



FUSS & O'NEILL
Disciplines to Deliver

9

May 7, 2009

MAY 8 2009

Ms. 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
Year 6 Annual Report
Belchertown, Massachusetts

Dear Ms. Herrick:

Enclosed please find an Annual Report for the Town of Belchertown in accordance with the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) (Permit Number MA014002). A copy of the Annual Report is also being submitted to the Massachusetts Department of Environmental Protection.

Please contact me at (413) 452-0445 ext. 4433 with any questions regarding this submittal.

Sincerely,

78 Interstate Drive
West Springfield, MA
01089

Erik V. Mas, P.E.
Senior Project Manager

t (413) 452-0445
(800) 286-2469
f (413) 846-0497

www.FandO.com

Attachment

c: Fred Civian, MA DEP
Steven Williams, Belchertown DPW Director

Massachusetts

Connecticut

New York

Rhode Island

North Carolina

South Carolina



FUSS & O'NEILL
Disciplines to Deliver

May 7, 2009

Mr. Fred Civian
Massachusetts Department of Environmental Protection
One Winter Street – 5th Floor
Boston, MA 02108

RE: NPDES Phase II Small MS4 General Permit
Year 6 Annual Report
Belchertown, Massachusetts

Dear Mr. Civian:

Enclosed please find an Annual Report for the Town of Belchertown in accordance with the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) (Permit Number MA014002). A copy of the Annual Report is also being submitted to the United States Environmental Protection Agency.

Please contact me at (413) 452-0445 ext. 4433 with any questions regarding this submittal.

Sincerely,

Erik V. Mas, P.E.
Senior Project Manager

78 Interstate Drive
West Springfield, MA
01089

t (413) 452-0445
(800) 286-2469
f (413) 846-0497

www.FandO.com

Attachment

c: Ann Herrick, US EPA
Steven Williams, Belchertown DPW Director

Massachusetts

Connecticut

New York

Rhode Island

North Carolina

South Carolina

Storm Water Management Plan 2009 Annual Report

Town of Belchertown
Belchertown, Massachusetts

May 2009



FUSS & O'NEILL
Disciplines to Deliver

78 Interstate Drive
West Springfield, MA 01089

Table of Contents

Storm Water Management Plan 2009 Annual Report Town of Belchertown

General Information	iii
1 Introduction.....	1
2 Public Education and Outreach	1
2.1 School Programs.....	1
2.2 Educational Materials Distributed.....	1
2.3 Citizen Groups.....	2
2.4 Modifications to Plan	2
2.5 Activities Schedule for Next Year	2
3 Public Participation	3
3.1 School Programs.....	3
3.2 Boy and Girl Scouts of America	3
3.3 Storm Water Management Committee	3
3.4 Public Meetings.....	4
3.5 Modifications to the SWMP	4
3.6 Activities Planned for Next Year.....	4
4 Illicit Discharge Detection and Elimination	4
4.1 Activities Conducted	4
4.2 Modifications to the SWMP	5
4.3 Activities Planned for Next Year.....	5
5 Construction Site Runoff Controls.....	5
5.1 Activities Conducted	5
5.2 Modifications to the SWMP	6
5.3 Activities Planned for Next Year.....	6
6 Post-Construction Storm Water Management	6
6.1 Activities Conducted	6
6.2 Modifications to the SWMP	7
6.3 Activities Planned Next Year	7
7 Pollution Prevention/Good Housekeeping	7
7.1 Employee Training.....	7
7.2 Street Sweeping	7
7.3 Catch Basin Cleaning.....	8
7.4 Stormwater BMP Inspection and Maintenance.....	8
7.5 Deicer Material Storage.....	8
7.6 Preventative Maintenance	8



Table of Contents
Storm Water Management Plan
2009 Annual Report
Town of Belchertown

7.7 Transfer Station8
7.8 Modification to the SWMP.....9
7.9 Activities Planned Next Year9

Appendices

End of Report

A Revised Storm Water Management Plan Summary
B Storm Water Educational Materials
C Field Screening Data Sheets
D Storm Water Bylaw Documents
E Storm Water Training Materials
F Street Sweeping Log
G Transfer Station and Hazardous Waste Disposal Materials





General Information

Storm Water Management Plan 2009 Annual Report Town of Belchertown

Municipality/Organization: Town of Belchertown

EPA NPDES Permit Number: MA041002

Annual Report Number and Reporting Period: Report #6: May 1, 2008 through April 30, 2009

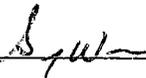
Contact Person: Steven J. Williams
Director, Department of Public Works
(413) 323-0415
swilliams@belchertown.org

Self Assessment:

The Town of Belchertown has completed the required self-assessment and has determined that the municipality is in compliance with all permit conditions.

