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Municipality/Organization: Town of Millville

EPA NPDES Permit Number: MAR041138

MaDEP Transmittal Number: W-063418

Annual Report Number

& Reporting Period: No. 8: May 1, 2010 - April 30, 2011

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Helen Coffin

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Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:

Helen M. Coffin

Printed Name: Helen Coffin

Title: Executive Secretary

Date:

April 26, 2012

Part II. Self-Assessment

The Town of Millville received confirmation for coverage under the General Permit for its Municipal Separate Storm Sewer System (MS4) on May 10, 2003. In accordance with the NPDES Phase II Stormwater requirements, Millville has completed the required annual self-assessment compliance review for its Phase II Stormwater Program. The following topics were evaluated for the completion of the Annual Report:

1. Compliance with the Phase II Permit Conditions
2. Appropriateness of the Selected BMPs
3. Progress Towards Achieving the Program's Measurable Goals
4. Results of Any Information that has been Collected and Analyzed
5. Activities for the Next Reporting Cycle
6. Changes in Identified BMPs or Measurable Goals

The Town continued its work on public education by providing a number of informational flyers at public locations in Town. Educational materials target residential uses, as the Town is almost exclusively residential in nature. The Town also provides information on the Town website, in newspaper articles, and through the local cable access channel, much of which promotes public participation events such as the annual roadside cleanup events in conjunction with Earth Day. For this event, volunteers spread out throughout the town and clean up Town streets and walking paths. The Town also periodically coordinates with the Blackstone River Watershed Association (BRWA) for public participation opportunities, such as the Earth Day Shoreline Cleanup and annual canoe and kayak race down the Blackstone River.

To date, the Town has mapped 78 outfalls using GIS software, representing all known outfalls as of 2007, as well as all known catch basins, manholes and pipes. Since then, the Town has acquired as-built plans showing new stormwater structures. Also during 2007, the Town inspected outfalls for dry weather flows, possibly indicating an illicit discharge. Flowing outfalls appeared to stem from natural sources such as upstream wetlands, and no illicit discharges were found.

The Town has adopted a Stormwater Management Bylaw, requiring projects disturbing one or more acres to obtain a Stormwater Management Permit through the Planning Board. The Planning Board routinely uses the Massachusetts Stormwater Handbook when reviewing and approving projects. The Town also requires that erosion controls are in place and good design techniques be employed, such as maintaining post development flows at predevelopment levels. Finally, Town departments routinely inspect construction projects to ensure erosion controls are in place and stormwater structures are functioning properly. Any complaints received by the public are addressed.

The Highway Department hires an outside contractor to conduct street sweepings every spring after winter sanding operations are complete, and catch basin cleaning every September. Catch basins prone to excess sediment, such as those at the bottom of a hill or heavily sanded area are cleaned more frequently as needed. Sediment and other materials are removed from the system and properly disposed of. The Town also accepts mercury-containing items such as fluorescent bulbs, thermostats, etc. Items are stored in a shed behind the Town Hall until collection by an authorized waste transfer company for disposal.

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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
1.1 Revised	Material Distribution Distribute Educational Materials	Conservation Commission Highway Department	Distribute yearly mailing Distribute and display educational materials	Stormwater educational materials are displayed and made available at the Town Hall, Senior Center, and Library. Educational materials target residential uses (car washing, pet wastes, etc.), illegal dumping, and illicit discharges. Industrial and commercial targets will be implemented if necessary; however current development is largely residential in nature.	Continue to provide educational materials for residents at public places.
1.2 Revised	Work with the Blackstone River Watershed Association	Board of Health, Conservation Commission	Coordinate with the Blackstone River Watershed Association	The Town coordinated with the Blackstone River Watershed Association on potential projects requiring stormwater management during permit years 1 through 5. No recent coordination has occurred.	Coordinate with the Blackstone River Watershed Association as necessary.

