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Organization: **Town of Agawam, Massachusetts**

PERMIT YEAR 9: 2012 ANNUAL REPORT

NPDES PERMIT # MAR 041 001

Reporting Period: May 2011– April 2012

MA DEP Transmittal X 250764

NPDES Phase II Small MS4 General Permit Annual Report

Part 1. General Information

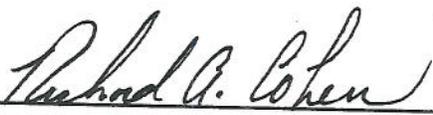
Contact Person: Chris Golba

Title: Superintendent
Department of Public Works

Telephone Number: 413-821-0623

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: 

Name: Richard A. Cohen

Title: Mayor

Date: April 17, 2012

Part 2. Introduction

The following is the Town of Agawam Massachusetts Annual Report as required by the EPA NPDES Phase II Small MS4 General Permit Regulations. This report is for Year 9 of the existing five year permit cycle. This report includes a self-assessment review of compliance with the permit conditions, an assessment of the appropriateness of the selected BMPs, an assessment of the progress towards achieving the measurable goals, a summary of results of any information that has been collected and analyzed, a discussion of activities for the next reporting cycle, a discussion of any changes in identified BMPs or measurable goals, and reference to any reliance on another entity for achieving any measurable goal.

RELIANCE ON OTHER ENTITIES

INTER-CONNECTED MS4s - The Town of Agawam has interconnected MS4s within its boundaries as follows: Massachusetts Highway Department controls certain State numbered routes, Massachusetts Department of Environmental Management controls Robinson State Park on the Westfield River, the Springfield Water and Sewer Commission controls the Bondi's Island Regional Treatment Facility on the Connecticut and Westfield Rivers, and the City of Springfield owns and operates the Bondi's Island Landfill on the Westfield River. Each of these facilities have drainage systems which are separate from or interconnect to the Town of Agawam's drainage system but are under control and operation by entities other than the Town of Agawam.

VOLUNTEERS – Several of the permit conditions within the minimum control measure for public participation relies on the interest and participation of volunteers.

SELF-ASSESSMENT

During Permit Year 9 of the EPA NPDES Phase II Small MS4 General Permit, the Town of Agawam continued to work to improve the quality of stormwater runoff using the six Minimum Control Best Management Practices as a guideline as well as the anticipated future permit requirement changes.

Public Education and Outreach continued to be implemented year round. Activities included educational displays, community events, classroom education as instructed by MCAS, local cable access bulletins, community website news and events, newspaper press releases, informational pamphlets, and PVTA bus billboards. Messages included proper fertilization practices, proper pet waste disposal, HHW disposal, water conservation, and prescription drug disposal.

Public Involvement and Participation activities continue to depend on volunteers and funding. The CT River Watershed and Westfield River Watershed have been very instrumental in recruiting volunteers and helping the Town of Agawam keep the area along the CT River clean. In addition the town was successful in public participation at its annual Household Hazardous Waste collection, Rain Barrel distribution and Earth Day Event as well as employee participation in an Attitude Survey distributed in partnership with the CT River Stormwater Committee.

The Town has continued to update the GIS mapping of the stormwater system and resolve reported illicit discharge issues through the Illicit Discharge Detection and Elimination program. The DPW (with the help of the Conservation Commission) continued to perform diligent inspections of construction sites and ensured that the Town's Construction Runoff Ordinance has been properly adhered to. Due to a lack of funding and manpower, the Town has had difficulty inspecting existing drainage outfalls and detention ponds for illicit discharges and any necessary maintenance. However, in April of 2011, the Town contracted Tighe & Bond to inspect all outfalls and perform illicit discharge testing. Tighe & Bond has completed this work with the assistance of the Agawam Engineering Division. All outfalls that were able to be located were inspected, photographed and linked to our GIS database.

In year 9, the Town continued its South West Area Sewer expansion project. Currently, the DPW/Engineering Division is working with Tighe & Bond on the design of Phase 2 which will bring sewer to South Westfield Street, Pine Street, sections of Barry Street and all of the smaller subdivisions off these streets. This project will help eliminate the use of septic systems in the area which have a history of failing. It is anticipated that work will begin on this project sometime in 2013 pending budgetary approval.

Due to the current economic situation, the proposed Stormwater Utility fee that was mentioned in the Year 7 Annual Report has been delayed. The Town is hopeful that eventually this fee will be approved so that the funding will help assist in MS4 maintenance projects, promote Low Impact Development and give support to educational activities throughout Town.

Good Housekeeping and Pollution Prevention practices continue to be a priority throughout the town. Employees continue to be educated on best management practices for municipal operations. Street sweeping, HHW collection, used motor oil collection and mercury waste collection continue to take place as funding is available. In addition, the town is participating in a Toxic Use Reduction grant pilot project to transition 3.2 acres of athletic fields from chemical lawn care practices to organic lawn care practices as well as training the grounds department in organic practices.

The Town of Agawam believes it has made a good effort in better educating residents, businesses and town employees and implementing best management practices that would help reduce negative impacts on stormwater runoff that would affect our water supplies.

PART 3. STORMWATER MANAGEMENT PROGRAM**MINIMUM CONTROL BEST MANAGEMENT PRACTICES****SECTION 1 – Public Education and Outreach****1A Educational Displays**Original BMP Description:

The Town will post one educational display per year in the Municipal Buildings. Displays will contain information on stormwater related issues and may be obtained from an applicable governmental or other public agency, purchased from a distributor, or created by students working on projects under BMP #1B. The Department of Public Works (DPW) will have responsibility for this BMP, which will be utilized in Years 1 through 5.

Year 9 Activities

The town continues to use posters available through the "Think Blue MA" Campaign at the Town Hall and DPW Municipal Annex. This year the town chose to display the Think Blue Fertilizer Application poster and make Greenscape Guides and flyers available to residents.

See Appendix 1A

Best Management Practice Assessment / Proposed Changes

Goal has been met. No changes proposed at this time.

