



COMPREHENSIVE
ENVIRONMENTAL
INCORPORATED

June 18, 2010

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

**Re: NPDES Stormwater General Permit
2009-2010 Annual Report
Town of Amesbury, MA**

Dear Ms. Velez:

On behalf of the Town of Amesbury, MA, please find enclosed the NPDES Phase II Stormwater General Permit 2009-2010 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
Robert Desmarais, P.E., Director of Public Works, Town of Amesbury, MA

Enclosure – NPDES Phase II Small MS4 General Permit 2009-2010 Annual Report

- Engineering
- Design
- Construction
- Inspection

Responsive
service,
cost-effective
solutions,
technical
excellence

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



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June 18, 2010

Mr. Frederick Civian
Stormwater Coordinator
Massachusetts Department of Environmental Protection
One Winter Street, 6th Floor
Boston, MA 02108

**Re: NPDES Stormwater General Permit
2009-2010 Annual Report
Town of Amesbury, MA**

Dear Mr. Civian:

On behalf of the Town of Amesbury, MA, please find enclosed the NPDES Phase II Stormwater General Permit 2009-2010 Annual Report. The Annual Report has simultaneously been filed with the U.S. Environmental Protection Agency.

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: U. S. Environmental Protection Agency, Boston Office
Robert Desmarais, P.E., Director of Public Works, Town of Amesbury, MA

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Municipality/Organization: Town of Amesbury

EPA NPDES Permit Number: MAR041177

MaDEP Transmittal Number: W-035560

Annual Report Number
& Reporting Period: No. 7: May 1, 2009-April 30, 2010

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Robert Desmarais

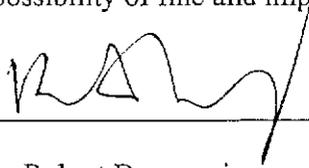
Title: Director of Public Works

Telephone #: (978)388-8135

Email: rob@ci.amesbury.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: Robert Desmarais

Title: Director of Public Works

Date: 6/15/10

Part II. Self-Assessment

The City of Amesbury has completed the required self-assessment of the annual compliance review for the Phase II Stormwater Program. In accordance with the NPDES Phase II Stormwater requirements, 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 has determined that our municipality is in compliance with all permit conditions.

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 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Period
1a	Publish information on voluntary yard waste program	Town Engineer	Publish in newspaper various times	The town continued to publish information regarding the hours of operation, location, materials to be collected, etc. for the yard waste program.	The Town will continue to advertise the yard waste collection program. Explore ways to increase participation and additional advertising methods.
Revised					
1b	Publish information about household hazardous waste program	Town Engineer	Publish flyers and notices in paper and radio in the spring	The town continued to publish information regarding the hours of operation, date, location, materials to be collected, etc. for the household waste program.	The Town will continue to advertise the household waste program. Explore ways to increase participation and additional advertising methods.
Revised					
1c	Publish educational brochure	Town Engineer	Coordinate with public awareness group and update annually	Poster boards displaying educational material on stormwater were prepared and then set-up at the Town Hall and Public Library for residents to view.	The Town will continue to display educational material in public places. Look for additional ways to improve public education.
Revised					
1d	Post brochure on town website	IS Dept.	Establish link and update annually	The town continued to host stormwater information on its website.	Efforts will be made to update website annually and to provide additional information to interested residents.
Revised					

1a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Period
1e	Install storm drain markers, stenciling and door hanger brochures	Town Engineer with Volunteers	Complete installation of markers on curbs and painted stencils	To date, 500 markers were installed, 1,000 magnets distributed, and 2,000 door hangers brochures distributed during previous years.	Maintain/replace markers and paint faded stencils as needed.
Revised					
1f	Install pet waste signs and bag dispensers	Dept. of Public Works/Town Engineer	Complete installation of pet waste signs and bag dispensers	The town previously installed pet waste signs and bag dispensers at various park and trail head locations.	Maintain dispensers and restock bags as needed. Look for additional locations to install pet waste bag dispensers.
Revised					

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Period
2a	Voluntary yard waste disposal program	Dept. of Public Works	Conduct Annually April-November	The town conducts a yearly voluntary yard waste program between April and November.	The Town will continue to conduct the yard waste collection program.
Revised					
2b	Conduct meetings regarding stormwater management	Dept of Public Works/Town Engineer	Conduct one meeting per year	The Lakes and Waterways Commission conducts open meetings numerous times during the year to discuss stormwater issues. Meetings are open to interested members of the public.	The Lakes and Waterways Commission will continue to conduct open meetings throughout the year.
Revised					

