



"City of Champions"

**DEPARTMENT OF PUBLIC WORKS
OFFICE OF THE COMMISSIONER**

Michael L. Thoreson
COMMISSIONER

April 27, 2009

CERTIFIED MAIL 7007 0710 0002 5722 7047

Thelma Murphy, Regional Stormwater Coordinator
U.S. Environmental Protection Agency
Water Technical Unit, P.O. Box 8127
Boston, MA 02114

APR 27 2009

**Subject: Brockton, MA Phase II Stormwater Annual Progress Report
NPDES Permit No. MAR041098**

Dear Ms. Murphy:

As required by the Phase II Final Rule, the City of Brockton is providing the enclosed Annual Progress Report for their Stormwater Management Plan. The City received their Stormwater NPDES permit in a correspondence dated September 17, 2003 from EPA and DEP.

This annual report details the City's progress on the best management practices (BMP's) listed in the NOI and included in the City's Stormwater Management Plan. It also describes the City's planned activities for the coming year.

If you have any questions, please do not hesitate to contact me (508-580-7135) or Gregory Roy at (617-452-6644).

Sincerely,

Michael L. Thoreson
Commissioner of Public Works

cc: Linda Domizio, Massachusetts Department of Environmental Protection
Jacques Borges, City Engineer, Department of Public Works
Michael Curtin, General Forman, Department of Public Works
Ian Mead, CDM

Municipality/Organization: City of Brockton, MA

EPA NPDES Permit Number: MAR041098

MaDEP Transmittal Number: W-127273

**Annual Report Number
& Reporting Period:** No. 6: March 08-March 09

APR 27 2009

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Michael L. Thoreson **Title:** DPW Commissioner

Telephone #: (508) 580 - 7135 **Email:** mthoreson@ci.brockton.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: Michael L. Thoreson

Title: DPW Commissioner, City of Brockton

Date: 4/27/09

Part II. Self-Assessment

The City of Brockton has completed the required self-assessment and determined that the municipality is in compliance with all applicable conditions.

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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7
1-1	Stencil Catch Basins	Highway Department	Catch Basins Stenciled	The highway department placed decals at 100 catch basins.	Attempt to place decals at another 100 catch basins.
1-2	Household Hazardous Waste Collection Day	Department of Public Works	One Collection Day Held per Year	Household Hazardous Waste Collection Day was held on September 27, 2008.	Hold a Household Hazardous Waste Collection Day is scheduled for September 26, 2009.
1-3 (same as 3-6)	Inserts in Water and Sewer Bills	Water and Sewer Department	Bill Stuffers Mailed in Years 2 (2004) and Year 4 (2006)	Bill stuffers were provided in permit Year 1 and Year 3. All requirements met.	None
1-4	Resident Hotline	Operations	Hotline operated 24 hours per day, 365 days per year	Hotline operated at Water and Sewer Department	Continue hotline.
1-5	Pooper Scooper Ordinance	City Clerk	Ordinance passed, enforced	Ordinance was passed prior to permit term.	Continue enforcing Pooper Scooper Ordinance.
1-6	Newspaper Article	Department of Public Works	One Article Published every three years	An article describing the stormwater permit was written and submitted to the Brockton Enterprise in permit year 1.	Publish an article describing the City's stormwater permit requirements.

1a. Additions
No Additions to Control Measure 1

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7
2-1	Comply with State public notification guidelines at MGL Chapter 39 Section 23B.	City Clerk	Notices Posted According to State Guidelines	All notices have been posted according to state guidelines.	Continue posting notices according to state guidelines.
2-2	Public Review for Stormwater Management Plan	Department of Public Works	Review Period Held	None	None

2a. Additions

No additions to Control Measure 2.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7
3-1	Illicit Connection Ordinance	City Council	Ordinances Passed	Development of ordinance and guidance manual complete.	Finish the new ordinance and submit it to the City Council for approval.
3-2	Dry Weather Screening	Highway Department	Outfalls Screened in 2002 and 2006	Second round of dry weather screening complete 2006. First was in 2002.	None
3-3	Map Stormwater Outfalls	Engineering Department	Map Created	Map completed in 2002.	None
3-4	Sewer GIS	Sewer Department	GIS Created	GIS of sewers completed in 1999.	None
3-5	Storm Drain GIS	Engineering Department	GIS Created	GIS of entire drainage system completed in 2004.	None
3-6	Identify and Remove Non-Stormwater Discharges to MS4	Engineering Department	Prioritized List of Outfalls by end of Permit year 1; field investigations completed, illicit connection located and removed within three years of dry weather screening	Prioritized list of outfalls developed based on 2006 dry weather screening	None
3-6 (same as 1-3)	Bill Stuffers in Water and Sewer Bills	Water and Sewer Departments	Illicit Connection Bill Stuffer Created in Permit Year 2 (2004)	None	None

3a. Additions

No additions to Control Measure 3.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7
4-1	Construction Site Erosion and Sediment Control Ordinance	Planning Board, Planning Department and Engineering Department	Ordinance developed and presented to City Council, Enforcement actions taken after ordinance is passed.	Development of ordinance and guidance manual complete.	Finish the new ordinance and submit it to the City Council for approval.
4-2	Site Plan Reviews	Craig Young, Jacques Borges and Howard Newton	Number of site plans reviewed	Site plans have been reviewed as needed.	Continue reviewing site plans.
4-3	Consideration of Public Input	Department of Public Works	Review periods held, signs posted at construction sites	None	None
4-4	Inspection of Erosion and sediment controls	Craig Young, Jacques Borges and Howard Newton.	Number of Inspections Performed	Inspections were performed at all sites thought to be in non-compliance.	Continue inspecting sites thought to be in non-compliance.

