

Municipality/Organization: Town of Ayer

EPA NPDES Permit Number: MAR04-1179

MaDEP Transmittal Number: W- 040750

Annual Report Number

& Reporting Period: **No. 12: May 1, 2014 -April 30, 2015**

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Mark Wetzel, P.E.

Title: Superintendent of Public Works

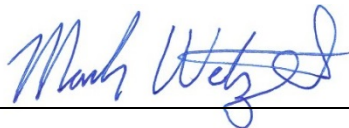
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Certification:

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: Mark Wetzel, P.E. , CPSWQ

Title: Superintendent, Department of Public Works

Date: April 29, 2015

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.

The Superintendent of Public Works directly managed the stormwater program with various Town Departments, as needed, to implement each of the BMPs. The DPW maintains the stormwater hotline and stormwater information on their website (http://www.ayer.ma.us/Pages/AyerMA_DPW/AyerMA_stormwater/index).

The Town would like to note the following additional activities and progress during the Year 12 reporting period:

- Ayer has been designated a “Green Community” of the Commonwealth of Massachusetts since July 2011. A Green Community Committee was established by the Board of Selectmen to investigate opportunities to develop programs and projects to foster energy conservation, energy efficiency, renewable energy generation and sustainability planning throughout the community. The Committee meets on a regular basis and members have been focused on energy savings, energy conservation, energy efficiency, renewable energy generation and sustainability planning throughout the community. The Committee shall develop and recommend approaches for influencing the town residents and businesses to maximize their environmental sustainability through educational outreach, information programs and incentives. During the permit year, the Town installed variable frequency drives (VFDs) at well pumping stations to reduce energy consumption.
- The Town’s Stormwater Committee met 4 times during the permit year and has been focused on establishing a Stormwater Utility in Ayer. The committee is also exploring Low Impact Development (LID) and other Green Infrastructure concepts for stormwater and infrastructure management.
- In Year 12, VHB, Inc. continued to assist the town with development of a stormwater utility. In Year 11, the initial phase of the stormwater utility implementation was completed including development of operating and capital budgets, evaluation of potential rate structures and impervious cover analysis and calculations. Based on the potential rate structures provided by VHB, the Town’s Stormwater Committee recommended a rate structure based on the average residential property impervious area (ERU). Non-residential and multi-family residential would be based on equivalent ERUs. The Stormwater Committee presented the proposed rate structure at a public hearing on February 24, 2015. After conclusion of the public hearing, the Board of Selectmen passed a motion to fund stormwater through the general fund and not through the rate structure as an enterprise fund. The dissolving of the stormwater enterprise fund will be opened for discussion at the Annual Town Meeting on May 11, 2015.
- “A Cleaner Ayer”, an area wide Cleanup, which is usually completed in one day, was conducted on April 25 and 26, 2015. 51 residents participated and approximately 12-15 cubic yards of trash was collected and approximately 7 cubic yards of recycling was collected.
- Geosyntec Consultants have been retained by the Town to conduct an assessment of Pine Meadow Pond, Flannagan Pond, Sandy Pond, Long Pond, Balch Pond, and Grove Pond; including aquatic vegetation surveys, water quality sampling, pollutant loading analysis, aquatic vegetation management, and a risk evaluation for secondary recreation contact (Grove Pond only).

The pond assessment is ongoing and should be completed during the next reporting year. Additionally, the Massachusetts

Department of Transportation (MassDOT) had a Phase 2 Dam Evaluation performed on the Balch Pond Dam and will be providing a copy of the evaluation report to the Town.

- The Town continued to institute the “Commonwealth Connects” program that includes a mobile application for citizens to log a service request for the Highway Department. Using the smartphone application available for download through the Town’s website, citizens can log a service request with the location and need (e.g., pothole, collapsed storm grate). The DPW is notified of the service request and a date of service is entered based on the urgency of the issue to indicate when the repair will be made. All logged service requests are tracked on the DPW on-line viewer and the DPW has found the mobile application to be a very effective and efficient tool to address citizen complaints and maintenance needs.
- The Town began evaluating improvements to the Main Street Corridor, from the rotary (Frederick Carlton Circle) to the Devens Town line, which includes streetscape reconstruction and evaluation of LID approaches for stormwater management. This evaluation is part of the recommendations from the Main Street Corridor Streetscape Plan. Most recently, the Town hired a consultant to design the reconstruction of East Main Street, from Harvard Road to Main Street. The Town is working to fund the project through the MassDOT Transportation Improvement Program (TIP).

