Organization: **Town of Agawam, Massachusetts**

PERMIT YEAR 4: 2007 ANNUAL REPORT **NPDES PERMIT # MAR 041 001**
Reporting Period: May 2006 – April 2007

MA DEP Transmittal # W 131453

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: Richard A. Cohen

Name: Richard A. Cohen

Title: Mayor

Date: April 25, 2007

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 four 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

The following is a summary of all activities which exceed the permit requirements and those requirements which have not been completed. The Town of Agawam requests that the following alterations of Minimum Control Best Management Practices (BMPs) permit requirements be adopted as new permit conditions. All Minimum Control BMPs not mentioned here are in compliance with the permit requirements.

BMP 1C – Local Cable Access – During permit year 4, five bulletins were posted on the cable access channel, rather than two. Bulletins included a request for volunteers to mark storm drains, HHW Bulletin, Dog Pollution, Catch Basin Cleaning Education and an EPA Video played twice a day for approximately 6 months.

BMP 1D – Community Website – During permit year 4, the town website was updated to include a links to the following sites: Mass DEP, US EPA, CT River Stormwater

Subcommittee campaign, CT River Watershed Council, Westfield River Watershed Association. In addition updated environmental literature was added, as well as updated permit applications and stormwater regulations.

BMP 1E – Press Releases – Nine newspaper articles were published in local newspapers to inform residents and businesses about stormwater management and local policy changes.

BMP 2A – Adopt–a-Road – The town successfully supported neighborhood cleanup days throughout the community. With the partnership of the Public School System, Conservation Commission, Beautification Committee, and the Connecticut River Watershed a number of locations were successfully cleaned by local volunteers.

BMP 2C – Storm Drain Markers – (BMP was previously known as Storm Drain Stenciling, now BMP 3G) with the help of a local Cub Scout troop, 402 storm drains were marked with markers. The town continues to seek volunteers for this project. All materials needed to mark all catch basins in town have been purchased and are available for use by volunteer groups.

BMP 2D Watershed Committee – During permit year 4, the Town of Agawam continued to be actively involved with the Westfield River Watershed and Connecticut River Watershed Committees. Each committee continued to focus on stormwater related events as well as increased public education on a regional level.

BMP 3A – Mapping Stormwater Outfalls – As described in the year 2 annual report, the Town of Agawam with its consultant Tighe & Bond have applied for and been granted a State Revolving Funding (SRF) loan for the mapping of the drainage system town-wide.

Project Status:

Compilation of existing data - complete

Compilation of existing GIS data layers - complete

Update of existing GIS data layers - complete

Field locating of stormwater features – over 95% of known features

Compilation of stormwater mapping – over 95% complete

Records Management of record plans – over 95% complete

Hardware and Software Purchase – future task (awaiting purchase approval of computers and GPS accessories)

Training – Tighe &Bond provided some GPS training in 2006; GIS training with Tighe & Bond to take place in Year 5.

An updated status map showing the progress on the mapping project may be found in Appendix 3A.

BMP 3C – Illicit Discharge Plan Development – An Illicit Discharge Plan has been developed. It will be evaluated and updated on an annual basis. A copy of this plan is located in Appendix 3C.

The Non-Stormwater Discharge Ordinance was adopted by the Mayor and City Council in May of 2006. Existing activities involve the investigation, and removal of illicit discharges, if the DPW is made aware of an issue based upon resident complaints or observation by DPW personnel. Removal of illicit discharges has been based upon existing authority by the DPW to do so. Also, drainage system GIS mapping development continues. Once the GIS mapping is complete, the continued evaluation of how to proceed with illicit discharge elimination will take place. The focus of the Illicit Discharge Plan is currently on a number of areas:

Site plan and subdivision plan review and on-site inspections

Updating of plan review design requirements

The Storm Drain Permit Program at DPW was updated and implemented in November of 2006. A copy of the new permit is located in Appendix 4A and in the Engineering Division's section of the Town's web page.

Illicit Discharge Ordinance development and adoption

GIS Mapping of drainage system

Public education

Development of new DPW structural and operations measures for the new DPW facility.

Information about illicit discharges was included in Agawam's Environmental Encyclopedia which was mailed out to approximately 8,820 homes and placed on the Town's webpage. A copy of this section is located in Appendix 1G on page 21.

