



# TOWN OF WESTBOROUGH MASSACHUSETTS

DEPARTMENT OF PUBLIC WORKS

MAY 4 2009

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WESTBOROUGH, MA 01581-3317  
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Dennis Cote, Operations Manager  
Joan Provost, Business Administrator

April 30, 2009

Ann Herrick - CIP  
U.S. Environmental Protection Agency - Region 1  
1 Congress Street, Suite 1100  
Boston, MA 02114-2023

RE: NPDES Phase II Small MS4 General Permit  
EPA NPDES Permit No MAR041173

Dir Sir/Madam:

Enclosed is the Annual Report for Permit Year 6.

If you have any questions, please call me at (508) 366-3070.

Sincerely,

John M. Walden  
Manager  
Department of Public Works

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**TOWN OF WESTBOROUGH, MA  
DEPARTMENT OF PUBLIC WORKS**

**Annual Report**

FOR

***NPDES PHASE II  
SMALL MS4  
GENERAL PERMIT***

***YEAR 6***



**Department of Public Works**

**John M. Walden, Manager**

**April 30, 2009**



Enter your transmittal number

x228009

Transmittal Number

Your unique Transmittal Number can be accessed online: http://mass.gov/dep/service/online/trasmfrm.shtml or call MassDEP's InfoLine at 617-338-2255 or 800-462-0444 (from 508, 781, and 978 area codes).

Massachusetts Department of Environmental Protection
Transmittal Form for Permit Application and Payment

1. Please type or print. A separate Transmittal Form must be completed for each permit application.

2. Make your check payable to the Commonwealth of Massachusetts and mail it with a copy of this form to: DEP, P.O. Box 4062, Boston, MA 02211.

3. Three copies of this form will be needed.

Copy 1 - the original must accompany your permit application. Copy 2 must accompany your fee payment. Copy 3 should be retained for your records

4. Both fee-paying and exempt applicants must mail a copy of this transmittal form to:

MassDEP
P.O. Box 4062
Boston, MA
02211

\* Note: For BWSC Permits, enter the LSP.

A. Permit Information

1. Permit Code: 7 or 8 character code from permit instructions
NPDES Phase II Permit Annual Report-Yr 6
2. Name of Permit Category
3. Type of Project or Activity

B. Applicant Information - Firm or Individual

Town of Westborough
1. Name of Firm - Or, if party needing this approval is an individual enter name below:
Thompson George
2. Last Name of Individual
Chairman, Board of Selectmen, Town Hall
3. First Name of Individual
4. MI
5. Street Address
Westborough MA 01581 508-366-3076
6. City/Town
7. State
8. Zip Code
9. Telephone #
10. Ext. #
John M. Walden
11. Contact Person
12. e-mail address (optional)
jwalden@town.westborough.ma.us

C. Facility, Site or Individual Requiring Approval

1. Name of Facility, Site Or Individual
2. Street Address
3. City/Town
4. State
5. Zip Code
6. Telephone #
7. Ext. #
8. DEP Facility Number (if Known)
9. Federal I.D. Number (if Known)
10. BWSC Tracking # (if Known)

D. Application Prepared by (if different from Section B)\*

1. Name of Firm Or Individual
2. Address
3. City/Town
4. State
5. Zip Code
6. Telephone #
7. Ext. #
8. Contact Person
9. LSP Number (BWSC Permits only)

E. Permit - Project Coordination

1. Is this project subject to MEPA review? [ ] yes [X] no
If yes, enter the project's EOE file number - assigned when an Environmental Notification Form is submitted to the MEPA unit:

EOEA File Number

F. Amount Due

Special Provisions:

- 1. [X] Fee Exempt (city, town or municipal housing authority)(state agency if fee is \$100 or less). There are no fee exemptions for BWSC permits, regardless of applicant status.
2. [ ] Hardship Request - payment extensions according to 310 CMR 4.04(3)(c).
3. [ ] Alternative Schedule Project (according to 310 CMR 4.05 and 4.10).
4. [ ] Homeowner (according to 310 CMR 4.02).

