Annual Report

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National Pollutant Discharge Elimination System Phase II Stormwater Management Plan 2004 Annual Report – Year 1

NPDES MS4 – MA 041196/W045925

Hamilton, Massachusetts

Prepared for:

Hamilton, Massachusetts
577 Bay Road
Hamilton, MA 01936

Prepared by:

Earth Tech, Inc.
196 Baker Avenue
Concord, Massachusetts 01742

Reports Submitted to:

United State Environmental Protection Agency
Water Technical Unit
P.O. Box 8127
Boston, MA 02144

Massachusetts Department of Environmental Protection
Division of Watershed Management
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United State Environmental Protection Agency
Water Technical Unit
P.O. Box 8127
Boston, MA 02144

Subject: Hamilton, MA
NPDES Phase II Stormwater Management Plan
Annual Evaluation

To Permit Reviewers:

On behalf of the Town of Hamilton, we are submitting the following NPDES Phase II Stormwater Management Plan Annual Evaluation as required by the United States Environmental Protection Agency (US EPA) and the Massachusetts Department of Environmental Protection (MA DEP) for coverage under the US EPA NPDES Stormwater General Permit.

If there are any questions or comments with respect to any of the information contained in the Annual Evaluation or the accompanying plan, please do not hesitate to contact the undersigned.

Very truly yours,

Earth Tech, Inc.

Abigail Thomas
Environmental Engineer

cc: Town of Hamilton w/ attachments

Municipality/Organization: **Town of Hamilton**

EPA NPDES Permit Number: **MA 041196**

MaDEP Transmittal Number: **W- 045925**

Annual Report Number & Reporting Period: **No. 1: March 03-March 04**

NPDES PII Small MS4 General Permit

Annual Report

Part I. General Information

Contact Person: Candace Wheeler Title: Town Administrator

Telephone #: 978-468-5572 Email: cwheeler@hamiltonma.gov

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: Candace P. Wheeler

Printed Name: Candace Wheeler

Title: Town Administrator

Date: 4/30/04

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1.0 INTRODUCTION AND BACKGROUND

In 1990, The United States Environmental Protection Agency (EPA) began implementing a stormwater management program under the National Pollutant Discharge Elimination System (NPDES). This program, known as Phase I of the NPDES stormwater program, was intended to reduce pollution in stormwater discharges for large urban areas with populations of 100,000 or greater.

On December 8, 1999, the Phase II Rule of the NPDES stormwater program was published to address Municipal Separate Storm Sewer Systems (MS4s) within urban areas of populations less than 100,000 that were not addressed under the Phase I program. Objectives of the Phase II rule is for the MS4s to develop, implement and enforce a storm water program designed to reduce the discharge of pollutants to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act.

On May 1, 2003 the EPA issued the General Permit for Stormwater Discharges from MS4s. The general permit requires that the stormwater program for each MS4 submit an annual evaluation. The following report contains information regarding the activities on the stormwater program for the previous calendar year. The report contains the information required in the general permit as follows: (a) Self-Assessment Review of Compliance with the Permit Conditions; (b) Assessment of the Appropriateness of the selected BMPS; (c) Assessment of the Program towards Achieving the Measurable Goals; (d) Summary of the Results of Any Information that has been Collected and Analyzed; (e) Discussion of Activities for the Next Reporting Cycle; (f) Discussion of any Changes in Identified BMPs or Measurable Goals; and (g) Reference any Reliance on another Entity for Achieving any Measurable Goal.

2.0 SELF-ASSESSMENT REVIEW OF COMPLIANCE WITH THE PERMIT CONDITIONS

The town of Hamilton filed a National Pollutant Discharge Elimination System (NPDES) Phase II Stormwater Management Plan in June 2003. The EPA responded with a letter of deficiencies on September 24, 2003. The deficiencies included identification of other regulated MS4s within municipal boundaries, and the NOI signature. A letter was sent to the EPA in response to the deficiencies on October 23, 2003. On November 24, 2003, the EPA sent a letter to the town stating that the stormwater program was administratively complete and in compliance with the conditions of the General Permit. The correspondence between the EPA and the town of Hamilton is included in Attachment A.

The town of Hamilton continued to work on improving stormwater management over the past year. Hamilton is a small, affluent community without a townwide wastewater treatment system. Therefore, the town of Hamilton does not find that it has many issues with stormwater. In addition, there is not a lot of new construction that takes place in town, so the town does not have many issues with construction stormwater runoff. The town and the DPW strive to incorporate improvements to stormwater management whenever possible.

