

DARTMOUTH

MASSACHUSETTS

DEPARTMENT OF PUBLIC WORKS



BOARD OF PUBLIC WORKS

Director  
David T. Hickox, P.E.

Lee M. Azinheira, P.E.  
Manuel Branco  
Mark S. Nunes

MAY 4 2009

May 1, 2009

Ms. Glenda Velez  
US EPA - CIP  
One Congress Street-Suite 1100  
Boston, MA 02114

RE: Town of Dartmouth, MA  
EPA NPDES Permit #: MAR041102

Dear Ms. Velez:

Please find enclosed the Town of Dartmouth's *NPDES PII Small MS4 General Permit Annual Report* for reporting period No. 6 March 2008-March 2009. If you have any questions, please do not hesitate to contact my office.

Sincerely,

David T. Hickox, P.E.  
Director of Public Works

DTH:md

Enclosure

**Municipality/Organization:** Dartmouth, Massachusetts

**EPA NPDES Permit Number:** MAR041102

**MaDEP Transmittal Number:** W-

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

## NPDES PII Small MS4 General Permit Annual Report

### Part I. General Information

**Contact Person:** David T. Hickox, P.E. **Title:** Director

**Telephone #:** (508) 999-0740 **Email:** dhickox@town.dartmouth.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:** Edward Iacaponi

**Title:** Interim Executive Administrator

**Date:** April 28, 2009

## **Part II. Self-Assessment**

**The Town of Dartmouth Massachusetts has completed the required self-assessment and has determined that our municipality is in compliance with all permit 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 – New Permit
1-1 Revised	Partnerships <i>Install tributary signage.</i>	DPW,BOH Planning	Partnerships, Press releases, distribute .Maintain and replace as necessary tributary signs.	The Town has continued a multi-year partnership with the University of Massachusetts, the Dartmouth Lloyd Center, and the Coalition for Buzzards Bay to restore the health of Dartmouth’s coastal estuaries and rivers. In the final year of the study, the TMDL’s will be established to assist the Town in the restoration. The Town continues to maintain and replace missing tributary signs on a as needed basis.	
1-2 Revised	Educational Materials	DPW,BOH	Distribute Fact Sheets to municipal buildings, Paint winning “Storm Drain Stencil” in designated areas..	Town utilized Highway Division laborers to continue the installation of permanent storm water logos on catch basin inlets. Damaged or missing logo’s were replaced on an as needed basis. The Town utilized Umass Dartmouth college intern evaluations to prioritize watersheds to determine installation locations..	
1-3 Revised	Reaching Diverse Audiences	DPW, BOH		The program was represented to the various boards, the general public as well as the building/construction industry.	
Revised					
Revised					

Revised								
Revised								

**1a. Additions**


**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 – New Permit
2-1 Revised	Storm Drain Stenciling	Planning, ConCom, DPW	Number of installed stormwater logos.	Town continued to maintain and install new metal stormwater logos utilizing Town staffing. Due to budget constraints the use of UMass college interns during the summer of 2008 was not possible.	
2-2 Revised	Existing Program Assistance	DPW, ConCom	Update of the NPDES Phase II Program to Town Boards	Staff continued ongoing discussions with the Board of Public Works, Board of Health and continued the maintain tributary signs.	
Revised					

**2a. Additions**


### 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 – New Permit
3-1 Revised	Mapping	DPW, ConCom	Coordination of data collection with students from New Bedford Vocational High School Utilize Buzzards Bay National Estuary Program data and Stormwater Discharge Atlas	Reviewed and utilized Atlas of Stormwater Discharges in the Buzzards Bay Watershed from the Buzzards Bay NEP for prioritizing areas of concern  Due to a lack of funding, the Town has halted additional effort on GIS drainage plan upgrades for 2007. Town will continue to utilize the Atlas of Stormwater Discharges in Buzzards Bay Watershed as the base drainage plan for the community.	
3-2 Revised	Legal Prohibited – Enforcement	BOH, ConCom	Continued review and upgrading of existing stormwater related bylaws. Restrict feeding of geese. DPW personnel have been directed to perform inspections on all SMH's and DMH's when ever the cover is opened. Inspections include condition of MH and evaluation of function to identify illicit connections.	DPW, Board of Health and Conservation Commission regulations have been reviewed to strengthen if required areas that prohibit illicit connections to storm drain systems.  The Department of Public Works did not uncover any illegal connections to the storm drain system in Year 6.	
3-3 Revised	Detection Plan	BOH, DPW	Water quality testing and monitoring.	This is the final year to the Town's continued to financial support und and partnership with the Umass and the Loyd Center for Environmental Studies and on the water quality testing and stream flow monitoring as part of the Turn the Tides Project.	

