



Town of Agawam

36 Main Street Agawam, Massachusetts 01001-1837

Tel. 413-786-0400

Fax 413-786-9927

April 27, 2009

MAY 1 2009

Ms. Glenda Velez
U.S. Environmental Protection Agency - CIP
1 Congress Street, Suite 1100
Boston, MA 02114

RE: Agawam Massachusetts
NPDES Phase II MS4 Permit
Annual Report 2009

Dear Ms. Velez:

The Town of Agawam is pleased to submit the enclosed Municipal Stormwater Management Program Annual Report for permit year six in order to comply with the NPDES Stormwater MS4 Permit requirements.

The enclosed information includes documentation of year six activities, a self-assessment, a detailed assessment of BMPs, measurable goals, assessment of progress towards achieving the measurable goals, summary of results of any information that has been collected and analyzed, discussion of activities for the next reporting cycle, discussion of changes in identified BMPs, and reference to any reliance on other entities for achieving measurable goals.

Please feel free to contact me with any questions or comments regarding this submittal.

Sincerely,


Susan R. Dawson
Mayor

CC: Massachusetts Department of Environmental Protection
John P. Stone, Dept. of Public Works
Michael Chase, Engineering
Tracy DeMaio, Environmental Project Coordinator
Debra Dachos, Planning and Community Development
Henry Kozlowski, Conservation Commission



Town of Agawam

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April 27, 2009

Mr. Fred Civian
Massachusetts Department of Environmental Protection
One Winter Street - 5th Floor
Boston, MA 02108

RE: Agawam, Massachusetts
NPDES Phase II MS4 Permit
Annual Report 2009

Dear Mr. Civian:

The Town of Agawam is pleased to submit the enclosed Municipal Stormwater Management Program Annual Report for permit year six in order to comply with the NPDES Stormwater MS4 Permit requirements.

The enclosed information includes documentation of year six activities, a self-assessment, a detailed assessment of BMPs, measurable goals, assessment of progress towards achieving the measurable goals, summary of results of any information that has been collected and analyzed, discussion of activities for the next reporting cycle, discussion of changes in identified BMPs, and reference to any reliance on other entities for achieving measurable goals.

Please feel free to contact me with any questions or comments regarding this submittal.

Sincerely,

Susan R. Dawson,
Mayor

CC: U.S. Environmental Protection Agency
John P. Stone, Dept. of Public Works
Michael Chase, Engineering
Tracy DeMaio, Environmental Project Coordinator
Debra Dachos, Planning and Community Development
Henry Kozlowski, Conservation Commission



Enter your transmittal number

X228005

Transmittal Number

Your unique Transmittal Number can be accessed online: <http://mass.gov/dep/service/online/trasmfrm.shtml> or call MassDEP's InfoLine at 617-338-2255 or 800-462-0444 (from 508, 781, and 978 area codes).

Massachusetts Department of Environmental Protection Transmittal Form for Permit Application and Payment

1. Please type or print. A separate Transmittal Form must be completed for each permit application.

2. Make your check payable to the Commonwealth of Massachusetts and mail it with a copy of this form to: DEP, P.O. Box 4062, Boston, MA 02211.

3. Three copies of this form will be needed.

Copy 1 - the original must accompany your permit application.
Copy 2 must accompany your fee payment.
Copy 3 should be retained for your records

4. Both fee-paying and exempt applicants must mail a copy of this transmittal form to:

MassDEP
P.O. Box 4062
Boston, MA
02211

*** Note:**
For BWSC Permits, enter the LSP.

A. Permit Information

MAR041001

1. Permit Code: 7 or 8 character code from permit instructions

Annual Report

3. Type of Project or Activity

General Permit MS4

2. Name of Permit Category

B. Applicant Information – Firm or Individual

Town of Agawam

1. Name of Firm - Or, if party needing this approval is an individual enter name below:

2. Last Name of Individual

1000 Suffield Street

5. Street Address

Agawam

6. City/Town

John P. Stone

11. Contact Person

3. First Name of Individual

MA

7. State

01001

8. Zip Code

413-821-0624

9. Telephone #

4. MI

10. Ext. #

dpw@agawam.ma.us

12. e-mail address (optional)