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 12	Planned Activities – Next Permit Term
PE1	Educational materials	DPW	Create educational flyers re stormwater	DPW adapted existing materials available through EPA’s website. Posters, brochures, fact sheets, bookmarks and a crossword puzzle were distributed or displayed at the DPW office, Library, Town Hall and Schools based on the audience. Created handouts and door-hangers for educating a neighborhood that experienced a dog waste management issue. The flyers advised not to put waste in the storm drains and the environmental consequences of these actions. This information was also posted on the Town’s website and sent out to residents in an “e-mail blast”. DPW is currently creating new handouts for the next permit year and will begin to track the take-away of these materials in the future.	Continue to display existing materials and evaluate the need for additional or new educational materials to address specific behaviors and target audiences. Track the distribution of take-away materials.
Revised			Distribute flyers to residents at two or more events; create a stormwater webpage	DPW maintained a “Stormwater Information” webpage under the DPW home page which includes links to stormwater fact sheets and the Stormwater Hotline number. Town instituted “Commonwealth Connects” program. Town web page also has a service request form for citizens to log and track stormwater issues. Carbon copies of each service request are stored and tracked under the highway department.	Evaluate a tracking system for calls to the Stormwater Hotline. Continue using the “Commonwealth Connects” program to track service requests. Consider tracking service requests on GIS system when the GIS system is completed in the future.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	Planned Activities – Next Permit Term
PE2	Cable TV info spots	DPW	Create 1 infomercial about stormwater by 5/06	The 10 copies of the EPA video “After the Storm” were still available for viewing at the Town Hall, Library and School Department. DPW maintained “monthly tips” for stormwater education on the DPW Stormwater Information webpage. Public hearings that included stormwater issues and stormwater presentations were aired on the cable channel.	Continue to communicate with the Library, School Department, and Cable Access Channel ways in which they can use the video and promote its use to raise public awareness. Consider tracking numbers of times “After the Storm” is rented.
Revised			Summer 2007		
PE3	Drain Stenciling	DPW	Stencil storm drains by 5/06	In Permit Year 12, DPW marked a total of 39 storm drains. DPW maintains a list of marked storm drain locations. Storm drains are re-stenciled as needed in the next permit year. In previous years, DPW stenciled and/or marked storm drains for a total of over 800 storm drains. Storm drains will be re-stenciled as needed in 2015.	Continue to refresh stencils and markers as needed. Maintain a database of marked locations.
Revised			25% of storm drains marked by Fall 2007		
PE4	Lawn Care Workshops	SWSC/DPW	Hold 1 workshop by 5/07	Completed in 2007. No workshops were conducted in Year 12.	Workshops are planned to occur in spring 2015.
Revised					
PE5	Educational Displays on stormwater mgt	SWSC/DPW	Create 1 display for use at town functions by 5/08	Various materials were displayed/updated at the Town Hall, DPW, Library and schools (see BMP PE 1). The DPW was unable to give a talk to classes at the Page Hill Elementary School in May 2014 due to a conflict with the school’s curriculum. DPW began working with the Page Hill Elementary School to conduct this event in spring 2015.	Continue to update and/or refresh posters/materials annually and continue to display them at public places. The DPW will attempt to schedule a talk for classes at the Page Hill Elementary School in spring 2015, with information on stormwater including a demonstration with the stormwater model. Continue to evaluate additional opportunities/events to display educational materials. Incorporate stormwater model with classroom education programs.
Revised					

