

MAY 7 2009

Municipality/Organization: Town of Stoughton, Massachusetts

EPA NPDES Permit Number: MAR041063

MassDEP Transmittal Number: W-035130

Annual Report Number Year 6
& Reporting Period: April 1, 2008 – March 31, 2009

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NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2009)

Part I. General Information

Contact Person: Benjamin Fehan, P.E.

Title: Town Engineer

Telephone #: 781.341.1300

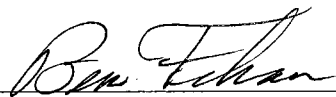
Email: bfehan@stoughton-ma.gov

Mailing Address: 10 Pearl Street, Stoughton, MA 02072

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: Benjamin Fehan, P.E.

Title: Town Engineer

Date:

Part II. Self-Assessment

While no specific activities were scheduled for Year 6 of the permit term, the Town of Stoughton has continued on minimum control measures that were slated for the entire permit term, such as holding regular Stormwater meetings, posting public meetings in accordance with MGL Section 23B, and including Stormwater-related information on construction documents, and in site inspections.

In addition, members of the Department of Public works have been working with the School Department to develop educational modules geared towards stormwater for elementary school students. PWD employees have coordinated with public school officials to deliver lectures to these students in Fall 2009.

No household hazardous waste collection days were held in Year 6 due to this item being cut from the town's budget.

Part III. Summary of Minimum Control Measures

TOWN OF STOUGHTON, MASSACHUSETTS
NPDES Stormwater General Permit

BMP ID #	Best Management Practice	Responsible Person / Department	Measurable Goal	Duration	Progress on Goal(s) - Permit Year Six	Planned Activities
1. Public Education and Outreach						
1-1	Classroom Education (Modified to Assemblies in Year 4)	Engineering Department	Make presentation to Elementary & Middle Schools. For Year 5, provide educational material to schools; coordinate with school superintendent	Permit Term	Presentations were made to Middle Schools during Years 2 and 3. In Year 5, the Engineering Department provided schools with stormwater materials to incorporate into curriculum. This year the PWD and schools are working together to develop Fall 2009 curriculum and lecture series	Fall 2009 stormwater lectures to Elementary School Students by PWD personnel.
1-2	Prepare Stormwater Video (Modified to TV appearance Year 4)	Engineering Department, High School Students	Stormwater Video "After the Storm" aired on local cable access television.	Year 1	Two appearances in stormwater forums (summer 2007, one in fall 2007); "After the Storm" aired on local cable access television in spring 2008.	No activity planned.
1-3	Stencil specified storm drains	Public Works Department (PWD)	Identify individual watersheds	Years 1-3	Catch Basins stenciled (Years 2-4); Complete. Stencils checked and repaired as necessary during Year 6.	Check stencils and repaint as necessary.
1-4	Create Stormwater Fliers	Engineering Department	Install stormwater posters and brochures in public buildings.	Year 3	Stormwater posters continue to be displayed in Town Hall; brochures are available at Town Hall and Library.	Ensure posters and brochures remain on display.
2. Public Involvement and Participation						
2-5	Create Stormwater Committee	Selectmen	Creation of Stormwater Committee/public meetings	Year 1	Created Stormwater Committee (Year 2) consisting of members of PWD, Engineering and Conservation Commission departments. Major focus to identify stormwater-related problem areas in town and develop game plan for correcting problems. Regular meetings held throughout Year 6.	Continue Stormwater Committee Meetings.
2-6	Review NOI	Stormwater Committee	Stormwater goals prioritized and published	Year 1	Technical Committee Mission Statement (Year 2); Complete.	No activity planned.
2-7	Stormwater Committee creates Technical Committee	Stormwater Committee	Technical Committee meetings	Year 2	Creation of Committee (Year 2), Town Meeting Article passed (Year 4); Complete.	No activity planned.
2-8	Technical Committee Rules and Regulations	Technical Committee	Publication of Rules and Regulations	Years 2-3	HAZMAT and Stormwater Bylaws are published in "Code of Town of Stoughton" and are available on the town's website.	No activity planned
NEW	Household Hazardous Waste Day	Department of Public Works	Hold two household hazardous waste collection days per year	Permit Term	No household hazardous waste days were held.	Household hazardous waste collection has been eliminated from the townwide budget.
NEW	Public Hearing/Meetings Posted	Town Manager/Board of Selectmen	Information on public meetings/hearings posted in accordance with MGL Section 23B	Permit Term	Public meeting information has been posted in accordance with MGL Section 23B.	Continue to post public meeting information.
NEW	Ames Pond Citizens Committee	Conservation Commission	Form committee to increase awareness and support to restore Ames Long Pond	Year 5	Committee formed to increase awareness of nutrient problems at Ames Pond. Information published on Town website. Performed aesthetic pond raking project with oversight by NHESP and other agencies, and performed turbidity monitoring.	No activity planned.

