

**Municipality/Organization:** City of Somerville

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**EPA NPDES Permit Number:** MAR041082

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**MaDEP Transmittal Number:** W- 041121

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JUL 17 2006

**Annual Report Number  
& Reporting Period:**

**No. 3: March 05-March 06**

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## NPDES PII Small MS4 General Permit Annual Report

### Part I. General Information

**Contact Person:** Charles E. O'Brien, P.E.

**Title:** City Engineer

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**Telephone #:** 617-625-6600 ext 5410

**Email:** COBrien@ci.somerville.ma.us

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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:**



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**Printed Name:** Joseph A. Curtatone

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**Title:** Mayor

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**Date:** July 12, 2006

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**Part II. Self-Assessment**

The City has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions, except for the following provisions:

Part II.F Failed to submit annual report on or before May 1<sup>st</sup>. Submitted in July.

**Part III. Summary of Minimum Control Measures**

The following sections numbered 1 through 7 detail the Best Management Practices (BMP's) as outlined in the Notice of Intent submitted in July 2003. Section 8 is a revised schedule of the BMP's. Asterisks (\*) note those BMP's that have revised schedules.

**1. Public Education and Outreach**

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
1-1	Article/brochure/flyer about stormwater mailed to residents and businesses	Conservation Commission/DPW	Article/brochure/flyer distributed annually starting in the second permit year	Distributed stormwater article. 6/05: Con Com prepared brochure & web page for residents about storm water.	Submit article.
1-2	Article about stormwater published in the local newspaper and/or the Mystic River Watershed Association newsletter	Conservation Commission	Article submitted annually for publication starting in the second permit year	Published article in newspaper. Somerville News published a lengthy article about the vortex unit when it became operational in April '05.	Article submitted for publication.
1-3	Update City website to include information on stormwater management issues	Conservation Commission/Communications	City website updated in the second permit year	None, BMP Complete.	None, BMP Complete.
1-4	Install and maintain pet waste clean-up signs at parks	DPW	Annual inspection and maintenance of signs starting in second permit year	Inspected and maintained signs. All signs read "No dogs allowed" in all parks.	Inspect and maintain signs as necessary.

1-5	Annual update of the Stormwater Management Plan at a televised Board of Aldermen meeting.	DPW/Conservation Commission	Annual update of SWMP at Board of Aldermen meeting	No update was provided. Quarterly reports on CSO's given to Aldermen.	Continue submitting periodic updates to Board of Alderman
1-6	Post information on stormwater management issues on local access television.	DPW/Communications	Information posted and updated on local access channel.	Continue to post information on local access TV.	Continue to post information on local access TV.

## 2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
2-1	Comply with state public notification guidelines at MGL Ch. 39 Section 23B.	Planning Board/Zoning Board of Appeals/DPW-ISD & Eng/Conservation Commission/City Clerk	Notices posted in designated locations.	The Planning Board and Zoning Board of Appeals held a total of 16 public hearings for projects requiring Special Permit. These projects were also reviewed by the City Engineer for drainage. All of these hearings were conducted in conformance with MGL Ch. 39 Section 23B.	Continue to hold public hearings for Special Permit projects, and review by City Engineer for drainage. Continue to meet all statutory notice requirements and ensure that all project sites that require permits from the Planning Board or Zoning Board have notices clearly posted on-site to alert neighbors and other interested persons.
2-2	Stencil catch basins with "don't dump" message.	DPW/Conservation Commission	Number of catch basins stenciled annually	Approximately 0 catch basins stenciled in West Somerville. Program may start up again next year.	Stencil additional catch basins.
2-3	Co-sponsor clean-up days for river and water bodies affected by Somerville discharges	DPW/Conservation Commission	Co-sponsor and participate in river cleanup events	Support continuing Mystic River cleanup events. Con. Com. Co-sponsors annual clean up with Mystic River Watershed Assoc. every May.	Support continuing Mystic River cleanup events.