DEP Use Only

Permit No:

Rec'd Date:

Reviewer:

Check Number Dollar Amount Date

NPDES PII Small MS4 General Permit  
Annual Report – Year 6

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- 4. Copy of Adopted Stormwater Bylaw and Illicit Discharges Bylaw
- 5. Copy of Non-Zoning Wetlands Protection Bylaw

**Municipality/Organization: Town of Westborough**

**EPA NPDES Permit Number: MAR041173**

**MA DEP Transmittal Number: X228009**

**Annual Report No & Report Period: No. 6 March 08-March 09**

**NPDES PII Small MS4 General Permit**

**Annual Report**

**Part I. General Information:**

Contact Person: John M. Walden, Manager, Department of Public Works,

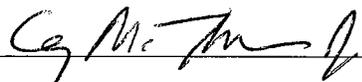
Telephone #: (508) 366-3070

Email: [jwalden@town.westborough.ma.us](mailto:jwalden@town.westborough.ma.us)

**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: \_\_\_\_\_



Printed Name: George Thompson

Title: Chairman, Board of Selectmen

Date: April 30, 2009

## **1.0 INTRODUCTION AND BACKGROUND:**

In 1990, The United States Environmental Protection Agency (EPA) began implementing a storm water management program under the National Pollutant Discharge Elimination System (NPDES). This program, know as Phase I of the NPDES storm water program, was intended to reduce pollution in storm water discharges for large urban areas with population of 100,000 or greater.

On December 1999, the Phase II Rule of the NPDES storm water program was published to address Municipal Separate Storm Sewer Systems (MS4s) within urban areas of populations less than 100,000 that were not addressed under the Phase I program. Objectives of the Phase II rule is for the MS4s to develop, implement and enforce a storm water program designed to reduce the discharge of pollutants to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act.

On May 1, 2003, the EPA issued the General Permit for Storm Water Discharges from MS4s. The general permit requires that the storm water program for each MS4 submit an annual evaluation. The following report contains information regarding the activities on the storm water program for the previous calendar year. The report contains the information required in the general permit as follows: (a) Self- Assessment Review of Compliance with the Permit Conditions; (b) Assessment of the Appropriateness of the selected BMPs; (c) Assessment of the Program towards Achieving the Measurable Goals; (d) Summary of the Results of Any Information that has been Collected and Analyzed; (e) Discussion of Activities for the Next Reporting Cycle; (f) Discussion of any Changes in Identified BMPs or Measurable Goal; and (g) Reference any Reliance on another Entity for Achieving any Measurable Goal.

The Town of Westborough filed the NPDES Phase II Storm Water Management Plan in March 2003. The Town submitted the Annual Report for year one on May 4, 2004, year two on April 25, 2005, year three on April 27, 2006, year four on April 30, 2007, and year 5 on April 30, 2008.

## **2.0 SELF-ASSESSMENT REVIEW OF COMPLIANCE WITH THE PERMIT CONDITIONS:**

### **Part II.B.1.a.**

Approximately sixty five storm drains were stenciled in April 2005, and approximately 150 storm drains were stenciled in May 2006. These were located on roadways which discharge to the Assabet River. Another 61 storm drains were stenciled in May 2007 in the center of town. In May of 2008 an additional 146 storm drains were stenciled by the Westborough Community Land Trust in conjunction with Explorer Post #85. These drains were located in Westborough's downtown and central arteries and ultimately flow to the Cedar Swamp. The stenciling program for 2009 is anticipated as an Eagle Scout project which would be completed in August. Documentation of the past year's program is included in Appendix 3.

### **3.0 ASSESSMENT OF THE APPROPRIATENESS OF THE SELECTED BMPS:**

The Best Management Practices (BMPs) selected for the storm water program appear to be appropriate. With new staff, the town has attempted to catch up to the original schedule of BMPs.

The following are summaries of major achievements in year-6:

- The town passed the proposed stormwater and illicit discharge bylaws at the Annual (Spring) 2008 Town Meeting. Construction inspections of stormwater management on construction sites are in effect. No illicit discharges have been discovered to date. A copy of these bylaws is in Appendix 4.
- The Conservation Agent continues to alert commercial properties of their obligation to continue maintenance of detention basins and cleaning of catch basins, along with any other general BMP maintenance. The Agent continues to personally visit each commercial property to assess their compliance with his recommendations to maintenance. The Agent is improving on his inspection process each year and has noticed progress among the maintenance of commercial properties. A copy of this letter is in Appendix 1.
- Stormwater stenciling is ongoing though the town of Westborough. We have several volunteer groups which participate in the stenciling in the spring time. Approximately 146 basins were stenciled in May 2008, with additional stenciling scheduled for summer 2009. A copy of this letter is in Appendix 3.
- Regarding the discharge into Water Quality Impaired Waters and Waters with Approved Total Maximum Daily Load Allocations, the following may be summarized:
  - In May 2007, the Town voted to authorize nearly 2 million dollars in design authorization and over 28 million in construction authorization to upgrade the Westborough Wastewater Treatment Plant. The upgrade is being designed to achieve the new EPA limits of 0.1 ppm phosphorous in the summer and 0.75 ppm in the winter. Redesign was completed and bid in March 2008 and bids were opened in April and May 2008. Unfortunately, bids received totaled nearly twice the appropriation on hand; therefore the contract was not awarded. Article 11 of the spring 2009 (Annual) Town Meeting seeks to expand construction authorization to 56 million dollars to accomplish this upgrade. The Spring Town Meeting occurs on May 16, 2009.