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BMP ID #	Best Management Practice	Responsible Person / Department	Measurable Goal	Duration	Progress on Goal(s) - Permit Year Six	Planned Activities
3-9	3. Illicit Discharge Detection and Elimination Map existing drain facilities in Stoughton	Engineering Department	Map outfalls and receiving waters	Years 1-3	During Year 5, all outfalls were located with coordinates captured using Geographic Positioning. The data has been incorporated into the Town-wide GIS to form a stormwater data layer.	No activity planned.
3-10	Create software application for flow direction determination	Engineering Department	Begin mapping outfalls and generate stormwater data layer for Town-wide GIS; research drainage system modeling options	Years 3-4	Hired GIS Coordinator- some data entry from existing plans completed (Year 4). Researched purchase of prepared stormwater system modeling software. Mapped stormwater outfalls.	No activity planned.
3-11	Perform closed circuit TV inspection of suspect areas	Public Works Department	Inspect and correct problem areas	Years 2-5	Drains Inspected (Years 2-3). Replaced failed drainage on Ross Avenue. Cleaned sediment from Red Wing Brook (York Street Area) (Year 4). Work performed in 2007 (Year 5): South Street culvert repair, Gay Street equalization pipe, School Street equalization pipe, replaced drains on West Street (Year 5). This year, approximately half the town's public drains have been inspected. Additional areas were completed as necessary to investigate flow restrictions or failures. Damaged pipes are repaired immediately.	Continue to inspect and repair drains as needed.
3-12	Create Illicit Connection By-law	Engineering Department	Stormwater By-law passed at Annual Town Meeting	Years 3-4	Illicit Discharge Detection and Elimination By-law adopted (Year 4).	No activity planned.
3-13	Information Distributed on Proper Waste Management	Engineering Department/ Board of Health	Provide targeted information regarding proper hazardous waste material disposal directly to local businesses; ensure compliance with local HAZMAT regulation	Years 2-5	Provided brochures from Northeast Waste Management to local businesses, auto body shops, etc.; all related businesses are regulated by the town's HAZMAT bylaw with oversight by Board of Health.	No activity planned.
NEW	Outfall Screening	Engineering Department	Perform inspection of known outfalls	Year 5	During GPS of outfall structures, collected data to create comprehensive database on outfalls. Data collected included structure type/material, presence of dry weather flow, flow characteristics, presence of sediment, etc. Developed listing of outfalls requiring further investigation regarding the potential for illicit discharges.	Keep running list of outfalls requiring further investigations based on observations made by town personnel during routine fieldwork and/or inspections.
NEW	Draft Stormwater Action Plan	Stormwater Commission and Engineering Department	10 Year Plan for Stormwater Management	Year 4	Established revolving fund, passed by-law, enforced erosion control, completed several improvement projects (Year 4)	No activity planned.
4-14	4. Construction Site Runoff Control Selection of Town standard BMP's	Technical Committee/Engineering Department	Publish standards	Year 3	Published standards (Year 3). Applied to new development under site plan review By-law. Ikea, Target, Page Place (Year 4). Complete.	No activity planned.
4-15	Selection of Stormwater Management Measures	Technical Committee and Stormwater Committee	Enforced during all construction	Year 3	Enforced during all construction by Conservation Committee (Years 2-3). Bylaw Approved at Town Meeting and several orders issued by Conservation Committee (Year 4). Permits are required for new construction. Complete.	No activity planned.
4-16	Technical Committee Creates Stormwater Erosion Guidelines	Technical Committee	Publish guidelines	Year 2	Published standards (Years 2-3). By-law approved at Town Meeting (Year 4). Complete.	No activity planned.
4-17	Enforcement of Guidelines	Engineering Department/Conservation Commission	Enforced during all construction	Years 4-5	Enforced during all construction by Conservation Commission (Years 2-3). Enforcement orders issued, fines imposed (Year 5). Complete.	Continue to enforce guidelines during construction.
5-18	5. Post Construction Runoff Control Technical Committee to educate Plan Board & ZBA	Technical Committee	Identify needed changes in existing Rules and Regulations/By-laws	Year 4	Town Meeting Article pending (Year 3). By-law approved (Year 3). Complete.	No activity planned.
5-19	Draft required changes	Stormwater Committee	Creation of new By-laws	Year 4	By-law approved (Year 3). Complete.	No activity planned.
5-20	Ongoing Review of Stormwater Impact	Stormwater Committee	Each project to be reviewed prior to construction	Year 5	Engineering staff on Stormwater Committee participate in comprehensive development site plan review prior to project approval.	Continue to conduct comprehensive site development plans for stormwater impact.
5-21	Require deed restrictions	Boards	Ensure long term maintenance by property owner	Years 4-5	All new site development in Stoughton requires post construction stormwater management with Operation & Maintenance Manuals submitted prior to project approval.	Continue to require post-construction stormwater management.

