

4/26/12

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Municipality/Organization: Town of Stow, Highway Dept.

EPA NPDES Permit Number: MA041223

MassDEP Transmittal Number: W-21004712

Annual Report Number & Reporting Period: Year 9 April 1, 2011 – March 31, 2012

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2012)

Part I. General Information

Contact Person: Michael Clayton Title: Superintendent of Streets

Telephone #: 978-897-8071 Email: highway@stow-ma.gov

Mailing Address: 88 South Acton Road, Stow, MA 01775

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: William Wrigley

Printed Name: William Wrigley

Title: Town Administrator

Date: 4/24/2012



Enter your transmittal number

21004712
Transmittal Number

Your unique Transmittal Number can be accessed online: <http://www.mass.gov/dep/counter/trasmfrm.shtml> or call DEP's InfoLine at 617-338-2255 or 800-462-0444 (from 508, 781, and 978 area codes).

Massachusetts Department of Environmental Protection

Transmittal Form for Permit Application and Payment

1. Please type or print. A separate Transmittal Form must be completed for each permit application.

2. Make your check payable to the Commonwealth of Massachusetts and mail it with a copy of this form to: DEP, P.O. Box 4062, Boston, MA 02211.

3. Three copies of this form will be needed.

Copy 1 - the original must accompany your permit application. Copy 2 must accompany your fee payment. Copy 3 should be retained for your records

4. Both fee-paying and exempt applicants must mail a copy of this transmittal form to:

DEP
P.O. Box 4062
Boston, MA
02211

* Note:
For BWSC Permits,
enter the LSP.

A. Permit Information

BRPWMO8A

NPDES Stormwater General Permit for MS4

1. Permit Code: 7 or 8 character code from permit instructions

2. Name of Permit Category

Discharges from Municipal MS4

3. Type of Project or Activity

B. Applicant Information - Firm or Individual

Town of Stow

1. Name of Firm - Or, if party needing this approval is an individual enter name below:

2. Last Name of Individual

3. First Name of Individual

4. MI

P.O. Box 23

5. Street Address

Stow

MA

01775

978-897-8071

6. City/Town

7. State

8. Zip Code

9. Telephone #

10. Ext. #

11. Contact Person

highway@stow-ma.gov

12. e-mail address (optional)

C. Facility, Site or Individual Requiring Approval

Town of Stow

1. Name of Facility, Site Or Individual

P.O. Box 23

2. Street Address

Stow,

3. City/Town

MA

01775

978-897-8071

4. State

5. Zip Code

6. Telephone #

7. Ext. #

8. DEP Facility Number (if Known)

9. Federal I.D. Number (if Known)

10. BWSC Tracking # (if Known)

D. Application Prepared by (if different from Section B)*

Town of Stow

1. Name of Firm Or Individual

P.O. Box 23

2. Address

Stow

3. City/Town

MA

01775

978-897-8071

4. State

5. Zip Code

6. Telephone #

7. Ext. #

8. Contact Person

9. LSP Number (BWSC Permits only)

E. Permit - Project Coordination

1. Is this project subject to MEPA review? yes no
If yes, enter the project's EOE file number - assigned when an Environmental Notification Form is submitted to the MEPA unit:

EOEA File Number

F. Amount Due

Special Provisions:

1. Fee Exempt (city, town or municipal housing authority)(state agency if fee is \$100 or less).
There are no fee exemptions for BWSC permits, regardless of applicant status.
2. Hardship Request - payment extensions according to 310 CMR 4.04(3)(c).
3. Alternative Schedule Project (according to 310 CMR 4.05 and 4.10).
4. Homeowner (according to 310 CMR 4.02).

DEP Use Only

Permit No:

Rec'd Date:

Reviewer:

Check Number

Dollar Amount

Date

Part II. Self-Assessment

The Town of Stow has completed the required self-assessment for Year 9, and it has determined that the Town is in compliance with the permit, with the exception of the following:

1. **Public Education and Outreach** – We have met our goals for this year by showing a powerpoint video about stormwater and its effects on our public access television channel “Stow TV” throughout the month of April. Press releases were also issued throughout the month of April in the local newspaper explaining the effects of stormwater and what steps can be taken to improve stormwater quality.
2. **Public Involvement and Participation** – We have displayed our stormwater travelling display in the Town Building, Town Library, and the DPW. Display scheduled to be set up at Town Police Department in the month of May. Several attempts at contacting SUASCO to purchase materials for the grade 5 poster contest and the High School photo contest were unsuccessful. Materials for these will be purchased this coming year and implemented.
3. **Illicit Discharge Detection and Elimination** – We have met our goals for this year. In addition to that, the Town Engineer is presently drawing drainage plans to improve water quality from the existing drainage system on White Pond Road at Shore Avenue. This existing drainage system has an outfall right at the Assabet River’s edge. Funding for this project will become available July 1, 2012.

