

Municipality/Organization: Town of Ayer

EPA NPDES Permit Number: MA 04-1179

MaDEP Transmittal Number: W- 040750

**Annual Report Number
& Reporting Period:** No. 6: May 1, 2008 – April 30, 2009

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Daniel F. Nason, CPESC, CPSWQ **Title:** DPW Superintendent

Telephone #: 978-772-8240 **Email:** dpwsupt@ayer.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: Cornelius F. Sullivan

Title: Chairman, Board of Selectmen

Date: 4/28/09

Part II. Self-Assessment

The Town of Ayer, Massachusetts has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions. As discussed in previous reports, the previous Town Administrator, Anita Scheipers left the Town of Ayer at the end of Year 2. Ms. Scheipers was heading up the Town's Stormwater Management Program (SWMP) at that time; therefore, little action was taken on the planned activities during that permit period. Michael Madigan, DPW Superintendent, was assigned the responsibility of handling the Stormwater Management Program for the Town of Ayer in April 2006. In Year 4, Mr. Madigan began to coordinate efforts to reform the previously established Stormwater Committee and distribute the level of effort for the SWMP moving into Permit Year 5. The Stormwater Committee was re-established and the Town made significant progress in Year 5. Michael Madigan left the Town of Ayer during Permit Year 6; therefore, little action was taken on the planned activities during the permit period. Daniel F. Nason, DPW Superintendent, was assigned the responsibility of handling the Stormwater Management Program for the Town of Ayer in February 2009 and began coordinating tasks to complete the planned activities.

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 6	Planned Activities – Next Permit Term
PE1 Revised	Educational materials	DPW	Create educational flyers re stormwater Distribute flyers to residents at two or more events	Posters were displayed in the Town Hall, DPW Office and Library as well as displayed at Town Meetings in Oct 08 and Spring 09. The Phase II Stormwater Bylaw and Illicit Discharge Bylaw were distributed and made available at the Annual Town Meeting in May 08.	Continue to display posters and make pamphlets available at public places. Begin to track the amount of materials distributed at each location/event. Contact SuAsCo Watershed Community Council to discuss their Stormwater Community Assistance Program.
PE2 Revised	Cable TV info spots	DPW	Create 1 infomercial about stormwater by 5/06 Summer 2007	Stormwater videos available with EPA were reviewed.	Dedicate a spot for broadcasting stormwater information and/or an EPA educational video on local TV by Summer 2009.
PE3 Revised	Drain Stenciling	DPW	Stencil storm drains by 5/06 25% of storm drains marked by Fall 2007	Approximately 63 storm drains were marked in Town.	Continue to complete markers in high and medium priority sub-basins.
PE4 Revised	Lawn Care Workshops	SWSC/DPW	Hold 1 workshop by 5/07	No lawn care workshops were held during this permit year.	No further action is planned at this time. Will look into additional workshops for next permit term.
PE5 Revised	Educational Displays on stormwater mgt	SWSC/DPW	Create 1 display for use at town functions by 5/08	Posters were displayed in the Town Hall and Library as well as displayed at Town Meetings in Oct 08 and Spring 09.	Continue to update and display posters at public places. Develop a stormwater display through the Stormwater Committee and use at Town functions.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6	Planned Activities – Next Permit Term
PP1 Revised	Establish Committee	Board of Selectmen	Est. committee by 11/03 July 2007	Under the supervision of the previous DPW Superintendent the Stormwater Committee met to discuss the Draft NPDES Phase II Stormwater Regulations. The new DPW Superintendent met with the ConCom agent in February 2009 to discuss stormwater related issues.	Committee will continue to meet on stormwater issues and coordinate for the completion of BMP tasks. The Committee will meet to discuss the Phase II Stormwater Bylaw and each member's role in implementation and enforcement of the stormwater regulations.
PP2 Revised	Public Info Meetings	SWSC	2 meetings in 2004 2 meetings in 2007 & # of people attended	The Phase II Stormwater Bylaw and Illicit Discharge Bylaw were distributed and made available at the Annual Town Meeting in May 08.	Continue to hold Public Info Meetings related to stormwater issues.
PP3 Revised	Annual Roadside Cleanup	SWSC/DPW	Schedule 1 cleanup day by 4/05 1 cleanup by Fall 2007, # participants	An area wide Town Cleanup was held on 4/25/09. Approximately 70 residents participated. A town volunteer, who also heads the Recycling Committee, has been coordinating the program.	Continue to organize resident roadside cleanup activities.
PP4 Revised	Establish neighborhood watch groups Establish a Stormwater Hotline	SWSC/DPW	Create 4 groups by 4/06 Hotline established, # calls received & follow-up actions	Stormwater Hotline is advertised on local TV. 1 call was received regarding a local restaurant dumping into a storm drain. The restaurant was reprimanded by the Town Administrator.	Continue to record calls and follow-up actions to address stormwater issues.
PP5 Revised	Reforestation Native Tree Replanting Program	ConsCom And Tree Warden	Establish plan to require/encourage planting of cleared areas	Options to establish a native tree replanting program in sensitive resource areas were evaluated. ConsCom requires native tree/shrub species to be planted based upon specific wetland permits on a need basis.	Evaluate program needs/funding and solicit participation from the local Garden Club and residents. Conduct replanting activities as the program develops.