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: STEVEN J WILLIAMS

Title: PUBLIC WORKS DIRECTOR

Date: MAY 4, 2009



1 Introduction

The Town of Belchertown developed a Storm Water Management Plan (SWMP) to comply with the *National Pollutant Discharge Elimination system (NPDES) General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4 General Permit)* issued jointly by the United States Environmental Protection Agency (USEPA) and the Massachusetts Department of Environmental Protection (MA DEP) (effective May 1, 2003, expiring this year). The Town was granted coverage under this permit (MAR041002) on September 12, 2003. The Phase II regulated area in Belchertown consists of an approximately 1.8-square mile area located in the southwest portion of the Town. The General Permit requires the Town to prepare an Annual Report. This document constitutes the Town's Annual Report and summarizes the activities conducted to satisfy the permit requirements, modifications to the plan, and activities scheduled for the upcoming year. A copy of the modified SWMP Summary is included as *Appendix A*.

2 Public Education and Outreach

2.1 School Programs

As described in the SWMP, the Belchertown public school system provides numerous environmental educational programs in its curriculum. These programs will continue to be an integral part of the science curriculum and foster an appreciation for and a sense of responsibility for the environment. All schools participate in recycling programs mainly focusing on the recycling of white paper. Overall, approximately 2,500 students received environmental-related education as a regular part of the school curriculum.

The community is also working to develop the Lake Wallace Project, which would create a natural outdoor environment that: offers students a unique learning opportunity outside of the classroom; allows the incorporation of real-life teaching strategies into the curriculum, creates a safe haven that is accessible to the community for varied leisure and recreational uses; and maintains a natural resource which is aesthetically pleasing and that becomes a "jewel" of the community (see *Appendix B* for more information and new articles regarding this project).

2.2 Educational Materials Distributed

Copies of the SWMP have been distributed to the public schools and the Town library as an educational resource. The SWMP also identified numerous educational resources for students and teachers. A storm water link was created on the Town's website which includes links to a copy of the SWMP and annual reports. Additionally, a storm water flyer was developed in 2007 to inform citizens and the development community about and the Town's new Storm Water Bylaw and low impact development (LID) practices. The flyer continued to be distributed in 2008 and is available on the DPW website (a copy was provided with the 2007 annual report).

The Conservation Commission distributed a flyer that describes wetlands protection in Belchertown. The flyer includes details regarding impacts of lawn chemicals on wetlands when conveyed by storm water. A copy of this flyer was provided with the 2007 annual report.





As described in Section 6, the Town adopted a Storm Water and LID Bylaw and associated regulations in January 2008. A checklist and flowchart were prepared to assist citizens and developers in determining whether the new bylaw applies to their project. This flow chart has been available throughout permit year 6. Copies of these documents are presented in *Appendix D*.

The Town also worked with Pioneer Valley Planning Commission to complete a LID Guidance Document in June 2008 that is currently available to local land use boards, municipal staff, the development community, and the public. A copy of this document is included in *Appendix B*.

2.3 Citizen Groups

The following local citizen groups and organizations have been identified in the SWMP that provide public education resources on storm water quality issues or could provide a public outreach avenue in developing storm water awareness and developing partnerships with the public:

- Connecticut River Watershed Council
- Pioneer Valley Planning Commission
- Tri-Lakes Association
- Belchertown Land Trust

These groups continue to provide and/or have the capacity to provide public education resources on storm water quality issues and continue to exist as support for future storm water education programs in Belchertown.

In Year 6 the Belchertown Conservation Commission continued with the acquisition of land projects and closed on the final 57-acre parcel of land identified as the Topping Farm Property on June 4th, 2008. Grant assistance from the Community Preservation Act consisting of \$145,600.00 and a Self-Help Grant in the amount of \$455,600.00 from the Executive Office of Energy and Environmental Affairs (EOEEA) enabled the Conservation Commission to secure the remaining acreage of the Topping Farm Property, which has great value for aquifer protection, recreation and wildlife habitat. In addition, the Scarborough Brook Conservation Area Nature Walk and Fundraiser were held by the Conservation Commission on June 8th, 2008 to showcase the 65 acres, now open to the public to enjoy for passive recreation. The land was acquired for the protection of the Lawrence Swamp aquifer and the endangered species located on the property.

2.4 Modifications to Plan

No changes to the Public Education and Outreach Components of the SWMP are proposed at this time.