1a. Additions

None at this time.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	Planned Activities – Next Permit Term
PP1	Establish Committee	Board of Selectmen	Est. committee by 11/03	In Permit year 11, the Stormwater Committee members (DPW, Conservation, Industry and Residents) met 6 times during the permit year and continued work to implement the stormwater utility program. As discussed previously, the Stormwater Committee presented the proposed rate structure at a public hearing on February 24, 2015. After conclusion of the public hearing, the Board of Selectmen passed a motion to fund stormwater through the general fund and not through the rate structure as an enterprise fund. The dissolving of the stormwater enterprise fund will be opened for discussion at the Annual Town Meeting on May 11, 2015.	The Stormwater Committee will continue to evaluate and support the implementation of the stormwater utility and stormwater management program, pending the outcome of the May 11, 2015 Town Meeting.
Revised			July 2007	Ayer was designated a “Green Community” of the Commonwealth of Massachusetts in July 2011. A Green Community Committee was established by the Board of Selectmen to investigate opportunities to develop programs and projects to foster energy conservation, energy efficiency, renewable energy generation and sustainability planning throughout the community. During the permit year, the Town installed variable frequency drives (VFDs) at well pumping stations to reduce energy consumption.	The Green Community Committee will evaluate opportunities to include sustainable practices throughout the community, including stormwater management and water conservation. DPW will continue to coordinate directly with Town Departments for BMP tasks.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	Planned Activities – Next Permit Term
PP2 Revised	Public Info Meetings	SWSC/DPW	2 meetings in 2004 One meeting annually, # of people attended	The Dam and Pond Committee held monthly meetings that were posted at the Town Hall in accordance with state regulations. DPW presented the stormwater program and utility at the following meetings: • presented to large commercial industrial users (~8 attendees) • presented to Board of Selectmen (~16 attendees) • presented at stormwater utility public hearing (~15 attendees)	Continue to provide adequate public notice and host Public Informational Meetings annually to discuss stormwater issues and needs, including funding. Continue to track the number of attendees at each meeting.
PP3 Revised	Annual Roadside Cleanup	SWSC/DPW	Schedule 1 cleanup day by 4/05 1 cleanup annually, # participants	“A Cleaner Ayer”, an area wide Cleanup was conducted April 25 and 26, 2015. Similar to years past, 51 residents participated collecting ~15 cubic yards of trash and ~7 cubic yards of recycling. Laurie Sabol, a town volunteer who also heads the Recycling Committee, coordinated the program. An article with the results of the cleanup event was published in the Ayer Public Spirit and on the Town’s website. In past years, the Middlesex House of Corrections conducted roadside cleanups a few times during the year. This was not available to the Town in Permit Year 12.	Continue to organize at least one cleanup activity annually and track participation and volume collected. Consider streams and additional priority cleanup priority areas.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	Planned Activities – Next Permit Term
PP4	Establish neighborhood watch groups	SWSC/DPW	Create 4 groups by 4/06	The Stormwater Hotline was advertised on local TV and posted on the “Stormwater Information” webpage under the DPW home page.	Continue to promote the hotline through the web page, local TV, and stormwater educational materials.
Revised	Establish a Stormwater Hotline		Hotline established, # calls received & follow-up actions		Continue to record calls and follow-up actions to address stormwater issues.
PP5	Reforestation	ConCom	Establish plan to require/encourage planting of cleared areas	Currently there is no funding source for a native tree replanting program, but a tree planting program is currently being considered for next permit year.	Continue to evaluate potential program funding sources and complete projects as opportunities arise.
Revised	Native Tree Replanting Program	And Tree Warden		ConCom requires native tree/shrub species to be planted to fulfill the requirements of specific wetland permits. Work was completed at the Balch Pond Dam to remove dead trees and prepare the area for plantings to support reforestation/restoration.	

2a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	Planned Activities – Next Permit Term
PP6	Hazardous Waste Collection Program	Ayer Recycling Committee	Conduct yearly hazardous waste collection day (HWCD)	The Town continued to participate with the 9 communities in the Devens Region for the “Devens Regional Household Hazardous Products Collection Program” that is open to Ayer residents twice a month. The transfer station also accepts oil and antifreeze at this time.	Conduct hazardous waste collections as part of the regional program and incorporate/advertise information to prevent illegal dumping.
Revised				55 Ayer residents and small businesses delivered 3,750 lbs of HHW from May 2014 through April 9, 2015.	Continue tracking Ayer resident participation and waste collection results.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	Planned Activities – Next Permit Term
PP7	Mercury Waste Collection for Residents	Ayer Recycling Committee & DPW	Make mercury waste collection available to residents, # materials collected	Posters were displayed to raise awareness of mercury collection at the Transfer Station and the DPW Office. Information related to the collection of mercury products at the Transfer Station was advertised on the DPW web page. The Town continued to work with Covanta to collect mercury products by setting up collection boxes at the local Aubuchon Hardware store and Transfer Station. Approximately 1,639 grams of mercury were reclaimed from Ayer residents at the Devens HHW and Transfer station. This amount is based on the following materials collected: • 19 thermometers • 36 thermostats • Elemental mercury • 13 HID bulbs • 244 U-Tubes • 282 CFL bulbs • 8060 feet of florescent bulbs • 500 grams of batteries	Continue to promote mercury waste collection boxes through posters and the DPW web page. Continue to track results of mercury collection activities.
Revised					