2a. Additions

No additions at this time.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Period
3a	Map stormwater drainage system and outfalls	Town Engineer	3 year program using GPS equipment with submeter accuracy	100% of Town GIS database/mapping completed. Known outfalls have been recorded and mapped.	Continue to update existing drainage system mapping as new developments are constructed or additional outfalls located.
Revised					
3b	Visually inspect outfalls for dry weather flow	Town Engineer	3 year program concurrent with mapping	Known outfalls have been inspected for dry weather flow. A total of 312 outfalls have been inspected to date. Mapping was completed as part of BMP 3a.	Continue with follow-up observations and inspections for outfalls where dry weather flows were identified.
Revised					
3c	Develop sampling and analysis program	Town Engineer	3 year program based on results of outfall inspections	Samples previously collected at outfalls with dry weather flow were analyzed to determine potential illicit discharge sources. To date, 14 outfalls have been sampled.	Continue to sample dry weather flow as needed.
Revised					
3d	Develop a program to identify and locate illicit discharge connections	Town Engineer	3 year program to test drains based on results of sampling and analysis	IDDE investigations have been completed for outfalls with dry weather flow that indicated potential illicit discharge sources. Additional illicit discharge investigations continued in the Aubin Street and Mill Street neighborhood.	Continue to pursue sources of discovered illicit discharges and work towards elimination.
Revised					
3e	Periodically inspect outfalls	Town Engineer	Inspect 25% of outfalls per year.	Continued inspection program.	Continue inspection program.
Revised					
3f	Develop Stormwater Use Regulation prohibiting illicit discharges	Town Engineer	Incorporate into comprehensive stormwater ordinance.	A draft Stormwater Management Ordinance addressing illicit discharges was developed and is under review by various Town Departments. This BMP was combined with BMP 4a as a single document.	Continue to review and develop an Illicit Discharge ordinance to satisfy Phase II requirements.
Revised					

3a. Additions

No additions at this time.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Period
4a	Develop a comprehensive stormwater ordinance	Dept. of Public Works, Town Engineer, other Depts.	Obtain approval from Mayor and Municipal Council.	A draft Stormwater Management Ordinance addressing erosion controls and post-construction stormwater controls was developed and is under review by various Town Departments. This BMP was combined with BMP 3f as a single document.	Continue to review and develop a stormwater management ordinance. Adopt and enforce the ordinance through peer review and site inspections.
Revised					
4b	Reassess stormwater management plan	Town Engineer	Perform every three years	Numerous Phase II programs and BMPs have been implemented over the past several years or are currently taking place.	Perform an annual review of the stormwater program and look for possible improvement areas.
Revised					
4c	Require erosion and sediment control measure plan prior to construction on all projects	Planning Board, Conservation Commission, Town Engineer	Conduct periodic site inspections and monitor and track violations through reports to the Conservation Commission.	The Town Planning Board requires erosion and sedimentation control plans prior to construction. Site visits are conducted periodically to assure the contractor is in compliance with the proposed plan	Continue to review erosion and sedimentation control plans and perform periodic site inspections.
Revised					

4a. Additions

No additions at this time.

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 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Period
5a	Develop standards for regulating stormwater controls for all new and redevelopment projects and inspect controls	Planning Board, Conservation Commission, Town Engineer	Incorporate into comprehensive stormwater ordinance.	A draft Stormwater Management Ordinance addressing erosion controls and post-construction stormwater controls was developed and reviewed by various Town Departments.	Continue to review and develop a stormwater management ordinance. Adopt and enforce the ordinance through peer review and site inspections.
Revised					

5a. Additions

No additions at this time.