1a. Additions.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
1.3 Revised	Attend meetings	All Town Departments and Boards	Coordinate on stormwater-related issues	Town departments and boards, such as the Highway Department, Planning Board, Conservation Commission, and Board of Health coordinate on stormwater-related issues. Work to date has included the establishment of bylaws discussed in BMPs 3.2, 4.1 and 5.1 and establishment of Stormwater Management Permit through the Planning Board. Meetings are held as necessary.	Continue to coordinate between Town departments and attend meetings as necessary.
1.4 Revised	Create Dedicated Stormwater Website	Highway Department	Website with information on stormwater	The Town made stormwater information available on the Town's website (www.milvillema.org), such as the BOH's schedule of recycling pickup, information about the Blackstone Valley Recycling Center, the stormwater management permit application, and applicable stormwater and illicit discharges as discussed in BMPs 3.2, 4.1 and 5.1.	Continue to provide stormwater information on the Town website.
1.5 Revised	Utilize the Public Access Cable Channel to Distribute Stormwater Information	Highway Department	Advertisements of upcoming public participation events and providing stormwater public information	The Town advertised the Earth Day roadside cleanup activity on the local public access channel in advance of the May event.	Continue to advertise the roadside cleanup event.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
1.6	Publish Stormwater-Related Newspaper Articles	Highway Department	Advertisements of upcoming public participation events and providing stormwater public information	The Town posted advertisements for the May Earth Day roadside cleanup. Advertisements were posted in The Valley Breeze and The Woonsocket Call in advance of the event.	Continue to advertise the roadside cleanup event.
Revised					

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
2.1 Revised	Public Involvement	Board of Health, Conservation Commission	Organize an annual canoe trip to inspect outfalls Participate in public BRWA events	The BRWA hosts an annual Earth Day Shoreline Cleanup in April that targets towns within the Blackstone River watershed. The BRWA also hosts an annual Canoe and Kayak Race in May. Volunteers are encouraged to participate in these events as a way to beautify and enjoy the outdoors.	Continue to encourage resident participation in the Earth Day Shoreline Cleanup and canoe and kayak races.
2.2 Revised	Municipal Roads Stencil Catch Basins	Conservation Commission	Storm drain stenciling	Town employees stenciled all catch basins prior to Permit Year 7. Town employees periodically inspected the storm drain system to see if re-stenciling was required. Fading labels were identified and repainted when necessary.	Stencil new and/or repaved streets as budget and time allow.
2.3 Revised	Watershed Organizations	Stormwater team Conservation Commission	Coordinate with the Blackstone River Watershed Association	The Town coordinated with the Blackstone River Watershed Association on potential projects requiring stormwater management during permit years 1 through 5. No recent coordination has occurred, however public participation events as described in BMP 2.1 continue.	Coordinate with the Blackstone River Watershed Association as necessary.

2a. Additions.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
2.4	Earth Day Roadside Cleanup	Highway Department	Annual roadside cleanup and amount of trash and material collected	The Town held its annual roadside cleanup in May 2010 in coordination with Earth Day. Residents and volunteer groups such as the Boy Scouts of America are invited to participate. Volunteers meet with Town workers at the Town Hall and are given a section of Millville to target during cleanup efforts. Volunteers typically clean up all Town streets, as well as walking paths in town. The Town advertised the event via newspaper advertisements and the local cable access channel as discussed in BMPs 1.5 and 1.6.	Continue to hold an annual Earth Day roadside cleanup event in May 2011. Continue to advertise the event through current media channels.
Revised					

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
3.1 Revised	Stormwater System Mapping	Highway Department	Map outfalls, catch basins, etc. Map outfalls, pipes, manholes and catch basins.	The Town mapped a total of 78 outfalls using GIS software during 2007, representing all known outfalls at that time. Catch basins, manholes, pipes, etc. were also mapped. The Town also has a number of as-built plans documenting new stormwater structures installed since then.	No new field mapping efforts are planned at this time.
3.2 Revised	Regulatory Mechanism	Board of Health	Develop and implement ordinance	The Board of Health developed a bylaw prohibiting non-stormwater discharges into the storm sewer system.	Continue to enforce the bylaw and prohibit non-stormwater discharges from entering the small MS4.
3.3 Revised	Illicit Discharge Plan	Highway Department, Board of Health	Develop illicit discharge plan	The Board of Health responds to any public complaints of suspected illicit discharges such as failed septic systems, illegal dumping, etc. Highway Department employees inspect outfalls as part of routine operations and document any evidence that may reveal an illicit discharge could be present. To date, no illicit discharges have been detected. Procedures for documenting information submitted by the public are outlined under BMP 4.4.	Continue to document any suspected illicit discharges or complaints received by the public. Follow up on all complaints and document the outcome. Continue to inspect outfalls during routine operations.
3.4 Revised	Post Removal Evaluation	Board of Health	Report on post removals	The Board of Health is prepared to report on any illicit discharges discovered or eliminated in a given year. To date, no illicit discharges have been detected.	Post follow-up reports on any illicit discharges found.