3-4	Awareness & Education	BOH, Planning	Continue to update the placement of Fact Sheets in Public Facilities, prepare and fund (2) two Household Hazardous Waste Days during this reporting period..	Fact sheets and Stormwater informational brochures have been obtained and displayed, (2) two Hazardous Waste Days have been advertised and held at the DPW Highway Yard.	
Revised					
Revised					
Revised					

**3a. Additions**


#### 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 – New Permit
4-1 Revised	Stormwater Management	ConCom	Providing Stormwater Management Guidelines & Requirements	The Town continues to enforce storm water BMP's for private sector project. Town continues review and upgrading if necessary the aquifer protection bylaw and the bylaw as approved by Town Meeting . Conservation Commission continues to inventory structural storm water technologies within the Town . Continued the review of standards for Stormwater related to the construction of residential and commercial developments.	
4-2 Revised	Stormwater Regulations	Planning Board	Review of Subdivision Regulations relative to stormwater control during construction.	Enforcement of subdivision regulations that prevent the release of residential lots for sale until all stormwater facilities have been constructed and are fully operational.	
4-3 Revised	Education Materials	DPW	Provide Stormwater Information to all contractors that have been awarded construction contracts with the Department of Public Works.	All contractors performing site work or utility work on significant size projects are provided with a Memorandum and wall guide to Planning & Implementing Erosion & Sediment Control Practices.	
Revised					
Revised					
Revised					

Revised						

**4a. Additions**


**5. Post-Construction Stormwater Management in New Development and Redevelopment**

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 6</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – New Permit</b>
5-1	Stormwater Management	ConCom	Enforcement of Town of Dartmouth's and Mass DEP's Stormwater Guidelines.	Ongoing review and monitoring of the current stormwater bylaws and regulations. The Town has a designated drainage consultant who is responsible for the review of all stormwater designs. The Town's Environmental Affairs Coordinator monitors all construction related activities.	
Revised					
5-2	Drainage Consultant	ConCom	Consistent Technical Review of Stormwater design and policy.	Consultant continues to provide technical input Conservation Commission pursuant to Stormwater Regulations and Bylaw upgrades in preparation for Town Meeting. Consultant continues the review of all Notice of Intents involving the construction of drainage facilities and drainage calculations.	
Revised					
5-3	Subdivision Rules & Regulations	Planning	Enforcement of regulations pertaining to stormwater facilities being fully operational prior to release of lots.	Developers are aware that they must construct all drainage facilities, and provide fully operational system prior to the release of any lot for sale.	

Revised							

**5a. Additions**


## 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 – New Permit
6-1 Revised	Employee Training	DPW	Provide employee training in conjunction with 40 CFR 112 program.	DPW has scheduled Spring staff training on May 1, 2009. The DPW has purchased new training videos for review by all staff. SPCC training will be performed by the Director of Public Works to all field personnel on "Good Housekeeping Methods". Examples of daily maintenance procedures and equipment inspections will be presented.	
6-2 Revised	O&M Program	DPW	Implementation of O&M program designed to reduce and eliminate the discharge of pollutants from various DPW facilities.	DPW Highway Division has continued the revised snow and ice procedure to eliminate the use of road sand in winter operation. Operators have been trained in the proper procedures for delivery of salt to roadway, DPW is evaluating the use of liquid treatment of the salt in order to reduce the volume of salt required. The Town has acquired a third vacuum sweeper. This third sweeper has allowed the Town to complete sweeping operations in a more timely manner. Staff monitors all exterior stored equipment for fluid leakage. Stormwater detention ponds at the Highway Division garage have been serviced and the remaining Highway Division Yard is swept clean of salt residues, the existing oil/gas separator has been fully serviced after the winter season in preparation for the new season.	
6-3	Roadway Maintenance	DPW	Sweep all streets. Clean all catch basins annually.	The Town swept all primary roadways and a majority of secondary roadways. The addition of a third sweeper has	

Revised								
Revised								
Revised								
Revised								

**6a. Additions**


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

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 – New Permit
7-1 Revised	BMP's for TMDL Reduction	DPW	Implement BMP's for existing stormwater facilities..	The Umass Turn the Tides Project will establish TMDL's for the Town to obtain. The will continue to work closely with Umass in setting up the necessary programs to meet the expected TMDL limits.  The Town continues to uses new Vacuum Truck for servicing stormwater facilities.	
Revised					

7a. Additions


**7b. WLA Assessment**

#### **Part IV. Summary of Information Collected and Analyzed**

- The Town's ongoing support and contribution of \$336,000 to partner with the Lloyd Center, The Coalition for Buzzards Bay, and the University of Massachusetts on the Turn the Tide Project is a commitment by the Town to protect it's most natural asset by restoring the health and vitality of Dartmouth's waters. This is the final year of the project.
- The program has continued to maintain tributary signs lost due to damage or theft.
- The program continues publicized the local estuary project including the overall progress being made by the Umass Dartmouth School of Marine Science and Technology of the various brooks and ponds in the Town of Dartmouth.
- Conservation Commission continues to categorized all structural storm water units in Town.
- DPW staff continued the maintenance and installation of metal stormwater runoff logos on catch basins. Locations were chosen by the interns by prioritizing watersheds.
- The Town funded and purchased an additional 500 storm water logos for summer 2008 installation by staff. The use of summer Umass interns was discontinued due to funding .
- The Dartmouth Natural Resources Officer has been retained to assist in the ongoing development of coastal water quality data.

**Part V. Program Outputs & Accomplishments (OPTIONAL)**

**Programmatic**

Stormwater management position created/staffed	(y/n)	
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 screenings (landfill, POTW, compost, beneficial use, etc.)	(location)
Cost of screenings 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 <sub>2</sub> % MgCl <sub>2</sub> % 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)