1238

ACTON BOARD OF HEALTH

Douglas Halley
Health Director

472 Main Street
Acton, MA 01720

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

May 15, 2005

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 Acton's second 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: May 04-May 05**

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: Don P. Johnson

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-3 The Town was unable to schedule the Storm Water Poster Contest for youth groups at NARA because the materials provided by SUASCO did not arrive until after the summer programs were complete. Contest will be held in Year 3.

Part 3. ID-3 The Town was unable to obtain a grant from the 604B Water Quality Management Planning Grant to fund the Watershed Health Monitoring And Management Plan. As an alternative the Town will continue to seek and identify grants that would fund the Plan.

Part 6. GH-1 The method to record storm water activities for Good Housekeeping was successfully implemented in Year Two.

Part 6. GH-3 Tracking records for Catch Basins cleaned was successfully implemented in Year Two.

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**
PE-1	Partner w/Local Organization	Board of Health Health Director	Provide financial contribution to Partner w/ SUASCO WCC	On October 21, 2004 Acton was officially accepted into 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.	Continue commitment to participate in the SUASCO Watershed Community Council's "Storm Water Community Assistance Program" for Storm Water Phase II Permit Year 3 from July 2005 to June 2006.
Revised					

PE-2	Develop Public Education Brochures/Flyers	Board of Health Health Director	Prepare/Distribute Storm Water Awareness Survey	The Stormwater Awareness Surveys were distributed at the April 2005 Annual Town Meeting and the September 2004 Hazardous Waste Day.	Two survey respondents will receive Stormwater Umbrellas at a public presentation as thanks for their participation. Stormwater Flyer will be sent out to Community Business'
Revised					
PE-3	Structural BMP Education	Board of Health Health Director	No Goal Established for Year One	Public Information Kiosk completed adjacent to constructed wetland that filters Stormwater to NARA public swimming area.	Opening Celebration for the 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 May 24, 2004 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.	Continue meeting with the Board of Selectman annually with televised replays.
Revised					

1a. Additions

PE-5	Incorporate Stormwater Education into School Lesson Plans	School Curriculum Director/ Health Director	Work with A/B School System to implement Lesson Plan developed by SUASCO	In September 2004 SUASCO delivered Lesson Plan which was than shared with the Curriculum Director for the A/B School System	Implement Stormwater Matters Lesson Plan for 5th or 6th grade.

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
PP-1	Partner with Local Organization	Board of Health Health Director	Provide financial contribution to partner with SUASCO WCC	On October 21, 2004 Acton committed 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.	Continue commitment to participate in the SUASCO Watershed Community Council's "Storm Water Community Assistance Program" for Storm Water Phase II Permit Year 3 from July 2005 to June 2006.
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.	Stormwater Educational Boards have been displayed in the main entrance way to the Town Hall above the Isaac Davis Plow. Display was also 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	Year two action was delayed until year three.	Hold a Storm Water poster contest for Youth Groups at NARA. Hold Stormwater Photo Contest for High School Students.
Revised					

PP-4	Organize Public Meetings/Panels	Board of Health Health Director	Discuss Storm Water at one public meeting every year.	On May 24, 2004 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	Stream Identification Signs placed at stream and street intersections in conjunction with Acton's Stream Team.	Maintain signs.
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*	Now designated as PP-5	
PP-7	*Citizen Involved Storm Water Programs*	OAR Assabet River Stream Watch	Provide Nashoba River Stream Quality Gauge	The Organization for the Assabet River installed and maintained a water quality gauge at Nashoba Brook.	Maintain Public Education Gauge.

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
ID-1	Drainage Mapping	Board of Health Health Director	Prepare draft drainage map with watershed delineations.	Field verified 25% of the existing catch basins and updated Stormwater Map based on the findings of the field verification..	Field verify an additional 25% of the existing catch basins and update Stormwater map based on those findings.
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.	Continue to review Board of Health regulations and recommend modifications that would address illicit discharge issues.
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.	Resubmitted a grant proposal "Watershed Health Monitoring and Management Plan. The grant application was again denied. Investigation and sampling of outfalls to the Assabet River have been delayed until year 3.	Seek alternative grant sources and Resubmit grant proposal for funding of Acton Watershed Health Protection Program to identify potential problem areas. Investigate and sample outfalls to the Assabet River.
Revised					

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

3a. Additions

ID-5	On-site Wastewater Impacts	Board of Health Health Director	Analyze on-site Wastewater Impacts.	No Goal Established for Year Three.	Delete ID-5.