### 3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
3-1	Conduct dry weather outfall screening	DPW	Percent of outfalls screened	Continue to monitor and report on outfalls, in association with Mystic River Watershed Association.	Continue to monitor and report on outfalls, in association with Mystic River Watershed Association.
3-2	Map stormwater outfalls and receiving waters	DPW	Map created	None, BMP complete.	None, BMP complete.
3-3	Map the stormwater collection system in a GIS	DPW/IT	GIS of stormwater system created	None, BMP complete.	None, BMP complete.
Revised	GIS System Improvements	DPW/IT	Outfall watersheds shown on GIS	None, BMP complete.	None, BMP complete.
3-4	Develop and implement plan to identify and remove non-stormwater discharges	DPW	Number of illicit connections found and removed	Constructing sewers and drains in area of Woodstock St., an area which is experiencing high bacteria counts at outfall (apparent mixing of sewage and drainage from collapsed sewers and/or drains). Funds have been secured and the work will commence this year	Continue efforts to identify and repair illicit connections, repair collapsed catch basins and replace broken storm sewers.
3-5	Identify twin-invert manholes and implement sanitary inflow prevention measures	DPW	Number of twin-invert manholes identified and corrected	None, BMP complete.	None, BMP complete.
3-6 *	Develop ordinance that prohibits non-stormwater connections to the MS4, gives the City authority to access buildings to search for and require redirection of illicit connections.	City Solicitor/DPW	Draft ordinance developed in second permit year and present to Board of Aldermen	Continued developing a draft comprehensive stormwater ordinance.	Present ordinance to Board of Aldermen, Mayor and Law Office.

3-7	Continue inspection of new construction for correct connection	DPW	New construction inspected	Fifteen (15) new sanitary sewer connections were inspected and permitted by City Engineer's Office.	New sewer construction will continue to be inspected and permitted.
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#### 4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
4-1 *	City-wide construction site ESC ordinance for construction sites greater than 1 acre in area	City Solicitor/Planning Dept/DPW	Draft ordinance developed in second permit year and presented to Board of Aldermen	Continued developing a draft comprehensive stormwater ordinance. Erosion control is presently addressed for Special Permitted projects, regardless of size, within Zoning Regulations.	Present ordinance to Board of Aldermen, Mayor and Law Office.
4-2	Review site plans for stormwater impacts for sites greater than 1 acre	Conservation Commission/Planning Dept	Number of site plans reviewed	Two (2) sites greater than 1 acre submitted for review. Including the Special Permits for less than 1 acre, sixteen (16) site plans were reviewed. Con Com commented on 1 development on construction of storm water management plan.	Review applicable site plans.
4-3	Consider public input	Planning Board	Public review and comment periods held; signs posted at construction sites	Continue public hearing, hold review and comment periods, post signs at construction sites.	Continue public hearing, hold review and comment periods, post signs at construction sites.

#### 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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
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5-1 *	Develop ordinance to apply Standards 2, 3, 4, 7, and 9 of the MA Stormwater Policy to developments disturbing > 1 acre.	City Solicitor/Planning Dept	Draft ordinance developed in second permit year and presented to Board of Aldermen	Continued developing a draft comprehensive stormwater ordinance.	Present ordinance to Board of Aldermen, Mayor and Law Office.
5-2	Specify a stormwater BMP manual to be used for consistent design and performance standards	Conservation Commission/Planning Dept	BMP manual selected	None, MA DEP BMP Manual selected in Year 1.	None, BMP complete.
5-3	Ensure long-term maintenance of structural BMPs.	City Solicitor/Planning Dept/DPW	Draft ordinance developed in second permit year and presented to Board of Aldermen	Continued developing a draft ordinance. Projects that require a Special Permit from Planning/Zoning are required to conform to DEP stormwater standards; and the City Engineer reviews the site plan for drainage, requires proponent to generate a drainage report and an operation and maintenance plan.	Present ordinance to Board of Aldermen, Mayor and Law Office for enactment. If not enacted, continue to review site plans, etc. for conformance to Zoning and DEP regulations.

## 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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
6-1	Employee training program.	DPW	Number/percent of DPW employees who receive stormwater training each year	City Engineer, Sewer Director and Environmental Coordinator attended seminars on stormwater management, and reviewed appropriate literature, books and articles relating to stormwater.	Continue with education and training activities. Environmental Coordinator will present a paper on stormwater asset management at EnviroExpo Conference in Boston in May 2005.