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	Planned Activities – Next Permit Term
ID1	System Mapping	DPW	Complete system map by 3/05	The Town previously updated the drainage map with all known and visible catch basins and outfalls. The Town worked with the Montachusett Regional Planning Commission (MRPC) to map parcels and impervious cover in October 2012. The MRPC is in the process of mapping the stormwater collection and outfall system using GPS equipment. 90-95% of the outfalls have been mapped using GPS equipment. Drafting of GPS maps for connectivity is 50% complete and will be done by summer 2015.	Complete the storm drain system map to show the connections between drainage structures and outfalls. Continue to update the drainage map as structures are located and as new developments are constructed.
Revised	Drainage System Mapping		9/06		
ID2	ID illicit discharges	DPW	Conduct inspections by 11/05	One (1) illicit discharge occurred in Year 12 –The Town was notified of pet waste being disposed into storm drains in a local neighborhood. DPW investigated the problem and began notifying the neighborhood through flyers and door-hangers to inform the residents of the environmental issues this waste can cause. They also posted this information on the Town’s stormwater website and sent out an “e-mail blast” to the neighborhood residents. The matter was resolved and is being monitored. Field investigations and outfall and catch basin inspections were implemented during this permit year. Catch basin cleanings are recorded on an iPad app including any potential illicit discharges. Training for new staff on how to conduct dry weather inspections using the existing SOP and refresh training annually for staff was completed in permit year 12.	Train new staff on how to conduct dry weather inspections using the existing SOP and refresh training annually for all staff. Continue outfall inspections on iPad app for potential illicit discharges. Continue to track materials from catch basin cleanings and note any suspect illicit discharges.
Revised	Screen Outfalls for Illicit Discharges	DPW	Record of inspections & follow-up actions - we have implemented a mobile data form for inspections		

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	Planned Activities – Next Permit Term
ID3	Prohibit illicit discharges	DPW/BoH	Establish regulatory mechanisms to prohibit by 4/06 Spring 2008	The Illicit Discharge Bylaw (Article XLVII of the General Bylaws) was adopted in May 2008.	No further action needed.
Revised	Develop a Local Illicit Discharge Prohibition			The Town amended the Bylaw at the October 25, 2011 Special Town Meeting to revise language related to enforcement.	
ID4	Cost of illicit discharges	DPW	Plan for removal options	See BMP ID2. The cost of the illicit discharge removal was not tracked. Culvert inspection was also done in permit year 12.	Address illicit discharges as they are discovered. Continue inspecting culverts.
ID5	Eliminate illicit discharges	DPW	Show # of re-routed connections	See BMP ID2.	Address illicit discharges as they are discovered.
Revised	Illicit Discharge Removal Options		Illicit discharges removed within 1 year of discovery		

3a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	Planned Activities – Next Permit Term
ID6	Public Education for Illicit Discharges	SWSC & DPW	Distribute education materials at least annually	The “Stormwater Information” webpage under the DPW home page continued to include information related to illegal dumping, associated impacts to waterways, and the Stormwater Hotline. Information targeting a variety of types of illicit discharges is presented in the various education materials discussed under BMP PE1. Flyers and door-hangers were distributed to the neighborhood with pet waste dumping into storm drain issues. Along with the flyers and door-hangers notifying the residents of the illicit discharge violation, the DPW posted information on the Town’s website not to throw pet waste into storm drains and also sent an “email blast” to the residents of that particular neighborhood where the problem was most prevalent.	Continue to promote the use of the Stormwater Hotline to report illicit discharges in an educational brochure distributed to residents, at public events, and public places.
Revised					

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	Planned Activities – Next Permit Term
CRC1	Establish water quality benchmarks	DPW	Develop score sheet and do Rd 1. of testing	The Stormwater Bylaw (Article XLVII of the General Bylaws) was adopted in May 2008. This Bylaw included criteria/requirements to address water quality. The Town amended the Bylaw on October 25, 2011 to revise language related to exempt activities and enforcement.	See BMP CRC4.
Revised	Select Existing Water Quality Criteria		Water quality criteria selected		
CRC2	Site Inspection Criteria	DPW	Develop site inspection criteria by 5/05	Water, Sewer, and Highway Departments conduct inspections on all of their projects using the standardized inspection form. Water, Sewer, and Highway Departments also conducted inspections of the Ayer-Shirley Regional High School construction project and the Pingree Hill development project. Note that the Pingree Hill project is administered by the Conservation Commission but inspected by DPW. The Town's consultant conducted an inspection for a subdivision off of Willow Road. Information collected in the inspection forms and reports is continuously entered into the Town GIS. Electronic versions of the reports will be implemented for more frequent inspections and automatic upload into the GIS system.	Continue to inspect all sites, review the inspection form and update as necessary. Continue to use an electronic version of the reports for more frequent inspections and automatic upload into the GIS system.
Revised			Standardized inspection form		