2a. Additions

PP6	Hazardous Waste Collection Program	Ayer Recycling Committee	Conduct yearly hazardous waste collection day (HWCD)	Household hazardous waste collections were co-sponsored with the North Central Regional Solid Waste Cooperative at Devens on May 3, 2008 and Lunenburg on September 27, 2008. Approximately 1,000 pounds of hazardous waste was collected from Ayer residents over the two events. The Ayer Transfer Station collected 4,840 gallons of waste oil in 2008.	Continue to sponsor and advertise hazardous waste collections and incorporate information on illegal dumping. Continue tracking resident participation. Events are scheduled for May 2 nd and Sept. 26 th 2009.
Revised					
PP7	Mercury Waste Collection for Residents	Ayer Recycling Committee & DPW	Make mercury waste collection available to residents, # materials collected	Information related to the collection of mercury product at the Transfer Station was advertised on the DPW web page. The Town is also working with Covanta to collect mercury products by setting up collection boxes at the local Aubuchon Hardware store and Transfer Station. 323 various bulbs, 17-4” thermometers, 31 thermostats, and 9,280-feet of straight bulbs have been collected. Posters are on display at the Transfer Station and the DPW Office.	Continue to make mercury waste disposal available to residents and begin tracking materials collected.
Revised					

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
ID1	System Mapping	DPW	Complete system map by 3/05	The Town has updated the drainage map with the identification of all known and visible catch basins and outfalls.	Continue to update the drainage map as structures are located (if any unidentified structures still exist), and as new developments are constructed.
Revised	Drainage System Mapping		9/06		
ID2	ID illicit discharges	DPW	Conduct inspections by 11/05	No obvious illicit discharges were found.	Individuals responsible for outfall inspections will be trained to search for dry weather flows, odors and strange colors, as well as fill out a field inspection sheet for each outfall. Outfall inspections for potential illicit discharges will continue.
Revised	Screen Outfalls for Illicit Discharges	Volunteer & Consultant	Record of inspections & follow-up actions		
ID3	Prohibit illicit discharges	DPW/BoH	Establish regulatory mechanisms to prohibit by 4/06	The Illicit Discharge Bylaw was adopted at the May 2008 Annual Town Meeting.	No further action needed.
Revised	Develop a Local Illicit Discharge Prohibition		Spring 2008		
ID4	Cost of illicit discharges	DPW	Plan for removal options	No illicit discharges were found.	Develop methods and funding options for removal of illicit discharges.
Revised	Illicit Discharge Removal Options				
ID5	Eliminate illicit discharges	DPW	Show # of re-routed connections	No illicit discharges were found during this permit year.	Remove illicit discharges as they are identified.
Revised			Illicit discharges removed within 1 year of discovery		

3a. Additions

ID6	Public Education for Illicit Discharges	SWSC & DPW	Distribute education materials at least annually	As discussed in BMP PE1, the Phase II Stormwater Bylaw and Illicit Discharge Bylaw were distributed and made available at the Annual Town Meeting in May 08. The Bylaws were also available at the DPW Office; advertisements of their availability are on local TV, the town website and at the Town Hall.	Continue to incorporate illicit discharge information into existing public education and outreach topics. Develop/adapt educational materials to target all types of illicit discharges.
Revised					

