

Municipality/Organization: Town of Needham

EPA NPDES Permit Number:

MaDEP Transmittal Number: W-041019

**Annual Report Number
& Reporting Period: No. 9: May 2011 - May 2012**

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Richard P. Merson Title: Director, Dept. of Public Works

Telephone #: 781-455-7550 Email: RMerson@needhamma.gov

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: Richard P. Merson

Title: Director, Public Works Department

Date: May 2, 2012

Part II. Self-Assessment

The Town of Needham has completed the required self-assessment and has determined that our municipality is in compliance with all proposed permit applications Permit Year 9 goals except as noted in Part III of this report.

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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
1-1	Classroom education on Storm Water	DPW Director	<ul style="list-style-type: none"> - Teachers instruct classes and present materials gathered in year one. - Volunteer outreach to youth groups and Public Schools 	Needham DPW host at the DPW yard on Dedham Ave. “Touch the Trucks” display for the elementary schools comprising all children grades K-5. Dated 5/21/11, and hosted a field trip to the Water Treatment Plant on October 26 and 28 for the Hillside School	Continue presentations and truck displays along with (Catch Basin Cleaner and Vactor truck) at 2 elementary schools.
1-2	Flyer and Brochure Distribution and Web Site Link	DPW Director	<ul style="list-style-type: none"> - Supply the DPW, Town Hall, and Public Library with a Flyer and Fact Sheet - Provide a Web Link on the Town’s Web Site to the Charles River Watershed Web Site 	A flyer aimed at what local business can do to help, and a “What you can do...” fact sheet were supplied at all suggested locations.(PSA Building, Town Hall, and Public Library).	Re-distribute current flyers and fact sheets, establish a link on the Town web-site to the Charles River Watershed web-site.

1-3	Using the Media	DPW Director	- One local cable public service announcement - one yearly press release - one annual storm water article	One Press release article released by Board of Health Department 1) Health Matters, 6/21/11 2) Non Municipal partners to publish articles on Storm Water Management in local media	Continue to issue press releases in local paper, continue to have local cable air the PSA provided by American Oceans Campaign.
1-4	Hazardous Waste Management	DPW Director	- Surplus Paint Program Continuation - Hazardous Waste Day Continuation	The Town of Needham continues to hold Hazardous waste days yearly, and paint collection days 7 times per year, this begins in April, every third Saturday of the month 1. All amount information is provided in section five of the report.	Continue to offer same program to the community.
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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
2-1	Adopt-a-Stream Programs	DPW Director	- Clean adopted local water bodies, - adopt a stream program continued	Adopted water bodies are cleaned on an as needed basis by the DPW Rosemary Brook and Mallard Brook	Continue to clean and have cleaned adopted local water bodies.
2-2	Stencil Storm Drains	DPW Director	- Stencil 50 storm drains per year - maintain records	50 designated storm drains were stenciled in the summer of 2011	Continue current program
2-3	Community Hotline	DPW Director	- Residents use hotline and DPW personnel investigate illegal dumping reports	Hotline is direct number to the Needham Water & Sewer Division, posted on the Town website (781-455-7550, extension 340).	Illegal Dumping reports are immediately inspected. Areas are noted and random checks ensue.
2-4	Storm Water Committee	DPW Director	Hold annual meetings	Last meeting held on 3/15/12	Continue to hold annual meetings and discuss current issues
2-5	Pet Waste By-Law	DPW Director	Post signs near parks and other areas where the town by-law is applicable	Signs are posted at areas that are problematic with pet waste deposits. These signs will be replaced if they are destroyed or vandalized. Amendment 3.7.7 to existing Town bylaw stating for that pet waste on public areas and catch basins is prohibited and is finable.	Continue to Post signs where applicable.
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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
3-1	Outfall Testing Program	DPW Director	Continue to monitor outfalls in local area	Information unavailable	Continue this process yearly.
3-2	Illegal Dumping Education	DPW Director	# of education tools distributed, # of illegal dumps reported, # of penalties given to dumpers, # of meritorious acknowledgements to citizens	<ul style="list-style-type: none"> No reported illegal dumping 	Continue Current Program
3-3	Septic System Controls (Board of Health)	DPW Director	# of systems, # regularly maintained, # of educational flyers, # of trained people, # of failed systems	<ul style="list-style-type: none"> 359 Private Septic Systems 1 failed systems that is currently in the process of being restored. 5 systems that have been abandoned <ol style="list-style-type: none"> 174 Charles River Street 26 Sherman Street 115 Wellesley Ave 61 Briarwood Circle 926 Greendale Ave 	Continue Current Program
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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
4-1	Policy and Procedure Review and Updates	Town Engineer	Revise existing policies and procedures, develop Storm Drain Connection Permit requirement	No action required in PY09	Continue to implementation of policies
4-2	Construction Reviews	Town Engineer	Develop requirement to inspect sites, # of inadequate sites/plans reported by inspectors, # of non-compliant permits	Continue monitoring of site plans at the planning board level – No reported incidents in PY09 <ul style="list-style-type: none"> • 8 sites have been submitted and revised by Engineering and Planning Board • No Inadequate • Zero non complying permit 	Continue inspections
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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
5-1	Policy for Post Construction Runoff	Town Engineer	- Develop town-wide policy for post-construction runoff control, a storm drain connection permit requirement - Develop and implement standard construction details and policies	<ul style="list-style-type: none"> Continued implementation of Board of Selectmen / NPDES Policy, Standard Construction Specifications, Details and Policies Memorandum Of Understanding (MOU) with EPA signed June 1996 	Continue Standard Construction Specifications and Details
5-2	BMP Inspection and Maintenance	Town Engineer	- Inspect all Town maintained BMPs annually, - Document # of problems identified and remedied and changes in effluent	Continued Inspection of BMPs - DPW water quality swale - Water Quality Tanks at Broad Meadow and Elliot Schools - Detention Basins at RTS and Bridle Trail, Rosemary Pool (Servicing Library Parking lot, and High School also). -Infiltration Basin on Heath St. development.	Continue to inspect and document issues
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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
6-1	Predictive Catch Basin Program	DPW Director	Develop, collect data, and refine program	1,693 catch basins out of 3,752 were cleaned a record of the condition of the structure and conduits to the structure as well as the amount of materials is collected and entered to a database for asset management.	Continue Current Program
6-2	Street Cleaning	DPW Director	- Sweep all streets annually years 1&2 - Sweep twice years 3 -5 sweep all parking lots annually, - Document Amount of Collected Debris	Spring and Fall street sweeping programs are in place and active. All parking lots also swept per year. Collected debris is documented and recorded at the RTS. Spring sweeping between April 15 and May 15, Fall sweeping between October 15 and November 15	Continue current sweeping program.
6-3	Pipe Inspections	DPW Director	Analyze 10% of drainage system/yr.	Camera inspections have been ongoing. 44, 143 linear feet of inspections.	Continue Current Program
6-4	Pipe Cleaning	DPW Director	-Clean 4,750' of drain pipe per year, - jet flush 19,000' of drain pipe/yr.	Flushed 44,143 linear feet of drain pipe inspected.	Continue Current Program
6-5	New Pipe and Structure Installations	DPW Director	- Replace 10 catch basins and 475' of drain pipe/yr.	15 catch basins replaced, 9 catch basins repaired, 2 drain manholes repaired, and 300 lf of drain pipe installed	Continue Current Program
6-6	Investigate Town Owned BMPs for Retrofit Opportunities	DPW Director	- Inspect 3 structural BMPs annually Implement two retrofit projects by year five	1) Trash grate relocated on Lake Drive for better access by Vector Truck 2) Stormceptors installed at Pollard and Newman Schools 3) Volante Farms installation of infiltration units(Central Ave)	Continue to meet requirements