Possible Future Activities

The town will continue to educate the community on stormwater related topics as necessary using municipal buildings and businesses as a means to distribute the materials.

1B Classroom EducationOriginal BMP Description:

The Town will continue the science curriculum and encourage stormwater educational topics to be included in the curriculum for Grades 4 through 8. At minimum, the curriculum will include one presentation given to the students about stormwater related topics. The School Department will be responsible for this BMP, which will be implemented in Years 1 through 5.

Revised BMP Description:

The Agawam Public Schools will use the recommended teaching lessons from the state MCAS standards in grades K – 10 to increase awareness about stormwater related topics. The DPW will continue to support programs within the schools as funding is available as well as continue to seek volunteers for stormwater projects throughout the community.

Year 9 Activities

Water filtration, water pollution, storm drains, and erosion control activities are introduced to grades K – 4 per MCAS standards.

See Appendix 1B

Best Management Practice Assessment / Proposed Change

No proposed changes to this BMP

Possible Future Activities

Future activities pending school participation and DPW funding.

1C Local Cable AccessOriginal BMP Description:

The Town will post two informational bulletins per year on the local cable access channel. Bulletins will contain information on stormwater related issues and associated community activities. The DPW will have responsibility for this BMP, which will be utilized in Years 1 through 5.

Year 9 Activities

During permit year 9 the Town of Agawam posted the following information to help viewers learn more about stormwater management, healthy habits, and community activities.

- Household Hazardous Waste Day Event / Hazardous Waste items list
- Rain Barrel Sale / Rain Barrel literature
- Earth Day Event

See Appendix 1C

Best Management Practice Assessment / Proposed Change

No proposed changes to this BMP.

Possible Future Activities

The town will continue to post educational bulletins and community activities as they arise.

1D Community WebsiteOriginal BMP Description:

The Town will post stormwater educational information on the community website two times per year. The website will include a link to DEP's website and updates annually or as needed. The DPW will be responsible for this BMP, which will be implemented in Year 1 and updated in Years 2 through 5.

Year 9 Activities

During permit year 9 the Town of Agawam updated its website to include the following information to help viewers learn more about stormwater management, healthy habits, and community activities.

- Household Hazardous Waste Day Event / Hazardous Waste items list
- Rain Barrel Sale / Rain Barrel literature
- Earth Day Event
- National Drug Take Back Day

Town website was also updated to include the following links:

- Link to Mass DEP NPDES Stormwater page
- Link to Mass DEP Stormwater Frequently Asked Questions
- Link to Think Blue Campaign
- Link to Mass DEP Protecting Water Sources from Fertilizers

See Appendix 1C

Best Management Practice Assessment / Proposed Change

No proposed changes to this BMP

Future Activities

The DPW will continue to update the website as necessary as to keep the general public informed of stormwater issues and environmental events.

1E Newspaper Press ReleasesOriginal BMP Description:

The Town will send out two press releases per year to the local newspaper. Press releases will contain information on stormwater related issues and community activities. The DPW will have responsibility for this, which will be utilized in Years 1 through 5.

Year 9 Activities

During permit year 9, the following press releases were sent and published in local newspapers.

- Rain Barrel Sale
- Household Hazardous Waste Day Event
- Earth Day Event
- Pet Waste Stations
- Prescription Drug Take Back Day
- See Appendix 1E

Best Management Practice Assessment / Proposed Change

No proposed changes

Possible Future Activities

Town will continue to send out press releases to local newspapers throughout permit year 10.

1F Informational PamphletsOriginal BMP Description:

The Town will distribute one informational pamphlet or notice per year to every household Town-wide. The pamphlet or notice will likely be included with the mailing of the Consumer Confidence Report on water quality. Pamphlets will contain information on stormwater related issues and may be obtained from an applicable governmental or other public agency, purchased from a distributor, or possibly created by student's project under BMP #1B. The DPW will have responsibility for this BMP, which will be utilized in Years 1, 3, and 5.

Year 9 Activities

In June 2011, the town distributed approximately 12,500 Aqua Almanacs to all businesses and dwelling units in Agawam.

See Appendix 1F

Best Management Practice Assessment / Proposed Change

No proposed changes.

Possible Future Activities

Pending 2012 General Permit Requirements

MINIMUM CONTROL BEST MANAGEMENT PRACTICES**SECTION 2 - PUBLIC INVOLVMENT AND PARTICIPATION****2A Adopt-a-Road**Original BMP Description:

The Town will continue to support neighborhood cleanup days by providing trash-bags and subsequent collection for voluntary roadside cleanups. The town will document locations targeted during each permit year as well as communication with potential volunteers. The Department of Public Works (DPW) will be responsible for this BMP, which will be implemented in Years 1 through 5.

Year 9 Activities

Through the continued efforts of the, CT River Watershed Association and the Westfield River Watershed Association, areas along the CT River were cleaned during the month of October.

Best Management Practice Assessment / Proposed Change

No changes at this time.

Possible Future Activities

As volunteers and funding are available, DPW will continue to support community cleanups.

2B Attitude SurveysOriginal BMP Description:

The Town will include a questionnaire with stormwater related questions with the mailing of the water bills. The questionnaire will be used to measure community awareness of stormwater issues and the success of the Public Education and Public Involvement components of the Stormwater Management Plan. The DPW will have responsibility for this BMP, which will be utilized in Years 2 and 5.

Year 9 Activities

Attitude surveys were distributed as an insert of the Consumer Confidence Report / Aqua Almanac in permit year 2 and 5.

In partnership with the CT River Stormwater Committee, the Town of Agawam participated in the distribution of a stormwater survey via the online Survey Monkey

Website. The survey was distributed to every employee within the town of Agawam and

See Appendix 2B

Best Management Practice Assessment / Proposed Change

Any changes pending 2012 General Permit Requirements

Future Activities

Additional surveys pending the 2012 General Permit Requirements

2C Catch Basin Marking

Original BMP Description:

The Town will support and supervise volunteer groups to mark catch basins with stormdrain markers. The DPW will supply guidance to volunteer groups regarding the installation of stormdrain markers, directions to locations, and all necessary materials. The Town's goal is to identify and mark 200 catch basins per year depending on volunteer participation. The DPW/volunteer groups will be responsible for this BMP, which will be implemented in Years 1 through 5.