BMP 4A - Construction Runoff Ordinance – Stormwater Ordinance amendments to the existing Water and Sewer Ordinance section were developed and adopted in May of 2006. These amendments included sections pertaining to erosion and sediment control. Additionally, all new subdivisions are required to include within the construction plan set, a separate sheet showing all construction phase erosion and sediment control measures for

the site. Also, the developer is required to submit an informational copy of the project's SWPPP to the DPW as prepared for the NPDES construction phase N.O.I. for EPA. Construction site BMP educational materials have been displayed in the DPW offices. The material includes information on construction phase erosion and sediment control BMPs.

BMP 4B - Construction Plan Review – Stormwater Ordinance amendments to the existing Water and Sewer Ordinance section were developed and adopted in May of 2006. These amendments include sections pertaining to review of construction plans and design standards. 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. 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.

BMP 5A – Post Construction Runoff Ordinance – The stormwater ordinance was adopted by the City Council in May of 2006. It includes new procedures in the Storm Drain Permit requirements addressing post construction runoff controls. The revised ordinance was sent out to a majority of the Engineers and Developers who work in Agawam and is being implemented in reviewing and inspecting new site plans and subdivisions throughout Town.

5B – Site Plan Review – On going site plan review procedures continue. Implementation of new Storm Drain Permit procedures as described in the Stormwater Ordinance began shortly after the new Ordinance was approved by the City Council in May of 2006.

5C – Post Construction Controls – The existing practice of requiring post construction controls is on going. Implementation of new Storm Drain Permit procedures as described in the Stormwater Ordinance began shortly after the new Ordinance was approved by the City Council in May of 2006.

BMP 6A – Municipal Maintenance Activity Program - During Permit Year 4, the DPW moved to its new Public Works Annex. Procedures for the Good Housekeeping BMP's are being reviewed based on the new location. During permit year 5 Tighe & Bond Consulting Engineers and Environmental Specialist will consult the DPW with an Environmental Audit and SPCC Planning.

BMP 6B – Municipal Employee Training – Initial discussions and coordination amongst DPW supervisors and Tighe & Bond has occurred. Pending Tighe & Bond reports, more formal training will occur as BMP 6A is completed. This is anticipated during permit year 5.

BMP 6C - Catch Basin Cleaning Program – The town successfully had 255 storm drains cleaned and maintained during permit year 4.

BMP 6F - Stormwater Pollution Prevention Plan / MSGP – Currently, the DPW continues to move operations from the old DPW site to the new DPW facility. The Town of Agawam requests that this goal be amended to allow for the revised schedule and the construction schedule of the new DPW facility, which will reduce pollutant loading from current conditions in a cost effective manner. At this time, the MSGP requirement for DPW yards is not currently in effect. The DPW has provided Tighe & Bond with the required information for a SPCC plan and environmental audit for the new DPW facility. The Town's future MSGP compliance program, specifically a Stormwater Pollution Prevention Plan, is anticipated to incorporate components of the SPCC Plan.

BMP 6G – Hazardous Waste Collection – The town successfully offered a Household Hazardous Waste Day Collection to the residents of Agawam due to available funding.

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 4 Activities

Within the month of March 2007, a new educational display was posted in the Town Hall and DWP Municipal Annex. The message of the display was "Remember, the Drain is Just for Rain", giving Do's and Don'ts of residential household habits. Also, a display was placed in a meeting room at the new DPW. It is entitled: "Stormwater and the Construction Industry" prepared by the EPA provides a menu of BMP's for construction sites

See Appendix 1A for display contents.

Best Management Practice Assessment / Proposed Changes

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

Possible Future Activities

Next display to be posted in the Spring 2008.

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 4 Activities

To increase recycling awareness and reduce the number of pollutants and their impacts on stormwater, the Agawam DPW has made aware and encouraged the public schools to participate in the following activities:

- The Go Green Initiative
  Grades Pre-K through 12
  The Town of Agawam adopted the Go Green Initiative within permit year 2. Schools continue to implement recycling within their school system, tracking their success through the year. Schools continue to show an increase in their recycling efforts.

- Student Essay Contest – Connecting Kids and the Environment
  Teachers of grades 4 – 8 were encouraged to have their students participate in the Springfield Materials Recycling Facility Student Essay Contest, Connecting Kids and the Environment. See Appendix 1B

- Anti-Litter Critters
  Grades 3-4
  This group of students was formed to address the litter problem around the schools. The Anti-Litter Critters are working on ways to educate not only their fellow students but the entire town.
  See Appendix 1E

Best Management Practice Assessment / Proposed Change

The Town of Agawam has completed this BMP and feels all the activities were effective in helping support the public school department in educating the students on reducing the amount of waste disposed of improperly within our town.

