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Section A

Date Prepared: 2/1/2017

For questions regarding this report contact:
Timothy Bockus
740 Main Street
East Hartford, CT 06108

Stormwater Program Permit Information	
1. Permitting Authority: Department of Environmental Protection	
2. Permit Number: GSM000027	**3. Permit Type:** General
4. Permit Name: Storm Water Phase II	
5. Date Issue: 1/9/2004	**6. Date Expire:** 1/9/2009

General Information for MS4 Operator			
1. Operator Name:	Marcia A. LeClerc		
2. Operator Title:	Mayor		
3. Represented Entity:	Town of East Hartford		
4. Mailing Address:	740 Main Street		
5. Mail City, State, Zip:	East Hartford, CT 06108		
6. Phone Number:	(860) 291-7200		
7. E-Mail Address:	mleclerc@easthartfordct.gov		
8. Co-Permitting With:			
9. Population: 51,211	**Households:** 20,157	**Area (sq mi):** 19	
10. Official Website:	www.easthartfordct.gov		

General Information for Primary Contact Person	
1. Name:	Timothy Bockus
2. Title:	Director of Public Works
3. Phone Number	(860) 291-7372
4. E-Mail Address:	tbockus@easthartforct.gov

General Information for Secondary Contact Person	
1. Name:	M. Denise Horan
2. Title:	Town Engineer
3. Phone Number	(860) 291-7384
4. E-Mail Address:	dhoran@easthartfordct.gov

General Information for Receiving Waters		
Receiving Water Lists: Listed below are all the identified receiving waterbodies to which identified outfalls discharge.		
Receiving Streams (creek, stream, river, etc.)	**Receiving Waterbodies (lake, wetland, ocean, etc.)**	**Receiving Watersheds**
Connecticut River - Drainage Basin 4000 Hockanum River - Drainage Basin 4500 Podunk River - Drainage Basin 4004 Burnham Brook - Drainage Basin 4004 Goodwin Brook - Drainage Basin 4004 Willow Brook - Drainage Basin 4006 Porter Brook - Drainage Basin 4006 Pewterpot Brook - Drainage Basin 4006	Keeney Cove - Drainage Basin 4006	Lower Connecticut River (01080205)

Section B

Plan Contents Summary

The Stormwater Management Plan consists of the following Minimum Control Measures and BMPs:

Minimum Control Measures and BMPs		
Public Education and Outreach		
Brochures / Fact Sheets		
	7/1/2004	1/9/2009
Development of a Library of Educational Materials		
	7/1/2004	1/9/2009
Development of Alternate Information Sources		
	1/1/2005	1/9/2009
Storm Drain Marking Program		
	7/1/2004	1/9/2009
Public Participation/Involvement		
Comply with State & Local Public Notice and FOI Requirements		
	7/1/2004	1/9/2009
Develop Public Involvement / Participation Program		
	7/1/2004	1/9/2009
Evaluate Public Feedback		
	7/1/2004	1/9/2009
Hazardous Household Waste Collection Program		
	4/1/2004	1/9/2009
Public Review of the Storm Water Management Plan & Permit Registration		
	6/1/2004	7/7/2004
Research Public Opinion on Water Quality Issues		
	7/1/2004	1/9/2009
Storm Drain Marking Program		
	7/1/2004	1/9/2009
Illicit Discharge Detection and Elimination		
Develop a Program to Detect & Eliminate Illicit Discharges		
	7/1/2004	1/9/2009
Develop Illicit Discharge Ordinance		
	1/3/2005	6/1/2006
Map Storm Outfalls greater than 12" (Urbanized)		
	1/1/2007	12/30/2007
Map Storm Outfalls greater than 15" (Town wide)		
	1/1/2006	12/31/2006
Map Storm Outfalls greater than 15" (Urbanized)		
	7/1/2004	12/31/2005
Construction Site Runoff Control		
Develop Appropriate Stormwater Ordinance / Regulations for MS4 Program		
	4/1/2006	3/30/2007

Develop Procedures for Infomation Submitted by the Public		
	4/1/2006	9/30/2006
Develop Procedures to Track the Effectivness of the Program		
	4/1/2008	11/30/2008
Public Hearing & Comment Process for Regulation Modifications		
	4/1/2007	1/31/2008
Review & Revise Site Inspection Procedures		
	6/1/2007	12/30/2007
Review Land Use Regulations to meet MS4 Permit Requirements and E&S Guidelines		
	6/30/2004	3/31/2006
Review Town Ordinances to MS4 Requirements		
	7/1/2004	6/30/2006
Post-Construction Runoff Control		
Develop and Implement Post-construction BMP Strategy		
	4/1/2005	6/29/2006
Develop Post-construction Ordinance or Regulation		
	7/1/2004	6/30/2006
Develop Procedures to Track the Effectiveness of the Program		
	1/1/2008	10/31/2008
Develop Program to Ensure Long-term Operation and Maintenance of BMP's		
	7/1/2006	8/31/2007
Public Hearing / Comment Process to Implement Proposed Regulations		
	7/1/2007	1/31/2008
Review Land Use Regulations to meet MS4 Permit Requirements and E&S Guidelines		
	7/1/2004	3/30/2006
Pollution Preventation / Good House Keeping		
Catch Basin Cleaning Program		
	7/1/2004	1/9/2009
Develop Training Program for Muncipal Employees		
	7/1/2004	1/9/2009
Preventative Maintainance Program		
	7/1/2004	1/9/2009
Stormwater Monitoring Program		
	7/1/2004	1/9/2009
Street Sweeping Program		
	4/1/2004	1/9/2009

Section C

Public Education and Outreach

Descriptive Text:

Minimum Control Measure No. 1

This minimum control measure is an important component to the success of the town wide stormwater management program. The measure is intended to supply information to the public so they have a better understanding how their actions can help reduce pollutants that ultimately affect water quality. Obtaining public support will help to ensure that the program is a success.

Program Requirements

The Town will develop and implement a program to distribute educational materials to the public or conduct equivalent outreach activities. The materials will contain information on what the public can do to help reduce pollutants that find their way into the streams and water bodies of the Town and State

The material will contain information on what the public can do to help reduce pollutants that find their way into the streams and water bodies of the Town and State. At the bottom of each brochure, there will be a statement asking for comments and feedback along with the name, address and phone number of the project coordinator.

The results (goals) for each activity will be tracked and reported to the DEP in the Town's annual report.

The program will include the implementation of BMP's (Best Management Practices) to insure the minimum control measures for Public Education and Outreach.

An informed and knowledgeable community is crucial to the success of a storm water management program since it helps to ensure the following:

1. Greater support for the program as the public gains a greater understanding of the reasons why it is necessary and important. Public support is particularly beneficial when operators of small MS4s attempt to institute new funding initiatives for the program or seek volunteers to help implement the program; and

2. Greater compliance with the program as the public becomes aware of the personal responsibilities expected of them and others in the community, including the individual actions they can take to protect or improve the quality of area waters.

Number of BMPs associated with control measure:

4

Important Dates:

Earliest Start Date: 7/1/2004

End Date: 1/9/2009

Details of BMPs and Work Performed for Them

Brochures / Fact Sheets

Responsible Party: M. Denise Horan, Town Engineer

Start Date: 7/1/2004	End Date: 1/9/2009

Permits Years during which activities are scheduled:

Year 1 Year 2 **X** Year 3 **X** Year 4 **X** Year 5 **X**

Name of Separate Implementing Entity:
Not Applicable

BMP Description:
Brochures, fact sheets, and or electronic media will be developed that address the effects of stormwater quality on the environment and how to improve stormwater quality. The brochures and or fact sheets will be available at the East Hartford Town Hall and at various public facilities. Brochures will also be mailed to the residents of the Town. The brochure will be developed by the end of the first year of the program with distribution taking place during the following years. At the bottom of each brochure, there will be a statement asking for comments and feedback along with the name, address and phone number of the project coordinator.

The benefits associated with this BMP include reaching a diverse audience covering the Town of East Hartford.

Has Goal Been Accomplished: YES

Work Performed

Date: 11/15/2004	Responsible Party: Robert Sukosky, Assistant Town Engineer

2004 Stormwater Brochure Development
The Town has developed a brochure to inform the public of the impacts of various common practices/activities on the environment and surface waters. The brochure also includes information on how the Public can improve water quality. The intent of the brochure is to inform and educate the public about what effects their activities have on the water quality in the area's watercourses.

The brochure will be made available to the public in 2005. The brochure will be available in various Town offices and Public buildings.

Date: 10/12/2005	Responsible Party: Robert Sukosky, Assistant Town Engineer

2005 Stormwater Brochure
The Town has developed a brochure to inform the public of the impacts of various common practices/activities on the environment and surface waters. The brochure also includes information on how the Public can improve water quality. The intent of the brochure is to inform and educate the public about what effects their activities have on the water quality in the area's watercourses.

The brochure will be mailed to the public in the spring of 2006. The brochure will also be available in various Town offices and Public buildings.
The content of the brochure was posted on the Town's web site in late 2005.

Date: 5/3/2006	Responsible Party: Robert Sukosky, Assistant Town Engineer

2006 Stormwater Brochure
Development of the 2006 Brochure
The Town has developed a brochure to inform the public of the impacts of various common practices/activities on the environment and surface waters. The brochure also includes information on how the Public can improve water quality. The intent of the brochure is to inform and educate the public about what effects their activities have on the water quality in the area's watercourses.

The brochure will be mailed to the public in the spring of 2007. The brochure will also be available in

various Town offices and Public buildings, and posted on the Town's web site.

Date: 4/10/2007	Responsible Party: Robert Sukosky, Assistant Town Engineer

2007 Stormwater Brochure
The Town has developed a brochure to inform the public of the impacts of various common practices/activities on the environment and surface waters. The brochure also includes information on how the Public can improve water quality. The intent of the brochure is to inform and educate the public about what effects their activities have on the water quality in the area's watercourses. At the bottom of the brochure there is a statement asking residents for comments and feedback regarding the brochure and the program.

Approximately 17,000 brochures were mailed out to all residents of the Town of East Hartford during the spring of 2007. The brochure was also posted on the Town's web page.

During calendar year 2007, the Town did not receive any comments of feedback on the brochure/program

A brochure will again be mailed to all residents during the spring of 2008. The brochure will also be available in various Town offices and Public buildings.

Date: 4/1/2008	Responsible Party: Robert Sukosky, Assistant Town Engineer

2008 Stormwater Brochure
Development of the 2007 Brochure
The Town has developed a brochure to inform the public of the impacts of various common practices/activities on the environment and surface waters. The brochure also includes information on how the Public can improve water quality. The intent of the brochure is to inform and educate the public about what effects their activities have on the water quality in the area's watercourses. At the bottom of the brochure there is a statement asking residents for comments and feedback regarding the brochure and the program.

Approximately 17,000 brochures were mailed out to all residents of the Town of East Hartford during the spring of 2007. The brochure was also posted on the Town's web page.

During calendar year 2008, the Town did not receive any comments of feedback on the brochure/program

A brochure will again be mailed to all residents during the spring of 2009. The brochure will also be available in various Town offices and Public buildings.

Development of a Library of Educational Materials

Responsible Party: M. Denise Horan, Town Engineer

Start Date: 7/1/2004	End Date: 1/9/2009

Permits Years during which activities are scheduled:

Year 1 Year 2 Year 3 Year 4 Year 5 **X**

Name of Separate Implementing Entity:
Not Applicable

BMP Description:
A library of educational material will be developed and maintained by the Town of East Hartford, Engineering Division. The library will consist of data, information fact sheets, and guidelines pertaining to stormwater management. The library will be available for use by Town employees, developers, engineers, contractors, and the public. The collecting of materials and resources will be performed on an on-going basis.

The benefits associated with this BMP include the establishing a library within the Engineering Division for data and information relating to stormwater management and quality, and making the information available

The results (goals) from this activity will be tracked and reported to the DEP in the Town's annual report.

Has Goal Been Accomplished: YES

Work Performed

Date: 7/1/2004	Responsible Party: Robert Sukosky, Assistant Town Engineer

2004 Stormwater Education / Resource Materials
The Town is compiling a collection of resource materials concerning stormwater issues that will be located in the Town's Engineering Office. Access to the documents and publications will be made available to the Public and other Town Departments. The process is considered an ongoing activity and the documents will be supplemented over the life of the permit.