Year 9 Activities

No volunteers during permit year 9.

Best Management Practice Assessment / Proposed Change

No Change at this time.

Possible Future Activities

DPW will continue to recruit and support local volunteers in marking catch basins.

The subdivision and site plan construction standards are being updated so as to require that all newly constructed catch basins be properly marked as part of the site plan and subdivision approval process.

2D Watershed CommitteeOriginal BMP Description:

The Town of Agawam will coordinate stormwater activities with the Westfield River Watershed Association (WRWA) within Year 1 and will participate in Years 2 through 5. The Conservation Commission will be responsible for Agawam's participation in the WRWA.

Revised BMP Description:

The Town of Agawam will partner with the Westfield River Watershed Association and Connecticut River Watershed Association as able; to coordinate stormwater related activities and public outreach within the watersheds.

Year 9 Activities

The WRWA has become an active partner in helping the Town of Agawam keep the riverbanks clean. In addition to Westfield River Clean-ups, the WRWA is an active partner in the Source to Sea Cleanup along the CT River.

As an active member of the Connecticut River Watershed Stormwater Subcommittee, the town of Agawam is currently participating in two pilot projects:

- PVTA Bus Billboard initiative
- Municipal Park Organic Land care Transition Project

See Appendix 2D

Best Management Practice Assessment / Proposed Change

No proposed changes

Future Activities

Activities are pending the rewritten 2012 General Permit Requirements.

2E Community OutreachOriginal BMP Description:

The Town will attempt to track the community participation level based on community outreach programs provided by the Town. The DPW will have responsibility for this BMP, which will be utilized in Years 2-5.

Revised BMP Description:

The Energy Commission, Beautification Committee, Conservation Commission, Planning and Community Development, and Department of Public Works will attempt to distribute informational flyers at local community events; as well as sponsor educational programs as funding becomes available. Flyers and programs will contain information on stormwater related issues as pertinent to the town. All parties will make every effort to track the community participation level based on community outreach programs provided by the town

Year 9 Activities

During Permit Year 9, the DPW has offered the following programs to residents in town.

- Household Hazardous Waste Day, 175 homeowners participated
- Rain Barrel Distribution, 19 barrels sold in May 2011
- Earth Day Event – April 2011

Best Management Practice Assessment / Proposed Change

The town will continue to offer programs to residents and businesses as funding is available. In addition, the town will track program participation to the best of their ability.

Future Activities

The Think Blue Future activities are pending the rewritten 2012 General Permit Requirements.

Minimum Control Best Management Practices

Section 3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION

3A Mapping Stormwater Outfalls

Original BMP Description:

A Stormwater Outfall Map is to be developed showing the municipal stormwater outfall pipes greater than 12-inches diameter. Existing information and reports from previous investigations are to be compiled in Year 1. Approximately 25% of the outfalls are to be field inspected each year for Years 2 through 5. Inspectors will catalogue the size, pipe material and condition of each, the receiving water-body, and visual observation of the discharge and immediate downstream channel. The Department of Public Works (DPW) will be responsible for this BMP.

Year 9 Activities

GIS based mapping of the Town's existing stormwater drainage system is estimated to be over 99% complete. Tighe & Bond has updated the GIS map drainage information with new residential subdivisions that were constructed in Year 9. They have also inspected and photographed 95% of all known drainage outfalls and have linked that information directly to the Town GIS mapping system.

In past years, Tighe & Bond has been responsible for updating the GIS maps with new information. This year, Tighe & Bond has turned over control of the GIS database to the Town of Agawam. The Town will now be responsible for updating the maps as new work is completed and more complex investigations occur.

The mapping shows locations of all catch basins, drain manholes, drainage pipes, outflows, detention basins, and road culverts. The GIS maps are often utilized for stormwater related investigations including searching for cross connections and tracing the sources of illicit discharges. Both the DPW foremen and the Engineering Division have a hard copy set of the Town's most current drainage plans on file for quick access in the field. Also, a workstation within the DPW has been set up for the exclusive use of GIS related activities for quick and easy data access in the office. This GIS mapping is available to the public online via the Town of Agawam's website. This includes all the drainage mapping data.

Best Management Practice Assessment / Proposed Change

The GIS mapping of all drainage structures within the Town is nearly complete. The details described in this requirement have been gathered during the mapping process. As the DPW continues to perform complex drainage system investigations, the condition of known drainage outfalls will be reevaluated.

Possible Future Activities

The GIS drainage mapping project is an ongoing activity. Maps are updated as new construction is completed and new information about existing drainage is discovered in the field. The Town will continue to work with Tighe & Bond as a consultant to improve and add to the GIS maps.

3B Non-Stormwater Discharge OrdinanceOriginal BMP Description:

The Town intends to adopt an ordinance or other regulatory mechanism to prohibit non-stormwater discharges into the MS4 system. The Town will evaluate existing regulations in Year 1, prepare a draft ordinance in Year 2, and propose the new ordinance for adoption in Year 3. Pending adoption, the ordinance will be enforced in Years 3 through 5. The DPW will have responsibility for this BMP.

Year 9 Activities

As noted in permit year 4, the current Water and Sewer Ordinance has been revised to reflect the Federally Mandated Requirements prohibiting non-stormwater discharges into the MS4 system. The revised ordinance was approved by the City Council on May 15, 2006. The approved ordinance is currently being used and enforced.

Best Management Practice Assessment / Proposed Change

This ordinance has been enforced during permit year 9. Any discovered illicit connections to the stormwater system are eliminated as soon as possible.