Possible Future Activities

In an effort to further help the School Department educate students on stormwater quality, the Town of Agawam DPW Solid Waste Coordinator will continue to help coordinate any presentations as staffing and funds allow.

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 4 Activities

Summer 06, Stormdrain Marker Volunteer bulletin posted, asking for volunteers to help place stormdrain markers and help prevent illegal dumping in our community.

A Hazardous Waste Bulletin was posted in the September 06. Information on the bulletin included which items could be brought to the Household Hazardous Waste Day event. In addition, it listed how to properly dispose of latex paint and used motor oil, two common illegally dumped waste products.

Spring 06 – "The Clean Solution to Dog Pollution" bulletin continued to be posted, educating residents of the local campaign encouraging residents and visitors using the bike path to clean up after pets using the available dog waste bags.

Fall 06, a Stormwater informational bulletin was posted, educating residents on the cleaning of catch basins.

May – December 06, EPA "After the Storm" Video was played twice a day.

See Appendix 1C for bulletin details.

Best Management Practice Assessment / Proposed Change

No changes proposed to this BMP.

Possible Future Activities

The Town of Agawam will continue to post two bulletins on the local cable access channel to better educate the community regarding stormwater related issues.

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 4 Activities

During Year 4, the Town of Agawam updated its website to include the following links to help viewers lean more about stormwater management, healthy habits, and community activities and volunteer programs.

- Mass DEP Stormwater Frequently Asked Questions
- US EPA Stormwater page
- CT River Stormwater Subcommittee – Think Again, Think Blue! Campaign
- CT River Watershed Council
- Westfield River Watershed Association

See Appendix 1D

In addition, an online version of the town Environmental Encyclopedia is now available on the website. See Appendix 1G

The Engineering section of the Town Website includes the NPDES Phase II Stormwater Regulations as well as the option to download the new town Stormwater Permit Application. See Appendix 1D

Best Management Practice Assessment / Proposed Change

This goal has been met. No changes are proposed.

Future Activities

The website will again be updated within permit year 5.

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 4 Activities

The following Newspaper Articles were published in local newspapers to inform residents and businesses about stormwater management and local policy changes.

- Sewer and Water Regulations
  Springfield Republican
  Information regarding new town codes pertaining to state mandates and local ordinance changes. See Appendix 1E

- Pynchon Point Clean Up
  Springfield Republican
  Volunteer Community Clean up along the Connecticut River.
  See Appendix 1E

- Recycling Efforts Recognized
  Springfield Republican
  Agawam Student gets recognized as the winner of the Environmental Awareness Essay Contest. See Appendix 1E

- School Recycling Award
  Springfield Republican
  James Clark School Kindergarten class wins state award for recycling in the classroom. See Appendix 1E

- Household Hazardous Waste Collection
  Springfield Republican / Agawam Advertiser / Reminder
  A guideline to what items are considered Hazardous Waste and how to properly dispose of them. See Appendix 1C / 1E

- Help Us to Help You
  Springfield Republican / Agawam Advertiser
  Press release printed in October newspapers reminding residents of the importance of cleaning catch basins. See Appendix 1E

- Pet Waste PSA
  Agawam Advertiser See Appendix 1E

- Leaking Oil PSA
  Agawam Advertiser See Appendix 1E

- Fertilizer PSA
  Agawam Advertiser See Appendix 1E

Best Management Practice Assessment / Proposed Change

Goal has been met. No changes at this time.

Possible Future Activities

The Town of Agawam will continue to send out press releases throughout the year.

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 4 Activities

NA – next informational pamphlet due in Year 5

Best Management Practice Assessment / Proposed Change

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

Possible Future Activities

The next informational pamphlet is to be distributed during Year 5.

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 4 Activities

The DPW distributed flyers to 287 residents at the local Household Hazardous Waste Event. Flyers included information on catch basin cleaning as posted on Cable Access Channel. "Help Us Help You" See Appendix 1C

In partnership with the Department of Environmental Protection, Springfield Materials Recycling Facility and Allied Waste, the DPW distributed 8,545 Environmental Guides to all one – four family dwellings within the Town of Agawam. See Appendix 1G

Best Management Practice Assessment / Proposed Change

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

Possible Future Activities

The Town will continue to distribute educational flyers at community events and sponsor educational programs as funding becomes available.