The types of documents currently contained in the library include:
1. 2002 Connecticut Guidelines for Soil Erosion and sedimentation Control
2. 2004 Connecticut Stormwater Quality Manual
3. 2004 State of Connecticut Department of Transportation standard Specifications for Roads, Bridges and Incidental Construction - Form 816
4. Municipal Storm Water Management, Debo & Reese

Date: 12/20/2005	Responsible Party: Robert Sukosky, Assistant Town Engineer

2005 Stormwater Education / Resource Materials
The Town is continuing to compile a collection of resource materials concerning Stormwater issues that will be located in the Town's Engineering office. Access to the documents and publications will be made available to the Public and other Town Departments. The process is considered as an ongoing activity and the documents will be supplemented over the life of the permit.

Catalogs from various manufactures of stormwater treatment products have been added to the Town's technical library.

Date: 1/2/2006	Responsible Party: Robert Sukosky, Assistant Town Engineer

2006 Stormwater Education / Resource Materials
Stormwater Education Library
The Town is continuing to compile a collection of resource materials concerning Stormwater issues that will be located in the Town's Engineering office. Access to the documents and publications will be made available to the Public and other Town Departments. The process is considered as an ongoing activity and the documents will be supplemented over the life of the permit.

The type of documents currently contained in the library include:
1. 2002 Connecticut Guidelines for Soil erosion and Sedimentation Control

2. 2004 Connecticut Stormwater Quality Manual

3. 2004 State of Connecticut, Department of Transportation, Standard Specifications for Roads, Bridges and Incidental Construction - Form 816

4. Municipal Storm Water Management, Debo & Reese

5. Catalogs from various manufactures - Stormwater treatment products.

Date: 3/13/2007	Responsible Party: Robert Sukosky, Assistant Town Engineer

2007 Stormwater Education / Resourse Materials
The Town is continuing to compile a collection of resource materials concerning Stormwater issues that

will be located in the Town's Engineering office. Access to the documents and publications will be made available to the Public and other Town Departments. The process is considered as an ongoing activity and the documents will be supplemented over the life of the permit.

The type of documents currently contained in the library include the following:
1. 2002 Connecticut Guidelines for Soil erosion and Sedimentation Control
2. 2004 Connecticut Stormwater Quality Manual
3. 2004 State of Connecticut, Department of Transportation, Standard Specifications for Roads, Bridges and Incidental Construction - Form 816
4. Municipal Storm Water Management, Debo & Reese
5. 2007 Connecticut Field Guide - Best Management Practices for Water Quality While Harvesting Forest Products
6. Catalogs from various manufactures - Stormwater treatment products.

A complete list of materials will be compiled during calendar year 2008

Date: 1/2/2009	Responsible Party: Robert Sukosky, Assistant Town Engineer

2008 Stromwater Education / Resource Materials
Stormwater Education Library
The Town is continuing to compile a collection of resource materials concerning Stormwater issues that will be located in the Town's Engineering office. Access to the documents and publications will be made available to the Public and other Town Departments. The process is considered as an ongoing activity and the documents will be supplemented over the life of the permit.

The type of documents currently contained in the library include the following:
1. 2002 Connecticut Guidelines for Soil erosion and Sedimentation Control
2. 2004 Connecticut Stormwater Quality Manual
3. 2004 State of Connecticut, Department of Transportation, Standard Specifications for Roads, Bridges and Incidental Construction - Form 816
4. Municipal Storm Water Management, Debo & Reese
5. 2007 Connecticut Field Guide - Best Management Practices for Water Quality While Harvesting Forest Products
6. Catalogs from various manufactures - Stormwater treatment products.

A complete list of materials has been complied during calendar year 2008. Eighty-one various catalogs, brochures, magazines and articles have been collected and recorded. These documents and publications are available to the Public and other Town Departments.

Development of Alternate Information Sources

Responsible Party: M. Denise Horan, Town Engineer

Start Date: 1/1/2005	End Date: 1/9/2009

Permits Years during which activities are scheduled:

Year 1 Year 2 **X** Year 3 **X** Year 4 **X** Year 5 **X**

Name of Separate Implementing Entity:
Not Applicable

BMP Description:
A web page will be developed that addresses the effect of stormwater quality on the environment. The page will be part of the Town's web site and will be available to the public by means of internet access. The web page will be developed during the first and second years of the program with access to the public beginning in the fourth year. Links to additional web sites will be incorporated into the web site.

The benefits associated with these BMP's include creating awareness and making information available to a very large, diverse audience.

The results for this activity will be reported to the DEP in the Town's annual report.

Has Goal Been Accomplished: YES

Work Performed

Date: 1/3/2005	Responsible Party: Robert Sukosky, Assistant Town Engineer

2004 Web Site Development
The development of web site dedicate to the MS4 program is scheduled to begin in early 2005.

Date: 11/17/2005	Responsible Party: Robert Sukosky, Assistant Town Engineer

2005 Web Site Development
A web page has been developed for providing information on the NPDES program. Included in the site is a brief history of the program, brochures and links to other sites. The web page was added to the Town's web site in late 2005.

During calendar year 2006, additional information will be added to the web page.

Date: 4/6/2006	Responsible Party: Robert Sukosky, Assistant Town Engineer

2006 Web Site Development
Web Site Development

A web page has been developed that providing information on the NPDES program. Included in the site is a brief history of the program, brochures and links to other sites. During calendar year 2006, additional information was added to the web page.

Date: 2/14/2007	Responsible Party: Robert Sukosky, Assistant Town Engineer

2007 Web Site Development
A web page has been developed providing information on the NPDES program. Included in the site is a brief history of the program, brochures and links to other sites. During calendar year 2007, the brochure that was mailed to the residents of the Town of East Hartford was added to the web page.

Date: 1/2/2009	Responsible Party: Robert Sukosky, Assistant Town Engineer

2008 Web Site Development
A web page has been developed providing information on the NPDES program. Included in the site is a brief history of the program, brochures and links to other sites. During calendar year 2007, the brochure that was mailed to the residents of the Town of East Hartford was added to the web page.

Storm Drain Marking Program

Responsible Party: Billy Taylor, Public Works Director

Start Date: 7/1/2004	End Date: 1/9/2009

Permits Years during which activities are scheduled:

Year 1 Year 2 Year 3 Year 4 Year 5 **X**

Name of Separate Implementing Entity:
Not Applicable

BMP Description:
The Town of East Hartford, through the State of Connecticut, Department of Environmental Protection has acquired several thousand Long Island Sound storm drain marker kits. The markers measure approximately 4" x 8" and are made of a durable plastic material that is attached directly to each catch basin. The markers are highly visible so as to get the attention of the public before they dump something down the catch basin. The message on the plaque states "Drains to Waterways and Long Island Sound - No Dumping". Storm drain markers will be installed throughout the Town at various catch basin inlets that are owned and maintained by the Town of East Hartford.

Prior to starting the installation process, a press release will be published in a local newspaper informing the public about the program. Informational brochures will be hand delivered to each house in the neighborhood where markers are being installed.

The benefits associated with this BMP include increased public awareness. It will educate and demonstrate to the public the direct link between the storm sewer system and the surface waters to which it drains. Additionally, labeling projects can provide a lead - in to volunteer monitoring projects and increase community participation in a variety of other stormwater - related activities.

On a yearly basis there will be random inspection, of previously installed markers, to evaluate the condition and installation methods of the markers. Based on the findings of the survey, installation methods will be reviewed and revised accordingly.

The results (goals) for this activity will be tracked and reported to the DEP in the Town's annual report.

Has Goal Been Accomplished: YES

Work Performed

Date: 9/14/2004	Responsible Party: Robert Sukosky, Assistant Town Engineer

2004 Storm Drain Marking Program - Pilot Project
A pilot program was developed to install a limited number of the storm drain markers on Town owned catch basins. The purpose of the program was to develop installation procedures and to determine productivity rates prior to instituting the Town wide program. A representative area of Town was selected as the test site. During the month of October 2004, the Town's Street Division installed approximately 600 storm drain markers.

The catch basins located within the test site were reviewed after the installation of the markers. The markers were reviewed to determine the quality of the installation procedures. The pilot program and the subsequent review determined that there are some issues which need to be addressed prior to instituting the overall program. Some of the issues deal with physical aspects such as the lack of suitable location to install the plastic marker (deteriorating curbs, lack of concrete top, etc.). Other issues deal with the actual installation procedure utilized to install the plastic markers.

Appropriate revisions will be made to correct the issues experienced during the pilot program prior to beginning operations on the overall storm marking program.

Date: 10/25/2005	Responsible Party: Billy Taylor, Public Works Director

2005 Storm Drain Marker Installation Pilot Project
Appropriate revisions are being made to correct the problems of applying the markers from the previous year.

The storm drain marking program was scheduled to commence in 2005, unfortunately due to scheduling conflicts and other unforeseen circumstances no storm drain markers were installed.

The program is scheduled to continue in 2006.

Date: 1/2/2006	Responsible Party: Billy Taylor, Public Works Director

2006 Storm Drain Marking Program
The program commenced in 2006, markers were placed on all catch basins located within the Town's right of Way with the exception of the few streets that are scheduled for road construction within the next year. Markers will be placed on those structures once construction has finished.

Date: 4/18/2007	Responsible Party: Billy Taylor, Public Works Director

2007 Storm Drain Marking Program
The program commenced in 2007. Markers were placed on all catch basins located within the Town's right of way with the exception of the few streets that were scheduled for road construction during

calendar years 2006-07.

During calendar year 2008 markers will be placed on the structures that were replaced during the 2006-07 road improvement program. Subsequently each year the town will replace decals on structures that had been replaced the preceding year.

No storm drain markers were placed during calendar 2007.

Date: 4/23/2008	Responsible Party: Billy Taylor, Public Works Director

2008 Storm Drain Marking Program
The program commenced in 2008. During the Road improvement program structures that needed to be replaced were replaced with structures that were stamped with "Drains To Waterway" type "C" top. This procedure will continue through the 2009 Calendar year.

Public Participation/Involvement

Descriptive Text:

Minimum Control Measure #2

Public participation and involvement is different from public education in that it not only educates the public, but also provides opportunities for citizen to take action make decisions and have a say on what is going on in their Town. This plan describes ways in which the Town of East Hartford's community can play a role in developing and implementing the storm water management program (SWMP). The public involvement and participation program is also a requirement of the NPDES Phase II Final Rule.

Below are the goals of the public participation and involvement.
· Provide the public with information about storm water runoff
· Provide opportunities for the public to take part in the implementation of the Storm Water Permit
· Develop public support for the Storm Water Permit

EPA believes that the public can provide valuable input and assistance to a regulated small MS4's municipal storm water management program and, therefore, suggests that the public be given opportunities to play an active role in both the development and implementation of the program. An active and involved community is crucial to the success of a storm water management program because it allows for:

1. Broader public support since citizens who participate in the development and decision making process are partially responsible for the program and, therefore, may be less likely to raise legal challenges to the program and more likely to take an active role in its implementation;

2. Shorter implementation schedules due to fewer obstacles in the form of public and legal challenges and increased sources in the form of citizen volunteers;

3. A broader base of expertise and economic benefits since the community can be a valuable, and free, intellectual resource; and

4. A conduit to other programs as citizens involved in the storm water program development process provides important cross-connections and relationships with other community and government programs. This benefit is particularly valuable when trying to implement a storm water program on a watershed basis, as encouraged by EPA.

Number of BMPs associated with control measure:

7

Important Dates:

Earliest Start Date: 4/1/2004

End Date: 1/9/2009

Details of BMPs and Work Performed for Them

Comply with State & Local Public Notice and FOI Requirements

Responsible Party: M. Denise Horan, Town Engineer

Start Date: 7/1/2004	End Date: 1/9/2009

Permits Years during which activities are scheduled:

Year 1 **X** Year 2 **X** Year 3 **X** Year 4 **X** Year 5 **X**

Name of Separate Implementing Entity:
Not Applicable

BMP Description:
The Town will incorporate measures to insure that all Public Notice and Freedom of Information Requirements are addressed as part of the storm water management program.

Has Goal Been Accomplished: YES

Work Performed

Date: 7/1/2004	Responsible Party: Allyn Tarbell, Engineering Technician

2004 Public Notice / FOI Requirements
The program files and permit registration are available for public inspection in the Town's Engineering Office. The Town complies with all FOI requirements.

As of December 2004, no requests have been made to view any of the files or permit registration.

Date: 1/1/2005	Responsible Party: Allyn Tarbell, Engineering Technician

2005 Public Notice / FOI Requirements
The program files and permit registration are available for public inspection in the Town's Engineering Office. The Town complies with all FOI requirements.