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
CRC1	Establish water quality benchmarks	DPW	Develop score sheet and do Rd 1 of testing	The Stormwater Bylaw was adopted at the May 2008 Annual Town Meeting.	See BMP CRC4.
Revised	Select Existing Water Quality Criteria		Water quality criteria selected	This Bylaw included criteria/requirements to address water quality.	
CRC2	Site Inspection Criteria	DPW	Develop site inspection criteria by 5/05	Water, Sewer, and Highway Departments conduct inspections on all of their projects. Consultants were called approximately a dozen times for on call inspection services. A standardized inspection form was developed.	Continue to inspect all sites. Continue to update inspection form as needed. Develop a logging method for inspection forms. Log issues and corrective actions taken.
Revised			Standardized inspection form		
CRC3	Staff training re site inspections	DPW	Train all applicable staff by 5/06	No additional training took place during this permit year.	Continue to train staff as needed.
Revised			Training program & record of staff trained		
CRC4	Tighten regulatory controls	DPW/ConsCom	Review existing regs and propose updates as needed by 5/06	The Stormwater Bylaw was adopted at the May 2008 Annual Town Meeting. Draft regulations were developed to accompany the bylaw.	The Stormwater Committee will meet to discuss the regulations and each member's role in implementation and enforcement. Present the draft regulations to the Planning Board for review and adoption.
Revised	Develop Requirements for Sites >1 acre		Spring 2008		
CRC5	Maximum compliance	DPW	Achieve overall compliance	Erosion and sediment control issues were identified and addressed by the appropriate Town department.	Continue to address erosion and sediment control issues and record corrective actions.
Revised	Erosion & Sediment Control Compliance		Record of inspections & follow-up actions		

4a. Additions.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
CRC6	Construction Waste Mgt	DPW/Building Dept.	# of inspections in 2006	Inspections at on-going construction sites were completed and construction waste was controlled as needed. Waste control requirements were adopted within the bylaw for construction site erosion control under BMP CRC4.	Coordinate inspections with BMPs CRC2 and CRC5.
Revised			Record of inspections & follow-up actions		
CRC7	Establish a Procedure for the Receipt of Information Submitted by the Public	SWSC/DPW	# of issues reported, record of enforcement actions	No calls were received during the permit term regarding Construction Site Stormwater Runoff. The Stormwater Hotline number was also advertised on local TV.	Continue to log calls and address construction site erosion issues.
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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
RC1	ID BMPs	DPW/ConsCom /Planning Board	Review existing regs and draft new as needed by 12/05	The Stormwater Bylaw was adopted at the May 2008 Annual Town Meeting. This Bylaw included criteria/requirements to address BMP design. Draft regulations were developed to accompany the bylaw.	The Stormwater Committee will meet to discuss the regulations and each member's role in implementation and enforcement. Present the draft regulations to the Planning Board for review and adoption.
Revised	Incorporate BMP Design Criteria		Fall 2007		
RC2	Acceptance of new regs/bylaws as needed	DPW/ConsCom /Planning Board	Codify new by 5/06	The Stormwater Bylaw was adopted at the May 2008 Annual Town Meeting.	See BMP RC1.
Revised	Develop Requirements for Sites >1 acre		Spring 2008		
RC3	Construction Waste Mgt	This BMP was removed from this section and added to Section 4, under BMP CRC6 to be consistent with the requirements for construction site management.			
Revised					
RC4	Evaluate Water Quality	DPW	Round 2 of testing	The Stormwater Bylaw was adopted at the May 2008 Annual Town Meeting. This Bylaw included criteria/requirements to address water quality.	See BMP RC1.
Revised	Select Existing Water Quality Criteria		Water quality criteria selected		