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 4 Activities

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

- Pynchon Point – See Appendix 1E
- Garden Street
- Shea Field
- Skateboard Park
- Borgatti Field
- Wade Park
- Agawam High School, with the help of the HS Track and Field Teams
- Bike Path along the Connecticut River

The Connecticut River Watershed Association organized a 2 day volunteer group to help clean up the Connecticut River Riverbank along side River Road in Agawam. See Appendix 2A

As agreed in Permit Year 3, the DWP posted 30"x30" No littering signs at each of the Elementary Schools as requested by the schools "Anti Litter Critter Group".

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 4 Activities

NA – next survey due during permit year 5.

Best Management Practice Assessment / Proposed Change

No changes are proposed.

Future Activities

A questionnaire will be mailed to town residents during permit year five.

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 4 Activities

In an effort to increase community participation and strengthen our volunteer programs, flyers were again posted at public library, town hall and the local cable access channel. See appendix 1C

A local Boy Scout continued to recruit volunteers to help him mark storm drains and pass out informational door hangers in an effort to earn his Eagle Badge. Through his efforts we were able to get the following number of storm drains marked on the streets listed below:

TOTAL STORM DRAINS MARKED:

Forest Hill Road – 12	Doloris Lane – 4
Clover Hill Road – 19	Calico Lane - 3
Valley Brook Road – 1	Centerwood Drive - 20
Fox Farm Road – 7	Butternut Drive - 17
Pleasant Valley Road – 8	Butterwood Drive - 2
High Meadow Road – 6	Hunting Lane – 2
Beech Hill Road – 8	Primrose Lane - 4
Robin Ridge Drive – 13	Arbor Lane - 6
Oriole Road – 4	Adams Street - 21
Allison Lane – 2	Mallard Circle - 1
North Westfield Street – 9	Rosie Lane - 1
Thalia Road – 1	South Brook Lane - 2
Princeton Ave – 9	Jade Lane -2

Morningside Circle – 6

Brookside Drive – 4

Windmere Drive – 4

Suffield Street – 59

Main Street – 45

Walter Way – 1

Forest Ridge Lane – 6

Lawnwood Street – 2

Hampden Lane – 5

Alhambra Circle n/s -14

Quail Hollow Road - 7

Charest Lane - 2

South Street -2

Mark Drive - 5

Barden Street -4

Trinity Terrace – 2

River Road – 31

Danny Lane – 7

Glendale Road – 12

TOTAL STORM DRAINS MARKED DURING PERMIT YEAR 4: 402

Best Management Practice Assessment / Proposed Change

The goal of supporting and supervising volunteers to mark catch basins during year four was accomplished.

Possible Future Activities

DPW will continue to seek volunteers to continue marking storm drains.

In addition to marking storm drains with markers, discussions have been taking place with the Westfield River Watershed to stencil storm drains within the Westfield River Watershed area.

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 4 Activities

The Agawam DPW has informed the Westfield River Watershed Association of the Town's initiative to find volunteers to help identify and stencil storm drains within the watershed. The WRWA has become an active partner in helping the Town of Agawam and hopes to have a volunteer group scheduled for the spring.

In addition to the WRWS, the Town of Agawam has continued to be an active member of the Connecticut River Stormwater Committee, a subcommittee of the Connecticut River Clean-up Committee (CRCC). The CRCC formed the Stormwater Subcommittee as a way of implementing a regional stormwater public outreach program. CT River Stormwater Subcommittee Accomplishments - see Appendix 2D

Best Management Practice Assessment / Proposed Change

The goal has been met. No changes proposed at this time.

Future Activities

Members of the WRWA Five Year Action Plan Committee and Connecticut River Stormwater Committee will participate in meetings and activities as they are scheduled.

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 3 Activities

The DPW distributed flyers to 287 residents at the local Household Hazardous Waste Event. Flyers included information on catch basin cleaning as posted on Cable Access Channel. "Help Us Help You" See Appendix 1C

In partnership with the Department of Environmental Protection, Springfield Materials Recycling Facility and Allied Waste, the DPW distributed 8,545 Environmental Guides to all one – four family dwellings within the Town of Agawam. See Appendix 1G

Best Management Practice Assessment / Proposed Change

No proposed Changes.

Possible Future Activities

The town will continue to track the community participation level.