As of December 2005, no requests have been made to view any of the files or permit registration.

Date: 1/1/2006	Responsible Party: Allyn Tarbell, Engineering Technician

2006 Public Notice / FOI Requirements
The program files and permit registration are available for public inspection in the Town's Engineering Office. The Town complies with all FOI requirements.

As of December 2006, no requests have been made to view any of the files or permit registration.

Date: 5/29/2007	Responsible Party: Allyn Tarbell, Engineering Technician

2007 Public Notice / FOI Requirements
The program files and permit registration are available for public inspection in the Town's Engineering Office. The Town complies with all FOI requirements.

As of December 2007, no requests have been made to view any of the files or permit registration.

Date: 1/2/2008	Responsible Party: Allyn Tarbell, Engineering Technician

2008 Public Notice /FOI Requirements
The program files and permit registration are available for public inspection in the Town's Engineering Office. The Town complies with all FOI requirements.

As of December 2008, no requests have been made to view any of the files or permit registration.

Develop Public Involvement / Participation Program

Responsible Party: M. Denise Horan, Town Engineer

Start Date: 7/1/2004	End Date: 1/9/2009

Permits Years during which activities are scheduled:

Year 1 **X**	Year 2 **X**	Year 3 **X**	Year 4 **X**	Year 5 **X**

Name of Separate Implementing Entity:
Not Applicable

BMP Description:
The Town will develop a plan which allows the community to have a role in the development and implementation of the storm water management program.

Has Goal Been Accomplished: YES

Work Performed

Date: 9/1/2004	Responsible Party: Allyn Tarbell, Engineering Technician

2004 Public Involvement \ Participation Program Development
Various methods of achieving Public involvement / participation are being explored. The Town has begun the process of contacting community and volunteer groups to determine the interest in assisting the Town on improving the area's water quality.

Date: 3/7/2005	Responsible Party: Allyn Tarbell, Engineering Technician

2005 Public Involvement \ Participation Program Developement
Various methods of achieving Public involvement / participation are being explored. The Town has begun the process of contacting community and volunteer groups to determine the interest in assisting the Town on improving the area's water quality.

The following Volunteer groups are being investigated

1. Connecticut River Watershed Council.
2. Connecticut Forest and Park Association.

Date: 4/17/2006	Responsible Party: Allyn Tarbell, Engineering Technician

2006 Public Involvement \ Participation Program Developement
Various methods of achieving Public involvement / participation are being explored. The Town has begun the process of contacting community and volunteer groups to determine the interest in assisting the Town on improving the area's water quality.

The following Volunteer groups are being investigated

1. Connecticut River Watershed Council.
2. Connecticut Forest and Park Association.

Date: 5/24/2007	Responsible Party: Allyn Tarbell, Engineering Technician

2007 Public Involvement \ Participation Program Developement
During the process of contacting community and volunteer groups to determine the interest in assisting the Town on improving the area's water quality several concerns have arised. The major one is the Town's liability if a person gets hurt. The Town is trying to find away around some of these issues.

Date: 4/15/2008	Responsible Party: Allyn Tarbell, Engineering Technician

2008 Public Involvement \ Participation Program Developement
At various times throught the year the Connecticut River Watershed Group and the Hockanum rRiver Watershed Group.

Each year the towns in the Hockanum River Watershed Area participate in an Annual Clean-Up event. These are done in concert with the Connecticut River Watershed Council's annual "Source to Sea Clean-Up" project.

Date: 1/2/2012	Responsible Party: David Riordan, Engineering Technician
2012 Public Involvement\Participation Program Development Each year the towns in the Hockanum River Watershed Area participate in an Annual Clean-Up event. These are done in concert with the Connecticut River Watershed Council's annual "Source to Sea Clean-Up" project.	
Date: 1/1/2013	Responsible Party: Timothy Bockus, Director of Public Works
2013 Public Involvement\Participatio Program Development Each year the towns in the Hockanum River Watershed Area, including East Hartford, participate in an Annual Clean-Up event. These are done in concert with the Connecticut River Watershed Council's annual "Source to Sea Clean-Up" project.	
Date: 1/1/2014	Responsible Party: Timothy Bockus, Director of Public Works
2014 Public Involvement\Participation Program Development Each year the towns in the Hockanum River Watershed Area, including East Hartford, participate in an Annual Clean-Up event. These are done in concert with the Connecticut River Watershed Council's annual "Source to Sea Clean-Up" project.	
Date: 1/1/2015	Responsible Party: Timothy Bockus, Director of Public Works
2015 Public Involvement\Participation Program Development Each year the towns in the Hockanum River Watershed Area, including East Hartford, participate in an Annual Clean-Up event. These are done in concert with the Connecticut River Watershed Council's annual "Source to Sea Clean-Up" project.	
Date: 1/1/2016	Responsible Party: Timothy Bockus, Director of Public Works
2016 Public Involvement\Participation Program Development Each year the towns in the Hockanum River Watershed Area, including East Hartford, participate in an Annual Clean-Up event. These are done in concert with the Connecticut River Watershed Council's annual "Source to Sea Clean-Up" project.	

Evaluate Public Feedback

Responsible Party: M. Denise Horan, Town Engineer	
Start Date: 7/1/2004	End Date: 1/9/2009
Permits Years during which activities are scheduled: Year 1 **X** Year 2 **X** Year 3 **X** Year 4 **X** Year 5 **X**	
Name of Separate Implementing Entity: Not Applicable	
BMP Description: A policy will be developed and implemented to allow for the submission and evaluation of public comments on the storm water management program. The policy will also address the reporting of possible violations witnessed by the community.	
Has Goal Been Accomplished: YES	

Work Performed

Date: 7/1/2004	Responsible Party: Allyn Tarbell, Engineering Technician
2004 Evaluate Public Stormwater Survey The Town developed a survey about stormwater pollution to determine the public's understanding of what issues affect the environment and stormwater quality. The survey was available at various Town Departments and the Public Library. The Engineering Division collected the completed forms and correlated the data. The data will be utilized to determine the public education effort required and future public participation activities. The Town will continue collect the surveys and review the data in future surveys. The following survey data was been collected as of 12/6/2004.	

1. Information was gathered on age, property ownership (own/rent), town resident, along with other storm water related questions. 65 percent of the people who completed the surveys lived in East Hartford, with 83 percent of the surveys answered correctly. This information will aid the Town the process to better inform the public about storm water issues

Date: 7/1/2005	Responsible Party: Allyn Tarbell, Engineering Technician

2005 Evaluate Public Stormwater Survey
The Town developed a revised survey to further explore the public knowledge about and understanding of what issues affect the environment and stormwater quality. The survey was available at various Town Departments and the Public Library. The Engineering Division collected the completed forms and correlated the data. The data will be utilized to determine the public education effort required and future public participation activities. The Town will continue collect the surveys and review the data in future surveys.

The following survey data was been collected as of 12/16/2005.

1. Information was gathered on age, property ownership (own/rent), town resident, along with other storm water related questions. 87 percent of the people who completed the surveys lived in East Hartford, with 90 percent of the surveys answered correctly. This information will aid the Town the process to better inform the public about storm water issues

Date: 7/3/2006	Responsible Party: Allyn Tarbell, Engineering Technician

2006 Evaluate Public Stormwater Survey
The Town has reviewed the last 2 public stormwater surveys and is in the process of developing a new survey that will be published in 2007 with the possibility of making it available on the Town's website. The idea of a web based survey is to reach those who have a tendency to use the internet or those who feel uncomfortable answering a survey in person.

Date: 7/3/2007	Responsible Party: Allyn Tarbell, Engineering Technician

2007 Evaluate Public Stormwater Survey
After careful review of the past stormwater surveys it has been noticed that over time there has been a decrease in the public feedback from the surveys. At this point we are trying to develope a different way to have input from the public.

Date: 8/5/2008	Responsible Party: Allyn Tarbell, Engineering Technician

2008 Evaluate Public Stormwater Survey
During the 2008 calendar year no storm water survey were published due to the lack of response from previous surveys in previous years. An increased effort to educate the public by providing them with additional information about stormwater and pollution to stormwater is the next approach.

Hazardous Household Waste Collection Program

Responsible Party: Billy Taylor, Public Works Director

Start Date: 4/1/2004	End Date: 1/9/2009

Permits Years during which activities are scheduled:

Year 1 **X** Year 2 **X** Year 3 **X** Year 4 **X** Year 5 **X**

Name of Separate Implementing Entity:
Metopolitan District Commission

BMP Description:
The Town and MDC will organize a series of places with specific dates and times where the community can participate in a Household Hazardous Waste Collection Program. This program allows people of the community to dispose of hazardous waste in a safe manor without harming the environment, also on a yearly basis an annual report will be submitted to DEP containing the number of people/vehicles that contributed to the Household Hazardous Waste Collection program.

Has Goal Been Accomplished: YES

Work Performed

Date: 10/27/2004 | Responsible Party: Allyn Tarbell, Engineering Technician

2004 MDC Household Hazardous Waste Collection
The Metropolitan District Commission held their annual household hazardous waste collection day in Town on October 23, 2004. The MDC program is held in the eight MDC member Towns and various other locations throughout the year. In 2004 the MDC held 19 household hazardous waste collection days. East Hartford residents have the ability to utilize any of the MDC collection days.

The collection program will resume in the spring of 2005.

2004 House Hold Hazardous Waste Collection Numbers

Obtained From MDC Hazardous Waste Collections

East Hartford Totals 2004		# of Cars	# of HH's
May 1, 2004	Newington	4	4.5
May 1, 2004	Farmington	0	0
May 8, 2004	Enfield	1	2
May 15, 2004	Windsor	5	3
June 5, 2004	Hartford Lewis Fox	2	1
June 12, 2004	East Windsor	4	10
June 19, 2004	Wethersfield	11	15.5
September 11, 2004	Bloomfield	1	2.0
September 18, 2004	Simsbury	0	0.0
September 18, 2004	Ansonia	0	0.0
September 25, 2004	Hartford WPCF	6	7.5
September 25, 2004	Ellington	0	0.0
October 2, 2004	West Hartford	3	2.0
October 9, 2004	Middletown	0	0.0
October 16, 2004	Windsor Locks	1	2.0
October 17, 2004	Bloomfield (Sunday)	0	0.0
October 23, 2004	East Hartford	251	222.0
October 30, 2004	Rocky Hill	2	1.5
October 30, 2004	South Windsor	3	3.0
	Totals	294	276

Date: 10/15/2005 | Responsible Party: Allyn Tarbell, Engineering Technician

2005 MDC Household Hazordous Waste Collection
The Metropolitan District Commission held their annual household hazardous waste collection day in Town on October 15, 2005. The MDC program is held in the eight MDC member Towns and various other locations throughout the year. In 2005 the MDC held 18 household hazardous waste collection days. East Hartford residents have the ability to utilize any of the MDC collection days.

The collection program will resume in the spring of 2006.

East Hartford Totals 2005	# of Cars	# of HH's

April 30, 2005	Newington	6	7
May 7, 2005	Enfield	1	0.5
May 7, 2005	Hartford Lewis Fox		
May 14, 2005	Farmington		
June 4, 2005	Rocky Hill	8	9
June 11, 2005	East Windsor		
June 11, 2005	Windsor	6	7
June 18, 2005	Wethersfield	5	6.5
September 10, 2005	Simsbury	1	0.5
September 17, 2005	Bloomfield	4	12.0
September 24, 2005	Hartford	4	3.0
September 24, 2005	Ellington		
October 1, 2005	Middletown		
October 8, 2005	West Hartford	1	0.5
October 15, 2005	East Hartford	133	92.0
October 15, 2005	Ansonia		
October 16, 2005	Bloomfield Sunday		
October 22, 2005	Windsor Locks	2	2.0
October 29, 2005	South Windsor	8	10.0
	Totals	179	150

A household is considered 15 gallons or 20 pounds of waste.