2.5 Activities Schedule for Next Year

The current MS4 General Permit expired at the end of Year 5. All MS4s in Massachusetts are now covered under an administratively extended version of the prior general permit (MAR041002). As this current permit is simply a continuation of the old one, the SWMP will not be revised at this





time. Belchertown will implement requirements of the new permit, including modifications to this SWMP as necessary, when it is issued. Activities for the coming year include:

- Make available the LID guidance document and support materials, including a link to the document on the Town website.
- Continue existing school educational programs.

3 Public Participation

3.1 School Programs

Students in the Belchertown public schools are encouraged to volunteer in environmental activities over the summer vacation, in addition to after-school activities. Some of these ongoing programs include:

- An annual science fair open to the public.

3.2 Boy and Girl Scouts of America

Boys and girls may be involved in the Scout programs from ages 5 to 17. Scouts are involved in various community service programs and are available to assist with implementation of the Town's storm water management program.

3.3 Storm Water Management Committee

In 2003 the Town established a Storm Water Management Committee to develop and implement the SWMP. The Committee consists of the following Town employees, board members, and an interested citizen:

- Gary Brougham, Town Administrator
- Steven Williams, DPW Director
- LeeAnn Connolly, Conservation Commission Administrator
- Judy Metcalf, Direction of Public Health, Quabbin Health District
- Doug Albertson, Town Planner
- Paul Adzima, Building Inspector
- Ted Bock, Fire Chief
- Don Minney, citizen representative

Members of the committee met regularly during 2008 to draft and discuss the implementation of the Storm Water Bylaw and associated regulations and procedures. The Town received its first application under the bylaw in Year 5 and continued to receive applications in Year 6. The Committee met twice in Year 6 (June 27 and April 1, 2008).





3.4 Public Meetings

The SWMP and Phase II Storm Water Program were presented at a Board of Selectmen's meeting on January 29, 2003. Notice of the meeting was published in a local newspaper approximately one week prior to the meeting. The presentation was taped and aired on the local public access television station. This year's annual report and previous annual reports are made available to the public on the Town of Belchertown website.

The Storm Water Management Committee intends to continue to meet periodically in 2009 to review implementation of the bylaw and related issues.

The Belchertown Conservation Commission held fifty-four hearings under the Wetlands Protection Act; eighteen of these were Requests for Determination, twenty-nine were Notices of Intent, six were for permit extensions, and one Public Hearing for input regarding the New Open Space & Recreation Plan 2008-2012, which is now complete (hearing on June 9, 2008). The Belchertown Open Space and Recreation Plan (OSRP) is a statement of the current priorities of Town boards, officials, and citizens for natural resource protection and recreation. The purpose of this plan was to revise the original 1986 OSRP plan - to update the 2008 OSRP and reassess the open space, recreation, and natural resource protection needs and priorities for the next five years (2008-2012). In addition, the Belchertown Open Space and Recreation Map was also updated in 2008. Both of these publications may be purchased from the Conservation Commission Office, or the Town Clerks Office

3.5 Modifications to the SWMP

No changes to the Public Participation components of the SWMP are proposed at this time.

3.6 Activities Planned for Next Year

The current MS4 General Permit expired at the end of Year 5. All MS4s in Massachusetts are now covered under an administratively extended version of the prior general permit (MAR041002). As this current permit is simply a continuation of the old one, the SWMP will not be revised at this time. Belchertown will implement requirements of the new permit, including modifications to this SWMP as necessary, when it is issued. Activities for the coming year include:

- Periodic meetings of the Storm Water Committee

4 Illicit Discharge Detection and Elimination

4.1 Activities Conducted

A preliminary storm sewer outfall map showing storm water outfalls within the Phase II regulated area has been prepared. The preliminary outfall map was prepared from the town's Geographic Information System (GIS) data, which includes storm drainage layers, as well as an initial outfall inventory performed by DPW staff during March 2003. Dry weather screenings of twenty-three (23) outfalls for detection of illicit discharges were performed on September 17 and 18, 2008.





Outfalls were inspected using an outfall reconnaissance inventory field sheet. There was no flow witnessed at any of the outfalls inspected during Year 6. Given these findings, the two locations where dry weather flow was observed in Year 5 are no longer suspected as illicit discharges. Copies of the ORI field data sheets from these dry weather screening events are included in *Appendix C*.

A regulatory review was completed relative to illicit discharge detection and elimination in Belchertown. Although a bylaw does not exist in Belchertown that specifically prohibits illicit discharges, regulatory mechanisms that address non-storm water discharges are in place to meet this requirement. These include the revised Storm Water Management Standards that were incorporated into the Massachusetts Wetlands Protection Act. These standards, which are administered and enforced by the Conservation Commission, specifically prohibit all non-storm water discharges (with limited exceptions) to wetlands and watercourses or to storm water management systems which discharge to wetlands and watercourses. Additionally, the Belchertown Board of Health regulations also addresses non-storm water discharges relative to protection of public health and the environment.

