

**TOWN OF MASHPEE
DEPARTMENT OF PUBLIC WORKS**

**350 Meetinghouse Road
Mashpee, MA 02649
Telephone 508-539-1420
Fax 508-539-3894**

FASCIMILE

DATE: April 27, 2006

TO: Ann Herrick, EPA New England

Fax Number: 617-918-0505

FROM: Catherine Laurent

re: Year 3 Annual Report, NPDES Phase II Small MS4 General Permit

of Pages (including cover page) : 12

Comments:

Municipality/Organization: Town of Mashpee

EPA NPDES Permit Number: MAR041129

MaDEP Transmittal Number: W-035197

Annual Report Number

& Reporting Period: No. 3: March 05 – April 06

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Catherine Laurent

Title: Assistant DPW Director

Telephone #: 508-539-1420

Email: clarent@ci.mashpee.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: Joyce M. Mason

Printed Name: Joyce M. Mason

Title: Town Manager

Date: April 26, 2006

Part II. Self-Assessment

The Town of Mashpee 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 1.B.2.(k) The Town has not yet implemented a water monitoring program so any discharges have not been conclusively determined to be contributing to exceedance of water quality standards. Until such a program is developed and implemented, the Town will continue to eliminate direct discharge from roadways, with those roadways targeted where discharge is to a surface water.

- Part 1.B.2.(l) See above.

- Part 1.C. See above.

- Part 1.D. See above.

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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
PE1	Zone II Information	Public Works; Water District	Distribute information annually on protection of drinking water	Worked on brochure for distribution to water users.	Distribute brochure with water bill.
Revised					
PE2	Storm Water Information	Public Works; County; Private Homeowners Associations	Develop and distribute information annually on impacts of storm water on water bodies and groundwater	Met with other Phase II coordinators on Cape Cod in regional group for public education. Displayed posters produced by County and EPA. Distributed at Library, Town Hall, and five school classrooms bookmarks with storm water impact information.	Continue to work with regional group. Work with Homeowner Associations adjacent to surface waters to include information in Association newsletters. Work with local media for broadcast of information on local cable access channel or publishing in local newspaper.
Revised					
PE3	Storm Drain Stenciling	Public Works	Stencil drains in target areas	None to date.	Order markers through County if option provided. Install in target areas.
PP4	Storm Water School Program	Public Works; School Dept; County	Develop program for presentation to Grades 3-5	Gathered information on programs/presentations used by other Cape Cod towns	Work with School Department to schedule program for school-wide assembly.

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
PP1	Community Cleanups	Public Works	Continue to organize annual cleanups of Town properties	Conducted clean ups of several Town properties (Noisy Hole Road, Mashpee Wildlife Refuge)	Continue conducting and working with others on clean ups.
Revised				Worked with other property owners (Trustees of the Reservation, Orenda Wildlife Trust, Waquoit Bay National Estuarine Research Reserve) on clean ups.	
PP2	Reciprocal HHP Collections	Public Works	Continue to provide HHP collections	Held and funded with towns of Sandwich, Falmouth, and Bourne four collections of HHP from residents. Residents able to participate at no direct cost. Eleven percent (11%) of Mashpee households participated.	Continue collections. Work to increase participation through increased publicity.
Revised					
PP3	Permanent HHP Collections	Public Works	Continue to provide permanent collection of certain products at Transfer Station	Collected used oil (2,610 gallons), spent antifreeze (160 gallons), CRTs (49 tons), car batteries (5 tons), rechargeable batteries (5 boxes), and mercury products (including over 7,070 LF of bulbs) from residents.	Continue collection.
Revised					
PP4	Pooper Scoopers	Animal Control	Expand provision of "pooper scoopers" on Town properties beginning in '03	Maintained existing pooper scoopers.	Identify other areas for provision of pooper scoopers and install.
Revised					
PP5	Fertilizer/Pesticide Use	Public Works; Health	Develop and distribute information on effects of fertilizer and pesticides use on water	Switched to use of organic fertilizers on certain Town properties.	Begin drafting brochure.
Revised					