Possible Future Activities

The DPW will continue to educate the community regarding the ordinance as well as enforce the ordinance regulations regarding non-stormwater discharges into the MS4 System. The DPW may propose some revisions to the ordinance that will expand on the Federally Mandated Requirements and clarify the wording in a few sections. Any future revisions are pending the rewritten 2012 General Permit Requirements.

The DPW has previously proposed a stormwater utility fee for all residents and private sites in Town due to the increased costs resulting from both the maintenance of the municipal stormwater system and continued compliance with the NPDES and the Six Minimum Control Measures in the MS4 General Permit. The Town continues to research, discuss and propose the opportunity to implement the new Stormwater Fee for all properties in Town. The monies acquired by this fee will be used to help offset the costs of maintaining the Town's drainage system, implementing the Illicit Discharge Program and educational purposes.

3C Develop Illicit Discharge Plan

Original BMP Description:

The Town will develop an Illicit Discharge Plan to include procedures for identifying, locating, removing illicit discharges as well as documenting actions and evaluating impacts. The Town will evaluate existing procedures in Year 2. The Town will prepare a draft plan and propose the plan for adoption in Year 3. Pending adoption, the plan will be implemented in Years 3 through 5. The DPW will be responsible for this BMP.

Year 9 Activities

As part of the development of the Non-Stormwater Discharge Ordinance, existing illicit discharge practices were evaluated. Existing activities involve the investigation and removal of illicit discharges or dumping if the DPW is made aware of an issue based upon resident complaints or observation by DPW or Town personnel. Removal of illicit discharges has been based upon existing authority by the DPW to do so. GIS drainage mapping continues to be updated as new construction and complex investigations are performed. As the mapping continues, the detailed evaluation of which areas to focus on for investigations will proceed.

A copy of the Town's Illicit Discharge Detection and Elimination (IDDE) Plan can be found in Appendix 3C of the 2008 Annual Report.

Since Year 4, an Illicit Discharge Verbal Notice of Violation form has been used as a method of notification and documentation by the DPW when Non-Stormwater Discharges are observed at a site that is in violation of Town Code.

In Year 9, the Town of Agawam has investigated and resolved illicit discharges in the following locations:

- Moore Street: Soil erosion from the construction of a new duplex was discharging sediment into the street. Hay bales had been installed as an erosion control measure, but rain runoff had shifted them. – The owner was notified and advised to replace the shifted hay bales.
- Cleveland Street: A resident called the Town to complain of a swimming pool cleaning company that was discharging washwater with a high level of algae into the Town drainage system. – The company was order to discharge the washwater into the Town sewage system instead.

A list of existing detention basins within the Town has been created. This list will be updated as new construction is completed. The Engineering Department is conducting inspections of the detention basins to prevent and eliminate illicit discharges by confirming the basins are working properly and are being maintained as per Town stormwater regulations. If it is observed that a detention basin has not been

maintained, the owner of the property where the basin is located is notified and instructed to repair the basin to the satisfaction of the Town.

Tighe & Bond has inspected 95% of the known drainage outfalls in town in Year 9. During inspections, pictures were taken of each outfall and its condition was noted on an Outfall Reconnaissance Inventory Sheet along with obvious signs of any illicit discharges including noticeable odors, outflow color and turbidity, and any observed floatables.

Best Management Practice Assessment / Proposed Change

In Year 7, a program was started by the Engineering Department to inspect all mapped outfall pipes over the next four years. In Year 9, Tighe & Bond inspected 95% of the known drainage outfalls. According to the new General Permit regulations, 25% of the existing outfalls must be inspected and tested each year. Due to a lack of funding and manpower, the Town has had difficulty in meeting this requirement. The DPW will make every effort to improve its performance in this BMP by setting up a detailed list of outfalls that need inspecting. All inspection results will be documented on an Outfall Reconnaissance Inventory Sheet and recorded within the GIS maps.

Future Activities

In order to meet the NDPES General Permit regulations, the Town hired Tighe & Bond to assist with the necessary inspection, as described above. The Town will continue to perform inspections as time and budget allows. In future inspections, if signs of an illicit discharge are discovered, a sample will be taken from the outfall and tested in-house for pH, Chlorine, Copper, Phenols, and Detergents. A list of outfalls that need maintenance will be created. These outfalls will be repaired and illicit discharge connections will be investigated as the Town's budget allows.

The Town shall continue inspecting detention basins and outfalls as the available budget and manpower allows. Town owned detention basins will be given priority. The DPW will be responsible if any repairs to the basins are deemed necessary. Inspections will also be conducted at detention basins on private property. The property owners will be responsible for the maintenance and repair of all detention basins on their property. Assistance can be given at the discretion of the DPW.

3D Inform Employees, Businesses, and PublicOriginal BMP Description:

Municipal employees, businesses and the public will be informed regarding the illicit discharge plan and the non-stormwater ordinance. Elements of the public education program will include publicity for this BMP. The DPW will be responsible for this BMP, which will be implemented in Years 3 through 5.

Year 9 Activities

During permit year 8, it was anticipated that the DPW Sewer Department would mailing out an inspection and maintenance letter to all restaurants regarding the installation of kitchen grease traps. Attached to the notification would have been the restaurant flyer. Unfortunately, there has been a delay in its distribution due to revisions in town code. In the interim, the Town Plumbing Inspector will hand out the flyers during the course of his normal duties.

Best Management Practice Assessment / Proposed Change

No proposed changes.

Possible Future Activities

Any additional future activities are pending the rewritten 2012 General Permit Requirements

3E Video InspectionOriginal BMP Description:

The DPW will contract for the use of a video camera to inspect storm drain pipes as practicable to follow up on illicit discharges discovered during activities under BMP #3B. The DPW will be responsible for this BMP, which will continue for permit Years 3 through 5.

Year 9 Activities

During year 4, the DPW purchased a video camera system which has been used to investigate the condition of several drainage pipes. The DPW has performed several video inspections in town during permit Year 9. The video inspections were used to determine: if there were any illicit connections, the condition of the drainage pipe, and to assist in mapping of the Town's drainage system.