3.0 ASSESSMENT OF THE APPROPRIATENESS OF THE SELECTED BMPS

Most of the Best Management Practices (BMPs) selected for the stormwater program were appropriate for the town of Hamilton.

Comments on Appropriateness

BMP ID Number	BMP	BMP Description
2.4	Educate/Monitor/Assist Compliance by Commercial/ Agricultural/Livestock Interests	Enlist Private/Business Groups

Over the past year, the town realized that trying to enlist private and business groups, that concern commercial and agricultural interests, is not relevant. Hamilton does not have a large commercial or agricultural base. Therefore, there aren't groups in town that represent them. The town is going to remove BMP ID 2.4 due to the fact that it is inappropriate. The DPW will incorporate town businesses and agricultural interests in the educational mailings for stormwater pollution awareness.

4.0 SUMMARY OF MINIMUM CONTROL MEASURES

In order to meet the six control measures required by the EPA, the town proposed to supplement their existing BMP's with the following BMPs. The following outlines the progress of the town in achieving the measurable goals for the first year. The annual evaluation of MPS is also detailed in Table 4-1 – Annual Evaluation. Table 4-1 also discusses activities for the next reporting cycle, and identifies any changes in the identified BMPs or measurable goals.

4.1 PUBLIC EDUCATION AND OUTREACH

Over the past year Hamilton's DPW incorporated public education and outreach into their stormwater program. The DPW went to the local schools and helped the third graders to created posters on all types of non point source pollution. The DPW also worked on the catch basin stenciling program. The DPW individually spoke with local business to gain support for the stenciling program, and purchased the stencils for the catch basins which lead to local water resources. The DPW also started to draft stormwater pollution educational materials. The DPW reviewed the EPA stormwater brochure models for materials for the stormwater pollution prevention flyer and for information to be included in the wellhead protection information mailings.

4.2 PUBLIC PARTICIPATION AND INVOLVEMENT

The DPW held several events, which allowed for public participation in stormwater pollution prevention. The DPW held their annual hazardous waste collection on 8/16/2003. Information on the collection is included in Attachment B. Recycling program stared in 2002 continued through 2003. The recycling program is advertised in the local newspaper and cable TV station. Details on the town's recycling are included n Attachment C. In addition, DPW runs a mercury recovery program, which includes recycling of button cell batteries. In regards to public participation, the DPW worked with the Chebacco Lake Association and the local boy scouts during town clean up days. The DPW also requested public participation at various town events.

4.3 ILLICIT DISCHARGE DETECTION AND ELIMINATION

The DPW progressed on the town's detection and elimination of illicit discharge. The DPW's initial goals in detection are to create a townwide Geographical Information System (GIS) map. In 2003, Hamilton contracted a consultant to create a base GIS map. The consultant mapped 5 drainage areas in town and will incorporate the drainage areas into the GIS map.

BMP Category in Notice of Intent/OU	BMP	Year In	Revision or Additions
1.0	**Public Education and Outreach**		
1.1	Public Education of Stormwater Collection Systems & Illicit Connections	er information into a mailing	
1.2	General Public – Knowledge of Stormwater Issues and their Environmental Interaction		
1.3	Private Groups – Identify Catch Basins leading to Open Waters	ch Basins	
1.4	Non Point Pollution Awareness	t local businesses out mailers as part of ection mailings.	
2.0	**Public Involvement and Participation**		
2.1	Work with private/volunteer groups	to supply manpower r groups	
2.2	Request Public Participation for Inspection/Monitoring	blic participation at vents	
2.3	Promote Stenciling Program	One Cable TV and s to solicit volunteers g program	
2.4	Educate/Monitor/Assist Compliance by Commercial/ Agricultural/Livestock Interests		Removing goal from plan - Not appropriate no relevant groups in town. Continue to educate people through mailings.

[illegible]	[illegible]	[illegible]	[illegible]
3.0	**Illicit Discharge Detection and Elimination**		
3.1	Locate All Catch Basins, Sump Pumps, Stormwater Collection Systems & Culverts	mount of GIS data	
3.2	Determine if any Violations are present in the Stormwater System	ent program	
3.3	Define Drainage Surface Area to Stormwater Collection Systems	rainage areas on the S system	
3.4	Eliminate Contributions to Water Quality Deterioration	n septic management in	
3.5	Educate Public Works Department on the Importance of Illicit Discharge and Elimination	onal material on DPW workers	
3.6	Review/update town regulatory control measures town regulatory to prohibit illicit sewage connections	A create a By Law waste on riding trails	
4.0	**Construction Site Storm Water Runoff Control**		
4.1	Review/update town regulatory control measures to require sediment and erosion control at construction sites		
4.2	Educate Contractors through Permit Process	Co water brochure with permits	
4.3	Educate Public on Changes or Improvements		
4.4	Assure Understanding and Compliance of Runoff and Erosion Control	rochure to local tors	

