOFF CONTROL**

#### **BMP 4-1 Soil Erosion and Control By-Law**

- Form committee to prepare by-law to present to Town Meeting for approval in year 3 of the Permit.

#### **BMP 4-2 Construction Inspections**

- Continue to perform inspections of construction activities for proper erosion and sediment control practices. Various Town departments perform this activity as a normal course of business. Appropriate actions are taken for any known violations. A more formalized inspection criteria, schedule, and assignment of responsibilities will be created when and if the Town of Natick establishes a Soil & Erosion Control By-Law (BMP 4-1)

**MINIMUM CONTROL MEASURE 5  
POST CONSTRUCTION SITE CONTROLS**

**BMP 5-1 Post Construction Stormwater Runoff By-Law**

- Form committee to prepare by-law to present to Town Meeting for approval during 3<sup>rd</sup> permit year.

**BMP 5-2 Inspection of Town Owned Structural BMPs**

- Inspect approximately 50% of all known existing town owned structural BMP's. Perform needed maintenance, and evaluate effectiveness of BMP.

**MINIMUM CONTROL MEASURE 6  
POLLUTION PREVENTION AND GOOD HOUSEKEEPING**

**BMP 6-1 Catch Basin Cleaning**

- Clean 1/3 of the Town's catch basins.

**BMP 6-2 Street Cleaning**

- Swept all Town streets.
- Downtown streets swept once per month (April through November).
- Sweep major Town streets twice.
- Sweep all Town owned parking lots twice.
- Document the amount of street sweepings and catch basin sediment collected.

**BMP 6-4 Municipal Employee Training**

- Continue current employee training in Pollution Prevention & Good Housekeeping procedures.