Municipality/Organization: **City of Somerville**

EPA NPDES Permit Number: **MAR041082**

MaDEP Transmittal Number: **W- 041121**

Annual Report Number & Reporting Period: **No. 2: March 04-March 05**

05

MAY 17 2005

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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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: Joseph A. Curtatone

Printed Name: Joseph A. Curtatone

Title: Mayor

Date: 5/4/05

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 1st. Submitted on May 8th.

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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
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.	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.	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	Updated website.	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	Present update at Board of Aldermen meeting in Spring 2005.	Submit Plan to Board of Aldermen.
1-6 *	Post information on stormwater management issues on local access television.	DPW/Communications	Information posted and updated on local access channel.	Post stormwater issues on local access TV in Spring 2005.	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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
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 11 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 35 catch basins stenciled in west Somerville, tributary to Alewife Brook.	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	Supported Super Clean Up at the Mystic River in May 2004 (sponsored by Mystic River Watershed Association).	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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
3-1	Conduct dry weather outfall screening	DPW	Percent of outfalls screened	Mystic River Watershed Association monitored the city's outfalls. High bacteria count at #001-Woodstock St. reported.	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	Map was created in Year 1, BMP complete.	None, BMP complete.
3-3 *	Map the stormwater collection system in a GIS	DPW/IT	GIS of stormwater system created	GIS was created in Year 1, BMP complete.	None, BMP complete.
Revised	GIS System Improvements	DPW/IT	Outfall watersheds shown on GIS	Created stormwater overlay showing stormwater outfall watersheds.	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). City's contractor repaired 27 collapsed catch basins and replaced 400 ft +/- of storm sewer.	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, baffle manholes were previously separated in areas tributary to Alewife Brook and Mystic River.	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	Twelve (12) new sanitary sewer connections were inspected and permitted by City Engineer's Office.	New sewer construction will continue to be inspected and permitted.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
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	Three (3) sites greater than 1 acre submitted for review. Including the three Special Permits for less than 1 acre, eleven (11) site plans were reviewed.	Review applicable site plans.
4-3	Consider public input	Planning Board	Public review and comment periods held; signs posted at construction sites	Public review and comment periods were held for the eleven (11) Special Permit site plans reviewed.	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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
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	Twenty (20) catch basins cleaned by DPW on daily basis from March to November.	Continue cleaning catch basins at rate of 20 per day.

6-4	Evaluate street sweeping and catch basin cleaning equipment	DPW	Continually evaluate existing equipment	Sewer Director initiated process to purchase a vactor truck to clean catch basins. New street sweepers were purchased by DPW.	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: 4,500+/- T. rock salt; 500 +/- T. sand; 200 +/- 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	Two (2) DPW employees trained.	Provide 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	One hundred twenty three (123) trees planted in 2004. Also, a comprehensive satellite image of tree canopy was generated by Environmental Coordinator and Tufts University. Eighteen percent of the city's area is covered by trees. The runoff is estimated to be reduced by 10 percent due to trees.	Continue tree planting program.
6-11	Continue to hold Household Hazardous Waste Collection Events	DPW/Environmental Engineer	Household Hazardous Waste Collection Day held.	Collection days were held on the 2nd 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 Engineer	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	Stormwater management program and pollution prevention measures evaluated for improvement on regular basis.	City monitors Vortechnic 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.	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

	PERMIT YEAR ONE				PERMIT YEAR TWO				PERMIT YEAR THREE				PERMIT YEAR FOUR				PERMIT YEAR FIVE			
BMP ID #	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																				
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																				
3-3 *																				
3-4																				
3-5 *	Complete.																			
3-6 *													Done if passed by Board of Aldermen							
3-7																				
4-1 *													Done if passed by Board of Aldermen							
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4-3																				
5-1 *													Done if passed by Board of Aldermen							
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Part IV. Summary of Information Collected and Analyzed

Not applicable.