



COMPREHENSIVE
ENVIRONMENTAL
INCORPORATED

September 1, 2009

Glenda Velez
US EPA – CIP
One Congress Street, Suite 1100
Boston, MA 02114

- Engineering
- Design
- Construction
- Inspection

Responsive
service,
cost-effective
solutions,
technical
excellence

- Water &
Wastewater
- Parks &
Recreation
- Drainage &
Flooding
- Hazardous Waste
- Transportation
- Stormwater & LID
- Watershed
Restoration

**Re: NPDES Stormwater General Permit
2007-2008 Annual Report
Town of Southbridge, MA**

Dear Ms. Velez:

On behalf of the Town of Southbridge, MA, please find enclosed the NPDES Phase II Stormwater General Permit 2007-2008 Annual Report. The Annual Report has simultaneously been filed with the Massachusetts Department of Environmental Protection.

If you have any questions or require any additional information, please do not hesitate to call me at (800)725-2550 ext. 303.

Sincerely,

Comprehensive Environmental Inc.

Nick Cristofori
Project Engineer

cc: Massachusetts Department of Environmental Protection, Boston Office
Ken Kalinowski, Director of Public Works, Town of Southbridge

Enclosure – NPDES Phase II Small MS4 General Permit 2007-2008 Annual Report

Municipality/Organization: Town of Southbridge

EPA NPDES Permit Number: MAR041161

MaDEP Transmittal Number: W- 041270

Annual Report Number

& Reporting Period: No. 5: March 2007-April 30, 2008

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Kenneth Kalinowski **Title:** Director of Public Works

Telephone #: (508) 764-5403 **Email:** kkalinowski@southbridgemass.org

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: Christopher Clark

Title: Town Manager

Date: 9-1-09

Part II. Self-Assessment

The Town of Southbridge has had numerous staff changes in recent years, which has impacted progress of the program and the ability to meet proposed BMP schedules, and delayed submittal of the year 5 report. Southbridge has had three Town Managers in less than two years, three new Town Council members each year, a new Department of Public Works (DPW) Director, and turnover in the Health Department. Southbridge recently retained a consultant to assist with its Phase II program. The Town expects to make significant improvements to its stormwater program in the coming years.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
1A	Public Outreach	DPW	Reach 5 th grade	Presentation made on water quality to selected grade 5.	Continue classroom education program.
Revised	Stormwater Education for Students				
1B	Public Outreach	Water Department	Reach all water accounts (4,000 households)	Mailed annual Water Quality Report to residents which details drinking water quality for the Town.	Continue annual Water Quality Report mailing.
Revised	Annual Water Quality Report Mailing				

1a. Three Additions at this Time.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
1C	Stormwater Press Release	DPW, Board of Health	Annual stormwater newspaper article	Advertised the four Household Hazardous Waste (HHW) disposal events in the local newspaper. Events are held approximately once every season in June, September, December and March.	Continue to advertise the HHW events in the local newspaper.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
1D	Distribute Educational Flyers and Advertise Household Hazardous Waste Event	Board of Health	Distribution of flyers	Household Hazardous Waste flyer advertisements were made available at the DPW building, Town Hall, and Jacob Edwards Library. HHW events were advertised on the local cable network.	Continue to make HHW flyers available to advertise the events.
Revised					
1E	Develop Stormwater Section of Town Website	DPW and Town Website Manager	Measure number of hits annually	Posted street sweeping schedule on the DPW website. Updated schedules are posted each week on the website.	Continue updating street sweeping schedules.
Revised					

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
2A	Monitor Streams	Conservation Commission	Monitor 1 stream annually	Nearby residents performed informal sediment accumulation monitoring in streams.	Continue stream sediment monitoring.
Revised					

2a. No Additions at this Time.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
Revised					

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
3A Revised	Map Storm Sewer System	DPW	Map outfalls	Outfall mapping was ongoing in the GIS system through the use of aerial photography. Mapping of catch basins, manholes, outfalls and culverts continued in the Urbanized Area (UA)	Continue outfall mapping.
3B Revised	Amend Drainage ByLaw	Town Council	Modify existing bylaw	A draft bylaw is under review by the Southbridge DPW.	Develop and implement a bylaw to prohibit illicit discharges.
3C Revised	Inspect Outfalls	Board of Health	Identify illicit discharges	Inspected known problem outfalls for blockages and flooding issues. Potential obstructions or other problems were fixed.	Continue outfall inspections.