The Town used the video camera system to inspect a drainage culvert on School Street to see if it would have to be replaced prior to the proposed widening of School

Street and construction of a new pedestrian and bike path. It was determined that most of the culvert was in acceptable condition and could wait until the project starts. It is anticipated that this project will take place in 2013 or 2014 depending on funding.

Best Management Practice Assessment / Proposed Change

The DPW continues to use its video camera to assist in Illicit Discharge and other related drainage and sanitary sewer investigations. The camera is in need of replacement due to years of use. The DPW is currently looking into options for replacement. If it is necessary, when an illicit discharge is discovered under BMP #3B in larger diameter pipes, the DPW may need to contract out the use of a more advanced video camera system.

Possible Future Activities

The DPW continues to discuss the opportunity to implement a new stormwater fee for all properties in Town. The monies acquired by this fee will be used to help offset the costs of maintaining the Town's drainage system and the Illicit Discharge Program including video inspections. If the new stormwater fee is implemented, the Town would have extra funding available to do more video inspections by either the Town's camera and crews or via a private company.

3F Failing Septic Systems

Original BMP Description:

The Board of Health (BOH) currently keeps records of septic system failures that are used to identify problem areas. The BOH will report failures to the DPW for inclusion in GIS mapping in Year 3. The BOH will be responsible for this BMP, which will continue for Years 1 through 5.

Year 9 Activities

The Board of Health maintains records on all inspections involving septic systems. The BOH has forwarded a list of all failed systems from 2011 to the DPW. Septic System locations and their failures from 2003-2011 have been incorporated into the GIS mapping project.

See Appendix 3F

Best Management Practice Assessment / Proposed Change

The Town is continuing work on the Southwest Area Sewer project. Phase 2 of the project is currently being designed with Tighe & Bond. This phase includes South Westfield Street, Pine Street, parts of Barry Street and the subdivisions off of these

streets. It will also include 2 pump stations. This phase will be a significant investment in the Town's sewer system. Once the new sewer is constructed, the areas that have been experiencing septic system failures will be able to connect to the Town sewer system.

Future Activities

The DPW plans to further analyze septic system failures using the data that has been input into the GIS database. This information will help the Town prioritize future sewer proposals and also help residents understand where problematic areas in town are located. Analyzing septic information in GIS will also help to determine which areas of town should be classified as a high risk of illicit discharge.

3G CATCH BASIN MARKING

Original BMP Description:

The Town will support and supervise volunteer groups to mark catch basins with stormdrain markers. The DPW will supply guidance to volunteer groups regarding the installation of stormdrain markers, directions to locations, and all necessary materials. The Town's goal is to identify and mark 200 catch basins per year depending on volunteer participation. The DPW/volunteer groups will be responsible for this BMP, which will be implemented in Years 1 through 5.

Year 9 Activities

No volunteers during permit year 9.

Best Management Practice Assessment / Proposed Change

No Change at this time.

Possible Future Activities

DPW will continue to recruit and support local volunteers in marking catch basins.

Minimum Control Best Management Practices

SECTION 4 - CONSTRUCTION SITE RUNOFF CONTROL

4A Construction Runoff Ordinance

Original BMP Description:

The Town has adopted a Construction Runoff Ordinance which requires sediment and erosion control at construction projects with over one acre in total disturbance. The Town has evaluated existing regulations (including Zoning, Subdivision, and Wetlands regulations) in Year 1, prepared a draft ordinance in Year 2, and proposed the new ordinance for adoption in Year 3. Pending adoption, the ordinance was enforced in Years 3 through 5. The DPW, Planning Department, and Building Inspector have responsibility for this BMP.

Year 9 Activities

The current Water and Sewer Ordinance has been revised to reflect the Federally Mandated Requirements requiring sediment and erosion control at construction projects with over one acre in total disturbance. The revised edition was approved by City Council on May 15, 2006. Enforcement of the new ordinance began shortly after this approval. A new Stormwater Permit Application was created and implemented during Year 4. The ordinance and permit application continues to be used and enforced.

Best Management Practice Assessment / Proposed Change

The Agawam Engineering Division continues to work with developers to identify and address possible problematic areas before stormwater runoff issues occur. As a result, Year 9 had very few construction runoff issues in Town.

Possible Future Activities

This ordinance may be revised in the future to help clarify and improve the requirements pending the rewritten 2012 General Permit Requirements. The ordinance will continue to be used and enforced.

The Town continues to research, discuss and propose the opportunity to implement a new Stormwater Fee for all properties in Town. The monies acquired by this fee will be used to help offset the costs of maintaining the Town's drainage system, implementing the Illicit Discharge Program and educational purposes. Also, the new stormwater fee rules will include special incentives for private sites: to implement low impact development procedures, to reduce peak stormwater runoff rates through detention or infiltration, and to improve existing TSS treatment.

The Town should also look into implementing a system that includes the possibility of fining developers, builders, etc. if BMPs are not properly installed and maintained resulting in erosion and sediment runoff from the construction sites.

4B Construction Plan Review

Original BMP Description:

Under the Construction Runoff Ordinance (or other regulatory mechanism), applicants with projects with disturbance over one acre will be required to submit sediment and erosion control plans for Town review and approval. Until a new ordinance is adopted (anticipated in Year 3), the Town will continue to review construction plans in accordance with existing regulations. Pending adoption, plans will be reviewed per the new ordinance in Years 3 through 5. The DPW, Planning Department, and Building Inspector have responsibility for this BMP.

Year 9 Activities

All construction sites within the jurisdiction of the Rivers Act and the Wetland Protection Act must submit plans to the Conservation Commission for review of proposed erosion and sediment control measures. These sites are inspected and overseen by the Conservation Commission with the assistance of the DPW.

All new subdivision submittals are required to include construction phase erosion and sediment control measures within the construction plan set. This includes both short-term and long term BMPs for the site.