C. Facility, Site or Individual Requiring Approval

Town of Agawam

1. Name of Facility, Site Or Individual

2. Street Address

3. City/Town

4. State

5. Zip Code

6. Telephone #

7. Ext. #

8. DEP Facility Number (if Known)

9. Federal I.D. Number (if Known)

10. BWSC Tracking # (if Known)

D. Application Prepared by (if different from Section B)*

1. Name of Firm Or Individual

2. Address

3. City/Town

4. State

5. Zip Code

6. Telephone #

7. Ext. #

8. Contact Person

9. LSP Number (BWSC Permits only)

E. Permit - Project Coordination

1. Is this project subject to MEPA review? ☐ yes ☐ no
If yes, enter the project's EOEA file number - assigned when an Environmental Notification Form is submitted to the MEPA unit:

EOEA File Number

F. Amount Due

Special Provisions:

1. ☒ Fee Exempt (city, town or municipal housing authority)(state agency if fee is \$100 or less).
There are no fee exemptions for BWSC permits, regardless of applicant status.
2. ☐ Hardship Request - payment extensions according to 310 CMR 4.04(3)(c).
3. ☐ Alternative Schedule Project (according to 310 CMR 4.05 and 4.10).
4. ☐ Homeowner (according to 310 CMR 4.02).

DEP Use Only

Permit No:

Rec'd Date:

Reviewer:

Check Number

Dollar Amount

Date

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Organization: **Town of Agawam, Massachusetts**

PERMIT YEAR 6: 2008 ANNUAL REPORT

NPDES PERMIT # MAR 041 001

Reporting Period: May 2008 – April 2009

MA DEP Transmittal # X228005

NPDES Phase II Small MS4 General Permit Annual Report

Part 1. General Information

Contact Person: John P. Stone

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:

Susan R. Dawson

Name:

Susan R. Dawson

Title:

Mayor

Date:

April 27, 2009

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 six of the 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 Year 6 of the EPA NPDES Phase II Small MS4 General Permit, the Town of Agawam increased its efforts in improving the quality of stormwater runoff using the six Minimum Control Best Management Practices as a guideline. Public education in the schools and in community via various media (i.e. displays, classrooms, cable access television, newspapers, mailed pamphlets, etc.) continued to be implemented year round.

The Illicit Discharge Detection and Elimination program has continued with complex stormwater system investigations, updated the GIS mapping of the stormwater system and resolving to illicit discharge issues. 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. In Year 6, the DPW constructed a new Sand/Salt Structure which will help with winter operations at the new facility. Good housekeeping education of the DPW employees has helped ensure that

municipal activities take place with minimal impact on stormwater runoff. Also, the DPW has proposed a Stormwater Utility fee which, if passed by the City Council, will help assist in funding MS4 maintenance projects, promote Low Impact Development and give support to educational activities throughout Town.

In the upcoming years, the Town plans to continue to expand and revise each of the six sections of the Minimum Control Best Management Practices as necessary when the new 2009 Permit Requirements are made available.

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

The Town will post one educational display per year in the Municipal Building. 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 6 Activities

The town continues to use posters available through the “Think Again, Think Blue Campaign” at the Town Hall and DPW Municipal Annex.

Best Management Practice Assessment / Proposed Changes

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

Possible Future Activities

No changes.

1B Classroom Education

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.

Year 6 Activities

Although stormwater educational topics may be included in the curriculum for grades 4-8, to increase recycling awareness and reduce the number of pollutants and their impacts on stormwater, as in previous years, the Agawam DPW has encouraged the public schools to participate in the following activities:

- DEP Green Team - 55 teachers signed up
- A Day At Bondi's Island, United Water Partnership – 14 fifth grade classrooms participated

- Be A Water Hero – School Pilot Project – Pending grant funding. If awarded the grant, the Agawam Middle School, in partnership with the Ct River Stormwater Subcommittee, would participate in a pilot project to expand the DEP Green Team program to include a water conservation portion.

Best Management Practice Assessment / Proposed Change

Re-write BMP to better align with the Massachusetts Department of Education Curriculum Frameworks for Mathematics, English Language Arts, and Science and Technology/Engineering.

Possible Future Activities

Meet with School Department to re-write BMP as noted in proposed changes and create a reporting document for permit records.

1C Local Cable Access

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 6 Activities

During permit year 6 the Town of Agawam posted the following information to help viewers learn more about stormwater management, healthy habits, and community activities.

- Greenscape Info and Greenscape Workshop Invitation
- Household Hazardous Waste Day Event / Hazardous Waste items list
- Rain Barrel Sale Opportunity / Rain Barrel Literature
- Earth Day Event with local "Green" Business literature and product
- "Greening Your Business" Workshop Info

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 Website

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 6 Activities

During permit year 6 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.