PP6	Regulatory Board Education	Public Works; County	Develop educational program for regulatory boards/commissions	None to date.	Work with regional group to develop guide/presentation for specific regulatory boards/commissions to review their authority and to educate them on reviewing projects for storm water controls
-----	----------------------------	----------------------	---	---------------	--

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
IDD1 Revised	Outfall Identification	Public Works; Shellfish	Map drainage and outfall locations	AmeriCorps member creating drainage data layer on Town's GIS System from drainage data points collected by Senior Environmental Corps. Spot checking data points in field for accuracy. NOTE: Town of Mashpee does not have a piped storm water system.	Update data layer as necessary.
IDD2 Revised	Prohibition of Illicit Discharge	Public Works	Amend General Bylaw to explicitly prohibit illicit discharge	Reviewed existing language in General Bylaw. Currently contains prohibition against discharge of certain substances to waters or shores of Mashpee.	Develop amendment for Town Meeting to prohibit discharge of other substances as well as prohibition against dumping into road drainage systems.
IDD3 Revised	Reduction of Direct Discharge	Public Works	Install drainage system to eliminate direct discharge	Installed drainage structures during road reconstruction to eliminate direct discharge of street storm water runoff	Continue to install drainage during planned road construction projects.
IDD4	Water Monitoring Program	Public Works; Shellfish	Develop volunteer monitoring program to test and identify pollutants and determine potential sources in '06 and '07	None to date.	Collect information on similar programs in other towns.

IDD5	Identification of Illicit Discharge	Public Works; Conservation	Identify illicit discharges, contact responsible party, and work to eliminate	Outfalls mapped (IDD1)	Monitor outfalls for illicit discharge.
------	-------------------------------------	----------------------------	---	------------------------	---

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
CSR1	Review and Amendment of Existing Regulations	Public Works; Planning; Conservation	Review regulations for existing controls and amend as necessary	General Bylaw for Erosion and Sedimentation Control during site clearing and construction approved at Fall 2005 STM.	Work with Conservation Agent and Planner to amend Subdivision regulations and Wetlands regulations.
Revised					
CSR2	Inspection Program	Public Works; Planning; Conservation; Building	Develop inspection program to ensure compliance with required controls	None to date.	Begin drafting inspection program for inclusion in applicable regulations as developed by CSR1.
Revised					

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
PCR1	Review of Existing Regulations	Public Works; Planning; Conservation	Review regulations for existing controls and amend as necessary	See CSR1 above.	See CSR1 above.
Revised					Work with Conservation Agent and Planner to amend Subdivision regulations and Wetlands 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
MGH1 Revised	Street Sweeping	Public Works	Continue to sweep Town roads annually	Swept 70± miles of road (all Town roads) in Spring 2006 after winter sanding.	Continue sweeping program.
MGH2 Revised	Catch Basin Cleaning	Public Works	Continue to clean catch basins annually	Cleaned approximately 1,200 catch basins in Fall 2005 and Spring 2006 (some catch basins cleaned each time).	Continue semi-annual catch basin cleaning program.
MGH3 Revised	Spill Training	Public Works	Provide annual training to employees	Provided annual training to DPW employees on spill prevention and spill clean up	Continue training.
MGH4 Revised	Minimization of Road Salt Use	Public Works	Continue to minimize application of salt on roads and parking lots	Used 3:1 ratio of sand to salt during winter ice and snow operations.	Continue with low salt use.

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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
IDD3 Revised	Water Monitoring Program	Public Works; Shellfish		See #3 above	
IDD2 Revised	Reduction of Direct Discharge	Public Works		See #3 above	

TMDL1	Development and Implementation of BMPs	Public Works; Shellfish	Develop BMPs to address the other sources of pollutants exceeding the TMDLs for a water body in '07	None to date.	None directly proposed. Activities for IDD4 and IDD5 will provide base of information for this BMP in future years.
-------	--	-------------------------	---	---------------	---

7b. WLA Assessment

A WLA has not yet been conducted.

Part IV. Summary of Information Collected and Analyzed

No information collected.

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 sweepings (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)	