5/24 (4)

INTERDEPARTMENTAL COMMUNICATION

Acton Board of Health - Telephone 978-264-9634 - Fax 978-264-9630

May 21, 2004

TO: Don Johnson, Town Manager

FROM: Doug Halley, Health Director

SUBJECT: NPDES Phase II Small MS4 General Permit

Attached please find the Town's Annual Permit submittal to EPA in compliance with the requirements of the NPDES Phase II Small MS4 General Permit. I will give a brief presentation to the Board of Selectmen on May 24th and answer any questions they may have.

ACTON BOARD OF HEALTH

Douglas Halley
Health Director

472 Main Street
Acton, MA 01720

Telephone 978-264-9634
Fax 978-264-9630

April 26, 2004

U.S. Environmental Protection Agency
Water Technical Unit
P.O. Box 8127
Boston, MA 02114

To Whom It May Concern:

Attached with this letter please find the Town of Acton's first Annual Report in compliance with its NPDES Phase II Small MS4 General Permit. This report contains the following information:

1. A self-assessment review of compliance with the permit conditions.
2. An assessment of the appropriateness of the selected BMP's
3. An assessment of the progress towards achieving the measurable goals.
4. A summary of results of any information that has been collected and analyzed.
5. A discussion of activities for the next reporting cycle.
6. A discussion of any changes in identified BMP's or measurable goals.
7. Reference to any reliance on another entity for achieving any measurable goal.

Should you have any questions regarding the Town of Acton's NPDES Phase II Small MS4 Annual Report or the information attached please contact me at (978) 264-9634.

Sincerely,

Doug Halley
Health Director

Cc: Massachusetts Department of Environmental Protection
Division of Watershed Management
627 Main Street
Worcester, MA 01608

Municipality/Organization: Town of Acton

EPA NPDES Permit Number: MAR041238

MaDEP Transmittal Number: W-

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: Doug Halley Title: Health Director

Telephone #: (978) 264-9634 Email: dhalley@town.acton.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: Don P. Johnson

Title: Town Manager

Date: 4/30/04

Part II. Self-Assessment

The Town of Acton has completed the required self-assessment and have determined that the Town is in compliance with all permit conditions, except for the following provisions:

Part 2. PP-5 The Town was unable to find a grant to fund a new stenciling program. As an alternative the Town applied for and received a grant to place Stream Identification Signs.

Part 3. ID-3 The Town was unable to obtain a grant from the Massachusetts Office of Coastal Zone Management to fund the Watershed Health Monitoring And Management Plan. As an alternative the Town will seek a grant from the 604(b) Water Quality Management Planning Grants to fund the Plan.

Part 6. GH-1 The method to record storm water activities for Good Housekeeping and all Minimum Control Measures did not get finalized until late in the year. Due to that delay recording of all Storm Water Management Activities will not begin until Year 2.

Part 6. GH-3 Tracking records for Catch Basins cleaned did not begin in Year One because the methodology for recording their cleaning was not established until late in the year.

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 1** (Reliance on non-municipal partners indicated, if any)	**Planned Activities – Permit Year 2**
PE-1	Partner w/Local Organization	Board of Health Health Director	Provide financial contribution to Partner w/ SUASCO WCC	On October 3, 2003 Acton committed to participate in the SUASCO Watershed Community Council's "Storm Water Community Assistance Program" for Storm Water Phase II Permit Year 1 from July 2003 to June 2004.	Continue commitment to participate in the SUASCO Watershed Community Council's "Storm Water Community Assistance Program" for Storm Water Phase II Permit Year 2 from July 2004 to June 2005.
Revised					

PE-2	Develop Public Education Brochures/Flyers	Board of Health Health Director	Prepare/Distribute Storm Water Awareness Survey	The Town's consultant, Woodard and Curran, as part of the Town's 319 Grant, prepared a Storm Water Awareness Survey. The Survey was distributed at the April 2004 Annual Town Meeting and the May 2004 Hazardous Waste Day. When the surveys are returned the responses will be cataloged and analyzed.	Prepare/Distribute Storm Water Flyer to households; reissue Storm Water Awareness Survey.
Revised					
PE-3	Structural BMP Education	Board of Health Health Director	No Goal Established for Year One	No action taken in year one.	Construct kiosk at North Acton Recreation Area (NARA) constructed wetland BMP.
Revised					
PE-4	Incorporate Storm Water into Public Meetings – Provide electronic media outlet.	Information Technology IT Director	Schedule Selectmen's Meeting to discuss Storm Water Management Plan (to be shown live on cable and taped for rebroadcast).	On February 24, 2003 the Board of Selectmen at their regularly scheduled meeting were updated on the NPDES Permit. They discussed the schedule of tasks, the anticipated costs and the potential of volunteer organizations assistance. The meeting was televised and re-televised one week later. A video tape is available for future showings.	No goal established for year two.
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 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
PP-1	Partner with Local Organization	Board of Health Health Director	Provide financial contribution to partner with SUASCO WCC	On October 3, 2003 Acton committed to participate in the SUASCO Watershed Community Council's "Storm Water Community Assistance Program" for Storm Water Phase II Permit Year 1 from July 2003 to June 2004.	Continue commitment to participate in the SUASCO Watershed Community Council's "Storm Water Community Assistance Program" for Storm Water Phase II Permit Year 2 from July 2004 to June 2005.
Revised					
PP-2	Place traveling display at various locations	Board of Health Health Director	Place display provided by SUASCO at one location throughout the year.	On December 19th SUASCO delivered the traveling storm water display to Acton. Since that date it has been displayed in the main entrance way to the Town Hall above the Isaac Davis Plow. Display will be brought to Town Meeting and other public events during the course of the year.	Continue to place display provided by SUASCO at one location throughout the year.
Revised					
PP-3	Poster/Photo Contests	Recreation Department Recreation Director	No Goal Established for Year One	No action taken in year one.	Hold a Storm Water poster contest for Youth Groups at NARA.
Revised					