The developers of all new subdivisions are required to submit the project's EPA NOI for construction activities, and give a courtesy copy of the SWPPP to the DPW.

DPW works with the Conservation Commission, developers, and property owners to reduce the chances of erosion control problems before they occur and alleviate any issues as soon as they arise.

A new ordinance addressing erosion and sediment control was adopted by the City Council in May of 2006 and is currently being implemented by the DPW.

Best Management Practice Assessment / Proposed Change

No Change is proposed.

Possible Future Activities

The ordinance may be revised in order to clarify and improve the requirements pending the rewritten 2012 General Permit Requirements.

4C Inspection / ReportingOriginal BMP Description:

Under the Construction Runoff Ordinance (or other regulatory mechanism), projects with disturbance over one acre will be required to have regular inspection of sediment and erosion controls and reporting of construction activities. Until a new ordinance is adopted (anticipated in Year 3), the Town will continue to require inspection and reporting in accordance with existing regulations. Pending adoption, construction inspection and reporting will be enforced in Years 3 through 5. The DPW, Planning Department, and Building Inspector have responsibility for this BMP.

Year 9 Activities

As documented in permit year 4, ordinance changes had been adopted by the City Council as of May 5, 2006.

The DPW and Conservation Commission continue to work together inspecting and enforcing the Wetland Protection Act on projects within the appropriate jurisdiction.

Best Management Practice Assessment / Proposed Change

No Change is proposed.

Possible Future Activities

This ordinance may be revised in the future to help clarify and improve the rules and regulations pending the rewritten 2012 General Permit Requirements. The ordinance will continue to be used and enforced.

MINIMUM CONTROL BEST MANAGEMENT PRACTICES**SECTION 5 POST CONSTRUCTION STORMWATER MANAGEMENT****5A Post Construction Runoff Ordinance**Original BMP Description:

The Town intends to adopt an ordinance or other regulatory mechanism to address post construction runoff from projects with over one acre in total disturbance. The Town will evaluate existing regulations (including Zoning, Subdivision, and Wetlands regulations) in Year 1, prepare a draft ordinance in Year 2, and propose the new ordinance for adoption in Year 3. Pending adoption, the ordinance will be enforced in Years 3 through 5. The DPW, Planning Department, and Building Inspector have responsibility for this BMP.

Year 9 Activities

The current Water and Sewer Ordinance has been revised to reflect regulatory mechanisms to address post construction runoff from projects with over one acre in total disturbance. The revised edition was adopted by the City Council as of May 5, 2006.

The Conservation Commission through the Wetland Protection Act continues to regulate activities within and near wetland resource areas. The DPW continues to regulate all other stormwater activities that are connected to the Town's MS4.

Best Management Practice Assessment / Proposed Change

No Change is proposed.

Possible Future Activities

This ordinance will continue to be enforced and may be revised to help clarify and improve requirements as needed pending the rewritten 2012 General Permit Requirements.

5B Site Plan ReviewOriginal BMP Description:

Under the Post Construction Runoff Ordinance (or other regulatory mechanism), applicants with projects with disturbance over one acre will be required to submit stormwater control plans for Town review and approval. Until a new ordinance is adopted (anticipated in Year 3), the Town will continue to review new development and redevelopment plans in accordance with existing regulations. Pending

adoption, plans will be reviewed per the new ordinance in Years 3 through 5. The DPW, Conservation Commission, Planning Department, and Building Inspector have responsibility for this BMP.

Year 9 Activities

New stormwater regulations were approved and adopted by the City Council in May of 2006. This ordinance has been implemented by the DPW and continues to be used during the site plan and subdivision review and inspection process. The Conservation Commission through the Wetland Protection Act continues to regulate activities within and near wetland resource areas. The DPW continues to regulate all other stormwater activities that are connected to the Town's MS4.

Best Management Practice Assessment / Proposed Change

No Change is proposed.

Possible Future Activities

Shortly after the adoption of the new Ordinance, the Town began permit activities. If necessary, the DPW may make minor modifications to the ordinance in the future pending the rewritten 2012 General Permit Requirements.

5C Stormwater System Maintenance Plan

Original BMP Description:

Under the Post Construction Runoff Ordinance (or other regulatory mechanism), projects with disturbance over one acre will be required to include a program outlining enhanced procedures for long term operation and maintenance of stormwater facilities. Until a new ordinance is adopted (anticipated in Year 3), the Town will continue to require stormwater facility operation and maintenance in accordance with existing regulations. Pending adoption, additional operation and maintenance requirements for stormwater facilities to be constructed as part of new development and redevelopment projects will be enforced in Years 3 through 5. The DPW, Planning Department, and Building Inspector have responsibility for this BMP.

Year 9 Activities

As documented during permit year 4, new ordinance requirements including drainage system maintenance of private sites had been adopted by the City Council. All new and redevelopment plans will continue to require maintenance activity schedules as part of the site's Stormwater Permit to the DPW.

Due to a lack of funding and man power, the DPW has had difficulty continuing with its detention pond inspection program. The DPW continues to assist in the maintenance

of some privately owned detention ponds in the Town as time and budget allows. However, there are many detention areas throughout town which still require significant repair, including areas identified as needing significant town assistance with maintenance. Three detention ponds have been identified as town owned and continue to be maintained by the DPW.

During permit year 6, the DPW proposed a stormwater utility fee for all residents and private sites in Town due to the increased costs resulting from both the maintenance of the municipal stormwater system and continued compliance with the NPDES and the Six Minimum Control Measures in the MS4 General Permit. The Town continues to research, discuss and propose the opportunity to implement the new Stormwater Fee for all properties in Town. The monies acquired by this fee will be used to help offset the costs of maintaining the Town's drainage system, expanding the Illicit Discharge Program and educational purposes.

A copy of the proposal can be located in the Permit Year 6 Report.