- Westborough participated in a sediment study of the Assabet River as one of the Assabet River Consortium Members. The consulting firm of Camp Dresser & McKee Inc. performed the study for the Army Corps of Engineers. The study was completed in 2007 with recommendations. In summary, some dam removals may be possible and beneficial downstream, however, funding sources have not been determined. Other than possible financial impacts this should have little to no effect on Westborough's future plans. The Town is not aware of new developments in dam removal in 2008. The wastewater Treatment Plan upgrade will proceed as noted above.
  - The Town of Westborough continues its efforts to clean catch basins from debris and sediment build up. The Town was able to clean approximately 80% of its catch basins in 2008. In conjunction with the catch basin cleaning the Town performs street sweeping on a regular basis to aid in pollution prevention to the waters of Westborough.
- Regarding the Medium Stressed Basin; Westborough Community Land Trust, Westborough Civic Club and the Town of Westborough have partnered together to provide residents of Westborough an opportunity to purchase Rain Barrels for a reduced price. This program began in April 2008 and continues in 2009. This will help the local watershed by slowly releasing rainwater from the rain barrels into resident's gardens. This will decrease stormwater runoff and pollution as well as help to recharge the groundwater. Copies of the website are in Appendix 2.
  - Due to staffing restraints, no additional mapping has been done.
  - The Town did not procure materials from the SUASCO Watershed Community Council to aid in public outreach requirements of the permit. By the deadline to make the financial commitment it became apparent that the DPW would need to trim spending because of the difficult economic times. This decision will be re-evaluated in the future.

#### **4.0 SUMMARY OF MINIMUM CONTROL MEASURES:**

Attached is a copy of our implementation schedule, as included with our NOI, as modified to reflect our progress in year six. Year six was not originally envisioned in the NOI so year five was projected forward. The Board of Selectmen continued with its decision not to have a committee oversee the program, but to utilize current staff in lieu thereof.

5.0

**TABLE 1  
TOWN OF WESTBOROUGH, MASSACHUSETTS  
NPDES PHASE II  
STORM WATER MANAGEMENT PLAN  
BEST MANAGEMENT PRACTICES (BMPS)**

**PUBLIC EDUCATION AND OUTREACH**

<b>ID</b>	<b>BMP CATEGORY</b>	<b>BMP</b>	<b>DEPARTMENT RESPONSIBLE FOR IMPLEMENTING BMP</b>	<b>MEASURABLE GOALS</b>	<b>PROGRESS GOAL PERMIT YEAR</b>
5.1.1	Homeowners	Mail educational flyer with stormwater survey	SuAsCo Council and DPW	Flyer distribution. Compile and evaluate survey results	Completed
5.1.2	Students	Teach stormwater lessons to fifth grader students	SuAsCo Council and DPW	Prepare and implement lesson	Completed
5.1.3	Businesses	Mail educational flyer with stormwater survey	SuAsCo Council and DPW	Flyer distribution Logo Display	Completed
5.1.4	General Public	Hold a stormwater media campaign	SuAsCo Council and DPW	4 press releases	Completed
		Show a stormwater video on a local cable station	SuAsCo Council and DPW	Develop and air stormwater video	No Progress-did not receive from SUA

