

Municipality/Organization: Town of Swampscott, Massachusetts

EPA NPDES Permit Number:

MaDEP Transmittal Number: W-041272

Annual Report Number

& Reporting Period: No. 4: March 06-March 07

6

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Gino Cresta, Jr.


Title: Superintendent of Public Works

Telephone #: 781.596.8860

Email: gcresta@town.swampscott.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: Andrew Maylor

Title: Town Manager

Date: 4/27/07

Part II. Self-Assessment

The Town of Swampscott, Massachusetts has completed the required self-assessment and has determined that, based on available information, the town is in compliance with the conditions of the permit, with the minor exception of where implementation of our minimum control measures did not meet our stated schedule documented as part of the Notice of Intent. In these instances, alternative BMPs have been performed or proposed as described below:

- BMP 1-1 – The town will continue to post stormwater information and brochure in public buildings in place of having speakers in two schools per year due to staffing shortages.
- BMP 3-4 – The town has inspected 15,000 linear feet (lf) of storm drains and is looking into additional less expensive methods to complete the entire system.
- BMP 6-5 – The town is waiting for a response from the US Forestry regarding the tree survey and will set up a training session in the near future.

Part III. Summary of Minimum Control Measures

TOWN OF SWAMPSCOTT, MASSACHUSETTS
NPDES Stormwater General Permit

Stormwater Management Program Summary

BMP ID #	Best Management Practice	Responsible Person / Department	Measurable Goal	Duration	Progress on Goal(s) - Permit Year Four	Planned Activities - Permit Year Five
1. Public Education						
1-1	Speakers	Superintendent of Public Works	Call two schools per year	Spring and Fall for the permit term	Posted stormwater posters in public buildings. Will continue through permit term.	Stormwater posters posted throughout term.
1-2	Local cable access spots	Superintendent of Public Works	Produce two 5-minute spots	Year 2 and 4	Aired stormwater education video from EPA on local cable access channel.	No activity planned.
2. Public Participation						
2-1	Public notification	Superintendent of Public Works	Posting of all appropriate meetings	Permit term	All DPW meetings (twice per month) are posted at Town Hall and advertised in local newspaper.	Continue to post notice of appropriate meetings.
2-2	Household hazardous waste collection	Health Director	One collection per year	Permit term	Household hazardous waste collection day was held June 10, 2006.	Household hazardous waste collection day May 5, 2007.
2-3	Stencil catch basins that drain to sensitive areas	Superintendent of Public Works	Stencil fifty (50) basins per year	Spring of year 2 and 4	The approximate 60 catch basins stenciled in 2005 are in good shape.	Continue to monitor the condition of the stenciled catch basins.
2-4	Seedlings for Arbor Day	Superintendent of Public Works / Tree Warden	Ten (10) seedlings per year for two (2) years	Spring of year 2 and 5	Twenty seedlings in Nursery, Planted one ceremonial tree on Arbor Day 2007.	Plant on Arbor Day 2008.
3. Illicit Discharge Detection and Elimination						
3-1	Map outfalls and receiving waters	Superintendent of Public Works	Updated map by the end of the second year	Year 1 and 2	In compliance	No activity planned.
3-2	Stormwater bylaw	Superintendent of Public Works	Draft completed in time to submit to town meeting	Winter Year 1, Spring Year 2, 3, 4, and 5	Bylaw is currently under review by town officials.	Present for enactment in Summer 2007.
3-3	Dry weather screening of outfalls	Superintendent of Public Works	Two rounds of sampling in 2004	Summer and Fall of Year 1, 4, and 5. Spring and Summer Year 3	The Board of Health takes samples from beach areas during the Summer.	Continue to investigate sources of high bacterial counts.
3-4	Illicit discharge elimination	Superintendent of Public Works	Televis the entire system by the end of the term	Permit term	Continued inspection of remaining storm drains is cost prohibitive. Obtained information on Aqua Zoom/Inframatrix.	Evaluating other options for evaluating storm drains.
4. Construction Site Runoff Control						
4-1	Construction site bylaw and ordinance	Planning Board, Building Inspector, DPW, ERAC	Present draft bylaw to town meeting in 2004	Winter Year 1, Spring Year 2	Bylaw is currently under review by town officials.	Present for enactment in Summer 2007.
4-2	Public Comment	ZBA, ConComm, Planning Board, DPW	Receive input on draft bylaw at public meetings	Permit term	Received input at various public meetings.	Continue to receive input at public meetings.
4-3	Review site plans	Building Inspector, DPW, ZBA, ConComm	Add stormwater management to scope of review	Winter and Spring Year 2	In compliance, continue to review site plans for stormwater program compliance.	Continue to review site plans for stormwater program compliance.
4-4	Enforcement Procedures	Planning Board, ConComm	Notification to the boards about enforcement procedures	Spring and Summer Year 2	Enforcement procedures currently under review by town officials.	Present for enactment in Summer 2007.