4.2 Modifications to the SWMP

No changes to the Illicit Discharge Detection and Elimination component of the SWMP are proposed at this time.

4.3 Activities Planned for Next Year

The current MS4 General Permit expired at the end of Year 5. All MS4s in Massachusetts are now covered under an administratively extended version of the prior general permit (MAR041002). As this current permit is simply a continuation of the old one, the SWMP will not be revised at this time. Belchertown will implement requirements of the new permit, including modifications to this SWMP as necessary, when it is issued. Activities for the coming year include:

- Continue to perform an additional round of dry weather screening of outfalls.

5 Construction Site Runoff Controls

5.1 Activities Conducted

Approximately 37 new building lots were created along existing town roads through Subdivision Approval Not Required plans. The Planning Board reviewed one preliminary subdivision plan during permit Year 6 and two definitive subdivision plans. Two subdivisions were completed during permit Year 6. The Planning Board granted three site plan approvals. Of these town-wide projects, approximately 2 are located within the Phase II regulated area.

The Belchertown Conservation Commission reviewed and commented on all septic system installation permits, site plan reviews, subdivision applications that occurred in the Town in Year 6. Several of the larger projects were also reviewed by engineering consultants hired by the Town. The majority of these projects incorporated some form of storm water erosion and sediment controls to satisfy existing local and state regulatory requirements.





The Town of Belchertown has adopted a Storm Water Bylaw that regulates construction and post-construction storm water runoff for new development and redevelopment projects. The bylaw provides a clear set of storm water management goals, standards, and design criteria to minimize the adverse impacts of storm water runoff from land development projects. The bylaw also promotes LID and sustainable design practices. Copies of the bylaw, associated regulations, and permit application materials were included with prior annual reports.

The Storm Water Bylaw addresses construction site runoff and erosion and sediment controls, including inspections and enforcement. Projects subject to the new bylaw will be documented by the DPW (the Storm Water Authority) and by Reviewing Boards. The Belchertown Conservation Commission is one of those reviewing boards. There were 13 approved and one disapproved storm water permit in Year 6 (see *Appendix D* for a copy of the permits log maintained by the DPW).

5.2 Modifications to the SWMP

At this time, no changes to the Construction Site Runoff components of the SWMP are proposed.

5.3 Activities Planned for Next Year

The current MS4 General Permit expired at the end of Year 5. All MS4s in Massachusetts are now covered under an administratively extended version of the prior general permit (MAR041002). As this current permit is simply a continuation of the old one, the SWMP will not be revised at this time. Belchertown will implement requirements of the new permit, including modifications to this SWMP as necessary, when it is issued. Activities for the coming year include:

- Provide training for Town staff (i.e., land use board members and staff) responsible for reviewing site plans to determine compliance with the proposed Storm Water Bylaw.

6 Post-Construction Storm Water Management

6.1 Activities Conducted

As described in Section 5.1, a number of the new development and redevelopment projects that were constructed in Belchertown during the previous year included post-construction storm water management controls to satisfy the performance standards in the Wetlands Protection Act and 401 Water Quality regulations and the *Massachusetts Stormwater Handbook*.

Specific information on the number of projects and the types of post-construction storm water management measures was not tracked this year. Activities conducted and their method of tracking will largely be determined as storm water management permit applications are received.

The Storm Water Bylaw addresses post-construction storm water management and erosion and sediment controls, including inspections and enforcement. Projects subject to the bylaw will be documented by the DPW (the Storm Water Authority) and by Reviewing Boards. See Section 5.1 for more information on permit applications and approvals.





6.2 Modifications to the SWMP

At this time, no changes to the Post-Construction Storm Water Management component of the SWMP are proposed.

6.3 Activities Planned Next Year

The current MS4 General Permit expired at the end of Year 5. All MS4s in Massachusetts are now covered under an administratively extended version of the prior general permit (MAR041002). As this current permit is simply a continuation of the old one, the SWMP will not be revised at this time. Belchertown will implement requirements of the new permit, including modifications to this SWMP as necessary, when it is issued. Activities for the coming year include:

- Continue to implement the new Storm Water Bylaw and associated regulations.
- Provide training for Town staff (i.e., land use board members and staff) responsible for reviewing site plans to determine compliance with the proposed Storm Water Bylaw.