Until the utility fee is approved, the DPW will continue to maintain the public stormwater system (including outfalls, publically owned detention ponds, pipes, catch basins, culverts, drain manholes, etc.) as much as the budget will allow. A complete list of stormwater maintenance and repair projects completed in Year 9 is included in Appendix 6C

Best Management Practice Assessment / Proposed Change

No change is proposed, pending the rewritten 2012 General Permit Requirements.

Possible Future Activities

If the stormwater utility is approved, the DPW would work to improve the overall municipal stormwater system. This would include improving the work needed to meet or exceed the six minimum control measures in the MS4 Permit and any new regulations that may be required. Also, the DPW will take on the responsibility of ensuring that all drainage detention areas located within town easements are properly maintained and in the originally proposed working condition. (Currently, this responsibility typically falls upon the property owner).

MINIMUM CONTROL BEST MANAGEMENT PRACTICES**SECTION 6 GOOD HOUSEKEEPING / POLLUTION PREVENTION****6A Municipal Maintenance Activity Program**Original BMP Description:

The Town will develop a program to outline procedures associated with maintenance of open spaces and parks, vehicular fleets, Town-related construction activities, roads, and storm sewer system. The Town will evaluate existing municipal procedures, modify any procedures if needed, and prepare the program plan in Year 1. The Town will continue to monitor compliance and revise policies as necessary in Years 2 through 5. The DPW will have the responsibility for this BMP.

Year 9 Activities

The DPW continues to work closely with the Conservation Commission to ensure that all open spaces, parks, town-related construction activities, roads and storm sewer systems are properly maintained and erosion control BMPs are properly implemented.

The Town continues to educate employees regarding Pollution Prevention and Good Housekeeping Practices for Municipal Operations. The Motor Vehicle Maintenance Department Foreman has trained his staff in regards to Fuel Station Inspections, which take place weekly and is kept on file in the Motor Vehicle Maintenance Department Office.

See Appendix 6A

Best Management Practice Assessment / Proposed Change

Any changes to BMP are pending the 2012 Permit Requirements

Possible Future Activities

Future activities are pending the 2012 Permit Requirements

6B Training of Municipal EmployeesOriginal BMP Description:

Municipal employees performing activities under the new Municipal Maintenance Activity Program (BMP #6A) will be informed of new good housekeeping policies and procedures. This will occur pending adoption of the Program in Year 1. DPW employees will also be informed of the Stormwater Pollution Prevention Plan requirements for the DPW and Transfer Station, as applicable. Initial training will be given in Year 2. An Annual Refresher in the form of a seminar or memorandum will be given each year for Years 3 through 5. The DPW has responsibility for this BMP.

Year 9 Activities

Throughout the year, the DPW's work is inspected by both the Engineering Division and the Conservation Commission (when applicable). If any work is unsatisfactory, the DPW is informed of which BMP's need to be implemented and future policies and procedures are explained.

The Town continues to educate employees regarding Pollution Prevention and Good Housekeeping Practices for Municipal Operations. The Motor Vehicle Maintenance Department Foreman has trained his staff in regards to Fuel Station Inspections, which take place weekly and is kept on file in the Motor Vehicle Maintenance Department Office.

See Appendix 6A

Best Management Practice Assessment / Proposed Change

No changes at this time unless required by new 2012 Permit Regulations

Future Activities

The DPW will continue to educate town employees on Pollution Prevention and Good Housekeeping Practices for Municipal Operations.

6C Catch Basin Cleaning ProgramOriginal BMP Description:

The Town will develop a program with prioritized areas for catch basins in the urbanized area in Year 1. The Town will continue to monitor compliance and revise policies as necessary in Years 2 through 5. The DPW will have the responsibility for this BMP.

Year 9 Activities

The town continues to use the previously developed catch basin cleaning priority area location list to determine where to focus their catch basin cleaning efforts. These priority areas are based on the locations in town, which have significant hills and a history of clogging. During Permit Year 9, approximately 30 catch basins were repaired and cleaned to improve the performance of their function.

See Appendix 6C for exact locations.

Best Management Practice Assessment / Proposed Change

The town will continue to utilize funds, if available, for annual cleaning of catch basins within priority areas.

No changes at this time unless required by new 2012 Permit Regulations

Possible Future Activities

The DPW will continue to seek dedicated funds for catch basin cleanings during FY13. The DPW plans on inputting the data for catch basin cleaning into GIS so that an updated catch basin cleaning priority area list can be made.

The DPW will be creating a catch basin cleaning door hanger that will notify home owners and businesses when catch basins were cleaned in their neighborhood. The door hanger will include best management practices for homeowners and businesses to help keep our catch basins clean of pollutants and obstructions.

6D Street SweepingOriginal BMP Description:

The Town will sweep all streets in the urbanized area once each year. The DPW has the responsibility for this BMP, which will be utilized for Years 1 through 5.

Year 9 Activities

During permit year 9, the DPW completed street sweeping in the following areas:

- 70 curb miles of roadway between April 1, 2009 – April 1, 2010
- Additional sweeping included
 - Water break clean up of soil and salt
 - Street sweeping prior to paving operations

During the winter of 2008-2009, the DPW made an economical and environmental decision to eliminate sand from their roadways and apply "Liquid Magic" to their rock salt. Liquid Magic is non-corrosive, completely biodegradable, and releases far less chlorides into the environment than either plain rock salt or calcium chloride. With the elimination of sand, the DPW has found the streets to be much cleaner in the spring thus helping with the reduction of sweeping needed.

Best Management Practice Assessment / Proposed Change

The town will continue to sweep priority areas as funding is available.

Possible Future Activities

Any changes are pending new 2012 Permit Requirements.

6E Pest Control / Landscaping and Lawn Care

Original BMP Description:

The Town will evaluate the use of toxic chemicals in Year 1 and continue to contract with licensed applicators only in Years 2 through 5. The DPW has the responsibility for this BMP.

Year 9 Activities

The DPW provides maintenance services for Parks, the Golf Course, and Schools. The application of fertilizers and pesticides are under the supervision of licensed pesticide applicator, thus the chemicals are used appropriately and the over-use of chemicals is avoided. The maintenance of the golf course includes the use of organic practices where appropriate.