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	Planned Activities – Next Permit Term
CRC3	Staff training re site inspections	DPW	Train all applicable staff by 5/06	Staff are trained on site inspections. A grant was received to continue ongoing training for DPW staff (see BMP GH3).	Continue to update training annually for all staff using existing curriculum, through joint training sessions or outside resources.
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 draft regulations to be implemented under the Stormwater Bylaw were updated by the Stormwater Committee and remain under consideration by the Committee.	Continue to push the draft regulations forward through the Planning Board.
Revised	Develop Requirements for Sites >1 acre		Spring 2008		
CRC5	Maximum compliance	DPW	Achieve overall compliance	No erosion and sediment control issues were identified. DPW will continue to evaluate best practices to track erosion and sediment control activities performed by the Town.	Continue to inspect and 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 12	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.	Continue to coordinate inspections with BMPs CRC2 and CRC5 and record corrective actions.
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	1 call was received for the development construction at Pingree Hill. This issue was reported to the Conservation Commission who then dealt with the issue.	Continue to log calls and address construction site erosion issues.
Revised				Typically the Conservation Commission receives calls regarding sites subject to the Wetlands Protection Act. DPW reviewed a construction issue at a local business. DPW contacted the business and worked to assist in resolving the issue.	

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 12	Planned Activities – Next Permit Term
RC1	ID BMPs	DPW/ConsCom /Planning Board	Review existing regs and draft new as needed by 12/05 Fall 2007	The Stormwater Bylaw was adopted in May 2008. This Bylaw included criteria/requirements to address BMP design. The draft regulations to be implemented under the Stormwater Bylaw were updated and remain under consideration by the Stormwater Committee, to be sent to the Planning Board upon completion. The sub division regulations were revised for the town meeting in spring 2015. These regulations include LID requirements.	Continue to work towards finalizing and implementing the draft regulations through the Planning Board.
Revised	Incorporate BMP Design Criteria				
RC2	Acceptance of new regs/bylaws as needed	DPW/ConsCom /Planning Board	Codify new by 5/06	The Stormwater Bylaw (Article XLVII of the General Bylaws) was adopted in May 2008. The Town amended the Bylaw on October 25, 2011 to revise language related to exempt activities and enforcement.	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 in May 2008. 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 12	Planned Activities – Next Permit Term
GH1	Survey facilities and existing practices, etc	DPW	Do self survey	Municipal industrial facilities were inspected for pollution prevention practices. Hazardous wastes and materials were contained and stored indoors to avoid stormwater contact.	Continue existing pollution prevention practices at municipal facilities and update based on the results of activities discussed under BMP GH6.
Revised				Routine catch basin cleaning was completed in May and June 2014. The previous catch basin cleaning stockpile was removed. 45 catch basins were repaired along with 2 deep sump catch basins installed on Victor Drive. Outfalls were repaired at Central Ave. In November 2014 the Sewer Dept. inspected and maintained the o/w separator located within the DPW yard for the vehicle wash system and found it good operating condition.	Continue to inspect and maintain oil/water separator using the inspection form.
GH2	Develop training manual	DPW	Create manual by 12/04	SPCC, SWPPP and Environment Operation Procedures manuals are in use.	Continue inspections in accordance with the updated plans.
Revised				The SWPPP for the Wastewater Treatment Plant (WWTP) and the SPCC Plan for the DPW Facility were maintained.	
GH3	Train Employees	DPW	Train ALL staff by 5/05	Training was completed on September 26, 2014 for the SWPPP. SPCC Plan and Phase II Pollution Prevention/Good Housekeeping is scheduled for Summer 2015.	Update training program as necessary and continue training as part of pollution prevention and good housekeeping program.
Revised			Incorporate new training topics		