Date: 10/21/2006	Responsible Party: Allyn Tarbell, Engineering Technician

2006 MDC Household Hazardous Waste Collection

East Hartford Totals 2006		# of Cars	# of HH's	
April 22, 2006	Farmington	4	4	
May 6, 2006	Newington	5	6	
May 13, 2006	Enfield			
May 20, 2006	Hartford	6	9	
June 10, 2006	East Windsor	2	2.5	
June 17, 2006	Windsor	2	1.5	
June 24, 2006	Wethersfield	4	2.5	
August 19, 2006	Simsbury		2	1
August 26, 2006	Bloomfield			
September 9, 2006	Hartford	16	14.0	
September 16, 2006	Ansonia			
September 23, 2006	Ellington			
September 30, 2006	Middletown			
October 7, 2006	West Hartford	2	1.0	
October 14, 2006	South Windsor	3	2.0	
October 21, 2006	East Hartford	140	99.5	
October 28, 2006	Rocky Hill	4	4.0	
October 29, 2006	Bloomfield Sunday			
November 4, 2006	Windsor Locks	1	0.5	
Totals		191	147.5	

A household is considered 15 gallons or 20 pounds of waste.

Date: 10/15/2007	Responsible Party: Allyn Tarbell, Engineering Technician

2007 MDC Househols Hazardous Waste Collection

East Hartford Totals 2007	# of Cars	# of HH's
East Hartford	269	258.5

A household is considered 15 gallons or 20 pounds of waste.

Date: 10/18/2008	Responsible Party: Allyn Tarbell, Engineering Technician

2008 MDC Household Hazardous Waste Collection

East Hartford Totals 2008	# of Cars	# of HH's
East Hartford	223.0	177.0

Total Household waste in pounds 12,019 lbs.

Date: 4/14/2010	Responsible Party: Allyn Tarbell, Engineering Technician

2009 MDC Household Hazardous Waste Collection

East Hartford Totals 2009	# of Cars	# of HH's
East Hartford	201	205.5

Total Household waste in pounds 27,021 lbs.

Date: 10/16/2010	Responsible Party: Allyn Tarbell, Engineering Technician

2010 MDC Household Hazardous Waste Collection

East Hartford Totals 2010	# of Cars	# of HH's
East Hartford	272	188.5

Total Household waste in pounds 11,293 lbs.

Date: 10/8/2011	Responsible Party: Allyn Tarbell, Engineering Technician

2011 MDC Household Hazardous Waste Collection

East Hartford Totals 2011	# of Cars	# of HH's
East Hartford	214	217.5

Total Household waste in pounds 4,350 lbs.

Date: 10/6/2012	Responsible Party: Allyn Tarbell, Operations Engineer

2012 MDC Household Hazardous Waste Collection

East Hartford Totals 2012

	# of Cars	# of Households
East Hartford	180	154

A household is considered 15 gallons or 20 pounds of waste.

Date: 1/1/2013	Responsible Party: David Riordan, Engineering Technician

2013 MDC Household Hazardous Waste Collection
The MDC Household Hazardous Waste Collection program in East Hartford was held on October 5, 2013. The MDC has changed their methodology for recording the material collected. "Households" are no longer tabulated as they are using a "time and materials" basis. A total of 197 cars from East Hartford were recorded.

Date: 1/1/2014	Responsible Party: Timothy Bockus, Director of Public Works

2014 Household Hazardous Waste Collection
The MDC Household Hazardous Waste Collection program in East Hartford was held on October 18, 2014. The MDC has changed their methodology for recording the material collected. "Households" are no longer tabulated as they are using a "time and materials" basis.

A total of 232 cars from East Hartford were recorded. A total of 327 cars were recorded for the day (Event is open to other MDC member towns).

Date: 1/1/2015	Responsible Party: Timothy Bockus, Director of Public Works

2015 Household Hazardous Waste Collection
The MDC Household Hazardous Waste Collection program in East Hartford was held on October 17, 2015. The MDC has changed their methodology for recording the material collected. "Households" are no longer tabulated as they are using a "time and materials" basis.

A total of 204 cars from East Hartford were recorded. Another 88 residents disposed of materials at events held in other towns.

Date: 1/1/2016	Responsible Party: Timothy Bockus, Director of Public Works

2016 Household Waste Collection
The MDC Household Hazardous Waste Collection program in East Hartford was held on October 15, 2016. The MDC has changed their methodology for recording the material collected. "Households" are no longer tabulated as they are using a "time and materials" basis.

A total of 197 cars from East Hartford were recorded. Another 74 residents disposed of materials at events held in other towns.

Public Review of the Storm Water Management Plan & Permit Registration

Responsible Party: M. Denise Horan, Town Engineer

Start Date: 6/1/2004	End Date: 7/7/2004

Permits Years during which activities are scheduled:

Year 1 **X** Year 2 Year 3 Year 4 Year 5

Name of Separate Implementing Entity:
Not Applicable

BMP Description:
As part of the permitting process, the draft permit will be published so the public can review and

comment on it. The Town will advertise the availability of the draft permit and have copies of the permit available at the library or other public places. The draft permit will also be available on the Town's web site. Public comments on the plan and permit will be accepted via one or more of the following, telephone, mail, or e-mail.

Has Goal Been Accomplished: YES

Work Performed

Date: 7/8/2004	Responsible Party: Allyn Tarbell, Engineering Technician

2004 Public Comment on the Draft Stormwater Permit
Copies of the draft permit were placed in the Raymond Library, Town Clerk's Office, Public Work Administration Office, and the Engineering Office for Public review and comment. The draft permit was also placed on the Town's web site and notice of the permit was made on the Town's local community access television channel.

The Town did not receive any questions from the public or feedback concerning the Storm Water Management Plan and Permit Registration documents.

Research Public Opinion on Water Quality Issues

Responsible Party: M. Denise Horan, Town Engineer

Start Date: 7/1/2004	End Date: 1/9/2009

Permits Years during which activities are scheduled:

Year 1 **X** Year 2 **X** Year 3 **X** Year 4 **X** Year 5 **X**

Name of Separate Implementing Entity:
Not Applicable

BMP Description:
Researching public opinion will help to find people's perceptions/knowledge of storm water and storm water management. This research will be used to identify target audiences and determine what additional public outreach materials should be developed. Researching public opinion may be conducted using one of the following methods.

Conduct public surveys with general water and specific storm water questions. People could answer the questions and then return the forms, or the survey could be web based. Forms may be located at Public Works Office or at other public buildings.

Interview residents. A sign up sheet will be placed at various locations through out town were people can request that somebody contact them and ask general and specific water-related questions either by telephone or in person.

Has Goal Been Accomplished: YES

Work Performed

Date: 7/1/2004	Responsible Party: Allyn Tarbell, Engineering Technician

2004 Water Quality Public Survey
The Town developed a survey about stormwater pollution to determine the public's understanding of what issues affect the environment and stormwater quality. The survey was available at locations in the various Town Departments and the Public Library. The Engineering Division collected the completed forms and correlated the data. The data will be utilized to determine the public education effort required and future public participation activities. The Town will continue collect the surveys and review the data in future surveys.

The following survey data was been collected as of 12/6/2004.

1. Information was gathered on age, property ownership (own/rent), town resident, along with other

storm water related questions. 65 percent of the people who completed the surveys lived in East Hartford, with 83 percent of the surveys answered correctly. This information will aid us in the process to better inform the public about storm water issues

Date: 7/1/2005	Responsible Party: Allyn Tarbell, Engineering Technician

2005 Water Quality Public Survey
The Town developed a revised survey to further explore the public knowledge about and understanding of what issues affect the environment and stormwater quality. The survey was available at various Town Departments and the Public Library. The Engineering Division collected the completed forms and correlated the data. The data will be utilized to determine the public education effort required and future public participation activities. The Town will continue collect the surveys and review the data in future surveys.

The following survey data was been collected as of 12/16/2005.

1. Information was gathered on age, property ownership (own/rent), town resident, along with other storm water related questions. 87 percent of the people who completed the surveys lived in East Hartford, with 90 percent of the surveys answered correctly. This information will aid the Town the process to better inform the public about storm water issues

Date: 7/3/2006	Responsible Party: Allyn Tarbell, Engineering Technician

2006 Water Quality Public Survey
The Town has reviewed the last 2 public stormwater surveys and is in the process of developing a new survey that will be published in 2007 with the possibility of making it available on the Town's website. The idea of a web based survey is to reach those who have a tendency to use the internet or those who feel uncomfortable answering a survey in person.

Date: 7/19/2007	Responsible Party: Allyn Tarbell, Engineering Technician

2007 Water Quality Public Survey
After careful review of the past stormwater surveys it has been noticed that over time there has been a decrease in the public feedback from the surveys. At this point we are trying to develope a different way to have input from the public.

Date: 8/7/2008	Responsible Party: Allyn Tarbell, Engineering Technician

2008 Water Quality Public Survey
During the 2008 calendar year no storm water surveys were published due to the lack of response from previous surveys in previous years. An increased effort to educate the public by providing them with additional information about stormwater and pollution to stormwater is the next approach.

Storm Drain Marking Program

Responsible Party: Billy Taylor, Public Works Director

Start Date: 7/1/2004	End Date: 1/9/2009

Permits Years during which activities are scheduled:

Year 1 **X** Year 2 **X** Year 3 **X** Year 4 **X** Year 5 **X**

Name of Separate Implementing Entity:
Not Applicable

BMP Description:
The Town and community can make a difference by marking storm drains located through out the Town. These storm drains will be clearly identified with "Storm-Drain - No Dumping" (or similar statements) markers. This program will involve working with citizen volunteers and Town employees willing to participate and educate others about the program. Also on a yearly basis there will be a random inspection, of previously installed markers, to evaluate the condition of the markers. Based on the findings, installation methods will be reviewed and revised accordingly.

Has Goal Been Accomplished: YES

Work Performed	
Date: 7/1/2004	Responsible Party: Allyn Tarbell, Engineering Technician

2004 Storm Drain Marking Program - Pilot Project
A pilot program was developed to install a limited number of the storm drain markers on Town owned catch basins. The purpose of the program was to develop installation procedures and determine productivity rates prior to instituting the Town wide program. A representative area of Town was selected as the test site. The Town's Street Division installed the storm drain markers on approximately 600 of catch basin during the month of October 2004.

After the marker installation, the catch basins located within the test site were reviewed. The markers were reviewed to determine the quality of the installation procedures and the problems encountered during the work. The pilot program and the subsequent review determined that there are issues that need to be addressed prior to instituting the overall program. Some of the issues deal with physical aspects encountered in the field such as the lack of suitable location to install the plastic marker (deteriorating curbs, lack of concrete top, etc.). Other issues deal with the actual installation procedure utilized.

Appropriate revisions will be made to correct the issues experienced during the pilot program prior to beginning operations on the overall storm marking program.

Date: 10/25/2005	Responsible Party: Billy Taylor, Public Works Director

2005 Storm Drain Marking Program
Appropriate revisions are being made to correct the problems of applying the markers from the previous year.

The storm drain marking program was scheduled to commence in 2005, unfortunately due to scheduling conflicts and other unforeseen circumstances no storm drain markers were installed.

The program is scheduled to continue in 2006.

Date: 1/2/2006	Responsible Party: Billy Taylor, Public Works Director

2006 Storm Drain Marking Program
The program commenced in 2006, markers were placed on all catch basins located within the Town's right of Way with the exception of the few streets that are scheduled for road construction within the next year. Markers will be placed on those structures once construction has finished.

Date: 4/18/2007	Responsible Party: Billy Taylor, Public Works Director

2007 Storm Drain Marking Program
The program commenced in 2007. Markers were placed on all catch basins located within the Town's right of way with the exception of the few streets that were scheduled for road construction during calendar years 2006-07.

During calendar year 2008 markers will be placed on the structures that were replaced during the 2006-07 road improvement program. Subsequently each year the town will replace decals on structures that had been replaced the preceding year.

No storm drain markers were placed during calendar 2007.

Date: 4/23/2008	Responsible Party: Allyn Tarbell, Engineering Technician

2008 Storm Drain Marking Program
The program commenced in 2008. During the Road improvement program structures that needed to be replaced were replaced with structures that were stamped with "Drains To Waterway" type "C" top. This procedure will continue through the 2009 Calendar year.

Illicit Discharge Detection and Elimination

Descriptive Text:

Minimum Control Measure #3

Illicit Discharge: Any intermitted discharge to waters of the state that does not consist entirely of stormwater or uncontaminated ground water except those discharges identified in section 3(a) (2) of this general permit when such non-stormwater discharges are approved.

The Phase II Final Rule requires that the illicit discharge detection and elimination system must, contain the following.

· Storm system map, showing the locations of all the outfalls, names and location of all the waters that receive discharges from those outfalls.
· Implement an ordinance or other regulatory mechanism to effectively prohibit non-stormwater discharges into the MS4, as well as sanctions to ensure compliance, to the extent allowable under state and local law.
· Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.