4a. Additions

No 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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7
5-1	Develop a bylaw to apply Standards 2, 3, 4, 7 and 9 of the MA Stormwater Policy to the entire City.	City Solicitor	Ordinance Developed and Presented to City Council	Development of ordinance and guidance manual complete.	Finish the new ordinance and submit it to the City Council for approval.
5-2	Specify a stormwater BMP manual	Planning Board and Engineering	BMP Manual Selected	None	Finalize BMP manual selection.
5-3	Ordinance for the long-term maintenance of BMPs	Planning Board, Engineering Department and City Solicitor	Ordinance Developed and Presented to City Council	Development of ordinance and guidance manual complete.	Finish the new ordinance and submit it to the City Council for approval.

5a. Additions

There are no additions to Control Measure 5.

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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7
6-1	Identify Sensitive Receptors	Craig Young, Jacques Borges and Howard Newton	List of sensitive receptors developed in permit year 2, staff training completed	List of sensitive receptors completed.	None
6-2	Street Sweeping	Highway Department	All streets swept once per year	Swept all streets in the spring of 2008.	Sweep all streets in the spring of 2009.
6-3	Tree Planting Program	Highway Department, City Planner	Number of Trees Planted	Existing tree planting program performed.	Continue tree planting program.
6-4	Minimizing Effects from Road Salt	Highway Department	Spreaders Calibrated Every Year	Salt spreaders were calibrated and salt was stored inside.	Calibrate salt spreaders and continue storing salt inside.
6-5	Vehicle Washing	Department of Public Works	Vehicles Washed Correctly	Vehicle washing protocol was followed. Sander trucks were rinsed outside and other vehicles were washed inside the DPW garage where the wash water drains to the sewer.	Continue washing vehicles using the existing protocol.
6-6	Vehicle Maintenance	Department of Public Works	Employee Training Conducted in Permit Year 1, Materials Inventory Created in Permit Year 2	None	Create a hazardous material inventory.

6-7	Storm Drain Maintenance	Highway Department	All catch basins cleaned every 2 years	Clean half the City's catch basins in 2007.	Clean half the City's catch basins in 2008.
6-8	Park and Landscape Maintenance	Parks Department	Staff Training Completed in Permit Year 2, fertilizer use minimized thereafter	None	Train staff to minimize fertilizer use.
6-9	Illegal Dumping Control	Department of Public Works	Inventory areas in permit year 1, signs posted and staff trained in year 2 and records maintained thereafter	The Highway Department has developed a list of illegal dumping areas, posted signs and has a protocol for reporting illegal dumping.	Continue to perform the illegal dump control program.
6-10	River Bank Trash Clean-up	Highway Department	Clean-up conducted throughout the year	A clean-up crew worked an average of 2-days per week on river clean up.	Continue the river clean up project.
6-11	Best Management Practices for D.W. Field Park and Municipal Golf Course	Department of Public Works, Parks Department, Golf Course Personnel	Conduct study of potential BMPs in Year 2. Implement study results thereafter,	None	Conduct study of potential BMPs for the D.W. Field Park and Municipal Golf Course.

6a. Additions

There are no additions for Control Measure 6.

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) <<if applicable>>

Not Applicable

Part IV. Summary of Information Collected and Analyzed

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	yes
Annual program budget/expenditures	(\$)	

Education, Involvement, and Training

Estimated number of residents 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.)	
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	
▪ community participation	(%)	
▪ material collected	(tons or gal)	
School curricula implemented	(y/n)	

Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted	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

Outfall mapping complete	(%)			
Estimated or actual number of outfalls	(#)			
System-Wide mapping complete	(%)			
Mapping method(s)				
▪ Paper/Mylar	(%)			
▪ CADD	(%)			
▪ GIS	(%)			
Outfalls inspected/screened	(# or %)			
Illicit discharges identified	(#)			
Illicit connections removed	(#)			
	(est. gpd)			
% of population on sewer	(%)			
% of population on septic systems	(%)			

Construction

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 completed	(# or %)
Estimated volume of stormwater recharged	(gpy)

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)
Total number of structures cleaned	(#)
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, recycle for sand, beneficial use, etc.)	
Cost of screenings disposal	(\$)
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)
Cost of sweepings disposal	(\$)
Vacuum street sweepers purchased/leased	(#)
Vacuum street sweepers specified in contracts	(y/n)

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)	
▪ Fertilizers	(lbs. or %)
▪ Herbicides	(lbs. or %)
▪ Pesticides	(lbs. or %)

Anti-/De-Icing products and ratios	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand
Pre-wetting techniques utilized	(y/n)
Manual control spreaders used	(y/n)
Automatic or Zero-velocity spreaders used	(y/n)
Estimated net reduction in typical year salt application	(lbs. or %)
Salt pile(s) covered in storage shed(s)	(y/n)
Storage shed(s) in design or under construction	(y/n)