3a. Additions.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
3.5 Revised	Conduct Outfall Inspections	Highway Department	Locate and evaluate possible illicit discharges	The Town inspected all known stormwater outfalls in 2007 during dry weather while conducting the mapping efforts described under BMP 3.1. Any dry weather flows were traced upstream to ascertain if a natural or man-made source was likely. All dry weather flows encountered were traced to natural sources such as wetlands. No illicit discharges were suspected.	Continue periodic outfall inspections. A follow-up round of sampling is planned for October 2011.
3.6 Revised	Household Hazardous Waste Event	Highway Department		The Town accepts mercury-containing items such as fluorescent bulbs, thermostats, etc. Items are stored in a shed behind the Town Hall until collection by an authorized waste transfer company for disposal.	Continue accepting mercury-containing devices at the Town Hall.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
4.1 Revised	Regulatory Mechanism	Planning Board	Develop / implement ordinance Develop and implement bylaw	The Planning Board developed a “Stormwater Management Bylaw” requiring any project disturbing one or more acres to obtain a Stormwater Management Permit through the Planning Board. The bylaw was adopted by the Town prior to the conclusion of Permit Year 5.	Continue to enforce the Stormwater Management Bylaw by requiring projects disturbing one or more acres to obtain a Stormwater Management Permit.
4.2 Revised	Site Plan Review Procedures	Planning Board	Preconstruction review of stormwater pollution prevention plan (SWPPP)	During permit review, the Planning Board utilizes the Massachusetts Storm Water Management Policy and Massachusetts Stormwater Handbook as a guideline for reviewing and approving projects. Erosion and sediment controls are required to be in place during construction activities by the Conservation Commission. Plan reviews were conducted as required throughout Permit Year 8.	Continue to require erosion and sediment controls to be in place during construction activities.
4.3 Revised	Site Inspection and Enforcement	Planning Board and Conservation Commission	Conduct construction site inspections	Construction site inspections were conducted by the Planning Board and/or Conservation Commission as required throughout Permit Year 8 along with BMP 5.3. Site inspections typically look for items such as proper stormwater management techniques and well-maintained erosion and sediment controls.	Continue to inspect construction projects to ensure adequate erosion and sediment BMPs are in place.

4a. Additions.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
4.4	Establish a Procedure for the Receipt of Information Submitted by the Public	Highway Dept., Planning Board, Conservation Commission, Board of Health	Call log of public complaints and follow-up actions taken	In the event of a complaint, residents contact the Town Hall and are directed to the appropriate department or board for follow-up action. Town contact information is posted online and advertised in flyers, tax bills, etc. Complaints are addressed by the appropriate department as necessary.	Document and follow-up on any calls or complaints received.
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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
5.1 Revised	Regulatory Mechanism	Planning Board	Develop / implement ordinance. Develop and implement bylaw	The Planning Board developed a “Stormwater Management Bylaw” requiring any project disturbing one or more acres to obtain a Stormwater Management Permit through the Planning Board. The bylaw was adopted by the Town prior to the conclusion of Permit Year 5.	Continue to enforce the Stormwater Management Bylaw by requiring projects disturbing one or more acres to obtain a Stormwater Management Permit.
5.2 Revised	Review BMP Designs	Planning Board	Preconstruction review Preconstruction review of site designs	During permit review, the Planning Board utilizes the Massachusetts Storm Water Management Policy and Massachusetts Stormwater Handbook as a guideline for reviewing and approving projects. At a minimum, new development and redevelopment projects must maintain post-development stormwater flows at predevelopment levels. Plan reviews were conducted as required throughout Permit Year 8.	Continue to review stormwater projects and require designs to conform to the Massachusetts Stormwater Handbook.
5.3 Revised	Site Inspection and Enforcement	Planning Board	Construction site inspections	Construction site inspections were conducted by the Planning Board and/or Conservation Commission as required throughout Permit Year 8 along with BMP 4.3. Site inspections typically look for items such as proper stormwater management techniques, as well as proper construction according to the approved plans.	Continue to inspect construction projects to ensure stormwater BMPs are in place and functioning properly.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
5.4 Revised	Operation and Maintenance Procedures	Highway Department	Develop operation and maintenance procedures for BMPs Track quantities of sediment removed during O&M procedures	The Highway Department hires an outside contractor to conduct catch basin cleaning, street sweeping annually, and perform BMP maintenance as needed. Sediment and other materials removed from the system are sampled as required, and properly disposed of, typically at a landfill facility.	Continue to clean out stormwater system structures as needed.