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 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
6a	Street sweeping	Department of Public Works	Continue program of sweeping twice annually. Track volume of material collected by area. Sweep in late spring and fall with additional sweeping during severe winters.	All streets are swept in Town at least once annually. Efforts are made to sweep more heavily traveled streets at least twice per year.	Street sweeping efforts will be continued and efforts will be made to track the amount of debris collected during the sweeping in order to prioritize areas for additional sweeping.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
6b	Deicing	Department of Public Works	Continue program of using Ice Ban to enhance melting	Ice Ban was not used to enhance melting during the past year.	Upon further evaluation, the Town does not intend to use Ice Ban in the future.
Revised					
6c	Develop Spill Prevention Control Plan	Department of Public Works	Implement Plan and train employees within one year	A database for all facilities in Town that require an SPCC plan was previously completed to help promote pollution prevention throughout Town.	Provide facilities with information on regulatory requirements and additional information such as fact sheets.
Revised	Develop Spill Prevention Control Plan Database	Department of Public Works	Database of facilities throughout town that require SPCC Plan.		
6d	Catch basin cleaning	Department of Public Works	Continue program of catch basin cleaning twice annually. Track volume of material removed by area.	Approximately 2,000 catch basins were cleaned throughout Amesbury.	Continue to clean catch basins as funding allows. Also clean other BMPs such as Vortech units in residential areas and baffle tanks in residential and commercial areas.
Revised			Limited funding has reduced the Town's catch basin cleaning to once annually.		
6e	Trash removal and recycling	Department of Public Works	Continue program of trash removal weekly and curbside recycling biweekly.	The curbside trash removal and recycling program was conducted and advertised in conjunction with BMP 1b.	Continue conducting curbside trash removal and recycling efforts. Explore ways to increase participation and expand advertising efforts in conjunction with BMP 1b.
Revised					
6f	Yard waste disposal	Department of Public Works	Continue voluntary program for resident drop-off of yard waste April-November.	The voluntary yard waste drop-off program was conducted and advertised in conjunction with BMP 1a.	Continue holding yard waste drop-off events. Explore ways to increase participation and expand advertising efforts in conjunction with BMP 1a.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
6g	Household hazardous waste program	Department of Public Works	Continue annual program of conducting a collection day for household hazardous waste	Amesbury held a household hazardous waste day during the past year.	Continue to hold a household hazardous waste disposal day at least annually. Advertise the event through available media such as television, newspaper and internet.
Revised					
6h	Develop storm drain flushing program	Department of Public Works	Flushing reports of pipe sections completed.	Pipe sections were flushed as needed.	Continue flushing pipe sections as needed.
Revised					
6i	Television inspection of storm drains	Department of Public Works	Inspection reports of pipe sections completed.	No additional pipe sections were TV inspected throughout Town.	Continue TV inspections as needed.
Revised					
6j	Require Spill Control Plans from all non-residential establishments	Department of Public Works	Inspection reports and plans.	A database for facilities in Town that require an SPCC plan was completed to help promote pollution prevention throughout Town.	Provide facilities with information that discusses regulatory requirements and additional information such as fact sheets.
Revised					

6a. Additions

No additions at this time.

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) -

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Period
7a					
Revised					

7a. Additions

No additions at this time.

7b. WLA Assessment

MADEP has prepared a draft of the Massachusetts Year 2010 Integrated List of Waters. The following waterbodies are listed as Category 5, “Waters Requiring a TMDL”:

1. Lake Attitash (84002), segment ID MA84002, impaired for metals
2. Back River (8450325), segment ID MA84A-16, impaired for siltation, pathogens, and turbidity
3. Powwow River (8450300), segment ID MA84A-08, impaired for pathogens
4. Powwow River (8450300), segment ID MA84A-25, impaired for fecal coliform, total suspended solids, and turbidity

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.

Part IV. Summary of Information Collected and Analyzed

Locations and physical descriptions of approximately 312 outfalls have been gathered since Permit Year 1. Copies of all educational materials and memos distributed have been kept on file. Meeting memos and phone logs have also been kept on file. To date, 14 outfalls have been sampled and a total of 8 dry weather flow sources have been investigated to date.

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 %)	95%
Stormwater management committee established	(y/n)	
Stream teams established or supported	(# or y/n)	
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	1
▪ community participation	(%)	
▪ 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	(%)	100%
Estimated or actual number of outfalls	(#)	
System-Wide mapping complete	(%)	100%
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	
Outfalls inspected/screened	(# or %)	312
Illicit discharges identified	(#)	1 since Permit Year 1
Illicit connections removed	(#) (est. gpd)	1 since Permit Year 1
% of population on sewer	(%)	55%
% of population on septic systems	(%)	45%

Construction

Number of construction starts (>1-acre)	(#)	
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	
Site inspections completed	(# or %)	
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	(%)	
Site inspections completed	(# or %)	
Estimated volume of stormwater recharged	(gpy)	

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	Once every 2 years
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	Once every 2 years
Total number of structures cleaned	(#)	~2,000
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.)		
Cost of screenings disposal	(\$)	

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	1/year
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	1/year
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	0
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)	Yes
Storage shed(s) in design or under construction	(y/n)	