PP-4	Organize Public Meetings/Panels	Board of Health Health Director	Discuss Storm Water at one public meeting every year.	On February 24, 2003 the Board of Selectmen at their regularly scheduled meeting were updated on the NPDES Permit. They discussed the schedule of tasks, the anticipated costs and the potential of volunteer organizations assistance.	Continue to discuss Storm Water at one public meeting every year.
Revised					
PP-5	Stencil Storm Drains	Board of Health Health Director	1.1 OAR volunteers stenciled small portion of town 1.2 Submit grant application for new stenciling program	1.1 Stenciling Project completed in 2000. 1.2 Grant application unavailable at this time (see PP-6 for alternative measure).	Construct and place Stream Identification Signs at stream and street intersections in conjunction with Acton's Stream Team.
Revised					

2a. Additions

PP-6	*Stream Identification Signs*	Board of Health Health Director	*1.2 Submit grant application for the creation and placement of Stream Identification Signs*	Applied for and received grant to place Stream Identification Signs at Stream and Street Intersections in conjunction with Acton's Stream Team	Construct and place Stream Identification Signs at stream and street intersections in conjunction with Acton's Stream Team.
PP-7	*Citizen Involved Storm Water Programs*	Acton Stream Team Coordinator	Provide educational displays at town events	Acton Stream Team provided an educational display on Storm Water Issues at Earth Day event in Acton.	No Goal Established for Year Two

3. Illicit Discharge Detection and Elimination

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
ID-1	Drainage Mapping	Board of Health Health Director	Prepare draft drainage map with watershed delineations.	All existing catch basins, manholes and outfalls have been mapped in a GIS format. With this information in combination with the USGS contour map micro-watersheds were delineated within the Fort Pond Brook and Nashoba Brook watersheds.	Field verify and update draft map features for new construction and 25% of streets older than 1960.
Revised					
ID-2	Develop/Implement Illicit Discharge Bylaw	Planning Board Town Planner Board of Health Health Director	No Goal Established for Year One	Even though no action was scheduled to be taken in year one, the Board of Health reviewed its regulations and through a series of advertised hearings modified them accordingly.	2.1 Review/Analyze existing bylaws, rules and regulations.
Revised					
ID-3	Perform Illicit Discharge Detection Campaign	Board of Health Health Director	Submit grant proposal for funding of Acton Watershed Health Protection Program to identify potential problem areas.	On January 10, 2003 the town through its consultant, Woodard & Curran, submitted a grant proposal "Watershed Health Monitoring and Management Plan" to the Massachusetts Office of Coastal Zone Management. The grant application was denied May 23, 2003.	Conduct investigation and sampling of outfalls discharging to Assabet River (303(d)waterway). (Resubmit grant proposal for funding of Acton Watershed Health Protection Program to identify potential problem areas)
Revised					

ID-4	Correct Illicit Discharges	Board of Health Health Director	No Goal Established for Year One	No action taken in year one.	No Goal Established for Year Two.
Revised					

3a. Additions

ID-5	On-site Wastewater Impacts	Board of Health Health Director	Analyze on-site Wastewater Impacts.	Case study on Impact of Title V issues on communities	No Goal Established for Year Two

4. Construction Site Stormwater Runoff Control

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**
CS-1	Develop/Implement Construction Site Runoff Control Program	Planning Board Town Planner	No Goal Established for Year One.	No action taken in year one.	Begin In-House Assessment of current status of construction site runoff control program.
Revised					
CS-2	Develop/Implement Erosion And Sediment Control Bylaw	Planning Board Town Planner	No Goal Established for Year One.	No action taken in year one.	Begin In-House Assessment of current status of Erosion and Sediment Control Bylaws, Rules And Regulations.
Revised					