Under Section 3 of the NPDES General Permit landscape irrigation, uncontaminated ground water such as pumped ground water, foundation drain, water from crawl space pumps and footing drains, irrigation water, lawn watering runoff, residual street wash water, discharges or flows from fire fighting activities (except training), and naturally occurring discharges such as rising ground waters, uncontaminated ground water filtration, springs, diverted stream flows, flows from riparian habitats and, wetlands, are all are non storm water discharges that are allowed under the General Permit.

Discharges from MS4s often include wastes and wastewater from non-storm water sources. A study conducted in 1987 in Sacramento, California, found that almost one-half of the water discharged from a local MS4 was not directly attributable to precipitation runoff. A significant portion of these dry weather flows were from illicit and/or inappropriate discharges and connections to the MS4. Illicit discharges enter the system through either direct connections (e.g., wastewater piping either mistakenly or deliberately connected to the storm drains) or indirect connections (e.g., infiltration into the MS4 from cracked sanitary systems, spills collected by drain outlets, or paint or used oil dumped directly into a drain). The result is untreated discharges that contribute high levels of pollutants, including heavy metals, toxics, oil and grease, solvents, nutrients, viruses, and bacteria to receiving water bodies. Pollutant levels from these illicit discharges have been shown in EPA studies to be high enough to significantly degrade receiving water quality and threaten aquatic, wildlife, and human health.

Number of BMPs associated with control measure:

5

Important Dates:

Earliest Start Date: 7/1/2004

End Date: 1/9/2009

Details of BMPs and Work Performed for Them

Develop a Program to Detect & Eliminate Illicit Discharges

Responsible Party: M. Denise Horan, Town Engineer

Start Date: 7/1/2004 | End Date: 1/9/2009

Permits Years during which activities are scheduled:

Year 1 Year 2 **X** Year 3 **X** Year 4 **X** Year 5 **X**

Name of Separate Implementing Entity:
Not Applicable

BMP Description:
The Town will conduct an outfall inspection program. The program will prioritize its inspections mainly in the industrial areas where illicit connections and discharges are most likely to occur, while proceeding to conduct 25% of the all the outfalls per year. If water flow is found during a dry weather inspection the Inspector will track the flow back to the area of discharge. Once the source has been correctly identified the Town will require that the owner eliminate the discharge.

Has Goal Been Accomplished: YES

Work Performed

Date: 7/1/2004 | Responsible Party: Allyn Tarbell, Engineering Technician

2004 Illicit Discharge Program - Detection & Elimination
The Town is in the process of developing a program to detect and eliminate illicit discharges to the Town's storm drainage system. A majority of the Town's storm drainage outfalls have been located. A program is underway to develop an overall map of the Town's entire storm drainage system to assist in the illicit discharge detection program.

The Town is planning to inspect 25% of the Town's system on an annual basis for the next four years to determine the location of dry weather flows. The dry weather flows might be an indication of an illicit discharge to the system. Appropriate procedures and methodologies will be developed prior to the starting the inspection process in 2005. The personnel responsible for the dry weather testing will be trained to locate the source of the discharges in an attempt to determine if the flows represent an illicit discharge.

Development of the program is ongoing.

Date: 4/1/2005 | Responsible Party: Allyn Tarbell, Engineering Technician

2005 Illicit Discharge Program - Detection and Elimination
The Town is in the process of developing a program to detect and eliminate illicit discharges to the Town's storm drainage system. All of the Town's storm drainage outfalls have been located. An overall map of the Town's entire storm drainage outfall system has been developed an overall map of the town's entire storm drainage system is being developed to assist in the illicit discharge detection program.

The Town has inspected 79 outfalls of which 25 had dry weather flow. At this point in time due to the weather we have not had a chance to investigate the dry weather flows further to determine the source of the flows. Over the course of the next four years we will continue to determine the location of dry weather flows. The dry weather flows might be an indication of an illicit discharge to the system. Appropriate procedures and methodologies are in the process of being developed
Development of the program is ongoing.

Date: 1/2/2006 | Responsible Party: Allyn Tarbell, Engineering Technician

2006 Illicit Discharge Program - Detection & Elimination
The Town has inspected 132 outfalls of which 34 had dry weather flow. Of the 34 outfalls that had dry weather flow 5 came back with an ammonia level of .25ppm or greater. Due the weather there has not

been time to investigate them further at this point. Over the course of the next three years we will continue to determine the location of dry weather flows. The dry weather flows might be an indication of an illicit discharge to the system. Appropriate procedures and methodologies are in the process of being developed .

Development of the program is ongoing.

Date: 4/3/2007	Responsible Party: Allyn Tarbell, Engineering Technician

2007 Illicit Dishcarge Program - Detection & Elimination
The Town has inspected 92 outfalls of which 26 had dry weather flow. Of the 26 outfalls that had dry weather flow 6 came back with an ammonia level of .25ppm or greater. At this point in time the town will continue to inspect outfall for dry weather flows as stated in the plan as well as investigating the outfalls that have flows to determine the source point.

Development of the program is ongoing.

Date: 4/10/2008	Responsible Party: Allyn Tarbell, Engineering Technician

2008 Illicit Discharge Program - Detection & Elimination
The Town has inspected 48 outfalls of which 17 had dry weather flow. Of the 17 outfalls that had dry weather flow 2 came back with an ammonia level of .25ppm or greater. At this point in time the town will continue to inspect outfall for dry weather flows as stated in the plan as well as investigating the outfalls that have flows to determine the source point.

Over the course of the five years the Town has dry weather inspected 351 of the 383 Outfalls mapped. The remaining 32 outfalls are either State owned, privately owned or can't be found in the field.

Date: 8/6/2012	Responsible Party: M. Denise Horan, Town Engineer

2012 Illicit Discharge Program - Detection & Elimination
In 2012 the town inspected 100 outfalls during dry weather for evidence of illicit discharge. This represents approx 25% of the total oufall structures in the town. Where flow was witnessed an ammonia test was performed. 25 water samples were taken. 5 had ammonia levels of .50 ppm. 17 had levels of .25 ppm, and 3 had levels of 0 ppm. Conditions of each structure and outfall area were noted, and photos were taken at each location.

All data, with links to photos, was entered in a spreadsheet with outfalls in poor condition highlighted.

The town plans to inspect a similar amount of outfall structures (25% of the total) each year in an on-going dry-weather inspection program.

Date: 1/1/2013	Responsible Party: M. Denise Horan, Town Engineer

2013 Illicit Discharge Program - Detection & Elimination
In 2013 the town inspected 89 outfalls during dry weather for evidence of illicit discharge. This represents approx 25% of the total oufall structures in the town. Where flow was witnessed an ammonia test was performed and results noted on a spreadsheet.

All data, with links to photos, was entered in a spreadsheet with outfalls in poor condition highlighted.

The town plans to inspect a similar amount of outfall structures (25% of the total) each year in an on-going dry-weather inspection program.

Date: 1/1/2014	Responsible Party: M. Denise Horan, Town Engineer

2014 Illicit Discharge Program - Detection & Elimination

In 2014 the town inspected 80 outfalls during dry weather for evidence of illicit discharge. Where flow was witnessed an ammonia test was performed and results noted on a spreadsheet.

All data, with links to updated photos, was entered in a spreadsheet with outfalls in poor condition highlighted.

The town plans to inspect a similar amount of outfall structures (25% of the total) each year in an on-going dry-weather inspection program.

Date: 1/1/2015	Responsible Party: M. Denise Horan, Town Engineer

2015 Illicit Discharge Program - Detection & Elimination
Due to low staffing levels and limited resources, no outfalls were inspected during dry weather in 2015.

Date: 1/1/2016	Responsible Party: M. Denise Horan, Town Engineer

2016 Illicit Discharge Program - Detection & Elimination
A total of 45 outfalls were inspected in 2016 during dry weather

Develop Illicit Discharge Ordinance

Responsible Party: M. Denise Horan, Town Engineer

Start Date: 1/3/2005	End Date: 6/1/2006

Permits Years during which activities are scheduled:

Year 1 Year 2 Year 3 **X** Year 4 Year 5

Name of Separate Implementing Entity:
Not Applicable

BMP Description:
The Town currently has various ordinances in place regarding solid waste disposal along with sanitary sewers and sewage disposal. Over the course of the permit term the Town will revise and / or replace the current ordinances to clearly state the prohibition of illicit discharge and connection to the storm water drainage system.

Has Goal Been Accomplished: YES

Work Performed

Date: 1/3/2005	Responsible Party: M. Denise Horan, Town Engineer

2005 Illicit Discharge Ordinance
The Town has written a draft illicit discharge ordinance that is currently being reviewed by staff members. The document still needs to be finalized and submitted to the Town's Corporation Counsel's office for review. Over the course of the permit term the Town will review/revise the proposed stormwater ordinance.

Date: 6/1/2006	Responsible Party: M. Denise Horan, Town Engineer

2006 Illicit Discharge Ordinance
The Town has written a draft illicit discharge ordinance that is currently being reviewed by staff members. The document still needs to be finalized and submitted to the Town's Corporation Counsel's office for review. Over the course of the permit term the Town will review/revise the proposed stormwater ordinance.

Date: 1/3/2007	Responsible Party: M. Denise Horan, Town Engineer

2007 Illicit Discharge Ordinance
The towns illicit discharge ordinance is currently being reviewed by the corporation counsel office and is scheduled to go before the ordinance and fees committee the spring of 2008.

Date: 1/3/2008	Responsible Party: M. Denise Horan, Town Engineer

2008 Illicit Discgarge Ordinance
The towns illicit discharge ordinance has been reviewed by the corporation counsel office and is currently being revised to go before the ordinance and fees committee the spring of 2009.

Date: 12/15/2009	Responsible Party: M. Denise Horan, Town Engineer
2009 Illicit Discharge Ordinance The proposed Stormwater Ordinance was referred to the Town Council Ordinance in December of 2009. At this time we are waiting there decision.	
Date: 12/14/2010	Responsible Party: M. Denise Horan, Town Engineer
2010 Illicit Discharge Ordinance Stormwater Ordinance passed December of 2010	

Map Storm Outfalls greater than 12" (Urbanized)

Responsible Party: M. Denise Horan, Town Engineer	
Start Date: 1/1/2007	End Date: 12/30/2007
Permits Years during which activities are scheduled: Year 1 Year 2 Year 3 Year 4 **X** Year 5	
Name of Separate Implementing Entity: Not Applicable	
BMP Description: The Town will gather and document all existing storm drainage structures through out the Town. Once all the information has been gathered, and a map in accordance with section 5(3) (b) of the General Storm Water Permit has been produced, the systems will then be field verified for accuracy. These Maps will be continually updated as new areas are developed through out the Town. The third effort will be to locate all outfalls located in Town which are 12" or greater in diameter.	
Has Goal Been Accomplished: YES	

Work Performed

Date: 4/1/2004	Responsible Party: Allyn Tarbell, Engineering Technician
2004 Storm Drainage Mapping Program The Town is involved in a multi-year effort to develop a map of the Town's entire storm drainage system. The initial effort of the program is to locate all of the storm drainage outfalls greater than 12" in diameter. The outfalls and the drainage structures are being located utilizing a GPS system. A CAD drawing is being developed from the field data. The current mapping is approximately 20 percent complete. The process is on going.	
Date: 1/3/2005	Responsible Party: Allyn Tarbell, Engineering Technician
2005 Storm Drain Mapping Program As part of minimum control measure # 3, the Engineering Division has developed a series of eight (8) maps entitled "N.P.D.E.S. Phase II Permit, Outfall Locations, Prepared for the Environmental Protection Agency." These maps identify the location and pertinent data of all existing, Town owned, storm drainage outfall pipes six (6) inch diameter and larger. The data has been plotted on base mapping supplied by the Metropolitan District Commission The locations of the outfall pipes were located using a "global positioning system." As part of the location work the coordinates, pipe size, material, overall condition, a photograph of each outfall and the receiving water body was recorded. This information will then be forwarded to the Public Works Department. The town will supply copies of the mapping under a separate cover.	

Map Storm Outfalls greater than 15" (Town wide)

Responsible Party: M. Denise Horan, Town Engineer

Start Date: 1/1/2006	End Date: 12/31/2006

Permits Years during which activities are scheduled:

Year 1 Year 2 Year 3 **X** Year 4 Year 5

Name of Separate Implementing Entity:
Not Applicable

BMP Description:
The Town will gather and document all existing storm drainage structures through out the Town. Once all the information has been gathered, and a map in accordance with section 5(3) (b) of the General Storm Water Permit, has been produced the systems will then be field verified for accuracy. These Maps will be continually updated as new areas are developed through out the Town.