Sections 4-6 All measurable goals have been met in these sections. Goals are met each year in section 6, BMP id’s 1-5, as this is part of good housekeeping.

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
1-1 Revised	Stormwater flyer to residents	SUASCO/BOS	Flyer distributed to 75% of residents		Distribute stormwater flyer to minimum 75% of residents
2-1 Revised	5 th grade lesson plan	same	Develop, distribute, teach		Repurchase teaching materials for school to give lesson plan
3-1 Revised	Flyer to businesses	same	Distributed to at least 50% of businesses		
4-1 Revised	Media campaign	same	Info packet to media with press releases	Press releases with info on stormwater published in local newspaper 4/4, 4/11, 4/18, 4/25 2012	
5-1 Revised	Stormwater video	same	Shown on public TV and public meeting	Powerpoint presentation stormwater video shown on public TV all throughout the month of April 2012	Continue scheduled showings
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
1-2 Revised	Traveling display	SUASCO/BOS	Circulate for 3 months and display in 3 public places	Displayed at Town Bldg, Town Library, DPW, and Planning Board office	Repeated
2-2 Revised	Poster contest for grade 5	Same	Poster contest held, receipts judged and displayed	No response from SUASCO	Purchase materials from SUASCO
3-2 Revised	Photo contest for high school	Same	Photo contest held, receipts judged and displayed	No response from SUASCO	Purchase materials, and hold contest this year
4-2 Revised	Stormwater summit special	Same	Advertise and hold a multi town stormwater summit	Unable to hold multi town summit without SUASCO assistance	
5-2 Revised	Participate in super summit; assess public awareness	Same	Self test distributed to 75% of residents		
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
1-3	Provide written instructions to catch basin cleaning contractors	Highway dept.	Plan written and issued annually	Complete	
Revised					
2-3	Develop map of drainage system outfalls	Same	Map complete	Done	Try to get funding for GIS mapping
Revised					
3-3	Bylaw making non-stormwater discharges and dumping illegal	Planning Board	Pass bylaw at town meeting	Done. Existing bylaw found	
Revised					
4-3	Outfall screening and plan for public reporting	Highway Dept. and BOH	Publish where to report; test outfall waters	Performed visual screening of 75% of outfalls. Tested 50% of outfalls to navigable waters.	Perform more visual screening and testing
Revised					
5-3	Hold hazardous waste collection day	BOH	Include cost in annual budget	Done every 1 ½ years. Held April 28 2012.	Schedule another collection day 1 ½ years from now.
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
1-4 Revised	Bylaw covering runoff and waste, 1-5 acre construction sites	Planning Board and Cons Com	Subcommittee established to review existing laws and regs	Done	
2-4 Revised	Ensure site plan reviews consider water quality	Same	Site plan review procedure in place	Done	
3-4 Revised	Develop means to consider reports received from public	Same	Written procedure in place	Done	
4-4 Revised	Same as 1-4 above	Same	Subcommittee drafts bylaws	Done	
5-4 Revised	Same as 1-4 above	Same	Bylaw presented to town meeting for approval	Done	
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
1-5 Revised	Develop program to address runoff from new developments	Planning Board and Cons Com	Appoint committee	Done	
2-5 Revised	Same	Same	Preliminary reports to joint boards	No need- bylaws and regs in place already require permit and conditions on permits will prevent post construction issues	
3-5 Revised	Develop BMP strategies appropriate for Slow	Same	Slow appropriate structural BMP list presented and distributed	Planning Board has adopted a list of preferred BMPs	
4-5 Revised	Regulatory changes to address runoff	Same	Proposed bylaw and rule changes proposed by committee	No need. Current bylaws and rules already cover this.	
5-5 Revised	Long term maintenance of BMPs	BOS	Town departments adopt plan	Plan written and adopted by Highway Department	
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
1-6 Revised	Pollution prevention plan for maintenance operations	Highway Department	Official adoption of posting and training	Done	
2-6 Revised	Develop inspection procedures of structural BMPs	Same	Plan written and implemented	Done	
3-6 Revised	Formalize pollution control for streets, yards and lots	Same	Plan written and implemented for annual catch basin cleaning	Done. The Highway Dept. has eliminated road sand from its snow and ice operations.	
4-6 Revised	Year round sweeping program	Same	Plan written and documentation	Done	
5-6 Revised	Pollution prevention from ball field runoff	Recreation commission	Include requirement in RFP to meet DEP standards	Done	
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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1-7 Revised	Install structural BMPs at outfalls to Lake Boon	Highway Dept.	Survey and ID outfalls to Lake Boon	Done.	
2-7 Revised	Same	Same	Propose schedule of funding for structural BMPs	Done	
3-7 Revised	Same	Same	Install at least 1/3 of BMPs	Done	
4-7 Revised	Same	Same	Install at least 1/3 of required BMPs	Done	
5-7 Revised	Same	Same	Complete installation of required BMPs	Done	
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