3a. Two Additions at this Time.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
3D Revised	Household Hazardous Waste Collection Events	Board of Health, Recycling Coordinator, Casella Waste Systems	Annual Household Hazardous Waste day	Southbridge hosts 4 Household Hazardous Waste Collection Events throughout the year, approximately once per season in June, September, December and March. Flyers were made available at several Town-owned buildings as discussed in BMP 1D. Volunteers counted and tracked car drop offs. Approximately 80 to 120 cars are typically present at each event.	Continue to host HHW collection events four times a year. Flyers are available as discussed in BMP 1D. Continue to track participation.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
3E	Establish Illicit Discharge Hotline	DPW	Number of phone calls to the DPW	Calls and complaints were handled by the DPW. Residents can fill out a complaint form to be recorded by Town administration personnel. Stormwater complaints are forwarded to the DPW which documents all complaints and follow-up actions for each street.	DPW will continue to handle illicit discharge related phone calls. The DPW phone number will continue to be advertised through existing media. Track calls and record actions taken annually.
Revised					

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
4A	Control Erosion and Sedimentation	Town Council	Enact new bylaw	A draft bylaw is under review by the Southbridge DPW.	Develop and implement a bylaw for construction sites. Explore additional erosion control enforcement measures as needed.
Revised		Town Council, DPW			

4a. Three Additions at this Time.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
4B	Establish a Procedure for the Receipt of Information Submitted by the Public	DPW	Number of phone calls to the DPW	As discussed in BMP 3E, calls and complaints were handled by the DPW. DPW documented all complaints and follow-up actions.	DPW will continue to handle stormwater related phone calls. The DPW phone number will continue to be advertised through existing media. Track calls and record actions taken annually.
Revised					
4C	Construction Site Runoff Site Plan	Conservation Commission	Erosion control site plan	Town regulations required erosion and sediment control plans and details for all projects requiring a Notice of Intent (NOI) to be submitted to the Conservation Commission for review prior to construction. The Conservation Commission also reviewed site calculations to check pre- and post-development stormwater runoff and compliance with the Massachusetts Stormwater Management Policy.	Continue review of proposed developments.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
4D	Conduct Inspections for Erosion Control	DPW	Inspections performed and documented	The DPW performed inspections of all construction sites to ensure erosion controls were working properly. Subdivision sites were inspected approximately once per day. Major problems are documented by DPW.	Continue the current inspection program. Develop a standard form to document erosion and sediment control issues.
Revised					

5. Post-Construction Stormwater Management in New Development and Redevelopment

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
5A	Regulate Post Construction Runoff	Town Council	Amend drainage control bylaw	A draft bylaw is under review by the Southbridge DPW.	Develop and implement a bylaw to meet the stormwater management requirements.
Revised					

5a. Two Additions at this Time.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
5B	Post-Construction Site Inspection	DPW	Inspections performed	Before accepting maintenance responsibility for new construction sites, the DPW performed a full inspection of public drainage systems.	Continue current inspection program. Develop a standard inspection checklist and document all procedures.
Revised					
5C	As-Built Plans	DPW	Plans documenting construction	DPW required that as-built plans be submitted upon completion of construction.	Continue to receive as-built plans for any new development.
Revised					

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
6A	Street Sweeping	DPW	Sweep streets annually	All streets swept annually between April and June. Collected material was disposed of in the Southbridge landfill. Sweeping schedules were posted on both the website and on the local access channel, Channel 12 and updated each week.	Continue to sweep all streets annually. Advertise street sweeping schedule on local cable network and website as currently doing. Continue to properly dispose of all material.
Revised					
6B	Catch Basin Cleaning	DPW	Clean critical basins annually	The DPW cleaned all critical basins. Collected material was disposed of in the Southbridge landfill.	Continue annual catch basin cleaning program. Clean critical basins first.
Revised					

6a. Three Additions at this Time.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
6C	Storm Drain System Inspection and Maintenance	DPW	Inspect and maintain storm drain system at least annually	Known problem outfalls were inspected as outlined in BMP 3C. Catch basins were inspected for structural deficiencies when cleaned by DPW staff.	Continue outfall and catch basin inspections.
Revised					
6D	Ensure Covered Storage for Winter Salt	DPW	All salt is covered	All salt for winter storm operations was covered in two salt sheds, one at each DPW building.	Continue to cover salt materials.
Revised					
6E	Conduct Town Employee Stormwater Training	DPW	Develop pollution prevention workshop for municipal employees	Pollution prevention topics were informally discussed as part of routine DPW operations meetings.	Continue training of town employees, particularly the DPW.
Revised					