5a. No additions at this time.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
6.1	Employee Training Program	Stormwater Management Team	Spill reporting / response	Pollution prevention and illicit discharge detection topics were informally discussed as part of routine Highway Department operations meetings.	Continue training of town employees, particularly Highway Surveyor and Highway Department employees for proper stormwater operations and maintenance procedures.
Revised		Highway Department	Conduct stormwater pollution prevention training		
6.2	Stormwater System Operation and Maintenance	Highway Department	System inspection program	The Highway Department hires an outside contractor to conduct catch basin cleaning. All catch basins in town are cleaned annually every September. Highway Department workers are also familiar with catch basins prone to excess sediment accumulation. These basins are inspected during routine operations, particularly after winter sanding operations are completed, to ensure proper function. If additional cleaning is required, select basins are cleaned on an as-needed basis.	Continue to clean all catch basins on an annual basis and clean priority basins prone to excessive sediment accumulation more often as required. Continue to inspect catch basins during routine operations.
Revised	Catch Basin Cleaning		Clean town-owned catch basins		
6.3	Parks and Open Space	Parks Department	Application controls	The Veterans Park is the only area in town that is fertilized, typically three times per year. The service is provided through a contracted lawn service. The Town formalized an application reporting procedure for pesticides and fertilizers.	Continue to hire an outside lawn care service to fertilize Veterans Park. Discuss ways to reduce or eliminate fertilizers and pesticide applications.
Revised		Highway Department, Parks and Recreation Department			

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
6.4 Revised	Municipal Roads Street Sweeping	Highway Department	Street sweeping Conduct street sweeping annually	The Highway Department hires an outside contractor to conduct street sweepings every spring after winter sanding operations are complete. Street sweeping was again performed in the spring during Permit Year 8.	Continue to hire a contractor to perform street sweeping annually in the spring.

6a. No additions at this time.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
Revised					

7b. WLA Assessment

The MADEP draft 2010 303(d) Integrated List of Waters outlines two segments of the Blackstone River (MA51-05 and MA51-06) in the Town of Millville that are classified as Category 5 “Waters Requiring a TMDL”. Segments are impaired as follows:

- MA51-05 Lead, PCBs, turbidity, total phosphorus, total suspended solids, low pH, fecal coliform, copper, cadmium, aquatic macroinvertebrate bioassessments, other flow regime alterations, and taste and odor.
- MA51-06 Lead, total phosphorus, fecal coliform, turbidity, total suspended solids, taste and odor, low flow alterations, copper, PCB in fish tissue, and cadmium.

Water quality concerns associated with 303d waters are addressed through the implementation of BMPs under the six minimum measures for Phase II. The approach for addressing impaired waters will be updated based on the new permit and release of final TMDLs for the above pollutants.

Part IV. Summary of Information Collected and Analyzed

Millville has completed a map of all stormwater structures, including catch basins, manholes, culverts and outfalls. Approximately 72 outfalls have been mapped, with several more located via as-built plans or similar mapping methodology. Structure locations were recorded using GPS software and imported into a base map depicting all locations within Town limits. An illicit discharge inspection program was completed during 2007 and no significant illicit connections were found in the UA storm drain system.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

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

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	
Stormwater management committee established	(y/n)	
Stream teams established or supported	(# or y/n)	Yes
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	0
▪ community participation	(%)	N/A
▪ material collected	(tons or gal)	N/A
School curricula implemented	(y/n)	No

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				
▪ Erosion & Sediment Control				
▪ Post-Development Stormwater Management				

Mapping and Illicit Discharges

Outfall mapping complete	(%)	100%*
Estimated or actual number of outfalls	(#)	~75
System-Wide mapping complete	(%)	100%
Mapping method(s)		
▪ Paper/MyIar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	
Outfalls inspected/screened	(# or %)	100%
Illicit discharges identified	(#)	0
Illicit connections removed	(#)	N/A
% of population on sewer	(est. gpd)	
% of population on septic systems	(%)	0
	(%)	100%

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 %)	0
Fines collected	(# and \$)	0
Complaints/concerns received from public	(#)	0

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)	

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	100%/yr
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1/yr
Total number of structures cleaned	(#)	~250
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	(\$)	
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)	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	
Cost of sweepings disposal	(\$)	
Vacuum street sweepers purchased/leased	(#)	
Vacuum street sweepers specified in contracts	(y/n)	
Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	
Anti-/De-Icing products and ratios	% NaCl	
	% CaCl ₂	
	% MgCl ₂	
	% CMA	
	% Kac	
	% KCl	
	% Sand	
Pre-wetting techniques utilized	(y/n)	
Manual control spreaders used	(y/n)	
Automatic or Zero-velocity spreaders used	(y/n)	
Estimated net reduction in typical year salt application	(lbs. or %)	
Salt pile(s) covered in storage shed(s)	(y/n)	
Storage shed(s) in design or under construction	(y/n)	