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	Planned Activities – Next Permit Term
GH4	Implement maintenance schedule	DPW	Implement veh and facilities maintenance schedule by 5/06	DPW vehicles were maintained to minimize fluid leaks.	Continue to ensure maintenance schedules are followed to minimize potential stormwater impacts. Incorporate proper maintenance procedures into the employee training program (BMP GH3).
Revised					
GH5	Evaluate Program	DPW	ID of facilities with controls in place by 5/07	DPW reviewed the need to update existing facility planning and training documents. DPW continued to update and implement plans at the DPW Facility and WWTP.	Re-evaluate municipal facilities and operations and develop/implement BMPs as needed. Continue to evaluate funding sources for program implementation.
Revised			Fall 2007		

6a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	Planned Activities – Next Permit Term
GH6	Municipal Facility Plans	DPW	Compliance with SWPPP & SPCC Plans	The SWPPP for the Wastewater Treatment Plant (WWTP) and the SPCC Plan for the DPW Facility were reviewed and an update was completed in September 2013. These plans assist with pollution prevention at these facilities.	Continue to ensure compliance with the updated facility plans at the Wastewater Treatment Plant and DPW Facility.
Revised				A rain garden is planned to be located at the DPW office property and is currently in the design phase. An additional rain garden is to be located near the local high school and is in the planning phase. The DPW developed a new program to use goats to clean a detention basin at the Transfer Station. This program was successful and the DPW will consider future use of goats for maintenance.	Continue to use goats for detention basin maintenance where it is difficult for DPW equipment to access and maintain the structures.

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 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
7.1	TMDL study	Department of Defense; NRWA		The next steps for developing a water quality strategy are pending the reissuance of the Phase II Permit.	Review the Phase II Permit once finalized and develop an implementation strategy under the new permit and the Town's SWMP. The Town anticipates that the strategy will consider the goals of the draft TMDL*, available resources, actions currently being undertaken by Ayer, and actions by others.
Revised	Evaluate TMDL Studies & Status of Town BMPs to Address Impaired Waters	SWSC/DPW	Review Memo and Recommended Next Steps	The Town is hired a consultant to conduct pond assessments, gather data about existing conditions, identify water quality concerns and complete water modeling. These efforts are ongoing.	Continue to collect water quality data for water bodies in Town based on available funding. Evaluate data and incorporate results into stormwater management program.
*A draft phosphorus TMDL study is available for the Nashua River, which drains the majority of Ayer.					

Part IV. Summary of Information Collected and Analyzed

The Town has nearly completed the town-wide drainage system map, including outfall locations. Previous mapping efforts resulted in approximately 1,480 structures and 39 outfalls show on 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	(%)	100%*
Estimated or actual number of outfalls	(#)	110
System-Wide mapping complete	(%)	95%
Mapping method(s)		
▪ Paper/Mylar	(%)	95%
▪ CADD	(%)	
▪ GIS	(%)	50% - 4/15 100% - 6/15
Outfalls inspected/screened	(# or %)	15
Illicit discharges identified	(#)	1
Illicit connections removed	(#) (est. gpd)	1
% of population on sewer	(%)	95%
% of population on septic systems	(%)	5%
*50% outfall mapping complete with GIS; 100% for paper files		

Construction

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

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	100%
Site inspections completed	(# or %)	100% (8)
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	(#)	878
Storm drain cleaned	(LF or mi.)	1,500 (est.)
Qty. of cleanings /debris removed from storm sewer infrastructure	(lbs. or tons)	340* tons
Disposal or use of cleanings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Removed by Contractor
Cost of cleanings disposal	(\$)	\$30.75 / ton
*number is sum of sand/debris from both sweeping and storm sewer cleaning		

Operations and Maintenance (con't.)

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	2/yr
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	7/yr (Main Street weekly)**
Qty. of sand/debris collected by sweeping	(lbs. or tons)	340*
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Store, dispose
Cost of sweepings disposal	(\$)	\$30.75 / ton
Vacuum street sweepers purchased/leased	(#)	N/A
Vacuum street sweepers specified in contracts	(y/n)	N/A
*number is sum of sand/debris from both sweeping and storm sewer cleaning		
**street sweeping is conducted once per week during summer months		

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	ProMelt added to 100% NaCl, sand eliminated*
Pre-wetting techniques utilized	(y/n)	Y
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 %)	Unknown*
Salt pile(s) covered in storage shed(s)	(y/n)	Y
Storage shed(s) in design or under construction	(y/n)	N
*The Ayer DPW started to use ProMelt and salt without sand to improve the effectiveness of salt treatments without an increase in the salt application rate. This mixture reduces the financial and environmental impacts of sand application and removal (i.e., street sweeping & catch basin cleaning).		