- Greenscape Info and Greenscape Workshop Invitation
- Household Hazardous Waste Day Event / Hazardous Waste items list
- Rain Barrel Sale Opportunity / Rain Barrel Literature
- Earth Day Event with local "Green" Business literature and product
- "Greening Your Business" Workshop Info

See Appendix 1C

Best Management Practice Assessment / Proposed Change

No proposed changes to this BMP

Future Activities

Website will be updates as necessary.

1E Newspaper Press Releases

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 6 Activities

During permit year 6, the following press releases were sent and published in local newspapers.

- Rain Barrel Sale – Republican, April 2008 and April 2009
- Volunteers Needed! – Republican, April 2008
- You've Been Caught Campaign – Agawam Advertiser, May 2008
- Stormdrain Marking – Agawam Advertiser, May 2008
- Think Blue – Business West, June 2008
- Lawn Care Workshop, Agawam Advertiser, July 2008
- Westfield River Clean up, Volunteers needed! – Agawam Advertiser, Sept 2008
- Source to Sea Cleanup along Westfield and Conn. Rivers - Republican, October 2008
- Water Conservation Tips – Agawam Advertiser, October 2008
- Students join Green Team – Agawam Advertiser, October 2008
- Earth Day Event – Agawam Advertiser, Reminder – April 2009
- Greening Your Business Workshop – Advertiser, Reminder, Republican, April 2009

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 7.

1F Informational Pamphlets

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 6 Activities

The town distributed 10,000 Fat Free flyers to all businesses and homeowners in town in September 2008.

In addition, 8,200 Greenscape Guides, educating residents on how to have a beautiful and healthy yard that protects the waterways was mailed out in late May of 2008

See Appendix 1F

Best Management Practice Assessment / Proposed Change

No proposed changes.

Possible Future Activities

Pending 2009 General Permit Requirements

1G Community Outreach

The Town 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. The DPW will have responsibility for this BMP, which will be utilized in Years 2-5.

Year 6 Activities

See BMP 2E
2E added in permit year 2

Best Management Practice Assessment / Proposed Change

Eliminate BMP 1G as it is referenced in BMP 2E

Possible Future Activities

See BMP 2E

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

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 6 Activities

Through the continued efforts of the Agawam Beautification Committee, CRWA, and the WRWA, the following areas were cleaned by local volunteers.

Suffield Street
Garden Street
Silver Street
Shoemaker Lane
Southgate Plaza
Skateboard Park
Borgatti Field
CT River Bike Path
Pynchon Point / Connecticut River

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 Surveys

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 6 Activities

Attitude surveys were distributed as an insert of the Consumer Confidence Report / Aqua Almanac in early June 2008. The Survey reflected questions regarding stormwater related topics to measure community awareness of stormwater issues.

See Appendix 2B

Best Management Practice Assessment / Proposed Change

Any changes pending 2009 General Permit Requirements

Future Activities

Pending 2009 General Permit Requirements

2C Catch Basin Marking

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 6 Activities

During permit year 6, volunteers from the High School and Westfield River Watershed were able to target streets along the Westfield and Connecticut River marking catch basins with markers. It is estimated that 300 catch basins were marked in those watersheds.

See Appendix 1E

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.

2D Watershed Committee

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.

Year 6 Activities

The WRWA has become an active partner in helping the Town of Agawam keep the riverbanks clean. In addition to the Westfield River Cleanup, the WRWA Source to Sea Cleanup included groups along the Connecticut River and its tributaries.

See Appendix 1E

Best Management Practice Assessment / Proposed Change

As an active partner of the Connecticut River Watershed Stormwater Subcommittee, the Town of Agawam will also include activities participated under the Connecticut River Watershed as part of BMP 2D.

Future Activities

Activities are pending the rewritten 2009 General Permit Requirements. BMP 2D will be modified to include activities under the Connecticut River Watershed.

2E Community Outreach

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.

Year 6 Activities

During Permit Year 6, the DPW has offered the following programs to residents in town.

- HHW Day, 161 homeowners participated
- Rain Barrel Distribution, 100 barrels sold

- First Annual Earth Day Event, an estimated 300 people attended!
- Water Conservation Devices (rain gauges, leak detection tablets, kitchen faucet aerators, low flow shower heads), 200 of each device distributed during Earth Day

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.

The DPW will propose to include other departments of the town to participate in this BMP. (Energy Conservation Commission, Beautification Committee, Conservation Committee, Planning and Community Development).

Future Activities

Future activities are pending the rewritten 2009 General Permit Requirements and BMP 2E will include other departments and committees of the town.

Minimum Control Best Management Practices

Section 3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION

3A Mapping Stormwater Outfalls

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 6 Activities

GIS based mapping of the Town's existing stormwater drainage system is almost 100% complete. This 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.

