

Municipality/Organization: **Town of Plymouth**

EPA NPDES Permit Number: **MAR 041150**

MaDEP Transmittal Number: **W-40949**

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

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: **Saeed B. Kashi, P.E.** **Title:** **Town Engineer**

Telephone #: **508-747-1620 Ext. 123** **Email:** **SKASHI@TOWNHALL.PLYMOUTH.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: **Saeed B. Kashi, P.E.**

Title: **Town Engineer**

Date: **04/27/05**

Part II. Self-Assessment

The Town of Plymouth 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 (e) (Vi)** **The Town of Plymouth permit eligibility with regard to the Endangered Species Act was pending at the time of our NOI submission. Our MS4 discharges will have the potential to impact the existence of specific species protected under the Endangered Species Act. We will investigate more on this issue of concern.**
- Part 1.B.2 (k)** **Some discharges have been determined (through DMF Sanitary Survey) to be contributing to exceedance of water quality standards in Plymouth Harbor. These discharges have been made priorities in our NPS Pollution Grant Program.**
- Part 11.B.8** **Had not yet evaluated physical conditions, site design considerations, and BMPs to promote groundwater recharge through the implementation of our stormwater management program. The Engineering Department will be completing such an evaluation and developing recharge practices and guidelines. This information will be incorporated into education materials, our Drain Use Regulations, and standard practice for municipal road and drainage projects.**

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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
1-1 Revised	Educational Flyer	Town Engineer/ Town Manager	Post in all schools & Town buildings	Evaluating alternative choices And making recommendations.	Distribution of brochures to residents.
1-2 Revised	Form Public Education Task Force Educational Workshops	Town Engineer/ Environmental Manager Town Engineer/ Environmental Manager	Participation in town wide events & schools Schedule Workshops	Establishing the task force through advertisement and interviewing. Holding one workshop per year.	Selection of task force members.
1-3 Revised	Air stormwater message on local cable access channel	Town Engineer	Post one message every month	None to date	Prepare and post content.
1-4 Revised	Storm Drain Stenciling Storm drain Markers	Town Engineer/Conservation Comm./Environmental Manager Town Engineer/Conservation Comm./Environmental Manager	Stencil Storm Drains with Messages (25% each year) 50 per year	Contacted companies for pricing information. 50 are all in place	Seeking small group of volunteers to participate.
1-5 Revised	Map outfalls and receiving waters	Town Engineer	Map of discharge pipes to waters & wetland (20%/yr.)	25% of Outfalls have been located.	Making progress on completion of GPS locating efforts and complete mapping.
Revised					