Minimum Control Best Management Practices

Section 3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION

3A Mapping Stormwater Outfalls

A Stormwater Outfall Map will be developed showing all municipal stormwater outfall pipes greater than 12-inches diameter. Existing information and reports from previous investigations will be compiled in Year 1. Approximately 25% of the outfalls will 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 4 Activities

A majority of the Town's existing mapping is available. This existing mapping is often utilized for stormwater related investigations. A bound set of the Town's drainage plans has been given to the D.P.W. foremen and the Engineering Division so that if an illicit discharge occurs, the surrounding drainage system can be promptly and accurately located in the field.

Mapping Stormwater Outfalls – The Town of Agawam with its consultant Tighe & Bond have applied for and been granted a State Revolving Funding (SRF) loan for the mapping of the drainage system town-wide.

Project Status:

Compilation of existing data - complete

Compilation of existing GIS data layers - complete

Update of existing GIS data layers - complete

Field locating of stormwater features – over 95% of known features

Compilation of stormwater mapping – over 95% complete

Records Management of record plans – over 95% complete

Hardware and Software Purchase – future task (awaiting purchase approval)

Training – future task

Map Deliverable from consultant - pending

A status map of the progress on the mapping project may be found in Appendix 3A.

Best Management Practice Assessment / Proposed Change

The GIS mapping project is in progress. The details described in this requirement will be gathered during the mapping. Once mapping is complete. The establishment of outfall inspections will be evaluated.

Possible Future Activities

The D.P.W. will finalize mapping the existing drainage system and continue to update the map as new projects are constructed. The establishment of an outfall inspection program will be evaluated.

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 4 Activities

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.

See Appendix 3B

Best Management Practice Assessment / Proposed Change

This ordinance has been enforced during permit year 4.

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.

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 4 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 were made aware of an issue based upon resident complaints or observation by DPW personnel. Removal of illicit discharges has been based upon existing authority by the DPW to do so. Also, drainage system GIS mapping is being developed. Once the GIS mapping is complete, the detailed evaluation of which areas to focus on for investigations will proceed. See Appendix 3C

A component of the Town's Environmental Encyclopedia includes education about illicit discharges and a phone number to call if a resident suspects an illicit discharge in their neighborhood. See Appendix 1G – page 21.

During permit year 4, an Illicit Discharge Verbal Notice of Violation form was created. This form is to be used as a form of notification and documentation by the DPW when Non-Stormwater Discharges are seen at a site that is in violation of Town Code.

See Appendix 3C

Best Management Practice Assessment / Proposed Change

The major focus of illicit discharge plan for year 4 was the development of new ordinances to address illicit discharges for site development. During Year 4, the ordinance was adopted by the City Council. Most of the staff's time was taken by plan review, storm drain permit administration and construction inspection. Illicit discharge investigations and removal will be based upon individual incidents. The illicit discharge plan will prioritize activities appropriately for the Town's needs.

Future Activities

During year 5, the Town will work toward completing the GIS mapping of the existing drainage system, illicit discharge detection can be implemented based upon available time of DPW staff.

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 4 Activities

An Illicit Discharge educational pamphlet has been developed and continues to be available at the Department of Public Works Municipal Annex (As referenced in permit year 3). During permit year 4, a new ordinance prohibiting illicit discharge had been adopted. See Appendix 3B

Design Consultants and Developers were notified of ordinance changes, fees and permit requirements within the town. See Appendix 3D

Best Management Practice Assessment / Proposed Change

No Proposed Changes.

Possible Future Activities

No changes to this BMP.

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 4 Activities

The illicit discharge detection program is not yet at the stage where video inspections are required.

Best Management Practice Assessment / Proposed Change

During year 4, the DPW purchased a video camera system which can be used on smaller diameter pipes. If necessary, when an illicit discharge is discovered under BMP #3B in larger diameter pipes, the DPW will contract for the use of a video camera.

Possible Future Activities

No Comment

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 4 Activities

The Board of Health maintains records on all inspections involving septic systems. The BOH has forwarded a list of all failed systems from 2006 to the DPW. Septic System locations and their failures will be incorporated into the GIS stormwater mapping project at the appropriate time. See Appendix 3F.

An Environmental Impact Report for the Southwest Area Sewer Improvement Project has been submitted to DEP and EOEA and is currently under review. The DPW is currently working with the Massachusetts Highway Department on resolving right of way issues. Once this is completed, the Project will be voted on by the City Council for funding approval.