[illegible]	[illegible]	[illegible]	[illegible]
5.0	**Post-Construction Storm Water Management in New Development and Redevelopment**		
5.1	Assure Post Construction Requirements are Followed	y Law in regards to changes	
5.2	Explain Permit Process to Comply with Post Construction Procedures	on post construction nation to distribute to ctors.	
5.3	Work Area Stabilization	of silt barriers around atch basins	
5.4	Assure Current Requirements Meet State/Federal Standards	ments to ensure that aws meet State and uirements	
6.0	**Pollution Prevention and Good Housekeeping for Municipal Operations**		
6.1	Maintain Drain Pipes	epaired Grease/Oil installed	
6.2	Catch Basin Cleaning	l Catch Basins	
6.3	Clean Sand & Debris Build up along Paved Shoulders	street sweeping	Street sweeping will occur once a year
6.4	Maintain Roadways	gram to cut road back	

The town expanded their program to eliminate illicit discharges. The DPW hired an outside contractor to clean and inspected 100% of the catch basins in town. The DPW worked with the Board of Health and Fire Department on management of emergency situations in regards to indirect contamination. Finally, the DPW worked with the Conservation Commission (Con Com) to incorporate identification of contamination through erosion control and Title 5 management.

4.4 CONSTRUCTION SITE RUNOFF CONTROL MEASURES

Hamilton had several construction site runoff controls measures in place prior to the Stormwater Management Plan. The Con Com incorporates construction site run off controls into the NOI process. The site plan review incorporates the NPDES SWPPP regulations. The DPW controls site runoff into town roadways. The Con Com hands out stormwater information with the NOI Order of Conditions. In addition, all town stormwater runoff control changes and improvements are noted at the monthly, televised Selectman's Meetings.

4.5 POST-CONSTRUCTION RUNOFF CONTROL MEASURES

The town is working towards post-construction runoff control measures. In 2003, the DPW discussed the current Town By Laws with Con Com and Planning Board. The town also distributed information on post construction controls to contractors at the issuance of their building permit. The Con Com also required contractors to place silt barriers around and over all catch basins in the area of construction projects.

4.6 POLLUTION PREVENTION/GOOD HOUSEKEEPING

The town of Hamilton prevents stormwater pollution and maintains good housekeeping procedures. The DPW installed fifteen grease/oil hoods on catch basins in town. The DPW will continue to install grease/oil hoods in catch basins that receive repairs. The town also hired an outside contractor to clean all of the catch basins during the first week in April and to conduct street sweeping in town during the third week in April. Finally, the DPW incorporated road shoulder into the road improvement program improvements. The DPW cut back three miles of road shoulders.

5.0 PROGRAM OUTPUTS AND ACCOMPLISHMENTS

Programmatic

Stormwater management position created/staffed	(y/n)	No
Annual program budget/expenditures	($)	$15,900

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	70%
Stormwater management committee established	(y/n)	N
Stream teams established or supported	(# or y/n)	N
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	Y
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	1
▪ community participation	(%)	90
▪ material collected	(tons or gal)	50 full car loads and 77 half car loads

Legal/Regulatory

Regulatory Mechanism Status (indicate with "X")	In Place Prior to Phase II	Under Review	Drafted	Adopted
▪ Illicit Discharge Detection & Elimination		X		
▪ Erosion & Sediment Control	X			
▪ Post-Development Stormwater Management	X			
Accompanying Regulation Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination		X		
▪ Erosion & Sediment Control	X			
▪ Post-Development Stormwater Management	X			

Mapping and Illicit Discharges

Outfall mapping complete	(%)	0
Estimated or actual number of outfalls	(#)	12
System-Wide mapping complete	(%)	0
Mapping method(s)		
▪ Paper/Mylar	(%)	0

▪ CADD	(%)	0
▪ GIS	(%)	100%
Outfalls inspected/screened	(# or %)	0
Illicit discharges identified	(#)	0
Illicit connections removed	(#) (est. gpd)	0
% of population on sewer	(%)	0
% of population on septic systems	(%)	100%