**TOWN OF SWAMPSCOTT, MASSACHUSETTS
NPDES Stormwater General Permit**

Stormwater Management Program Summary

BMP ID #	Best Management Practice	Responsible Person / Department	Measurable Goal	Duration	Progress on Goal(s) - Permit Year Four	Planned Activities - Permit Year Five
5. Post Construction Runoff Control						
5-1	BMP manual	DPW, ConComm	BMP manual selected	Winter Year 2	In compliance, continue to recommend BMP manual to local developers.	Continue to recommend BMP manual to local developers.
5-2	Runoff controls	Superintendent of Public Works	Draft bylaw to town meeting	Winter Year 1, Spring Year 2, 3, 4, and 5	Bylaw is currently under review by town officials.	Present for Enactment in Summer 2007.
6. Municipal Good Housekeeping						
6-1	Sensitive areas	Superintendent of Public Works	Identify and map sensitive areas	Fall and Winter Year 1	In compliance.	No activity planned.
6-2	Clean catch basins	Superintendent of Public Works	Clean catch basins every other year, maintain records	Permit term	Cleaned approximately 50% of catch basins townwide in 2006.	Continue to clean catch basins yearly.
6-3	Sweep streets twice per year	Superintendent of Public Works	Sweep each street twice per year	Permit term	All streets were swept twice during permit Year 4 and as needed.	Continue to sweep each street twice per year and as needed.
6-4	Continue no pesticide policy	Superintendent of Public Works	No pesticide use on town property	Permit term	No pesticides were used on town property.	Continue no pesticide policy.
6-5	Tree survey	Superintendent of Public Works / Tree Warden	Complete survey and long term forestation plan	Fall and Winter Year 2	Currently pursuing the tree survey through the US Forestry.	Complete the survey and develop long term forestation plan.
6-6	Implement long-term forestation plan	Superintendent of Public Works / Tree Warden	Implement long-term forestation plan	Permit term	Planted 20 trees throughout town.	Continue to implement long-term forestation plan.
6-7	Provide training to DPW staff	Superintendent of Public Works	Two training days per year	Winter for the permit term	Presented stormwater videos to DPW staff.	Present training videos to DPW staff.
6-8	Place additional barrels for pet waste collection in parks	Superintendent of Public Works	Place additional barrels in parks as needed	Spring and Summer Year 2	In compliance.	No activity planned.
6-9	Maintain covered salt storage; calibrate salt spreaders annually	Superintendent of Public Works	Maintain salt storage shed, and calibrate salt spreaders, as needed	Permit term	Calibrated salt spreaders in 2006. Awaiting available funding for salt storage shed improvement.	Improvement to salt storage shed over the next 3-4 years. Calibrate salt spreaders as needed.

Part IV. Summary of Information Collected and Analyzed

Storm Drain Outfall Inspections

The town located 24 stormwater outfalls discharging to Swampscott's coastal waters during permit Year 2. Overall, most of the outfalls seem to be in good condition.

Smoke Testing

Smoke testing was performed on approximately 41,150 LF of storm drain during June 2004.

Through dye testing it was confirmed that suspected connections actually discharge to the proper location and are not considered illicit connections.

Television Inspection

Approximately 15,000 LF of storm drains were television inspected between July and August 2004.

Dry Weather Sampling

Dry weather sampling was completed in December 2003 and July 2004. The samples were analyzed for fecal coliform at a state-certified laboratory.

The Board of Health samples waters from local beaches on a regular basis during the summer.

Dry weather samples were obtained by DEP in Spring 2006. The results are below.

- Manhole on Erie St. house #7: 1299.7 MPN/100 ml
- Duplicate of manhole on Erie St. house #7: 1986.3 MPN/100ml
- Manhole at Columbia and Essex: 1046.2 MPN/100 ml

Manhole Inspections

A select group of sewer manholes with underdrains were inspected in 2005 to identify the status of underdrain connections. A total of 41 manholes in subareas 2, 3A, 3B, 4 and 5A were inspected.

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 vactor **		(%)	

	(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	
<ul style="list-style-type: none">Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	

O:\Swampscott MA\SWMP 203282\MS4 Permit\MS4 annual report year four.doc