Best Management Practice Assessment / Proposed Change

This original permit requirement is proceeding as scheduled.

Future Activities

No changes to this BMP.

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 3 Activities

In an effort to increase community participation and strengthen our volunteer programs, flyers were again posted at public library, town hall and the local cable access channel. See appendix 1C

A local Boy Scout continued to recruit volunteers to help him mark storm drains and pass out informational door hangers in an effort to earn his Eagle Badge. Through his efforts we were able to get the following number of storm drains marked on the streets listed below:

TOTAL STORM DRAINS MARKED:

Forest Hill Road – 12	Doloris Lane – 4
Clover Hill Road – 19	Calico Lane - 3
Valley Brook Road – 1	Centerwood Drive - 20
Fox Farm Road – 7	Butternut Drive - 17
Pleasant Valley Road – 8	Butterwood Drive - 2
High Meadow Road – 6	Hunting Lane – 2
Beech Hill Road – 8	Primrose Lane - 4
Robin Ridge Drive – 13	Arbor Lane - 6
Oriole Road – 4	Adams Street - 21
Allison Lane – 2	Mallard Circle - 1
North Westfield Street – 9	Rosie Lane - 1
Thalia Road – 1	South Brook Lane - 2
Princeton Ave – 9	Jade Lane -2

Morningside Circle – 6

Brookside Drive – 4

Windmere Drive – 4

Suffield Street – 59

Main Street – 45

Walter Way – 1

Forest Ridge Lane – 6

Lawnwood Street – 2

Hampden Lane – 5

Alhambra Circle n/s -14

Quail Hollow Road - 7

Charest Lane - 2

South Street -2

Mark Drive - 5

Barden Street -4

Trinity Terrace – 2

River Road – 31

Danny Lane – 7

Glendale Road – 12

TOTAL STORM DRAINS MARKED DURING PERMIT YEAR 4: 402

Best Management Practice Assessment / Proposed Change

The goal of supporting and supervising volunteers to mark catch basins during year four was accomplished.

Possible Future Activities

DPW will continue to seek volunteers to continue marking storm drains.

In addition to marking storm drains with markers, discussions have been taking place with the Westfield River Watershed to stencil storm drains within the Westfield River Watershed area.

Minimum Control Best Management Practices

SECTION 4 - CONSTRUCTION SITE RUNOFF CONTROL

4A Construction Runoff Ordinance

The Town intends to adopt a Construction Runoff Ordinance or other regulatory mechanism to require sediment and erosion control at construction 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 4 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. See Appendix 3B. A new Stormwater Permit Application was created and implemented during Year 4. See Appendix 4A.

Best Management Practice Assessment / Proposed Change

No changes Proposed.

Possible Future Activities

This ordinance will be enforced during permit year 5.

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 4 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.

See Appendix 3B.

Best Management Practice Assessment / Proposed Change

No change is proposed.

Possible Future Activities

No Comment.

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 4 Activities

Ordinance changes have been adopted by the City Council as of May 5, 2006. See Appendix 3B.

The DPW and Conservation Commission continue to work together inspecting and enforcing the Wetland Protection Act on projects within the appropriate jurisdiction. See Appendix 3C.

Best Management Practice Assessment / Proposed Change

No change is proposed.

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 4 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. See Appendix 3B

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 Proposed Changes.

Possible Future Activities

This ordinance will be enforced during permit year 5.

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 4 Activities

New stormwater regulations were approved and adopted by the City Council in May of 2006. See Appendix 3B. This ordinance has been implemented by the DPW and is used during the site plan and subdivision review and inspection process.

Best Management Practice Assessment / Proposed Change

Adoption of the new stormwater ordinance occurred in May of 2006 and is currently being implemented by the DPW.

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 4 Activities

New ordinance requirements including drainage system maintenance of private sites has been adopted by the City Council.

See Appendix 3B

Best Management Practice Assessment / Proposed Change

Shortly after the adoption of the new Ordinance by the City Council, all new or redevelopment plans were required to develop maintenance activity schedules as part of a site's Stormwater Permit with the DPW. This is part of permitting with the DPW.

Possible Future Activities

The Town will proceed with activities as scheduled in the permit implementation.