7 Pollution Prevention/Good Housekeeping

There are no municipal facilities located within Belchertown's Phase II regulated area. Therefore, the focus of this minimum control measure is to ensure that municipal operation and maintenance activities associated with the infrastructure (e.g., roads and storm drainage system) within the regulated area are performed in a manner to reduce and prevent the discharge of pollutants to storm water. Activities at other municipally-owned facilities are also addressed in this annual report as they relate to the requirements of this minimum measure.

7.1 Employee Training

Twenty-one Public Works staff (representing administrative, cemetery, highway, and water staff) received environmental-related training this year. The training included Environmental Compliance and Stage II Vapor Recovery training.

Storm water training for DPW and other Town employees was conducted on April 1, 2009. The training was conducted in conjunction with annual training required by the EPA industrial storm water permit program for the highway garage and wastewater treatment plant. The training included education on goals/objectives of the Phase II program, pollution prevention for public works activities, waste management, and good housekeeping. A copy of the employee attendance log is included in *Appendix E*.

7.2 Street Sweeping

All of the streets within the regulated area were swept at least once during the previous year. A street sweeping log has been developed by the Town to record the names of the streets swept and the amount of street sweepings recovered. A copy of this log is included in *Appendix F*. All of the roads in Belchertown were swept by the Town using a Town-owned sweeper (2005 Elgin Pelican)





and approximately 1,370 yards of material were recovered. A majority of the roads that were not swept by the Town are privately-owned or State-owned. The DPW continues to follow a program for managing and disposing of street sweepings consistent with the Massachusetts solid waste regulations and applicable DEP guidance.

7.3 Catch Basin Cleaning

In April 2006, the Town obtained a Beneficial Use Determination (BUD) Permit from the MA DEP for the Beneficial Use of Catch Basin Cleanings. The permit provides the Town with the following reuse options for catch basin cleanings:

- Use/disposal in accordance with the DEP Street Sweepings Policy
- Use in asphalt recycling at the Ondrick facility in Chicopee, MA
- Use as an alternative daily landfill cover.

The Town did not generate any catch basin cleanings in Year 6.

7.4 Stormwater BMP Inspection and Maintenance

Brush and other vegetation within Town-owned detention basins is cut annually.

7.5 Deicer Material Storage

Salt is stored at the DPW maintenance garage inside a dedicated salt storage building, constructed in 2004. Approximately 2,272 tons of salt and 2,988 yards of sand were used in the winter of 2007-2008.

7.6 Preventative Maintenance

DPW staff conducts weekly inspections of the stage II vapor recovery system and waste oil collection area at the highway garage. Routine maintenance of the Town's fleet of equipment and vehicles is also performed at the highway garage.

7.7 Transfer Station

The Transfer Station and Recycling Center accepts household trash, recyclables, yard waste, waste motor oil, tires, appliances and bulky items such as furniture and mattresses. Over 912 tons of residential waste was collected at the Transfer Station in 2008. Approximately 402 tons of paper and cardboard were collected, 74 tons of white goods and scrap metal, 142 tons of commingled containers, 34 tons of CRTs/Electronics, 1,950 gallons of waste oil, and 354 tires (see *Appendix G* for a complete list of the materials collected).





Belchertown residents were permitted to participate in the hazardous waste collection day held by Northampton on May 7, 2008. A second hazardous waste collection day occurred on June 28, 2008 in the Town of South Hadley, which Belchertown residents were also permitted to attend (see *Appendix G* for a copy of the notices).

7.8 Modification to the SWMP

At this time, no changes to the Pollution Prevention / Good Housekeeping components of the SWMP are proposed.

7.9 Activities Planned Next Year

The current MS4 General Permit expired at the end of Year 5. All MS4s in Massachusetts are now covered under an administratively extended version of the prior general permit (MAR041002). As this current permit is simply a continuation of the old one, the SWMP will not be revised at this time. Belchertown will implement requirements of the new permit, including modifications to this SWMP as necessary, when it is issued. Activities for the coming year include:

- Conduct annual storm water pollution prevention training for Town employees at the highway garage and wastewater treatment plant as a requirement of the EPA Water Multi-Sector General Permit. Incorporate awareness training on waste oil management.
- Continue to maintain record keeping procedures for street sweeping, catch basin cleaning, deicer application and usage, and storm water BMP inspections and maintenance within the Phase II regulated area.
- Implement the inspection and maintenance schedule that has been developed for storm drainage structures and storm water BMPs within the Phase II regulated area.
- Conduct street sweeping and catch basin cleaning in the Phase II regulated area.
- Dispose of street sweepings and catch basin cleanings in accordance with MA DEP guidance and regulations, including the BUD Permit for Beneficial Use of Catch Basin Cleanings.