Part V. Program Outputs & Accomplishments (OPTIONAL)
 (Since beginning of permit coverage unless specified otherwise by a **, which indicates response is for period covering April 1, 2011 through March 31, 2012)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	
Annual program budget/expenditures **	(\$)	
Total program expenditures since beginning of permit coverage	(\$)	
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	(# or %)	Up to 100%
Stormwater management committee established	(y/n)	n
Stream teams established or supported	(# or y/n)	n
Shoreline clean-up participation or quantity of shoreline miles cleaned **	(y/n or mi.)	
Shoreline cleaned since beginning of permit coverage	(mi.)	
Household Hazardous Waste Collection Days		
<ul style="list-style-type: none"> ▪ days sponsored ** ▪ community participation ** ▪ material collected ** 	(#) (# or %) (tons or gal)	4/28/12 n/a n/a
School curricula implemented	(y/n)	n

Legal/Regulatory

	In Place Prior to Phase II	Reviewing Existing Authorities	Drafted	Draft in Review	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

	(Preferred Units)	Response
Outfall mapping complete	(%)	100%
Estimated or actual number of outfalls	(#)	20
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	n/a
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	
Outfalls inspected/screened **	(# or %)	75%
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	20
Illicit discharges identified **	(#)	0
Illicit discharges identified (Since beginning of permit coverage)	(#)	0
Illicit connections removed **	(#); and (est. gpd)	
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	
% of population on sewer	(%)	
% of population on septic systems	(%)	100%

Construction

	(Preferred Units)	Response
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 (for proper BMP installation & operation) completed **	(# or %)	
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	
Low-impact development (LID) practices permitted and encouraged	(y/n)	

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets) **	(times/yr)	1/yr
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	1/yr
Qty. of structures cleaned **	(#)	508
Qty. of storm drain cleaned **	(%, LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	100-150 ton
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	DPW garage

Basin Cleaning Costs			
• Annual budget/expenditure (labor & equipment)**	(\$)		Up to \$10,000
• Hourly or per basin contract rate **	(\$/hr or \$ per basin)		\$69.75/hr
• Disposal cost**	(\$)		0
Cleaning Equipment			
• Clam shell truck(s) owned/leased	(#)		
• Vacuum truck(s) owned/leased	(#)		
• Vacuum trucks specified in contracts	(y/n)		n
• % Structures cleaned with clam shells **	(%)		100%
• % Structures cleaned with vacator **	(%)		

Average frequency of street sweeping (non-commercial/non-arterial streets) **		(times/yr)	1/yr or as needed
Average frequency of street sweeping (commercial/arterial or other critical streets) **		(times/yr)	same
Qty. of sand/debris collected by sweeping **		(lbs. or tons)	100 ton +/-
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **		(location)	DPW garage
Annual Sweeping Costs			
• Annual budget/expenditure (labor & equipment)**	(\$)		
• Hourly or lane mile contract rate **	(\$/hr. or ln mi.)		
• Disposal cost**	(\$)		
Sweeping Equipment			
• Rotary brush street sweepers owned/leased	(#)		
• Vacuum street sweepers owned/leased	(#)		1, owned
• Vacuum street sweepers specified in contracts	(y/n)		
• % Roads swept with rotary brush sweepers **	%		
• % Roads swept with vacuum sweepers **	%		100%

(Preferred Units) Response

Reduction (since beginning of permit coverage) in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	0
▪ Herbicides	(lbs. or %)	0
▪ Pesticides	(lbs. or %)	0
Integrated Pest Management (IPM) Practices Implemented	(y/n)	n

	(Preferred Units)	Response
Average Ratio of Anti-/De-Icing products used **	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand	
(also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)		
8-10 gallons of magnesium chloride mixed with 1 ton of road salt.		
Pre-wetting techniques utilized **	(y/n or %)	Y, 15%
Manual control spreaders used **	(y/n or %)	Y, 40%
Zero-velocity spreaders used **	(y/n or %)	Y, 60%
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/ln mi. or %)	
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)	100% red.
% of salt/chemical pile(s) covered in storage shed(s)	(%)	100%
Storage shed(s) in design or under construction	(y/n or #)	
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)	100%

Water Supply Protection

Storm water outfalls to public water supplies eliminated or relocated	# or y/n	
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	
<ul style="list-style-type: none"> Treatment units induce infiltration within 500-feet of a wellhead protection area 	# or y/n	