**PUBLIC PARTICIPATION AND INVOLVEMENT**

<b>ID</b>	<b>BMP CATEGORY</b>	<b>BMP</b>	<b>DEPARTMENT RESPONSIBLE FOR IMPLEMENTING BMP</b>	<b>MEASURABLE GOALS</b>	<b>PROGRESS ON GOAL PERMIT YEAR 6</b>	<b>PLANNED ACTIVITIES</b>
<b>5.2.1</b>	Homeowners	Circulate stormwater traveling display	SuAsCo Council and DPW	Develop display Feature at 3 locations	Display featured at Earth Day Program, Spring Festival and Town Meeting.	Continue to display
<b>5.2.2</b>	Students	Poster contest for fifth graders Photo contest for high school students	SuAsCo Council and DPW SuAsCo Council and DPW	Hold poster contest Hold photo contest, judge and display entries	Completed Not Completed	Completed
<b>5.2.3</b>	General Public	Hold a local stormwater summit Hold a watershed-wide stormwater summit	SuAsCo Council and DPW SuAsCo Council and DPW	Advertise and hold summit Advertise and hold summit	Completed Not Completed Must be coordinated by SUASCO	Hold Summit
<b>5.2.3(new)</b>	General Public	Catch Basin Stenciling	SuAsCo Council, Westborough Community Land Trust and DPW	Catch Basin Stenciling	Approximately 146 Catch Basins Stenciled in May 2008.	Continue every year to mark more storm drains.

**ILLCIT DISCHARGE DETECTION AND ELIMINATION**

ID	BMP CATEGORY	BMP	DEPARTMENT RESPONSIBLE FOR IMPLEMENTING BMP	MEASURABLE GOALS	PROGRESS ON GOAL(S) PERMIT YEAR 6	PLANNED ACTIVITIES
5.3.1	Stormwater system mapping	<p>Map outfalls</p> <p>Map pipes manholes and catch basins</p> <p>Map structural BMPs (i.e. detention basins, water quality inlets, etc)</p>	<p>DPW</p> <p>DPW</p> <p>DPW</p>	<p>Prioritize outfalls. Percentage of total outfalls mapped per year</p> <p>Prioritize areas. Percentage of total system</p> <p>Percentage of total structures</p>	<p>GPS location of known outfalls complete</p> <p>No action taken due to time constraints.</p> <p>No action taken due to time constraints</p>	<p>Complete GPS location of outfalls as they become available</p> <p>Complete location of structures. Complete mapping of system.</p> <p>Complete GPS locations and map 100% of structures</p>
5.3.2	Regulatory Mechanism	<p>Develop a bylaw prohibiting non storm water discharges into storm sewer system</p> <p>Develop enforcement procedures for non storm water discharges including illegal dumping</p>	<p>DPW and/or Board of Health</p> <p>DPW and/or Board of Health</p>	<p>Formation of a technical committee and annual review of program. Development of a bylaw</p> <p>Development of enforcement procedures</p>	<p>Bylaw developed by Water Resource Management Committee and Adopted by Spring 2008 Town Meeting</p> <p>Enforcement included in the Bylaw</p>	<p>Implement Bylaw</p> <p>Implement Bylaw</p>

ID	BMP CATEGORY	BMP	DEPARTMENT RESPONSIBLE FOR IMPLEMENTING BMP	MEASURABLE GOALS	PROGRESS ON GOAL(S) PERMIT YEAR 6	PLANNED ACTIVITIES
5.3.3	Illicit Discharge Detection and Elimination Plan	<p>Identify areas likely to have illicit discharges</p> <p>Develop and implement a plan to detect and address illicit discharges</p> <p>Implement illicit discharge detection and elimination inspection</p>	DPW	<p>Develop record keeping.</p> <p>Prioritize outfalls.</p> <p>Percentage of outfalls inspected</p> <p>Plan Completion</p> <p>Identify and train inspection agents.</p> <p>Begin inspections</p>	<p>No action taken due to time constraints</p> <p>Suspect outfalls have no illicit discharges found to date.</p> <p>Identified Inspector</p>	<p>Continue to inspect outfalls</p> <p>Develop goals for plan to eliminate discharge found when they are found</p> <p>Begin inspections in accordance with illicit discharge detection and elimination plan (previous BMP)</p> <p>Continue searching for illicit connections.</p>
5.3.4	Post removal evaluation and reporting	<p>Implement a program to evaluate and report on conditions after illicit connections have been removed</p>	DPW	Annual Report	No illicit discharges found to date.	