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**
CS-1	Develop/Implement Construction Site Runoff Control Program	Planning Board Town Planner	No Goal Established for Year One.	Planning Board has begun an In-House Assessment of the current status of construction site runoff control Program.	Based on their In-House Assessment the Planning Board will propose regulations that address deficient control of construction site runoff.
Revised					
CS-2	Develop/Implement Erosion And Sediment Control Bylaw	Planning Board Town Planner	No Goal Established for Year One.	Planning Board has begun an In-House Assessment of the current status of the Erosion and Sediment Control Bylaws, Rules and Regulations..	Based on their In-House Assessment of current status of Erosion and Sediment Control Bylaws, Rules And Regulations the Planning Board will modify their regulations accordingly.
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 2** (Reliance on non-municipal partners indicated, if any)	**Planned Activities – Permit Year 3**
PC-1	Develop/Implement Post Construction Runoff Control Program	Planning Board Town Planner	No Goal Established for Year One	Planning Board has begun an In-House Assessment of the Current status of Post Construction Runoff Control.	Based on their In-House Assessment of current status of Post Construction Runoff Control the Planning Board will modify their program accordingly.
Revised					

5a. Additions

PC-2	Municipal Code & Ordinance Analysis	MIT Graduate Student Thesis	Thesis Submittal	MIT Students submitted a Thesis entitled "Encouraging Low-Impact-Development Stormwater-Management Practices: Assabet River Watershed Sub-Basin Case Study". Component of thesis was a Municipal Code & Ordinance Analysis	Public Presentation before the Planning Board of the findings of the thesis.

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
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)	6.1.1 Department of Public Works recorded all Stormwater Management Activities. 6.1.2 DPW reassessed eligibility criteria. 6.1.3 DPW provided a yearly report as required.	6.1.1 Record all storm water management activities. 6.1.2 Reassess eligibility criteria 6.1.3 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 Goal Established for Year Two.	Wastewater Treatment Facility will conduct and audit and submit a report.
Revised					
GH-3	Operation and Management Program	Public Works Director of Public Works	6.3.1 Create list of priority outfalls and complete 1st round of outfall cleaning 6.3.2 Begin tracking records for catch basins cleaned	6.3.1 Health Department in conjunction with DPW and MMCP tracked outfalls cleaned. 6.3.2 Health Department in conjunction with DPW tracked catch basins cleaned.	6.3.1 Continue to track records for outfalls cleaned. 6.3.2 Continue to track records for catch basins cleaned. 6.3.3 Begin measurable schedule for street sweeping.
Revised					

GH-4	Employee Training	Public Works Director of Public Works	6.4.1 Conduct a department meeting on pollution prevention 6.4.2 Generate a list of all prior relevant employee training activities.	6.4.2 Continue to track all training activities for DPW Personnel.	No Goal Established for Year Three.
Revised					
GH-5	Recycling Program	Public Works Director of Public Works	Review Current Recycling Program & Determine/Implement changes as needed.	Town instituted a Life After NESWC Committee to determine trash and recycling programs for the Town. Hazardous Waste Day was held twice.	Life After NESWC will recommend courses of action to June Town Meeting.
Revised					

6a. Additions

GH-6	Household Hazardous Waste	Board of Health Health Director	Generate Hazardous Waste Guide	Board of Health distributes Guide to all targeted populations within the Town.	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	Implemented as part of 6.3.2.	Delete GH-7.

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.	Draft Total Maximum Daily Load (TMDL) Report for Total Phosphorus in the Assabet River (Report # MA 82B-01-2004-01) was made available for public comment. Implementation of Report has only partially begun. Draft report has not 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 2004 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 2004 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 May and September Household Hazardous Waste Day Collections was mapped by watershed. (See attachment "D")
5 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 "E")
6 Promote and Distribute Environmental Maps
   a. The Department of Environmental Protection provided a "Guiding Land Conservation for Biodiversity in Massachusetts and "Guiding the Protection of Freshwater Biodiversity in Massachusetts maps (see attachment "F"). Maps have been placed on the Town's web site and used as an educational tool.
7. 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 "G").
9. Acton Shoreline Survey
   a. The 1998 OAR comprehensive shoreline survey of Acton's two major streams, Nashoba Brook and Fort Pond Brook has been placed on the internet for access by residents (see schedule "H"). 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)	