The town of Agawam was awarded a TURI (Toxic Use Reduction Initiative) grant in partnership with the Ct River Stormwater Committee in October 2011. The grant is in support of the towns Greenscape program that was awarded in September 2011 – June 2012. The grant is to transition 5 municipal parks to organic land care programs. The 3.2 acre Lacrosse Field at the School Street Park in Agawam will be transitioning from chemicals to organic lawn care.

In support of the grant, 4 employees of the DPW's Grounds Maintenance Department attended a TURI Organic Lawn Care workshop hosted by Bernadette Giblin of Safeground Organic Landcare.

Best Management Practice Assessment / Proposed Change

DPW will continue to work with Bernadette Giblin of Safeground Organic Landcare to transition 3.2 acres of public land from chemicals to organic land care products.

Proposed future activities are pending future rewritten General Permit Requirements and the inclusion of additional town departments to BMP 2E.

Possible Future Activities

Proposed future activities are pending the rewritten 2012 General Permit Requirements and the inclusion of additional town departments.

6F Stormwater Pollution Prevention Plan / MSGP

Original BMP Description:

A Stormwater Pollution Prevention Plan (SWPPP) will be implemented for the DPW facility under the EPA Phase II Stormwater Program Multi-Sector General Permit (MSGP). The DPW has the responsibility of this BMP, which will be utilized for Years 1 through 5.

Year 9 Activities

It is our understanding that as of this report date; EPA has delayed the Multi-Sector General Permit (MSGP) program for DPW facilities. A Spill Prevention Control and Countermeasure Plan (SPCC) has been in-place for the DPW maintenance facility since November 29, 2001. A SPCC Plan was received from the consultants at Tighe & Bond and signed by the DPW Superintendent, in accordance with the requirements of the U.S. EPA Oil Pollution Prevention Regulations (40 CFR Part 112.7). The Town's SPCC Plan describes oil storage at the facility and appropriate procedures, methods and equipment used to control and document oil spills and to prevent spills from reaching surface waters. In addition, the Plan includes recommendations to upgrade the facility in areas where existing oil spill prevention, control and countermeasures are inadequate. The Town's future MSGP compliance program, specifically a stormwater pollution prevention plan, is anticipated to incorporate components of the SPCC Plan. See Appendix 6F of the 2008 Annual NPDES Report for an outline of the SPCC Plan.

Best Management Practice Assessment / Proposed Change

The DPW operations procedures have been implemented at the new DPW facility. During the summer/fall of 2008, a new salt/sand storage structure was built at the new facility. All winter operations have since moved to the new facility. The DPW received an updated SPCC plan and environmental audit from Tighe & Bond in Year 5. See Appendix 6F of the 2008 Annual NPDES for documentation.

Future Activities

Modify the SPCC plan as needed pending the rewritten 2010 General Permit Requirements. The Town is looking into a possible grant funding for the installation of rain gardens and similar stormwater treatments on Town owned parcels. Rain gardens have already been installed in the School Street Park and are proposed for phase 2 of that project.

6G Used Oil Recycling

Original BMP Description:

The Town currently collects used oil for proper disposal and recycling. The Town will continue to offer Used Oil Recycling year-round in Years 1 through 5. The DPW has the responsibility for this BMP.

Year 9 Activities

The town continues to provide the residents a local drop off location for used motor oil.

In 2011, 2700 gallons of used motor oil were collected at the DPW Town Garage.

Best Management Practice Assessment / Proposed Change

No changes at this time.

Possible Future Activities

The town will continue to provide residents with a drop off location for used motor oil and car batteries at no charge.

6H Hazardous Waste Collection

Original BMP Description:

The Town will continue its annual Hazardous Waste Collection Day subject to funding. Every fall, the Town publicizes the collection day through newspaper ads and radio and television ads. The DPW will continue to have the responsibility for this BMP, which will be utilized in Years 1 thru 5.

Year 9 Activities

The Town hosted its annual Household Hazardous Waste Collection day in the fall of 2011. 185 vehicles dropped off Hazardous Waste rather than disposing of it in the trash or catch basins. In addition to the annual HHW Day, the DPW continues to collect used car batteries, used motor oil and mercury bearing waste by appointment/

Best Management Practice Assessment / Proposed Change

The town has met it's obligation to provide a HHW event and alternative disposal options to residents.

Possible Future Activities

The town will continue to provide proper disposal options to the residents as funding is available.

MINIMUM CONTROL BEST MANAGEMENT PRACTICES**7A TMDL for the Connecticut River**Original BMP Description:

According to the Massachusetts Year 2002 Integrated List of Waters, Connecticut River is designated as Category 5 "Waters requiring a TMDL". The targeted pollutants are priority organics, pathogens, and suspended solids. Sources of priority organics may include but are not limited to: road surfaces, inadequate fueling areas or practices, illegal dumping. Sources of pathogens may include but are not limited to: pet waste, winter road maintenance materials, illicit sewer discharges, and failing septic systems. Sources of the suspended solids may include but are not limited to: lawn care products, litter, winter road maintenance materials, erosion from construction activities, and illicit sewer discharges. The Stormwater Management Program includes many BMPs to address reduction of contaminants from these sources under all Six Minimum Control categories. The City will implement these BMPs under the responsible department and timeframes as previously described.

Year 9 Activities

All previously described Best Management Practices address the TMDL of the Connecticut River.

Best Management Practice Assessment / Proposed Change

The Connecticut River has many contributing factors to cause the need for the TMDL designation. Agawam, along with other community's efforts within Massachusetts, will contribute to improvements in this major river's water quality. Agawam participates in the Connecticut River Clean-up Committee's Stormwater subcommittee and the Westfield River Watershed Steering Committee.

Possible Future Activities

The future activities within the Town of Agawam's Stormwater Management Plan will be implemented as funding and other resources will allow.