**CONSTRUCTION SITE RUNOFF CONTROL**

ID	BMP CATEGORY	BMP	DEPARTMENT RESPONSIBLE FOR IMPLEMENTING BMP	MEASURABLE GOALS	PROGRESS ON GOAL(S) PERMIT YEAR 6	PLANNED ACTIVITIES
5.4.1	Regulatory Mechanism	Develop and implement a bylaw regulating erosion and sediment control for construction sites utilizing appropriate BMPs	DPW and Planning Department	Formation of a technical committee and annual review of program. Development of a bylaw	Bylaw developed by Water Resource Management Committee and Article adopted by Spring 2008 Town Meeting	Implement Bylaw
5.4.2	Site Plan Review Procedures	Implement pre-construction review of storm water control plan for proposed construction site	DPW and Planning Department	Identify and train staff Review each project	Review plans for site runoff control. Several projects permitted with local Stormwater Pollution and Prevention Plans	Continue Plan Review and requiring local control and reporting
5.4.3	Site Inspection and Enforcement Procedures	Conduct construction site inspections  Develop a procedure for handling reports of non-compliance	DPW  DPW	Identify and train staff. Review each project  Development of procedure	Reports received on several projects. DPW Inspecting prior and after rainfall events.  Enforcement included in Stormwater Bylaw	Continue Inspection  Implement Procedure

**POST-CONSTRUCTION RUNOFF CONTROL**

ID	BMP CATEGORY IN NOTICE OF INTENT (NOI)	BMP	DEPARTMENT RESPONSIBLE FOR IMPLEMENTING BMP	MEASURABLE GOALS	PROGRESS ON GOAL(S) PERMIT YEAR 6	PLANNED ACTIVITIES
5.5.1	Regulatory Mechanism	Develop and implement a bylaw regulating controls for post construction runoff utilizing appropriate BMPs	DPW and Planning Department	Formation of a technical committee and annual review of program. Development of a bylaw	Bylaw developed by Water Resource Management Committee and Article adopted by Spring 2008 Town Meeting	Implement bylaw
5.5.2	Plan Review of BMP Designs	Implement preconstruction review of BMPs for conformance with regulations	DPW and Planning Department	Identify and train staff. Review each project	Review Plans	Continue to Review Plans
5.5.3	Site Inspection/Enforcement Procedures	During construction, inspect for assurance that BMPs are compliant	DPW	Identify and train staff. Inspect each project.	Begin inspection of BMPs	Enforce bylaw and procedures
5.5.4	Operation and Maintenance Procedures for Structural BMPs	Develop operation and maintenance procedures for structural BMPs	DPW	Development of procedure	Not completed	Develop Procedure

**POLLUTION PREVENTION/GOOD HOUSEKEEPING**

ID	BMP CATEGORY	BMP	DEPARTMENT RESPONSIBLE FOR IMPLEMENTING BMP	MEASURABLE GOALS	PROGRESS ON GOAL(S) PERMIT YEAR 6	PLANNED ACTIVITIES
5.6.1	Employee training Program	Implement employee training	DPW	Develop goals. Develop program. Annually conduct training	Prepared training presentation for: illicit discharge detection, stormwater runoff, and good housekeeping.	Perform training and continue developing training program
5.6.2	Stormwater System Operation and Maintenance	Enhance the existing storm sewer system and catch basin cleaning  Structural BMP inspection and maintenance program	DPW  DPW	Implement schedule. Strengthen record tracking. Clean all catch basins twice per year  Develop and implement record keeping. Annually inspect and clean all BMPs once per year.	Maintain record keeping procedures.  90% of catch basins were cleaned last year. Problematic basins cleaned twice/yr. Some main roads were not cleaned because of logistics	Continue to maintain record keeping procedures.  Continue to implement program. Clean more basins twice/yr and clean basins on mains which were not cleaned previous year.

ID	BMP CATEGORY	BMP	DEPARTMENT RESPONSIBLE FOR IMPLEMENTING BMP	MEASURABLE GOALS	PROGRESS ON GOAL(S) PERMIT YEAR 6	PLANNED ACTIVITIES
5.6.3	Parks and Open Space	Develop and implement a management program for fertilizer and pesticide application	Parks Department	Annually summarize applications	Implement Management Program and revise as necessary.	Continue to implement program
5.6.4	Municipal Vehicle Maintenance and Repair	Review maintenance and repair programs for municipal vehicles	DPW	Review every two years	Evaluated operations and made improvements	Continue to evaluate operations and make improvements
5.6.5	Municipal Roads	Enhance street sweeping operations	DPW	Strengthen record tracking system. Evaluate increasing frequency in urban areas. If applicable, increase frequency.	Evaluated record keeping and modified as necessary. 90% of streets swept in spring and fall and downtown area swept every other week.	Continue to evaluate and strengthen record keeping.