6-2	Continue street and municipal parking lot sweeping.	DPW	City streets swept twice monthly from April to November, municipal parking lots swept in spring.	All streets were swept twice per month from April 1 through November 30, and earlier or later as weather permits.	Continue street sweeping program.
6-3	Storm drain maintenance	DPW	Clean 100 percent of stormwater catch basins every three years	All CB's cleaned in permit year	Continue cleaning catch basins.
6-4	Evaluate street sweeping and catch basin cleaning equipment	DPW	Continually evaluate existing equipment	City purchased new vactor truck to clean catch basins (\$250,000).	Continue to evaluate the necessary equipment needed to maintain the drainage system.
6-5	Roadway deicing	DPW	Amount and type of deicers used.	Deicers used: 3,000+/- T. rock salt; 250 +/- T. sand; 100 +/- T. calcium chloride.	Continue to use deicers as required by winter weather.
6-6	Continue spill prevention and response training at DPW facility.	DPW/Fire Department	Periodic training of employees	Continue periodic training.	Continue periodic training.
6-7 *	Develop written spill prevention and response plan for DPW facility.	DPW/Fire Department	Written spill prevention and response plan developed and reviewed annually	Plan is in the process of being developed.	Complete and review plan.
6-8	Minimize impacts from vehicle maintenance at DPW	DPW	Amount of hazardous materials used	Water with biodegradables used on vehicles. All gas traps in DPW yard were cleaned.	Continue to maintain gas traps and use biodegradable material on vehicles.
6-9	Minimize impacts from vehicle washing at DPW	DPW	City departments educated on proper vehicle washing practices	All catch basins in DPW yard are connected to a combined sewer, which flow is treated at MWRA plant.	Vehicle washing does not contribute to stormwater, since runoff is treated. However, continue to use biodegradable material on vehicles.
6-10	Continue tree planting and maintenance program.	DPW/OHCD	Number of trees planted	Continue tree planting program Planted 93 trees.	Continue tree planting program.

6-11	Continue to hold Household Hazardous Waste Collection Events	DPW/Environmental Protection Office	Household Hazardous Waste Collection Day held.	Collection days were held on the 2 <sup>nd</sup> Saturday of the month between April and November.	Continue holding collection days.
6-12	Continue to provide hazardous waste drop offs and collection services for other waste products throughout the year	DPW/Environmental Protection Office	Hazardous waste drop offs and normal waste collection services provided year-round	Provided year-round drop offs for TVs, computer monitors, tires, and propane tanks. Oil and anti-freeze drop off program has been discontinued.	Continue providing drop offs for TVs, computer monitors, tires, and propane tanks year-round.
6-13	Monitor pollution prevention programs for effectiveness and suggest improvements as needed	Stormwater Management Team/Conservation Commission/DPW/Planning Dept/City Solicitor's Office Environmental Protection Office.	Stormwater management program and pollution prevention measures evaluated for improvement on regular basis.	City monitors Vortech unit installed (2004) on 12-inch storm outlet 004 at Woods Ave for effectiveness. Tonnage of catch basin debris removed was recorded. Mystic River Watershed Association monitors the rivers and reports findings to the city. City periodically takes samples at outfalls for dry and wet weather flows; also city receives and analyzes flow samples taken by M.R.W.A. City inspects and maintains a "storm-treat" system on Mystic River at Boston Ave. bridge. Con Com issued 1 Order of Conditions and monitored work at 2 other sites near wetland resources. Con Com took enforcement action at one site.	Continue to monitor stormwater outlets for pollution.

**7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA)**

NONE REQUIRED; NO TMDLs in Somerville.





**8. Revised Schedule for Permit Term**

BMP ID #	PERMIT YEAR ONE				PERMIT YEAR TWO				PERMIT YEAR THREE				PERMIT YEAR FOUR				PERMIT YEAR FIVE			
	Spring 03	Summer 03	Fall 03	Winter 03-04	Spring 04	Summer 04	Fall 04	Winter 04-05	Spring 05	Summer 05	Fall 05	Winter 05-06	Spring 06	Summer 06	Fall 06	Winter 06-07	Spring 07	Summer 07	Fall 07	Winter 07-08
1-1										X				X				X		
1-2										X				X				X		
1-3										X				X				X		
1-4					X				X				X				X			
1-5								X				X				X			X	
1-6																				
2-1																				
2-2					X				X				X				X			
2-3						X				X				X				X		
3-1																				
3-2					Complete															
3-3										Complete										
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3-5	Complete.																			
3-6 *																			Done if passed by Board of Alderm	
3-7																				
4-1 *																			Done if passed by Board of Alderm	
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4-3																				
5-1 *																			Done if passed by Board of Alderm	
5-2					Complete															
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**Part IV. Summary of Information Collected and Analyzed**  
 Not applicable.