The second effort will be to locate and document the outfalls greater than 15" in diameter (Town-wide).

Has Goal Been Accomplished: YES

Work Performed

Date: 4/1/2004	Responsible Party: Allyn Tarbell, Engineering Technician

2004 Storm Drainage Mapping Program
The Town is involved in a multi-year effort to develop a map of the Town's entire storm drainage system. The initial effort of the program is to locate all of the storm drainage outfalls greater than 15" in diameter.

The outfalls and the drainage structures are being located utilizing a GPS system. A CAD drawing is being developed from the field data. The current mapping is approximately 20 percent complete.

The process is on going.

Date: 1/3/2005	Responsible Party: Allyn Tarbell, Engineering Technician

2005 Storm Drain Mapping Program
As part of minimum control measure # 3, the Engineering Division has developed a series of eight (8) maps entitled "N.P.D.E.S. Phase II Permit, Outfall Locations, Prepared for the Environmental Protection Agency." These maps identify the location and pertinent data of all existing, Town owned, storm drainage outfall pipes six (6) inch diameter and larger. The data has been plotted on base mapping supplied by the Metropolitan District Commission

The locations of the outfall pipes were located using a "global positioning system". As part of the location work the coordinates, pipe size, material, overall condition, a photograph of each outfall and the receiving water body was recorded. This information will then be forwarded to the Public Works Department.
The town will supply copies of the mapping under a separate cover.

Map Storm Outfalls greater than 15" (Urbanized)

Responsible Party: M. Denise Horan, Town Engineer

Start Date: 7/1/2004	End Date: 12/31/2005

Permits Years during which activities are scheduled:

Year 1 Year 2 **X** Year 3 Year 4 Year 5

Name of Separate Implementing Entity:
Not Applicable

BMP Description:
The Town will gather data and document all of the existing storm drainage structures through out the Town. Once all the information has been gathered, and a map in accordance with section 5(3) (b) of

the General Storm Water Permit, has been produced the systems will then be field verified for accuracy. These Maps will be continually updated as new areas are developed through out the Town. The first effort will be to locate and document the outfalls greater than 15" in diameter in the Urbanized Areas.
Has Goal Been Accomplished: YES

Work Performed

Date: 4/1/2004	Responsible Party: Allyn Tarbell, Engineering Technician
2004 Storm Drainage Mapping Program The Town is involved in a multi-year effort to develop a map of the Town's entire storm drainage system. The initial effort of the program is to locate all of the storm drainage outfalls greater than 15" in diameter. The outfalls and the drainage structures are being located utilizing a GPS system. A CAD drawing is being developed from the field data. The current mapping is approximately 20 percent complete. The process is on going.	

Date: 1/3/2005	Responsible Party: Allyn Tarbell, Engineering Technician
2005 Storm Drainage Mapping Program As part of minimum control measure # 3, the Engineering Division has developed a series of eight (8) maps entitled "N.P.D.E.S. Phase II Permit, Outfall Locations, Prepared for the Environmental Protection Agency". These maps identify the location and pertinent data of all existing, Town owned, storm drainage outfall pipes six (6) inch diameter and larger. The data has been plotted on base mapping supplied by the Metropolitan District Commission The locations of the outfall pipes were located using a "global positioning system." As part of the location work the coordinates, pipe size, material, overall condition, a photograph of each outfall and the receiving water body was recorded. This information will then be forwarded to the Public Works Department. The town will supply copies of the mapping under a separate cover.	

Construction Site Runoff Control

Descriptive Text:

Minimum Control Measure #4

The minimum control measure is an important component of the Town's stormwater management plan. Stormwater runoff from construction sites can be polluted and can be transported to storm sewer systems and ultimately impact area watercourses. The main pollutant is typically sediment but other pollutants may be present. The sedimentation and other pollutants can cause siltation and harm the water quality within the watercourses.

Pollutants commonly discharged from Construction Sites

Sediment	Oil and grease
Solid and Sanitary wastes	Concrete truck washout
Phosphorous (fertilizer)	Construction chemicals
Pesticides	Construction debris

The goal of the minimum control measure is to minimize the impacts of stormwater runoff from construction sites on the area watercourses.

Program Requirements

The Town will develop, implement and enforce a program or modify an existing program, to reduce pollutants in any stormwater runoff from construction activities that result in a land disturbance of greater than or equal to one half (0.5) acre. Reduction of stormwater discharges from construction activities disturbing less than one half (0.5) acre shall be included in the program if that construction activity is part of a larger common plan of development or sale that disturb one half (0.5) acre or more. The Town currently regulates construction sites with disturbance of greater than or equal to one half (0.5) acres. The existing regulations will be modified to conform to current Municipal Separate Storm Sewer System (MS4) Phase II requirements.

The program will include but is not limited to the following:

1. An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions for non-compliance, to the extent allowable under state or local law.
2. Procedures for notifying construction site developers and operators of the requirements for registration under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with construction Activities.
3. Requirements for construction site operators to implement appropriate erosion control best management practices in accordance with the Connecticut Guidelines for Soil Erosion and Sediment Control.
4. Requirements for construction site operators to control waste at the site such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste that may cause adverse impacts to water quality.
5. Procedures for site plan review, which incorporate consideration of potential water quality impacts.
6. Procedures for receipt and consideration of information submitted by the public.
7. Procedures for site inspection and enforcement of control measures.

Best Management Practices

The program will include the implementation of BMP's to insure the minimum control measures for Construction Site Runoff Control are met.

All erosion and sedimentation controls for projects shall be in accordance with all local, State and Federal regulations. The following documents will be incorporated into the program. The documents include the following:
1. Connecticut Guidelines for Soil Erosion Control, DEP Bulletin 34, 2002 and latest supplemental
2. Town's Manual of Technical Design as amended
3. Town's Subdivision Regulations as amended
4. Town's Zoning Regulations as amended

The program will address two major types of construction activities which include Town / publicly funded projects and privately funded projects.

Publicly Funded Projects
Town projects will incorporate the erosion and sedimentation measures, which will be designed in accordance with the Connecticut Guidelines for Soil Erosion and Sedimentation Control. The project specifications will notify the prospective Contractors of the need to register with Connecticut Department of Environmental Protection for the General Permit for the Discharge of Stormwater and Dewatering Wastewaters associated with Construction Activities.

The Town shall provide construction inspection to insure that contractors working for the Town will comply with all approved sediment and erosion control plans. The Town is not authorized to impose sanctions on Contractors who fail implement the approved erosion control measures. In the case of the failure of the contractor to take corrective action, the Town will arrange for the implementation of

the appropriate erosion control measures. The construction contract will be adjusted so that any funds required for the Town to implement erosion control measures are deducted from the construction contract.

Private Development
The Town will review and update the current local regulatory programs to insure they are in compliance with current Municipal Separate Storm Sewer System (MS4) Phase II requirements. The Connecticut Guidelines for Soil Erosion and Sedimentation will be incorporated into the appropriate local regulations. The site review process will be reviewed to insure that appropriate structural and non-structural measures will be incorporated into designs to minimize the pollution of stormwater runoff from the sites during construction.

The Town's site inspection procedures will be revised to include inspections of the erosion control measures. Currently, the subdivisions are the only type of development within the Town, which has a bonding mechanism to insure the erosion control measures are installed and maintained as per the approved plan. The Town will explore various options to incorporate enforcement measures for the other regulatory approvals, which relate to site development.

Polluted storm water runoff from construction sites often flows to MS4s and ultimately is discharged into local rivers and streams. Of the pollutants listed in Table 1, sediment is usually the main pollutant of concern. Sediment runoff rates from construction sites are typically 10 to 20 times greater than those of agricultural lands, and 1,000 to 2,000 times greater than those of forest lands. During a short period of time, construction sites can contribute more sediment to streams than can be deposited naturally during several decades. The resulting siltation, and the contribution of other pollutants from construction sites, can cause physical, chemical, and biological harm to our nation's waters. For example, excess sediment can quickly fill rivers and lakes, requiring dredging and destroying Aquatic habitats.

Table 1
Pollutants Commonly Discharged From Construction Sites

Sediment
Solid and sanitary wastes
Phosphorous (fertilizer)
Nitrogen (fertilizer)
Pesticides
Oil and grease
Concrete truck washout

Number of BMPs associated with control measure:
7

Important Dates:

Earliest Start Date: 6/30/2004

End Date: 11/30/2008

Details of BMPs and Work Performed for Them

Develop Appropriate Stormwater Ordinance / Regulations for MS4 Program

Responsible Party: M. Denise Horan, Town Engineer

Start Date: 4/1/2006	End Date: 3/30/2007

Permits Years during which activities are scheduled:

Year 1 Year 2 Year 3 **X** Year 4 Year 5

Name of Separate Implementing Entity:
Not Applicable

BMP Description:
The Town will develop appropriate ordinances and / or implement a model storm water ordinance to be incompliance with Federal law.

Has Goal Been Accomplished: YES

Work Performed

Date: 12/4/2006	Responsible Party: Nicholas Casparino, Civil Engineer

2006 Stormwater Ordinance Development
A majority of the Phase 2 requirements are currently addressed by the Town's existing Zoning Regulations with one major exception. The main requirement that is not addressed in the current regulations is enforcement. The issue is a result of the lack of enforcement provisions available to the Town under the enabling legislation for land use regulations. A decision has been made to develop a comprehensive stormwater ordinance, which will include enforcement provisions. Minor modifications will be made to the zoning regulations as well.

The Town is in the process of developing the appropriate stormwater ordinance.

Date: 1/2/2007	Responsible Party: Nicholas Casparino, Civil Engineer

2007 Develop Appropraite Stormwater Ordinance
A draft stormwater ordinance has been developed. The ordinance has been transmitted to Public Works Administration and the Town's Corporation Counsel's Office for their review and input. Engineering staff have met with representatives from Corporation Counsel to provide input and develop an appropriate schedule to adopt the ordinance.

Date: 1/3/2008	Responsible Party: Nicholas Casparino, Civil Engineer

2008 Develop Appropraite Stormwater Ordinance
The towns illicit discharge ordinance has been reviewed by the corporation counsel office and is currently being revised to go before the ordinance and fees committee the spring of 2009.

Date: 12/15/2009	Responsible Party: M. Denise Horan, Town Engineer

2009 Develop Appropriate Stormwater Ordinance
The proposed Stormwater Ordinance was referred to the Town Council Ordinance in December of 2009. At this time we are waiting there decision.

Date: 12/14/2010	Responsible Party: M. Denise Horan, Town Engineer

2010 Develop Appropriate Stormwater
Stormwater Ordinance passed December of 2010

Develop Procedures for Infomation Submitted by the Public

Responsible Party: M. Denise Horan, Town Engineer

Start Date: 4/1/2006	End Date: 9/30/2006

Permits Years during which activities are scheduled:

Year 1 Year 2 Year 3 **X** Year 4 Year 5

Name of Separate Implementing Entity:
Not Applicable

BMP Description:
The Town will develop procedures for the submission and evaluation of information which is submitted by the Public concerning activities taking place at construction sites.

Has Goal Been Accomplished: YES

Work Performed

Date: 2/1/2007	Responsible Party: Nicholas Casparino, Civil Engineer

2006 Procedural Development for Submission of Information
The Town's original Phase 2 plan called for this item to be developed in 2006. This item has been delayed due to limited resources and increased efforts on other portions of the stormwater plan. The Town plans to address this item in the upcoming year and will be completed by the end of 2007.

Date: 1/2/2007	Responsible Party: Nicholas Casparino, Civil Engineer

2007 Procedural Development for Submission of Information
This work item has been delayed due to limited resources. The Town plans to address this item in the upcoming year and will be completed by the end of 2008. The process will be coordinated with revisions to the land use regulations and proposed ordinance.

Date: 1/3/2008	Responsible Party: Nicholas Casparino, Civil Engineer

2008 Procedural Development for Submission of Information
This work item has been delayed due to limited resources. The Town plans to address this item in the upcoming year and will be completed by the end of 2009. The process will be coordinated with revisions to the land use regulations and proposed ordinance.

Date: 12/16/2009	Responsible Party: Nicholas Casparino, Civil Engineer

2009 Procedural Development for Submission of Information
This work item has been delayed due to limited resources. The Town plans to address this item in the upcoming year and will be completed as time allows. The process will be coordinated with revisions to the land use regulations and proposed ordinance.

