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Municipality/Organization: Town of Essex

EPA NPDES Permit Number: MA041239

MaDEP Transmittal Number: W-035216

**Annual Report Number
& Reporting Period:** No. 3: April 08 - April 09

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Paul Goodwin **Title:** Superintendent

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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: 

Printed Name: Paul Goodwin

Title: Superintendent

Date: April 7, 2009

Part II. Self-Assessment

The Town has now completed our storm water sampling project as required by the DEP. Our sewer collection system has been complete for over 3 years. All mandatory connection dwellings that are occupied are connected to the sewer system. We are working with the local Board of Health to identify any failed systems that will be hooked into sewer. All catch basins are cleaned and repaired as needed. Outfall pipes and drainage swales are monitored and maintained as required. In 2008 a local Eagle Scout stenciled 189 catch basins with a “No Dumping, Drains to Waterway” stencil. In 2009 Essex again worked with Greenscapes on public education and outreach.

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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7
SX1 Revised	Hazardous Waste Day	DPW Paul Goodwin	See Attachment 1	HHWD was held on May 10 2008	HHWD is scheduled for May 2, 2009
SX2 Revised	Water Conservation	Water Dept. Paul Goodwin	See Attachment 1	Greenscapes provided the town, through mailing, on water conservation measures.	More mailings.
SX3 Revised	Lawn & Garden	Wastewater	See Attachment 1	Greenscapes provided the town, through mailing, on water conservation measures.	More mailings.
SX4 Revised	Classroom Education	Wastewater Paul Goodwin	See Attachment 1	No action taken	Contact local elementary school for classroom education.
Revised					
Revised					
Revised					

1a. Additions

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7
SX5 Revised	Drain Stencils	Wastewater Paul Goodwin	See Attachment 1	Eagle Scout did stenciling of 189 drains in Dec 2008	Finish the remaining 80 +/- basins
SX6 Revised	Elementary School Projects	Wastewater Paul Goodwin	See Attachment 1	No action taken	Will talk with Principal about appropriate grade.
SX7 Revised	Hazardous Waste Day	DPW Paul Goodwin	See Attachment 1	Added a tire collection and a battery collection. Also have mercury shed in place for mercury containing items at the town's Transfer Station.	Continue current practices.
Revised					
Revised					
Revised					

2a. Additions

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7
SX8 Revised	Identify Failing Septic Systems	Board of Health Elaine Wozoney	See Attachment 1	All occupied mandatory/failed systems are connected to the Town Sewer System.	Continue to identify.
SX9 Revised	Drain Connection Permit	DPW Paul Goodwin	See Attachment 1	Local MS-4 by-law in place.	Continue to identify and require permits as needed.
SX10 Revised	Stormwater Sampling	Wastewater Paul Goodwin	See Attachment 1	Satisfied DEP requirement for Storm water sampling.	Program ended.
SX11 Revised	Outfall Inspections	Wastewater Paul Goodwin	See Attachment 1	Inspected annually and cleaned/maintained as needed.	Maintain current inspection process.
SX24 Revised	Illicit Discharge Enforcement	Wastewater Paul Goodwin	See Attachment 2	Personnel inspects when water meter work is required.	Enforcement of by-law.
Revised					

3a. Additions

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7
SX12	Inspection and Maintenance	Conservation Commission	See Attachment 1	ConCom has been very good about inspections.	Continue with current practices.
Revised					
SX13	Construction Entrances	DPW Paul Goodwin	See Attachment 1	Address construction site maintenance, as needed. Had contractor clean street if needed.	Keep local contractors informed about accountability of site maintenance.
Revised					
SX14	Silt Fence	Conservation Commission	See Attachment 1	ConCom has been very good about silt-fence inspections.	Continue with current practices.
Revised					
SX25	Enforcement	Conservation Commission	See Attachment 2	No progress at this time.	Talk to ConCom about By-Law.
Revised					
Revised					
Revised					

4a. Additions

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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities -- Permit Year 7
SX15 Revised	Alternative Pavers	Planning Board	See Attachment 1	Planning board has made this a suggestion.	Continue with current practices.
SX16 Revised	Catch Basins	Wastewater Paul Goodwin	See Attachment 1	Planning Board sends the DPW plans of proposed drainage work for new developments.	Continue with current practices.
SX17 Revised	Street Curbing	Planning Board	See Attachment 1	Planning board has made this a suggestion.	Mass. Highway installing/replacing curbing on RT 133/Main St.
SX26 Revised	Enforcement	Conservation Commission	See Attachment 2	No action taken.	Work with ConCom to come up with a By-Law.
Revised					
Revised					
Revised					

5a. Additions

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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7
SX18 Revised	Truck Wash Bay	DPW Paul Goodwin	See Attachment 1	Highway garage completed. Gas/sand trap installed for floor drains	Maintain good housekeeping practices.
SX19 Revised	Street Cleaning	DPW Paul Goodwin	See Attachment 1	We feel that at this time our street sweeping is adequate.	Continue to review.
SX20 Revised	Catch Basin Cleaning	DPW Paul Goodwin	See Attachment 1	Have all town catch basins cleaned annually.	Have all town catch basins cleaned annually.
SX21 Revised	Drain Repair / Replacement	DPW Paul Goodwin	See Attachment 1	If found in poor condition during cleaning they were repaired as needed.	If found in poor condition during cleaning they were repaired as needed.
SX22 Revised	Salt Storage	DPW Paul Goodwin	See Attachment 1	Maintain good housekeeping practices.	Maintain good housekeeping practices.
Revised					

6a. Additions

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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7
SX23	Public Sewer System	Wastewater Paul Goodwin	See Attachment 1	Maintain good housekeeping practices	Maintain good housekeeping practices.
Revised					
SX27	Outfall Map	Wastewater Paul Goodwin	See Attachment 2	Look into having engineer make more detailed/updated map.	Look into having engineer make more detailed/updated map.
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	
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)	
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	
Household Hazardous Waste Collection Days		
<ul style="list-style-type: none"> ▪ days sponsored ▪ community participation ▪ material collected 	(#) (%) (tons or gal)	
School curricula implemented	(y/n)	

Legal/Regulatory

In Place
Prior to
Phase II Under
Review Drafted Adopted

Regulatory Mechanism Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination				
▪ Erosion & Sediment Control				
▪ Post-Development Stormwater Management				
Accompanying Regulation Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination				
▪ Erosion & Sediment Control				
▪ Post-Development Stormwater Management				

Mapping and Illicit Discharges

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

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)	
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	
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.)		
Cost of screenings disposal	(\$)	
Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	

Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	
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)	