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BMP ID #	Best Management Practice	Responsible Person / Department	Measurable Goal	Duration	Progress on Goal(s) - Permit Year Six	Planned Activities
6-22	6. Municipal Good Housekeeping Catch Basin Cleaning	Public Works Department	Prevent Total Suspended Solids discharge	Permit Term	All catch basins in the Urbanized Area have been cleaned in the past year; most are cleaned two times per year, some more frequently based on need.	Clean all catch basins in U.A.
6-23	Regular Street Sweeping	Public Works Department	Prevent Total Suspended Solids buildup in catch basins, road	Permit Term	All streets are swept twice per year (Spring and Fall). Problem areas are swept more frequently. Sidewalks are also swept.	Sweep all streets and sidewalks.
6-24	Erosion and sediment control for all projects in Town	Engineering Department	Prevent Total Suspended Solids migration to street surfaces	Permit Term	All construction is inspected for erosion and sediment control.	Continue to inspect construction for erosion and sediment control.
6-25	Inside storage of Hazardous Materials	Public Works Department, Fire Department, Board of Health	No hazardous material leaks/spills	Permit Term	No leaks or spills during Year 6. Fire Department licenses all businesses handling hazardous materials. Board of Health enforces Aquifer Protection By-law. New Public Works Garage exceeds standards; has fully updated SPCC plan which is adhered to. All hazardous materials are stored inside.	Continue to adhere to SPCC plan in municipal buildings and respond appropriately to leaks or spills.
6-26	Obtain "No exposure" rating from EPA for Multi-Sector General Pesticide-free landscaping practices	Public Works Department, Fire Department	Obtain "no exposure" rating from EPA	Permit Term	"No exposure" rating obtained.	No activity planned.
NEW	Pesticide-free landscaping practices	Conservation Commission	Require pesticide-free landscaping practices as special requirement in Orders of Conditions	Permit Term	Require pesticide-free landscaping practices as special requirement in Orders of Conditions.	Continue to require pesticide-free landscaping in Order of Conditions.
NEW	Municipal Employee Training	Department of Public Works	Provide two training sessions to Municipal employees	Year 5	Conducted two training sessions for municipal employees. Topics included NPDES Phase II Stormwater program requirements, the Town's stormwater management plan, illicit discharge detection and elimination and good housekeeping practices. Aired video "After the Storm" for all employees at Town Hall.	No activity planned.
7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA)						
7-27	ID All MS4 outfalls	Engineering Department	All outfalls identified on map	Years 1-3	All stormwater outfalls have been located and incorporated into a layer on the Town-Wide GIS.	No activity planned.
7-28	ID MS4 Pollutants	Engineering Department	Begin screening outfalls for data inventory, outfall condition, dry weather flow and flow characteristics.	Years 3-5	All outfall structures have been screened to collect data to create comprehensive database on outfalls. Data collected included structure type/material, presence of dry weather flow, flow characteristics, presence of sediment, etc. Developed listing of outfalls requiring further investigation regarding the potential for illicit discharges.	No activity planned.
7-29	Find source of pollutant loading	Engineering Department	Monitor state listing of impaired waters, adjust stormwater management plan accordingly.	Years 4-5	There are currently no established TMDLs for receiving waters within the Town of Stoughton.	No activity planned.
7-30	Mitigate pollutant loading	Technical Committee and Stormwater Committee	Monitor state listing of impaired waters, adjust stormwater management plan accordingly.	Year 5	There are currently no established TMDLs for receiving waters within the Town of Stoughton.	No activity planned.

Part IV. Summary of Information Collected and Analyzed

No data has been collected or 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, 2006 through March 31, 2007)

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 %)	
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.)	
Shoreline cleaned since beginning of permit coverage	(mi.)	
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	
▪ community participation **	(# or %)	
▪ material collected **	(tons or gal)	
School curricula implemented	(y/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					
▪ 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

	(Preferred Units)	Response
Outfall mapping complete	(%)	
Estimated or actual number of outfalls	(#)	
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	
Outfalls inspected/screened **	(# or %)	
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	
Illicit discharges identified **	(#)	
Illicit discharges identified (Since beginning of permit coverage)	(#)	
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	(%)	

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

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

	(Preferred Units)	Response
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)	
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	(#)	
• Vacuum street sweepers specified in contracts	(y/n)	
• % Roads swept with rotary brush sweepers **	%	
• % Roads swept with vacuum sweepers **	%	

Reduction (since beginning of permit coverage) in application on public land of:
 ("N/A" = never used; "100%" = elimination)

▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	
Integrated Pest Management (IPM) Practices Implemented	(y/n)	

(Preferred Units)		Response
Average Ratio of Anti-/De-Icing products used **		
(also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)		
	% NaCl	
	% CaCl ₂	
	% MgCl ₂	
	% CMA	
	% Kac	
	% KCl	
	% Sand	
Pre-wetting techniques utilized **	(y/n or %)	
Manual control spreaders used **	(y/n or %)	
Zero-velocity spreaders used **	(y/n or %)	
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 %)	
% of salt/chemical pile(s) covered in storage shed(s)	(%)	
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)	

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	
• Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	