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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
GH1 Revised	Survey facilities and existing practices, etc	DPW	Do self survey	Municipal industrial facilities were reviewed for pollution prevention practices. Hazardous wastes and materials are contained and stored indoors to avoid stormwater contact. Through Bid process a Contractor was hired by the Town to remove and dispose of abandoned vehicles and scrap metal from the DPW yard. Contractor was hired by the Town to completely remove the catch basin cleanings stockpile in the DPW yard. The Sewer Dept. has inspected the o/w separator located within the DPW yard under the supervision of the DPW Superintendent.	Continue existing pollution prevention practices at municipal facilities. Continue to utilize Contractor to remove catch basin cleanings from DPW stock yard. Continue to inspect and maintain oil/water separator as needed, use inspection form and log findings.
GH2 Revised	Develop training manual	DPW	Create manual by 12/04	An inspection curriculum was previously developed. SPCC, SWPPP, and Environment Operation Procedures manuals are in use.	Continue to use the current manuals for pollution prevention and good housekeeping activities.
GH3 Revised	Train Employees	DPW	Train ALL staff by 5/05 Incorporate new training topics	No additional training took place during this permit year.	Continue DPW employee training for pollution prevention and good housekeeping.
GH4 Revised	Implement maintenance schedule	DPW	Implement veh and facilities maintenance schedule by 5/06	Maintenance schedules were updated.	Ensure maintenance schedules are maintained to minimize potential stormwater impacts.
GH5 Revised	Evaluate Program	DPW	ID of facilities with controls in place by 5/07 Fall 2007	DPW reviewed the need to update existing facility planning and training documents. Funding for updates was evaluated.	Re-evaluate municipal facilities and operations and develop/implement BMPs as needed and as appropriate.

6a. Addition

GH6	Municipal Facility Plans	DPW	Compliance with SWPPP & SPCC Plans	The Town maintained the SWPPP for the Wastewater Treatment Facility and SPCC Plan for the DPW Facility. The plans assist with pollution prevention at these facilities.	Ensure compliance with the facility plans at the Wastewater Treatment Plant and DPW Facility.
Revised					

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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
7.1	TMDL study	Department of Defense; NRWA		The Town discussed developing a strategy to meet the TMDL considering existing actions under the Phase II stormwater management program and available resources. The next steps for developing a water quality strategy are pending the reissuance of the Phase II Permit.	Review the pending Phase II Permit and develop an implementation strategy to meet the TMDL that considers the goals of the TMDL, available resources, actions currently being undertaken by Ayer and actions by others under the MA DEP RIA Permit.
Revised	Evaluate TMDL Studies & Status of Town BMPs to Address Impaired Waters	SWSC/DPW	Review Memo and Recommended Next Steps		
Revised					

Part IV. Summary of Information Collected and Analyzed

The Town has nearly completed the town-wide drainage system map, including outfall locations. Approximately 800 structures and 50 outfalls have been identified based on recent efforts to update the drainage map.

Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted	Adopted
Regulatory Mechanism Status (indicate with "X")				
▪ 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	(%)	95%
Estimated or actual number of outfalls	(#)	50
System-Wide mapping complete	(%)	95%
Mapping method(s)		
▪ Paper/Mylar	(%)	95%
▪ CADD	(%)	90%
▪ GIS	(%)	
Outfalls inspected/screened	(# or %)	0
Illicit discharges identified	(#)	0
Illicit connections removed	(#) (est. gpd)	
% of population on sewer	(%)	97%
% of population on septic systems	(%)	3%

Construction

Number of construction starts (>1-acre)	(#)	2
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	(#)	0

Post-Development Stormwater Management

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

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	1/yr
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1/yr
Total number of structures cleaned	(#)	800
Storm drain cleaned	(LF or mi.)	
Qty. of cleanings /debris removed from storm sewer infrastructure	(lbs. or tons)	200-300 tons
Disposal or use of cleanings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Removed by outside Contractor
Cost of cleanings disposal	(\$)	29.50 / ton
Qty. of cleanings /debris removed from stockpile at the DPW yard (not only this permit year, but from the stockpile which had been accumulating for years)	(lbs. or tons)	520 tons

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	1/yr
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	15/yr
Qty. of sand/debris collected by sweeping	(lbs. or tons)	Unknown

Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Store, then dispose of
Cost of sweepings disposal	(\$)	29.50 / ton
Vacuum street sweepers purchased/leased	(#)	N/A
Vacuum street sweepers specified in contracts	(y/n)	N/A

Reduction in application on public land of: (“N/A” = never used; “100%” = elimination)		
▪ Fertilizers	(lbs. or %)	N/A
▪ Herbicides	(lbs. or %)	N/A
▪ Pesticides	(lbs. or %)	N/A

Anti-/De-Icing products and ratios	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand	3 parts sand to 1 part salt
Pre-wetting techniques utilized	(y/n)	N
Manual control spreaders used	(y/n)	Y
Automatic or Zero-velocity spreaders used	(y/n)	N
Estimated net reduction in typical year salt application	(lbs. or %)	0%
Salt pile(s) covered in storage shed(s)	(y/n)	Y
Storage shed(s) in design or under construction	(y/n)	N