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 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
PC-1	Develop/Implement Post Construction Runoff Control Program	Planning Board Town Planner	No Goal Established for Year One	No action taken in year one.	Begin In-House Assessment of current status of Post Construction Runoff Control Program.
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 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2

GH-1	Reporting	Public Works Director of Public Works Board of Health Health Director	Create a method to record storm water activities for Good Housekeeping and all Minimum Control Measures (MCM's)	Forms developed for recording Catch Basin cleaning and Street sweeping activities. Reporting system established for any drainage maintenance or repair work or unusual storm water activity.	6.1 Record all storm water management activities. 6.2 Reassess eligibility criteria 6.3 Provide yearly report as required in the General Permit Part II.F.
Revised					
GH-2	Audit Current Town Facilities	Public Works Director Of Public Works	No Goal Established for Year One	No action taken for year one.	No Goal Established for Year Two
Revised					
GH-3	Operation and Management Program	Public Works Director of Public Works	1.1 Create list of priority outfalls and complete 1st round of outfall cleaning 1.2 Begin tracking records for catch basins cleaned	1.1 Woodard and Curran has developed a prioritized list of identified outfalls for the Town. 1.2 Tracking records for catch basin cleaning has been delayed until forms have been approved.	2.1 Continue to track records for outfalls cleaned. 2.2 Begin tracking records for catch basins cleaned.
Revised					

GH-4	Employee Training	Public Works Director of Public Works	1.1 Conduct a department meeting on pollution prevention 1.2 Generate a list of all prior relevant employee training activities.	1.1 On October 2, 2003 a DPW safety meeting was held with 20 DPW employees regarding the importance of proper hazardous materials/ waste storage, recordkeeping and housekeeping. 1.2	No Goal Established for Year Two
Revised					
GH-5	Recycling Program	Public Works Director of Public Works	Review Current Recycling Program & Determine/Implement changes as needed.	In February of 2004 the Health Department reviewed the current programs for recycling hazardous waste and recommended that the programs continue as presently constituted.	Continue recycling and hazardous waste collection programs.
Revised					

6a. Additions

GH-6	Household Hazardous Waste	Board of Health Health Director	Generate Hazardous Waste Guide	Board of Health developed a Resident's Guide to Hazardous Waste Disposal and distributed it to all residents within the sewer service area.	Continue to distribute Guide to targeted populations within the Town.
GH-7	Outfall Tracking program	Board of Health Health Director	Begin tracking records for outfalls cleaned	Central Massachusetts Mosquito Control Project has begun tracking records for outfalls cleaned.	Continue to track records for outfalls cleaned.

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
TMDL-1	Check Current Impairment List.	Board of Health Health Director	There are No completed studies for receiving waters in Acton.	Annual check of list has confirmed that a Draft Total Maximum Daily Load (TMDL) Report for Total Phosphorus in the Assabet River (Report # MA 82B-01-2004-01) is available for public comment. Implementation of Report is scheduled to begin in the summer of 2004. Review of the draft report has not thus far identified new implementation requirements for receiving waters in Acton.	Check list annually to determine new implementation requirements.
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

1. Stream Monitoring Program
   a. Four rounds of fecal coliform testing in 2003 were conducted at locations in the Fort Pond Brook and Nashoba Brook Watersheds as shown on the map. (see attachment "A")
2. Groundwater Well Monitoring Program
   a. Monthly rounds of water level and nitrate testing in 2003 were conducted within selected watersheds as shown on the map. (See attachment "B")
3. North Acton Recreational Area (NARA) Pond Monitoring
   a. Weekly Ecoli testing was conducted between May and September at NARA to ensure swimming water quality. (See attachment "C")
4. Household Hazardous Waste Day Collection
   a. Residential participation at the September Household Hazardous Waste Day Collections was mapped by watershed. (See attachment "D")
5. 319 Grant
   a. Selected Stormwater discharge points were selected to be analyzed for contaminant levels to determine priority of a site to install a BMP device. (See attachment "E")
6. Alternative Wastewater Treatment Program
   a. The Board of Health has permitted over three dozen alternative treatment systems in environmentally sensitive areas that are required to provide quarterly or annual effluent monitoring results. (See attachment "F")
7. Landfill Groundwater Monitoring Program
   a. The Engineering Department conducts annual groundwater analyses at the former Acton Landfill located at 14 Forest Road (see attachment "G"). Results of the 2003 analyses have not identified any action requirements.
8. Hazardous Material Storage Monitoring Program
   a. The Health Department inspects all commercial facilities that store more than 25 pounds or 25 gallons of hazardous materials or wastes to ensure materials are being stored in proper secondary containment and that releases to the environment are not occurring (see attachment "I").
9. Acton Shoreline Survey
   a. In 1998 OAR conducted a comprehensive shoreline survey of Acton's two major streams, Nashoba Brook and Fort Pond Brook (see schedule "J"). A follow-up shoreline survey is scheduled in the next few years.

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)	