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) <<if applicable>>

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
Revised					

7a. No Additions at this Time.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
Revised					

7b. WLA Assessment

MADEP released the 2008 303(d) Integrated List of Waters in July of 2008. The updated 303d list outlines three waters in the Town of Southbridge that are classified as Category 5 “Waters Requiring a TMDL”, as outlined in the following table. There are currently no TMDLs completed for waters in Southbridge. Water quality concerns associated with 303d waters are addressed through the implementation of BMPs under the six minimum measures for Phase II.

Name	Description	Impairment	
Cady Brook (4129125)	Charlton City WWTP, Charlton to confluence with Quinebaug River, Southbridge.	-Nutrients -Organic enrichment/Low DO	-(Flow alteration*) -Taste, odor and color
Morse Pond (41033)	Southbridge	-Organic enrichment/Low DO	-Noxious aquatic plants
Quinebaug River (4128875)	Confluence with Cady Brook to Southbridge WWTP in Southbridge.	-Organic enrichment/Low DO -(Other habitat alterations*)	-Turbidity -(Objectionable deposits*)
* non pollutant			

Part IV. Summary of Information Collected and Analyzed

The Town of Southbridge is continuing its outfall mapping program. Catch basin and manhole mapping continues to date. Structures are recorded and imported into a GIS base map.

Town of Southbridge NPDES PII Small MS4 General Permit Annual Report

EPA Transmittal Number: MAR041161

MADEP Transmittal Number: W-041270

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	No
Annual program budget/expenditures	(\$)	0

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	4,000
Stormwater management committee established	(y/n)	No
Stream teams established or supported	(# or y/n)	One
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	N/A
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	4/year
▪ community participation	(%)	80-120 cars
▪ material collected	(tons or gal)	
School curricula implemented	(y/n)	Yes

Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted	Adopted
Regulatory Mechanism Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination		X		
▪ Erosion & Sediment Control	X			
▪ Post-Development Stormwater Management		X		
Accompanying Regulation Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination		X		
▪ Erosion & Sediment Control	X			
▪ Post-Development Stormwater Management		X		

Mapping and Illicit Discharges

Outfall mapping complete	(%)	95%*
Estimated or actual number of outfalls	(#)	360
System-Wide mapping complete	(%)	90%
Mapping method(s)		
▪ Paper/Mylar	(%)	-
▪ CADD	(%)	-
▪ GIS	(%)	90%
Outfalls inspected/screened	(# or %)	0
Illicit discharges identified	(#)	0
Illicit connections removed	(#) (est. gpd)	N/A
% of population on sewer	(%)	85%
% of population on septic systems	(%)	15%

Construction

Number of construction starts (>1-acre)	(#)	
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	100%
Site inspections completed	(# or %)	100%
Tickets/Stop work orders issued	(# or %)	
Fines collected	(# and \$)	
Complaints/concerns received from public	(#)	

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	100%
Site inspections completed	(# or %)	100%
Estimated volume of stormwater recharged	(gpy)	Unknown

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	1
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1
Total number of structures cleaned	(#)	
Storm drain cleaned	(lf or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Landfill
Cost of screenings disposal	(\$)	0
Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	1
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	1
Qty. of sand/debris collected by sweeping	(lbs. or tons)	300-600 tons/month
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Landfill
Cost of sweepings disposal	(\$)	0
Vacuum street sweepers purchased/leased	(#)	0
Vacuum street sweepers specified in contracts	(y/n)	0
Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	No reduction
▪ Herbicides	(lbs. or %)	Undetermined reduction
▪ Pesticides	(lbs. or %)	N/A
Anti-/De-Icing products and ratios	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand	38% 0 0 0 0 0 62%
Pre-wetting techniques utilized	(y/n)	N
Manual control spreaders used	(y/n)	Y, though not many
Automatic or Zero-velocity spreaders used	(y/n)	Y, mostly auto used
Estimated net reduction in typical year salt application	(lbs. or %)	0%
Salt pile(s) covered in storage shed(s)	(y/n)	100%
Storage shed(s) in design or under construction	(y/n)	Y