Date: 1/7/2010	Responsible Party: Nicholas Casparino, Civil Engineer

2010 Procedural Development for Submission of Information
The Town currently utilizes the phone and email to receive and respond to public concerns regarding construction activities. It also has daily inspections that are performed by the Building and Engineering departments. These departments monitor the activities and make sure that they are conforming to the approved constructions plans

Date: 1/1/2013	Responsible Party: Timothy Bockus, Director of Public Works

2013 Procedural Development for Sumbission
The Town currently utilizes the phone and email to receive and respond to public concerns regarding construction activities. It also has daily inspections that are performed by the Building and Engineering departments. These departments monitor the activities and make sure that they are conforming to the approved constructions plans

Develop Procedures to Track the Effectivness of the Program

Responsible Party: M. Denise Horan, Town Engineer

Start Date: 4/1/2008	End Date: 11/30/2008

Permits Years during which activities are scheduled:

Year 1 Year 2 Year 3 Year 4 Year 5 **X**

Name of Separate Implementing Entity:
Not Applicable

BMP Description:

The Town will develop and implement procedures to track the effectiveness of the erosion control program including construction compliance, complaint tracking, BMP's, and structural measures.
Has Goal Been Accomplished: NO

Work Performed

Date: 1/3/2008	Responsible Party: Nicholas Casparino, Civil Engineer
2008 Program Effectivness This work item has been delayed due to limited resources. The Town plans to address this item in the upcoming year and will be completed by the end of 2009.	
Date: 12/16/2009	Responsible Party: Nicholas Casparino, Civil Engineer
2009 Program Effectivness This work item has been delayed due to limited resources. The Town plans to address this item in the upcoming year and will be completed as time allows.	
Date: 12/13/2010	Responsible Party: Nicholas Casparino, Civil Engineer
2010 Program Effectivness This work item has been delayed due to limited resources. The Town plans to address this item in the upcoming year and will be completed as time allows. Along with tracking the new stormwater ordinance.	
Date: 1/3/2011	Responsible Party: Nicholas Casparino, Civil Engineer
2011 Program Effectivness This work item has been delayed due to limited resources. The Town plans to address this item as additional resources become available, and will be completed as time allows. Along with tracking the new stormwater ordinance.	

Public Hearing & Comment Process for Regulation Modifications

Responsible Party: M. Denise Horan, Town Engineer	
Start Date: 4/1/2007	End Date: 1/31/2008
Permits Years during which activities are scheduled: Year 1 Year 2 Year 3 Year 4 **X** Year 5	
Name of Separate Implementing Entity: Not Applicable	
BMP Description: The Town will hold Public Hearings and comply with all notice requirements concerning the adoption of the revised regulatory procedures and model storm water ordinance (if deemed appropriate).	
Has Goal Been Accomplished: YES	

Work Performed

Date: 1/2/2007	Responsible Party: Nicholas Casparino, Civil Engineer
2007 Public Hearing & Comment for Regulation Modifications The public hearing and comment process has been delayed until the process for the ordinance adoption and land use regulation modifications commences.	
Date: 1/3/2008	Responsible Party: Nicholas Casparino, Civil Engineer
2008 Public Hearing & Comment for Regulation Modification The public hearing and comment process has been delayed until the process for the ordinance adoption and land use regulation modifications commences.	
Date: 1/2/2009	Responsible Party: Nicholas Casparino, Civil Engineer
2009 Public Hearing & Comment for Regulation Modifications The public hearing and comment process has been delayed until the process for the ordinance adoption and land use regulation modifications commences.	

Date: 12/1/2010	Responsible Party: Nicholas Casparino, Civil Engineer
2010 Public Hearing & comment for Regulation Modifications At this time the town has conformed to all foi requirements and held public hearing regarding the adoption on the new stormwater regulations.	

Review & Revise Site Inspection Procedures

Responsible Party: M. Denise Horan, Town Engineer	
Start Date: 6/1/2007	End Date: 12/30/2007
Permits Years during which activities are scheduled: Year 1 Year 2 Year 3 Year 4 **X** Year 5	
Name of Separate Implementing Entity: Not Applicable	
BMP Description: The Town's site inspection procedures will be revised to insure the best management practices associated with erosion control are utilized during the construction phase of all projects.	
Has Goal Been Accomplished: YES	

Work Performed

Date: 1/2/2007	Responsible Party: Nicholas Casparino, Civil Engineer
2007 Review Site Inspection Procedures The Town currently inspects all private development with the exception of individual house construction and minor projects which do not require regulatory approvals. The inspections are handled by the Engineering Division personnel and include a review of the erosion / sedimentation control facilities. All developments with a disturbance greater than ½ acre require Planning & Zoning Approval. These projects are inspected to insure that the erosion control measures are properly installed and maintained during construction. The inspection procedures will be evaluated over time to determine if additional improvements can be made to the process.	

Date: 1/10/2008	Responsible Party: Nicholas Casparino, Civil Engineer
2008 Review Site Inspection Procedures The Town currently inspects all private development with the exception of individual house construction and minor projects which do not require regulatory approvals. The inspections are handled by the Engineering Division personnel and include a review of the erosion / sedimentation control facilities. All developments with a disturbance greater than ½ acre require Planning & Zoning Approval. These projects are inspected to insure that the erosion control measures are properly installed and maintained during construction.	

Date: 1/2/2009	Responsible Party: Nicholas Casparino, Civil Engineer
2009 Review Site Inspection Procedures The Town currently inspects all private development with the exception of individual house construction and minor projects which do not require regulatory approvals. The inspections are handled by the Engineering Division personnel and include a review of the erosion / sedimentation control facilities. All developments with a disturbance greater than ½ acre require Planning & Zoning Approval. These projects are inspected to insure that the erosion control measures are properly installed and maintained during construction. The inspection procedures will be evaluated over time to determine if additional improvements can be made to the process.	

Review Land Use Regulations to meet MS4 Permit Requirements and E&S Guidelines

Responsible Party: M. Denise Horan, Town Engineer

Start Date: 6/30/2004	End Date: 3/31/2006

Permits Years during which activities are scheduled:

Year 1 Year 2 **X** Year 3 **X** Year 4 Year 5

Name of Separate Implementing Entity:
Not Applicable

BMP Description:
The program requirements will be discussed with other Town Departments and Commissions to receive feedback and assistance in developing a comprehensive plan for revising the Town's current Land Use Regulations. The revisions will be made to include measures in an attempt to improve water quality from the various sites.

Has Goal Been Accomplished: YES

Work Performed

Date: 7/1/2004	Responsible Party: Nicholas Casparino, Engineering Technician

2004 Land Use Regulation Review
The Engineering Division has begun the review process of the Town's existing Land Use Regulations. The existing regulations are being reviewed to insure the regulations are in conformance with MS4 requirements.

The Town's current Zoning regulations require sites with a disturbance greater than 1/2 acre receive "Soil-Erosion and Sedimentation-Control" approval from the Planning & Zoning Commission prior to construction. The major issue is the lack of enforcement in the current program. Initial discussions have taken place with the Town Planner concerning the possibilities for including enforcement in the current land use regulations. Research needs to be done to determine if the enabling legislation allows the Town to bond the erosion control measures to insure that the measures are properly installed and maintained. If the state legislation does not allow the Town to bond the measures, other mechanisms such as a storm water ordinance will be explored to insure the appropriate enforcement capabilities are provided.

The review process is ongoing.

The current Zoning regulation concerning this item is found below.

Section 217 Soil-Erosion and Sedimentation-Control Regulations
These regulations shall apply to all developments including, but not limited to, any construction on improved or unimproved real property located in the Town of East Hartford with a cumulatively disturbed area of more than one-half (.5) acre. For the purpose of this regulation, disturbed area shall mean an area where the ground cover is destroyed or removed, leaving the land subject to accelerated erosion.

217.1 Intent
The purpose of this section is to improve and broadened soil-erosion and sediment-control activities that will reduce the dangers from storm water runoff, minimized nonpoint sediment pollution, and conserve and protect land, water, air and other environmental resources.

217.2 Application procedure and information required for certification
Application for soil-erosion/sediment-control certification shall be made upon a form provided by the Planning and Zoning Commission and submitted to the Planning and Zoning Commission at least fifteen (15) days prior to the regularly scheduled or special meeting of the Planning and Zoning Commission during which the application is to be heard. To be eligible for certification, a Soil-Erosion and Sediment-Control Plan shall contain proper provisions to adequately control accelerated erosion and sedimentation and to reduce the danger from storm water runoff on the proposed site based on the

best available technology. Such principles, methods, and practices necessary for certification are found in the Connecticut Guidelines for Soil Erosion and Sediment Control (1985), as amended. Copies of the guidelines are available from the office of the Hartford County Soil and Water Conservation District. Alternate principles, methods, and practices may be used with the prior approval of the Commission. The Commission shall make adequate findings and conclusions based upon the evidence submitted to it whether the soil-erosion and sediment-control plan is necessary and essential to the development of the premises for a permitted use by the zoning regulations. Furthermore, twelve (12) copies of the application shall be filed and shall contain, but not be limited to, the following information:
a. Address or location of subject parcel;
b. Size of subject parcel;
c. Zone of subject parcel;
d. Name, address, telephone number of petitioner(s);
e. Name, address, telephone number of owner(s);
f. Signature of owner(s); and
g. Signature of petitioner(s).

217.3 Accompanying the application form shall be:
a. A check made payable to the Treasurer, Town of East Hartford, in an amount determined by the Town of East Hartford;
b. Twelve (12) copies of a vicinity map which shows the affected property boundaries and the surrounding area at least one-half (.5) mile in all directions of said property;
c. Twelve (12) copies of a minimum A-2 survey quality (as noted in Recommended Standards for Surveys and Maps in the State of Connecticut prepared and adopted by The Connecticut Association of Land Surveyors, Inc. (1975), as subject to amendment) site plan clearly drawn by a licensed land surveyor, to a scale of not smaller than one (1) inch to forty (40) feet. All proposed physical improvements shall be designed by a Connecticut registered professional engineer as specified by Connecticut State Statutes. The following information shall be shown as a minimum:
1. The location of the proposed development and adjacent properties;
2. The existing and proposed topography including soil types, wetlands, watercourses, and water bodies;
3. Location of any existing structures on the project site;
4. Proposed area alterations including cleared, excavated, filled or graded areas and proposed structures, utilities, roads and, if applicable, new property lines;
5. Location of and design details for all proposed soil-erosion and sediment-control measures and storm water management facilities;
6. Sequence of grading and construction activities;
7. Sequence for installation and/or application of soil-erosion and sediment-control measures;
8. Sequence for final stabilization of the development site;
9. Any other information deemed necessary and appropriate by the applicant or requested by the Commission, including but not limited to watershed map(s) and a statement of the project's impact on the watershed(s); and
10. Submission of inaccurate or incomplete material shall be grounds for denial.
d. A typed narrative describing the following:
1. Proposed development;
2. Schedule for grading and construction activities including:
(a) Start and completion dates;
(b) Sequence for installation and or application of soil-erosion and sediment-control measures;
(c) Sequence for grading and construction activities; and
(d) Sequence for final stabilization of the project site.
3. Design criteria and construction details for proposed soil-erosion and sediment-control measures and storm water management facilities;
4. Installation and/or application procedures for proposed soil-erosion and sediment-control measures and storm water management facilities;
5. Operations and maintenance program for proposed soil-erosion and sediment-control measures and storm water management facilities;

6. Person responsible for maintenance during construction of project; and
7. Organization or person responsible for maintenance or permanent measures when project is complete.

217.4 General conditions:
a. No grading activities or vegetation removal associated with site development shall begin unless the project's soil-erosion and sediment-control plan is certified by the Town Planning and Zoning Commission and those control measures and facilities in the certified plan are installed and functional.
b. Planned soil-erosion and sediment-control measures and facilities shall be installed as scheduled according to the certified soil-erosion and sediment-control plan.
c. All control measures and facilities shall be maintained in effective condition to ensure the compliance of the certified soil-erosion and sediment-control plan.