1a. Additions

1a.	Media coverage	Town Engineer	Story coverage on NPS Pollution Projects.	Coverage in the local newspaper.	Additional coverage's in local newspaper.
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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 Revised	Hazardous waste collection	DPW Recycling Coordinator DPW	Once/yr. (min.)	Hosted an event in Fall 04	Plan to have another one in Spring 05.
2-2 Revised	Volunteer Water Quality Monitoring	Town Engineer/Natural Resources Officer Town Engineer/Environmental Manager	Level of participation	Natural resources officer with the help of volunteer group has completed thirty (30) ponds.	Plan to continue this effort.
2-3 Revised	Citizen Stormwater Committee/Lake Associations	Town Engineer/Natural Resources Officer Town Engineer/Environmental Manager	Hold meeting to plan for stormwater issues/mgmt.	Establishing the task force through advertisement and interviewing.	Selection of task force members.
2-4 Revised	“Adopt a Storm Drain Program”	Town Engineer/Natural Resources Officer	Participation in Community Clean-ups	Working with volunteer group to establish the program.	Organize and support the cleaning efforts.
2-5 Revised	Citizen watch Groups	Town Engineer/Natural Resource Officer	Aid Local Enforcement author. In the identification of polluters	Establishing the task force through advertisement and interviewing.	Selection of task force members.
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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
3-1	Develop illicit dischg. id. & elim. plan	Town Engineer/BOH/ Environmental Manager/ Planning Bd.	Make recommendations for the plan	Working with team volunteers to provide field inspection and report.	Investigating drainage area of outfalls, and to locate sources when and if will be identified.
Revised	Screen outfalls for Illicit connections	Public Works	Screen outfalls by Winter 07-08		
3-2	Drainage Network Mapping	Town Engineer	Drainage of urbanized areas	25% of outfalls have been located.	Making progress on completion of GPS locating efforts and complete mapping.
Revised					
3-3	Public Info. on illicit connections/illegal discharges	Town Engineer/Board of Health	Educating the public-hazards associated with these activities	None to date.	Prepare and post content
Revised					
3-4	Develop/Modify general illicit discharge bylaw	BOH/Planning Board	Developing/modifying the plan	Review existing mechanisms and determining lack of adequate authority to regulate illicit discharges. Researched relevant & available bylaws & regulations in place for other communities.	Complete bylaw draft for internal and Town Counsel review by Summer 06.
Revised					
3-5	Present Bylaw for town meeting action	BOH/Planning Board	Make presentations for town Meeting action	Review existing mechanisms and determining lack of adequate authority to regulate illicit discharges. Researched relevant & available bylaws & regulations in place for other communities.	Complete bylaw draft for internal and Town Counsel review by Summer 06.
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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
4-1 Revised	Wetlands by-law for stormwater management	Conservation Commission	Town Meeting Action	Complete bylaw draft for internal and Town Counsel review – on going.	Adopting by Town Meeting – Spring 06
4-2 Revised	Subdivision regulations for stormwater management	Planning Board	Change subdivision Rules and Regulations	Complete bylaw draft for internal and Town Counsel review – on going.	Adopting by Town Meeting – Spring 06
4-3 Revised	Erosion control by-law	Planning/Zoning Board of Appeals	Town Meeting Action	Complete bylaw draft for internal and Town Counsel review – on going.	Adopting by Town Meeting – Spring 06
4-4 Revised	Reporting hotline	Town Engineer/Planning Board	Set up procedures in response to info submitted by public	Establishing the telephone No. will continue to advertise telephone number.	Hotline number will be included in town directory postcards mailed with other information.
4-5 Revised	Site plan review/constr. Site inspection program	Town Engineer, Planner/Building Inspector	Review all plans, inspect, & visit construction site	Drafting to implement an interim policy for all current jurisdictional projects that requires Eng. To review and approve ESC plans.	Continue to implement interm policy and update consistent with new bylaw.

4a. 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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
5-1 Revised	Stormwater Mange. By-law-Development	Planning/Zoning Bd. & Conservation Commission	Strategies to be developed	Complete bylaw draft for internal and Town Counsel review – on going.	Adopting by Town Meeting – Spring 06
5-2 Revised	Stormwater Mange. By-law Development	Planning/Zoning Bd. & Conservation Commission	Formulation of the By-law	Complete bylaw draft for internal and Town Counsel review – on going.	Adopting by Town Meeting – Spring 06
5-3 Revised	Conservation Comm. Wetlands By-law	Planning/Zoning Bd. & Conservation Commission	Presentation for Town Meeting Action	Complete bylaw draft for internal and Town Counsel review – on going.	Adopting by Town Meeting – Spring 06
Revised					
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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
6-1 Revised	Street sweeping program	Highway	Spring annual sweeping record sweeping as needed	Completed annual sweeping program.	Continue program.
6-2 Revised	Catch basin/drain cleaning	Highway	500 per year (record) Clean all catch basins once every 3 years.	Continuing collecting volume and frequency data from existing program and refine cleaning program into using a needs-based frequency.	Continue refining program. Explore cost/benefit of specifying vacuum equipment for future cleaning contracts.
6-3 Revised	Annual training at town facilities	Town Engineer	Conduct training, prepare literature, record attendance	Conducted ½ -day training to all key department staff regarding pollution prevention practices and SWMP implementation.	Continue to conduct ½-day training.
6-4 Revised	Policy Guide O & M program for town-owned structural BMP's	Town Engineer	Developing the Policy Guide Implement O & M program by Spring 06	Inventory town-owned BMP's and drafting O & M procedures for the town's detention ponds and particle separators.	Complete and implement O & M Procedures.
6-5	Permit filing for the town's activities related to Phase II	Town Engineer	Permits Filed as needed	Permits filed for our DPW facilities.	Continue program.

6a. Additions

6.6	Vehicle washing	Public Works	Implemented washing policy and constructed washing facility.	Implemented policy to wash only within designated locations, without the use of cleaners or degreasing agents.	Continue Program.
6.7	Implement Integrated Pest Management (IPM) at Town Facilities	Parks & Recreation	Train facility employees and practice IPM town-wide by Summer 2007	Inventory current chemicals, quantities, and practices used on town parcels.	Host an IPM/lawn care workshop for staff and lawn care professionals with Cooperative Extension Service.

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 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

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)	