

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

Annual Report

FOR

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

YEAR 7



Department of Public Works

John M. Walden, Manager

April 27, 2010

NPDES PII Small MS4 General Permit
Annual Report – Year 7

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Enter your transmittal number

X233130

Transmittal Number

Your unique Transmittal Number can be accessed online: <http://mass.gov/dep/service/online/trasmfrm.shtml>

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:
Emery Leigh
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. #
11. Contact Person
John M. Walden
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 [] no
If yes, enter the project's EOE A 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

Municipality/Organization: Town of Westborough

EPA NPDES Permit Number: MAR041173

MA DEP Transmittal Number: X233130

Annual Report No & Report Period: No. 7- March 09-March 2010

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

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: Leigh Emery

Title: Chairman, Board of Selectmen

Date: April 27, 2010

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, year 5 on April 30, 2008, and year 6 on April 30, 2009.

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

Permit Year 7 – Ending April 2010

- June 2009, the town began issuing and keeping track of all Stormwater Permits for projects that disturb over 5,000 square feet of land. Construction inspections continue for all projects. (see Appendix 1)
- Plans are continuously being reviewed for site runoff control. Several projects have been permitted with local Stormwater Pollution and Prevention Plans.

- The Conservation Agent continues to alert over 200 commercial, industrial and high density residential 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 improvements in the maintenance of commercial properties since he started the program in 2005. A copy of this letter is in Appendix 2 & 3.
- The Conservation Agent worked with the DPW's yearly detention basin maintenance program to assure that all municipally owned properties and all seven schools have had their detention basins cleaned and rebuilt as necessary.
- Stormwater stenciling is ongoing though the town of Westborough. We had an Eagle Scout, Brian Leslie, work on stenciling catch basins around town that are in critical areas. He also set up a spreadsheet with all the catch basins that have been stenciled, the receiving waters, and the dates that they were stenciled. This will be helpful for future stenciling projects. His group stenciled over 200 catch basins in August, 2009. (Appendix 4)
- On September 3, 2009, Worcester Telegram and Gazette published a Press Release on Westborough Launching a Stormwater Awareness Campaign.
- Westborough TV aired a Stormwater Matters Outreach and Participation Ad Campaign consisting of seven ads, each one covering a specific stormwater theme such as lawn care, car care, picking up after pets, not littering, and keeping storm drains clean. This series of ads was run through the month of September, 2009 and April, 2010. (Appendix 5)
- In December, 2009, The Conservation Agent spoke to the entire Fifth Grade class about watersheds and stormwater management. The students were brought outside and visually reviewed the stormwater at their school campuses.
- On March 19th, 2010, Westborough's Engineering Department presented a power point training lesson for DPW employees which covered: erosion control, illicit discharge detection, stormwater runoff, and good housekeeping.(Appendix 6)
- The Town did not procure new materials from the SUASCO Watershed Community Council to aid in public outreach requirements of the permit. DPW was required to trim spending because of the difficult economic times. This decision will be re-evaluated in the future. Past outreach material was used again this year.
- The Town has renewed their involvement in the Rain barrel program.. 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 7.
- The Town adopted the Wetlands Protection Regulations on February 9, 2010 as required by the Wetlands Protection Bylaw, approved by Town Meeting in May 2008.
- All catch basins were cleaned. Problematic basins cleaned twice/yr.
- Culverts repaired include: Glen St., Longmeadow Rd., Nourse St., South St., Morse St., Warren St. and W. Main St.

- All streets are swept in the spring and fall. Downtown is swept every other week in the summer.
- The majority of detention basins in town have been mapped. As-built information has been collected for all newly constructed detention basins and water quality inlets. (Appendix 8)
- Educational posters and post cards have been displayed around town. (Appendix 9)
- On April 20, 2010, Donna Williams, Conservation Advocacy Coordinator at Mass Audubon's Broad Meadow Brook Wildlife Sanctuary in Worcester, presented "Rain Gardens." This educational seminar was given at the Library to teach how rainwater rooftop runoff can be redirected into a specially-designed garden. This technique helps to create a beautiful garden; reduce erosion and flooding; attract wildlife; and, ultimately, improve water quality. This program had 15 attendees from the public.
- Recently hired staff has been trained in implementing the Stormwater Plan, including: review of plans, inspection of construction sites and to report any illicit connections.