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 4 Activities

The DPW has evaluated the BMPs shown on EPA's website regarding Pollution Prevention / Good Housekeeping for Municipal Operations and determined that several are significant to the Town of Agawam for further implementation in the future. Tighe & Bond Consulting Engineers and Environmental Specialist have been contracted to perform an Environmental Audit and develop an SPCC Plan during permit year 5. See Appendix 6F.

Best Management Practice Assessment / Proposed Change

No changes at this time.

Possible Future Activities

During permit year 5 consulting, planning and good housekeeping activities will be implemented, pending Tighe & Bond reporting.

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 4 Activities

Discussions and coordination amongst DPW supervisors and Tighe & bond has occurred. Pending Tighe & Bond reports, more formal training will occur as BMP 6A is completed. This is anticipated during permit year 5.

Best Management Practice Assessment / Proposed Change

No changes proposed at this time.

Future Activities

During permit year 5 consulting, planning and good housekeeping activities will be implemented, pending Tighe & Bond reporting. See Appendix 6F.

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 4 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 are thus subject to additional sanding during the winter season. See Appendix 6C for priority areas.

During Permit Year 3, 255 Storm Drains were cleaned.

See Appendix 6C for street locations.

Best Management Practice Assessment / Proposed Change

The Town of Agawam will continue to utilize funds, if available, for annual cleaning of catch basins within priority area. Catch Basin Cleaning could occur during the year 5 summer quarter of permit, depending FEMA snow emergency reimbursement to the town and / or the FY08 budget appropriation. In addition, the DPW will document any spontaneous catch basin cleanings as they arise.

Possible Future Activities

The DPW will continue seek dedicated funds for catch basin cleaning during FY 08.

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 4 Activities

During Year 4, the DPW completed street sweeping in the following areas:

- 264 curb miles of roadway between April and June 1st.
- Additional sweeping included
  Water break cleanup of soil
  Street sweeping prior to paving operations on

Best Management Practice Assessment / Proposed Change

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

Possible Future Activities

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

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 4 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 were practicable.

See Appendix 6E for FY 07 Outdoor Integrated Pest management Plan.

Possible Future Activities

The DPW intends to continue to utilize licensed contractors for grounds maintenance work.

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 4 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) Plan has been in-place for the DPW maintenance facility since November 29, 2001. An SPCC Plan is currently being prepared by contracted consultants Tighe & Bond, in accordance with the requirements of the U.S. EPA Oil Pollution Prevention Regulations (40 CFR Part 112.7). The Town's SPCC Plan will describe 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 will include 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 for an outline of the SPCC Plan.

Best Management Practice Assessment / Proposed Change

The establishment of new DPW operations procedures will occur at the new DPW facility. A majority of the move to the new facility occurred late in permit Year 4; however, operations will continue to make the transition to the new facility in Year 5. The DPW expects to receive the updated SPCC plan and environmental audit from Tighe & Bond in Year 5. See Appendix 6F for documentation.

Future Activities

No comment.

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 4 Activities

The Town of Agawam has continued to provide the residents of Agawam a local drop off location for waste oil. Residents were notified of the available drop off location on cable access and an Environmental Encyclopedia – See Appendix 1G

3175 gallons of used motor oil were collected at the DPW Town Garage.

Best Management Practice Assessment / Proposed Change

The Town of Agawam has met its obligation to provide the residents with a drop-off location for used motor oil. The town feels it has provided ample notification to residents through flyers and telephone communication regarding the drop off location option. The town will continue to provide this disposal option to the residents.

Possible Future Activities

The Town of Agawam will continue to provide the residents a drop-off location for used motor oil and car batteries at no charge to the residents. The DPW will continue notifying residents using the cable access informational bulletin and or press releases.

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 4 Activities

The Town of Agawam successfully hosted another annual Household Hazardous Waste collection day in the Summer of 05. The following materials were diverted from the waste stream and illegal dumping (See also Appendix 1C):

- 800 pounds liquid pesticides
- 500 pounds solid pesticides
- 400 pounds bleaches
- 225 pounds acid liquids

- 225 pounds household cleaners
- 5 pounds mercury waste
- 540 pounds aerosol cleaner
- 30 pounds ammonia
- 15 pounds lithium batteries
- 15 pounds NiCad batteries
- 100 pounds acid batteries

Best Management Practice Assessment / Proposed Change

Due to available funding, the Town of Agawam has successfully met its goal to provide proper and safe disposal options to the residents for Household Hazardous Waste.

Possible Future Activities

The town will continue to provide proper disposal options to the residents, based on available funding.

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 4 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.