6-7	Integrated Pest Management	DPW Director	Continue established program in the future	Continue established program with Norfolk Mosquito Control. As submitted in year 2 report.	Continue established program in the future
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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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
N/A					
Revised					
Revised					
Revised					
Revised					
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)	Yes
Annual program budget/expenditures	Purchase of Services =	\$ 38,028
	Expenses =	\$6,880
	Salaries =	\$48,814

Education, Involvement, and Training

Estimated number of residents reached by education program(s) via Town web site...	(# or %)	50%
Stormwater management committee established	(y/n)	Yes
Stream teams established or supported	(# or y/n)	N/A
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	N/A
Household Hazardous Waste Collection Days		
▪ days sponsored (October 15, 2011)	(#)	1
▪ community participation	# of Vehicles	208
▪ material collected	(tons or gal)	Not Recorded
Annual Paint collections – The Town of Needham sponsors 7 paint collections annually. Every third Saturday of the month starting in April Materials Collected:	(tons or gal)	6,752 gallons

The Town of Needham allows for the collection of waste oil and used anti-freeze 256 days a year. Amount Collected:	(tons or gal)	1880 gallons
School curricula implemented	(y/n)	No

Legal/Regulatory

Phase II	In Place Prior to Review	Under 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	(#)	295
System-Wide mapping complete	(%)	100%
Mapping method(s)		
▪ Paper/Mylar	(%)	N/A
▪ CADD	(%)	100%
▪ GIS	(%)	100%
Outfalls inspected/screened	(# or %)	Information unavailable
Illicit discharges identified	(#)	0
Illicit connections removed	(#) (est. gpd)	0
% of population on sewer	(%)	94%
% of population on septic systems	(%)	6%

Construction

Number of construction starts (>1-acre)	(#)	0
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	(#)	6

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)	Once within nine month h period
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	Once within nine month h

		period
Total number of structures cleaned	(#)	1693
Storm drain cleaned	(LF or mi.)	44,143 l.f.
Qty. of screenings/debris removed from storm sewer infrastructure / combined with street sweepings	(lbs. or tons)	638.9 tons
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)	(location)	Landfill
Cost of combined screenings and sweepings disposal-collection/ trucking / disposal	(annual cost)	\$33,401.70

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	2/year
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	4/year Downtown/Business area swept weekly during non-winter months
Qty. of sand/debris collected by sweeping. Note: combined with C.B. debris, collected at local RTS	(lbs. or tons)	Listed above
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Landfill
Cost of sweepings disposal/ combined with screening above	(\$)	\$33,401.70
Vacuum street sweepers purchased/leased	(#)	0
Vacuum street sweepers specified in contracts	(y/n)	No

Reduction in application on public land of: (“N/A” = never used; “100%” = elimination)		
▪ Fertilizers 39,150 lbs used this last year, same as previous years	(lbs. or %)	0%
▪ Herbicides None used	(lbs. or %)	0%
▪ Pesticides None used	(lbs. or %)	0%

Anti-/De-Icing products and ratios <div style="text-align: center;"> Meltdown 30 Ice Ban </div>	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand	1505 tons 5650 Gal. 0 gallons 53.5 tons
Pre-wetting techniques utilized	(y/n)	Yes
Manual control spreaders used	(y/n)	Yes
Automatic or Zero-velocity spreaders used	(y/n)	Yes
Estimated net reduction in typical year salt application	(lbs. or %)	3.76%
Salt pile(s) covered in storage shed(s)	(y/n)	Yes
Storage shed(s) in design or under construction	(y/n)	Yes