3.0 ASSESSMENT OF THE APPROPRIATENESS OF THE SELECTED BMPs:

The Best Management Practices (BMPs) selected for the stormwater program appear to be appropriate. Recently hired engineering staff, as well as DPW operations employees, have been trained on our methods for stormwater management.

4.0 LIST OF ACTIVITIES FOR THE NEXT REPORTING CYCLE

1. The Town will continue to air the stormwater video on cable TV.
2. Display the educational posters and post cards through out town.
 - a. Town Hall will have a special display in mid-summer
 - b. Spring Festival will have a special display in early May
 - c. Stormwater display will be at Town Meeting in mid-May
 - d. Sewer vs. Drain display will be held in early June
 - e. The Library will have a stormwater display in mid-July
 - f. The Senior Center will have a stormwater display in mid-September
3. The Town will continue to ask for volunteers to mark/stencil the catch basins, especially those that are in critical areas around town.
4. The High School photo contest will be judged in mid-may. The entries will be displayed around town throughout the year. The contest may be duplicated in years to come, as the availability occurs. (Appendix 10)
5. The Town is continuously evaluating the illicit discharge bylaw. No illicit discharges have been found to date. Continuous evaluation of discharges will occur, and proper action will take place to correct any illicit connections.
6. The Town will continue to review and implement the Stormwater Bylaw.
7. The Town will continue to perform preconstruction review of BMPs.
8. The Town will periodically train/retrain employees.

5.0 TABLE 1 - BEST MANAGEMENT PRACTICES

Attached is a copy of our implementation schedule, as included with our NOI, as modified to reflect our progress in year seven. The Board of Selectmen continued with its decision not to have a committee oversee the program, but to utilize current staff in lieu thereof.

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

PUBLIC EDUCATION AND OUTREACH

ID	BMP CATEGORY	BMP	DEPARTMENT RESPONSIBLE FOR IMPLEMENTING BMP	MEASURABLE GOALS	PROGRESS ON GOAL PERMIT YEAR 7	PLANNED ACTIVITIES
5.1.1	Homeowners	Mail educational flyer with stormwater survey	SuAsCo Council and DPW	Flyer distribution. Compile and evaluate survey results	Completed	Completed
5.1.2	Students	Teach stormwater lessons to fifth grader students	SuAsCo Council and DPW	Prepare and implement lesson	In December, 2009, the Conservation Agent gave a stormwater lesson, including a field visit, to all 5 th graders.	Repeat lesson as availability occurs
5.1.3	Businesses	Mail educational flyer with stormwater survey	SuAsCo Council and DPW	Flyer distribution Logo Display	Completed	Completed
5.1.4	General Public	Hold a stormwater media campaign Show a stormwater video on a local cable station	SuAsCo Council and DPW SuAsCo Council and DPW	4 press releases Develop and air stormwater video	Completed Aired on Cable TV twice	Completed Continue to air video
5.1.4 (new)		Display Educational Posters and Post Cards	SuAsCo Council and DPW	Distribute posters and post cards	Displayed educational posters and post cards and book marks at Library, Town Hall, and DPW	Continue to display

PUBLIC PARTICIPATION AND INVOLVEMENT

ID	BMP CATEGORY	BMP	DEPARTMENT RESPONSIBLE FOR IMPLEMENTING BMP	MEASURABLE GOALS	PROGRESS ON GOAL PERMIT YEAR 7	PLANNED ACTIVITIES
5.2.1	Homeowners	Circulate stormwater traveling display	SuAsCo Council and DPW	Develop display Feature at 3 locations	Displayed posters at Earth Day Program, Spring Festival and Town Meeting.	Continue to display
5.2.2	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 Photo contest is being held in April 2010	Completed Photo contest will be judged on May 18 th , 2010
5.2.3	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
5.2.3(new)	General Public	Catch Basin Stenciling	SuAsCo Council, Westborough Community Land Trust and DPW	Catch Basin Stenciling	Approximately 200 Catch Basins Stenciled in Aug. 2009.	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 7	PLANNED ACTIVITIES
5.3.1	Stormwater system mapping	Map outfalls Map pipes manholes and catch basins Map structural BMPS (i.e. detention basins, water quality inlets, etc)	DPW DPW DPW	Prioritize outfalls. Percentage of total outfalls mapped per year Prioritize areas. Percentage of total system Percentage of total structures	GPS location of known outfalls complete No action taken due to time constraints. 100% of known municipal detention basins mapped in GIS As-builts collected for all newly constructed detention basins and water quality inlets	Complete GPS location of outfalls as they become available Complete location of structures. Complete mapping of system. Update map as new BMPs are constructed
5.3.2	Regulatory Mechanism	Develop a bylaw prohibiting non storm water discharges into storm sewer system Develop enforcement procedures for non storm water discharges including illegal Dumping	DPW and/or Board of Health DPW and/or Board of Health	Formation of a technical committee and annual review of program. Development of a bylaw Development of enforcement procedures	Review of Illicit Discharge Bylaw is being done regularly Enforcement included in the Bylaw	Continue to implement Bylaw Continue to implement Bylaw