The Town of Agawam's engineering consultant, Tighe & Bond, has provided GIS and GPS training to new employees in Year 6. It should be noted that all areas were investigated to the best of the ability of our mapping field crew. More complex investigations continue with the assistance of the DPW in order to complete mapping. Also, mapping continues to be updated as new construction is completed throughout Town.

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. As the DPW continues to perform complex drainage system investigations, outfall inspections will be evaluated.

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. A comprehensive program that will inspect stormwater outfalls shall begin

within Year 7. Approximately 25% of the existing outfalls will be inspected each year, as per NPDES recommendations.

3B Non-Stormwater Discharge Ordinance

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 6 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 6.

Possible Future Activities

The DPW will continue to educate the community regarding the new 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 help: expand on the Federally Mandated Requirements, clarify the wording in a few sections, and also allow for automatic updates when the Federally Mandated Requirements are revised.

3C Develop Illicit Discharge Plan

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 6 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.

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.

A list of existing detention basins within the Town has been created. This list will be used to conduct inspections of the detention basins to prevent and eliminate illicit discharges. This list will be updated as new construction is completed.

Best Management Practice Assessment / Proposed Change

Prior to Year 6, the focus of the Town's Illicit Discharge Detection program was based on individual discharges observed by neighbors or DPW staff. In Year 6, a plan for annual inspection and sampling of the Town's stormwater outfalls was created. Methods of outfall inspection and sampling were researched from NPDES, the New England Interstate Water Pollution Control Commission (NEIWPCC), and the Center for Watershed Protection. It is anticipated that all existing Town stormwater outfalls will be inspected within years 7-10 of the permit.

Future Activities

Approximately 25% of the existing outfalls will be inspected each year for obvious signs of illicit discharges, such as tinted water, odors, and/or turbidity. If the preliminary inspection indicates the presence of an illicit discharge, sampling and further testing will be conducted. The Town is in the process of acquiring a Storm Water Kit for in-field testing. Any necessary testing beyond the scope of the Town's facilities will be performed by a private laboratory.

A comprehensive inspection program of all detention basins will begin in Year 7. Town owned detention basins will be given priority. The DPW will be responsible if any repairs to the Town owned 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.

The Town is currently working 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 including the Illicit Discharge Program and detention pond maintenance. (See Section 5C for details).

3D Inform Employees, Businesses, and Public

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 6 Activities

An Illicit Discharge educational pamphlet had been developed and continues to be available at the Department of Public Works Municipal Annex (As referenced in permit year 3). As documented during permit year 4, a new ordinance prohibiting illicit discharge had been adopted and design consultants and developers were notified of ordinance changes, fees and permit requirements within the town. The town continues to inform and educate as needed.

Best Management Practice Assessment / Proposed Change

No proposed changes.

Possible Future Activities

The Town is currently working 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, the Illicit Discharge Program, and all stormwater related educational programs and materials. (See Section 5C for details).

3E Video Inspection

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 6 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 Year 6. 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.

Best Management Practice Assessment / Proposed Change

The DPW will continue to use its video camera to assist in Illicit Discharge investigations. 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 Town is currently working 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. (See Section 5C for details)

3F Failing Septic Systems

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 6 Activities

The Board of Health maintains records on all inspections involving septic systems. The BOH has forwarded a list of all failed systems from 2008 to the DPW. Septic System locations and their failures from 2003-2008 have been incorporated into the GIS mapping project.

See Appendix 3F

Best Management Practice Assessment / Proposed Change

The Town is in the process of beginning Phase I of its Southwest Area Sewer project. The project is currently in the Planning and Conservation Commission review phase. The project is expected to begin late in 2009. Once the new sewer is constructed, some 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.

3G CATCH BASIN MARKING

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 6 Activities

During permit year 6, volunteers from the High School and Westfield River Watershed were able to target streets along the Westfield and Connecticut River marking catch basins with markers. It is estimated that 300 catch basins were marked in those watersheds.

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**

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 6 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

No changes proposed.

Possible Future Activities

This ordinance may be revised in the future to help clarify and improve the requirements. The ordinance will continue to be used and enforced.

The Town is currently working 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. (See Section 5C for details).

4B Construction Plan Review

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 6 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.

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 alleviate erosion control problems as they occur.

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.

4C Inspection / Reporting

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 6 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

Inspections will occur as needed for relevant existing regulations.

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

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 6 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.

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.

5B Site Plan Review

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, Planning Department, and Building Inspector have responsibility for this BMP.

Year 6 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.

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.

5C Stormwater System Maintenance Plan

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 6 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.