Construction

Number of construction starts (>1-acre)	(#)	6
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	100%
Site inspections completed	(# or %)	100%
Tickets/Stop work orders issued	(# or %)	0
Fines collected	(# and $)	0
Complaints/concerns received from public	(#)	3

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	100%
Site inspections completed	(# or %)	100%

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	1
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1
Total number of structures cleaned	(#)	771; 100%
Storm drain cleaned	(LF or mi.)	300 L.F.
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	0
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Fill/gravel – loam mix
Cost of screenings disposal	($)	$3,200
Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	1
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	1
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Lanfill
Cost of sweepings disposal	($)	$8,500
Vacuum street sweepers purchased/leased	(#)	0
Vacuum street sweepers specified in contracts	(y/n)	N

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	Organic only
▪ Herbicides	(lbs. or %)	Used Sparingly
▪ Pesticides	(lbs. or %)	N/A
Anti-/De-Icing products and ratios	% NaCl % $CaCl_2$ % $MgCl_2$ % CMA % Kac % KCl % Sand	20 80
Pre-wetting techniques utilized	(y/n)	0
Manual control spreaders used	(y/n)	0
Automatic or Zero-velocity spreaders used	(y/n)	0
Estimated net reduction in typical year salt application	(lbs. or %)	0
Salt pile(s) covered in storage shed(s)	(y/n)	Y

ATTACHMENT A

CORRESPONDENCE BETWEEN EPA AND THE TOWN OF HAMILTON

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
1 CONGRESS STREET, SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

February 24, 2004

Mr. Steven Kenney
Dept. of Public Works
Town of Hamilton
577 Bay Road
Hamilton, MA 01936

RE: National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)
Permit Number: MA041196/MaDEP Transmittal Number: W045925

Dear Mr. Kenney:

EPA New England is in receipt of the additional information requested relevant to your Notice of Intent (NOI) seeking coverage under the subject permit. EPA has reviewed your amended NOI submitted on your behalf by Earth Tech and has determined it to be administratively complete. Upon receipt of this letter, your municipality is authorized to discharge storm water from its designated small MS4 in accordance with the provisions of the general permit and has been assigned the permit number noted above.

This permit and authorization to discharge expires on May 1, 2008. Please review Part II D., E. and F. to understand your obligations for program evaluation, record keeping, and annual reporting during this 5-year permit term. As a reminder, your first annual report is due by May 1,2004.

This letter does not reflect agency approval of your storm water management program (SWMP). EPA anticipates completing, in coordination with the Massachusetts Department of Environmental Protection (MaDEP), a thorough review of your SWMP during the permit term. To facilitate our review, we may contact you for additional information as you implement your program. Further, EPA intends to provide additional workshops and outreach to assist you in the implementation of your program and will notify you accordingly.

In Massachusetts, this general permit is jointly issued and administered with the MaDEP. Accordingly, enclosed please find a letter from the MaDEP regarding their acknowledgment of your NOI submission (i.e. Form BRP WM 08A) and authorization to discharge.

If you have any questions, please contact me at 617/918-1577 or Ann Herrick at 617/918-1560.

Sincerely,

David J. Gray, P.E.
Environmental Engineer
Massachusetts State Program Office
Office of Ecosystem Protection

Enclosure

cc: Paul Hogan, MaDEP
Dale Mackinnon, EarthTech

Hamilton Department of Public Works

Recycling and Refuse Information

Curbside Pickup for Household Refuse

The Town contracts out its curbside waste pick-up on a three-year bid cycle. Normal pick-up days are Wednesday, Thursday and Friday each week. If there is a holiday on one of these days, the schedule is moved ahead one day for the remaining days. If a holiday falls on a Monday or Tuesday the entire schedule is moved ahead one day. There is no change in schedule for holidays that fall on a Saturday or Sunday.

Pick-up Routes

Wednesday – All roads west of the railway tracks, (between the tracks and the Topsfield line), with the exception of the neighborhood which lies within Route 1-A (Asbury St., Linden St. and Lois/North St.).

Thursday – All roads within the above exception area and any road off of and including Moulton St. and Route 1-A, except for Bridge St.

Friday – All roads off of and including Bridge St., Essex St. and Sagamore Rd.

Each dwelling (residential or commercial) is allowed four (4) barrels of refuse per legal living unit – i.e. a duplex home would be two (2) living units or a total of eight (8) barrels of trash per week. One (1) large bulky item can be exchanged each week in place of a barrel of trash. These items could be mattresses, couches, chairs, wooden furniture, etc…

The Commonwealth of Massachusetts does not allow the following items to be picked up as Municipal Solid Waste (curbside refuse).