ILLCIT DISCHARGE DETECTION AND ELIMINATION

ID	BMP CATEGORY	BMP	DEPARTMENT RESPONSIBLE FOR IMPLEMENTING BMP	MEASURABLE GOALS	PROGRESS ON GOAL(S) PERMIT YEAR 7	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>	<p>DPW</p> <p>DPW</p> <p>DPW</p>	<p>Develop record keeping. 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>Town has implemented a sewer system evaluation plan which has TV'd more than 80,000 lined feet of sewer pipe. Target areas for illicit connections were older parts of Town, and subdivisions built prior to DPW inspection. To date, no cross connections have been found.</p> <p>Suspect outfalls have no illicit discharges found to date.</p> <p>Trained Inspector</p>	<p>Continue to inspect outfalls</p> <p>Develop goals for plan to eliminate discharge found when they are found.</p> <p>House to house inspection will occur this summer as well as smoke testing if necessary.</p> <p>Begin inspections in accordance with illicit discharge detection and elimination plan (previous BMP)</p>
5.3.4	Post removal evaluation and reporting	Implement a program to evaluate and report on conditions after illicit connections have been removed	DPW	Annual Report	No illicit discharges found to date.	Will provide report on post removal evaluation if illicit discharges are found.

CONSTRUCTION SITE RUNOFF CONTROL

ID	BMP CATEGORY	BMP	DEPARTMENT RESPONSIBLE FOR IMPLEMENTING BMP	MEASURABLE GOALS	PROGRESS ON GOAL(S) PERMIT YEAR 7	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 adopted in Year 6. Bylaw implemented by issuing Stormwater Permits.	Continue to implement Bylaw and review.
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	Plans reviewed 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	Trained staff to perform regular inspections of construction sites Enforcement included in Stormwater Bylaw	Continue Inspection Continue to 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 7	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	Stormwater Bylaw with provisions for post-construction runoff implemented in Year 6.	Continue to 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	Staff trained. Several plans reviewed.	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.	Staff trained. Construction projects inspected on a regular basis.	Continue to 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	Operation and Maintenance Plans have been required for all BMPs	Continue to enforce

POLLUTION PREVENTION/GOOD HOUSEKEEPING

ID	BMP CATEGORY	BMP	DEPARTMENT RESPONSIBLE FOR IMPLEMENTING BMP	MEASURABLE GOALS	PROGRESS ON GOAL(S) PERMIT YEAR 7	PLANNED ACTIVITIES
5.6.1	Employee training Program	Implement employee training	DPW	Develop goals. Develop program. Annually conduct training	Presented training for: illicit discharge detection, stormwater runoff, and good housekeeping on March 19 th , 2010	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.	Records were kept for basin cleaning and culvert repairs. Several areas of the storm drain system were repaired and improved. 100% of catch basins were cleaned last year. Problematic basins were cleaned twice/yr.	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.
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

ID	BMP CATEGORY	BMP	DEPARTMENT RESPONSIBLE FOR IMPLEMENTING BMP	MEASURABLE GOALS	PROGRESS ON GOAL(S) PERMIT YEAR 7	PLANNED ACTIVITIES
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. 100% of streets swept in spring and fall and downtown area swept every other week.	Continue to evaluate and strengthen record keeping and continue street sweeping program.