In the spring of 2007, 72 Private Homeowners with Detention Ponds located on their property were mailed Detention Pond Maintenance Reminder letters. The DPW actively inspected a number of D-Ponds, working closely with residents to bring the areas back to working conditions. During Year 6, the DPW experienced some resistance from homeowners in regards to maintaining the detention ponds located on their properties. The DPW worked with several of the homeowners to help bring the detention ponds back to their originally proposed condition. However, there are many detention areas throughout town which still require significant maintenance.

The DPW has decided to propose 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 stormwater fees collected will be put toward the following:

- Enhanced Illicit Discharge Detection and Elimination (IDDE) program which will identify, isolate, and remove sanitary and other wastes from the stormwater system.
- Water quality monitoring of stormwater discharges
- Encouraging the use of Low Impact Development (LID) and green infrastructure techniques
- Requirements designed to meet approved Total Maximum Daily Load (TMDL) and Waste Load Allocations (WLAs).
- Overall maintenance of detention ponds and other stormwater utilities in town.

The stormwater utility proposal is currently being reviewed by the Town Solicitor and is pending approval by the Mayor and City Council. The DPW hopes that this utility will be approved in 2009.

A copy of the proposal can be located in Appendix 5C.

Best Management Practice Assessment / Proposed Change

See Year 6 Activities.

Possible Future Activities

If the stormwater utility is approved, the DPW hopes 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 drainage detention areas located within town easements are properly maintained and in the originally proposed working condition.

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

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 6 Activities

On an average, the Department of Public Works would apply 4-5 tons of sand per year during the winter season. Prior to the 2008-2009 winter operations, 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.

The spreading equipment was re-calibrated for the proper spreading rate when the hoppers were installed on the trucks for the winter season.

See Appendix 6A for "Magic Salt" information.

Best Management Practice Assessment / Proposed Change

The elimination of sand has reduced the number of plugged stormdrains, reduced the loads of solids from street surfaces that would otherwise be washed into the storm drainage system or local waterways, and reduced street sweeping disposal costs.

This application process will continue to be used within the town of Agawam.

Any changes to BMP are pending the 2009 Permit Requirements

Possible Future Activities

Future activities are pending the 2009 Permit Requirements

6B Training of Municipal Employees

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 6 Activities

The DPW made an economical and environmental decision to eliminate sand from their roadways and apply "Liquid Magic" to their rock salt pile. During this transition, the manufacturer of Liquid Magic trained all staff in Winter Operations of the following:

- Product Knowledge
- Equipment Calibration
- Application Process / Frequency

Best Management Practice Assessment / Proposed Change

No changes at this time unless required by new 2009 Permit Regulations

Future Activities

The DPW will continue to review EPA's website regarding Pollution Prevention / Good Housekeeping for Municipal Operation and implement policies and training to employees as needed.

6C Catch Basin Cleaning Program

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 6 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 6, thirty two catch basins were cleaned, 2 manholes and three drop inlets were cleaned.

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 2009 Permit Regulations

Possible Future Activities

The DPW will continue to seek dedicated funds for catch basin cleanings during FY10

6D Street Sweeping

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 6 Activities

During permit year 6, the DPW completed street sweeping in the following areas:

- 272.54 curb miles of roadway between April 1, 2008 – June 1, 2008
- Additional sweeping included
 - Water break clean up of soil and salt
 - Street sweeping prior to paving operations

Best Management Practice Assessment / Proposed Change

The town has successfully completed street cleaning to all streets in the urbanized area, including municipal building parking lots.

Any changes pending 2009 Permit Requirements.

Possible Future Activities

The DPW will continue to provide street cleaning to all proposed areas as needed during the Summer, Fall and Spring quarters of the permit years.

Any changes are pending new 2009 Permit Requirements.

6E Pest Control / Landscaping and Lawn Care

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 6 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.

Best Management Practice Assessment / Proposed Change

DPW will continue to utilize organic alternatives where practicable.

Proposed future activities are pending the rewritten 2009 General Permit Requirements and the inclusion of additional town departments to BMP 2E.

Possible Future Activities

Proposed future activities are pending the rewritten 2009 General Permit Requirements and the inclusion of additional town departments.

6F Stormwater Pollution Prevention Plan / MSGP

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 6 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 recently 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.

6G Used Oil Recycling

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 6 Activities

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

2650 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

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 through 5.

Year 6 Activities

The town hosted another Household Hazardous Waste collection day in the fall of 2008. 161 vehicles dropped off Hazardous Waste rather than disposing of it in the trash. 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**

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 6 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.