Tires or car parts.
Yard waste – Branches, lawn clippings, leaves and Christmas trees.
Metal of any kind including small and large appliances, bicycles and metal bed frames.
Batteries – Auto, button, rechargeable or mercury base types.
Petroleum products or bulk petroleum product containers such as gas cans.
Hazardous Waste – pesticides, fertilizers, undried oil base paint cans, harsh cleaners.
Smoke Detectors
Compressed gas containers such as propane cylinders.
Construction or demolition debris.
Recyclable materials – bottles, cans, newspaper, plastics 1 - 7, etc…

For more information on refuse pick-up please contact the Department of Public Works Monday through Thursday from 8:00 am to 4:30 p.m. or Friday at 8:00 am to 12:00 noon (468-5580).

Recyclable Materials

Curbside recycling is done on an every other week basis starting with the second full week in January. The following are materials you can leave curbside or can be dropped off at Town Hall for a minimal fee. The Department of Public Works offers one free recycling container to each household in town for this purpose. Please do not put out recycling bins the night before pick-up, especially on windy and snowy nights.

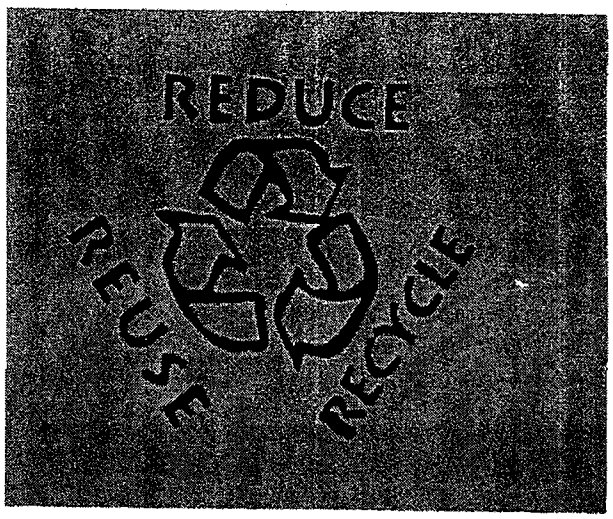
CURBSIDE

MATERIALS	WHAT TO RECYCLE	HOW TO PREPARE	NOT ACCEPTED
Newspaper, Magazines, Phone books, Computer & White Office Paper,	Newspapers, catalogs, magazines, phone books, computer & white office paper.	Place in paper bags or tie in bundle. Place on top of recycling bin.	No Junk mail, plastic coated, laminated or waxed paper.
Plastics	Plastic containers with Code 1 – 7	Rinse out, remove tops, labels can stay on.	No containers that store hazardous materials or motor oils.
Glass	Any bottles and jars of all colors.	Rinse out; remove all plastic or metal from them. Paper labels may be left on.	No bottle and jar lids, no dishes, ceramics, windows, mirrors, light bulbs, Pyrex, crystal or porcelain.
Cans	All aluminum, steel or tin cans or containers.	Rinse out and remove all paper and plastic. Flattened cans are encouraged since they use less space and save on transportation costs and fuel.	No plastic or jar lids, combined metal and non-metal items, scrap metal, sheet aluminum or containers that stored hazardous materials or petroleum products.
Special curbside items			
Leaves	Leaves only. Pick up will be on various Saturdays in the fall and spring. Days will be posted in the newspaper.	Place in biodegradable bags or trash barrels only.	No branches, wood chips, brush, lawn clippings, stones or other inorganic or organic debris.

CRT (Cathode Ray Tubes)	$10.00	Computer Monitors & Televisions
Mercury Vapor Lamps	$1.00	Fluorescent Lights
Household Hazardous Waste	$16.25 $ 8.00	Per full carload. Per half carload. These represent estimates. Pricing changes daily. Single items priced at time of drop-off.
Compost Bins	$20.00	The DPW currently sells compost bins for yard wastes at Town Hall.
Propane Cylinders	$5.00	

If you have any item to dispose of, bring the item to Town Hall, pay your fee, get a receipt, then you will be directed where to drop off the specific item in the DPW yard. The Department of Public Works is located on the second floor of Town Hall. Office hours are Monday's 8:00 a.m. to 7:00 p.m., Tuesday – Thursday 8:00 a.m. to 4:30 p.m. and Friday 8:00 a.m. to 12:00 noon. You may contact us by phone at 468-5580 during these hours also.

For more information on any of these items, recycling within the Town, or for disposal or recycling of products not listed, please contact the Department of Public Works.



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