217.5 Administration and inspection
Inspection may be made by the Engineering Division during development to ensure compliance with the certified soil-erosion and sediment-control plan and that control measures are properly performed and facilities installed and maintained. The Engineering Division shall be allowed to access the project site at any time. Prior to initiation of development activity, the permittee shall place on file with the Engineering Division a letter identifying designated person(s) responsible for implementation of the certified soil-erosion and sediment-control plan and with whom inspectors representing the Town may communicate routinely. The Town Engineer in his sole discretion is authorized to make minor field adjustments to the approved soil-erosion and sediment-control plan, provided that such adjustments are not in conflict with the approved soil-erosion and sediment-control plan and that those adjustments are in conformance with these zoning regulations.
Applications for major amendments or modifications to the soil-erosion and sediment-control plan shall be made in the same manner as the original application. It is the applicant's responsibility to anticipate unforeseen erosion or sedimentation problems and emergencies and to have the capability to deal effectively with such problems. In the event of an unforeseen emergency in which adjacent properties, roadways, wetlands or watercourses in the Town of East Hartford face imminent danger of pollution or obstruction from erosion and sedimentation and the applicant's or his designated agent cannot be contacted through reasonable effort, the Commission shall empower its agent to act to stem the threat of erosion and sedimentation. Except to the extent prohibited by applicable law, the expense for remedial action shall be recoverable from the permittee under the certified soil-erosion and sediment-control plan.

217.6 Required approved plans to be filed prior to the start of any work. The applicant shall file one (1) mylar print and three (3) paper prints of the approved certified soil-erosion and sediment-control plan with the Town Engineer. The following statement shall be placed on the filed mylar and paper prints:

"The East Hartford Planning and Zoning Commission certifies that the soil-erosion and sediment-control plan complies with the requirements the Town of East Hartford regulations and the Connecticut Guidelines for Soil Erosion and Sedimentation Control dated 1985, as amended. The applicant under this plan is responsible for ensuring compliance with the plan. The Town of East Hartford shall not be held liable for improper installation, lack of maintenance, or other neglect on behalf of the applicant."

Approval Date_____
Chairman_____

Date: 1/3/2005	Responsible Party: Nicholas Casparino, Civil Engineer

2005 Land Use Regulation Review
Land Use Regulation Review

The Engineering Division has reviewed the existing land use regulations and identified areas that need to be revised in response to the Stormwater Phase II requirements. The Development Department and

the Town Planner have been contacted to begin the process of developing the appropriate regulation modifications. The Town's Corporation Counsel's office has been contacted to determine if the existing enabling legislation for land use regulations allows the Town to enact various requirements through the land use process. The most important aspect will be the enforcement aspect and one of the mechanisms that we are exploring is the use bonding of the developers through the land use process. Currently, we are waiting for the legal response to determine the most effective direction to address the Stormwater Phase II requirements.

The following tentative revisions are being discussed for the Town's land use regulations.

1. Inland Wetlands Regulations
a. Section 2 - add appropriate definitions concerning stormwater quality and Stormwater Phase 2 requirements
b. Section 8 - add additional requirements to the "Information Required" section to address Stormwater Phase 2.
c. Section 11 - add information to the "Standards and Criteria for a Decision" concerning Stormwater Phase 2.
2. Subdivision Regulations
a. Article 1 - add language to the purpose statement concerning the Stormwater Phase 2 requirements
b. Article 2 - add appropriate definitions for stormwater quality issues
c. Article 3 - add requirements to the pre-application sketch on how the developer intends to comply with the Stormwater Phase 2 requirements.
d. Article 4 - add requirements to show the measures incorporated for Stormwater Phase 2 to the preliminary layout.
e. Article 5 - add requirements to show measure incorporated for Stormwater Phase 2 to the final layout.
f. Article 8 - Required Improvements & Design Standards. Add the appropriate design criteria and requirements to the section. Stormwater details and plates will need to be developed and included in the regulations.
3. Zoning Regulations
a. Section 200 - Add additional definitions associated with Stormwater Phase 2.
b. Section 209 - Review and revise the parking regulations to incorporate measures consistent with intent of the Stormwater Phase 2 requirements.
c. Section 217 - Update Soil Erosion & sedimentation control requirements
d. Section 218 - Review and revise the Natural Resource requirements
e. Section 602 - Review the Comprehensive Rehabilitation zone requirements
f. Section 603 - Review the Design Development District requirements
g. Section 703 - Revise the Criteria for Evaluation (Site Plans)
h. Section 704 - Revise the requirements contained in the Standards of Development
i. Section 707 - Revise the Environmental & Transportation Review Standards

The Town's Design Manual will need to be revised to incorporate the appropriate Stormwater Phase 2 requirements. The document is a design guide prepared by the Town's Engineering Division to provide an overview of the engineering and development guidelines for design professionals preparing land use applications.

Date: 1/3/2006	Responsible Party: Nicholas Casparino, Civil Engineer

2006 Land Use Regulation Review
The Engineering Division has completed a review of the Town's existing land use regulations and the inland wetland regulations with respect to the Stormwater Phase 2 requirements.

Modifications of the Town's regulations are required to be in conformance with the Phase 2 requirements. The inland wetland and erosion & sedimentation regulations will require minor modifications. The subdivision, zoning regulations and the Town's design manual will require a greater effort to insure compliance. One of the main requirements that can not be incorporated into the Town's

regulations is enforcement. A decision has been made to develop a comprehensive stormwater ordinance which will include enforcement provisions. The Town is in the process of developing the appropriate stormwater ordinance.

Date: 1/2/2007	Responsible Party: Nicholas Casparino, Civil Engineer

2007 Land Use Regulation Review
The Engineering Division has completed a review of the Town's existing land use regulations and the inland wetland regulations with respect to the Stormwater Phase 2 requirements.

Modifications of the Town's regulations are required to be in conformance with the Phase 2 requirements. The inland wetland and erosion & sedimentation regulations will require minor modifications. The subdivision, zoning regulations and the Town's design manual will require a greater effort to insure compliance. One of the main requirements that can not be incorporated into the Town's regulations is enforcement. A decision has been made to develop a comprehensive stormwater ordinance which will include enforcement provisions. The Town is in the process of developing the appropriate stormwater ordinance.

The draft storm water ordinance is currently being reviewed by the Town's Corporation Counsel's office. A decision was made to delay the modifications to the land use regulations until the storm water ordinance is discussed with the Town Council. The delay will allow the land use regulation modifications to be coordinated with the final version of the ordinance. The ordinance is proposed to be adopted in 2008.

Date: 1/3/2007	Responsible Party: Nicholas Casparino, Civil Engineer

2008 Land Use Regulation Review
The towns illicit discharge ordinance has been reviewed by the corporation counsel office and is currently being revised to go before the ordinance and fees committee the spring of 2009.

Review Town Ordinances to MS4 Requirements

Responsible Party: M. Denise Horan, Town Engineer

Start Date: 7/1/2004	End Date: 6/30/2006

Permits Years during which activities are scheduled:

Year 1 Year 2 **X** Year 3 **X** Year 4 Year 5

Name of Separate Implementing Entity:
Not Applicable

BMP Description:
A review of the Town's existing ordinances will be made versus the MS4 requirements to determine the best approach to bring the current ordinances into compliance with Federal law. The implementation of a model storm water ordinance will be explored.

Has Goal Been Accomplished: YES

Work Performed

Date: 12/1/2005	Responsible Party: Nicholas Casparino, Engineering Technician

2004 Town Ordinance Review
An initial review of the Town's existing ordinances has been started. The ordinances are being reviewed to determine what elements of the MS4 requirements are currently addressed by the Town's existing ordinances. Once all of the existing elements are determined, Public Works and the Corporation Counsels Office will be contacted to discuss the best mechanism to make the appropriate revisions and develop the required ordinance modifications.

The review process is ongoing.

Date: 6/1/2005	Responsible Party: Nicholas Casparino, Civil Engineer

2005 Town Ordinance Review

The Engineering Division has reviewed the existing Town ordinances to determine the existing requirements which address the Stormwater Phase II requirements.

The existing ordinances currently address onsite waste though a use of various ordinances. Illegal connections to the sanitary sewer are also addressed. The Town does not currently have a comprehensive ordinance or set of ordinances to address all of the Stormwater Phase 2 requirements.

The following are examples of the Town's existing ordinances that could be utilized to address stormwater quality.
1) Section 16-6 (a) - Containers - Requires proper containers for all solid waste generated or created on a premises.
2) Section 16-6 (h) - Public Places -All solid waste must be placed in a container, including on private property.
3) Section 16-6 (k) - Accumulation of Solid Waste - Any uncontainerized solid waste is a nuisance and is prohibited.
4) Section 16-6 (l) - Scattering of Solid Waste - Prohibits the scattering of solid waste and any solid waste being deposited in any body of water.
5) Section 16-6 (m) - Hazardous Wastes - Eliminates hazardous materials form the solid waste stream. State & Federal law would cover this item.
6) Section 16-7 - Failure to Remove Solid Waste - Provides a mechanism to have any accumulation of solid waste removed from a site.
7) Section 17-1 Industrial Wastes in Rivers and Stream; Treatment - Prohibits the discharge of industrial wastes and provides some standards.
8) Section 17-2 Untreated Raw Sewage in Rivers and Streams - Prohibits any discharge of sewage directly or indirectly outlets to a water body.
9) Section 17-3 Discharging Drain or Conductor Pipe Effluent into Public - Discharge of waste to sidewalk, road, or public place constitutes a nuisance.
10) Section 13-9 through 12 - Abatement of Nuisances - Provide a mechanism for the abatement nuisances, which include many of the items noted above.

The Town's Corporation Counsel's office will be consulted to begin the process of developing the appropriate modifications.

Date: 1/3/2006	Responsible Party: Nicholas Casparino, Civil Engineer

2006 Town Ordinance Review
The Engineering Division has completed a review of the Town's existing ordinances with respect to the Stormwater Phase 2 requirements.

The Town's existing ordinances do not adequately address stormwater quality. A decision has been made to develop a comprehensive stormwater ordinance to address the Phase 2 requirements. The Town is in the process of developing the appropriate stormwater ordinance.

Post-Construction Runoff Control

Descriptive Text:

Minimum Control Measure #5

The minimum control measure is an important component of the Town's stormwater management plan. Stormwater runoff from developed sites can become polluted and be transported to storm sewer systems and ultimately impact area watercourses. Planning and design features can minimize the pollutants, which reach area watercourses in the stormwater runoff from developed sites. There are two main water quality impacts associated with post construction stormwater runoff. The first is harmful sediments and chemicals are carried by stormwater runoff, which flows across developed properties. Development increases the amount and types of pollutants found in the runoff. The second water

quality impact is due to the increased quantity and temperature of the stormwater runoff from developed properties. The increased amount of runoff is caused by the addition of impervious areas (roofs, pavement, etc.) which prevents the water from percolating through vegetation and soil. The increased amount of runoff can cause stream flooding and stream scour. The temperature of the runoff is raised when runoff flows over areas of pavement.

The goal of this minimum control measure is to minimize the impacts of development on water quality and attempt to maintain predevelopment conditions as much as possible.

Program Requirements

The Town will develop, implement and enforce a program or modify an existing program to address stormwater runoff from areas of new development and redevelopment that result in a land disturbance of greater than or equal to one (1) acre. Projects which disturb less than one (1) acre shall be included in the program if the project is part of a larger common plan of development that discharges to a Town storm sewer system or area watercourse.

The program will include but is not limited to the following:

1. The program shall insure that controls are implemented to require appropriate infiltration practices, reduction of impervious surface, creation of or conversion to sheet flow, measure, and/or structures to reduce sediment discharge and any other innovative measures that will prevent or minimize water quality impacts.
2. Develop and implement strategies, which include a combination of structural and/or non-structural best management practices (BMPs).
3. Use an ordinance or other regulatory mechanism to address the elements of noted above regarding post construction runoff from new development and redevelopment projects to the extent allowable under State or local law.
4. Ensure adequate long-term operation and maintenance of BMPs.

Best Management Practices

The program will include the development and implementation of BMP's to insure the minimum control measures for Post Construction Site Runoff Control are met.

Structural and Non-structural BMP's

Structural and non-structural BMP's will be required on all projects disturbing greater than or equal to one (1) acre.

Storm sewers are to be designed in accordance with the Town's Manual of Technical Design, subdivision regulations, and ConnDOT Drainage Manual.

Measures which may be considered include but are not limited to the following.

Structural measures
1. Utilize natural vegetation to help filter particulate. On steep slopes appropriate erosion control measures are to be used.
2. Utilize catch basins with four foot deep sumps. If other end treatments (gross particle separators, retention ponds, detention ponds, etc.) are utilized the deeper sumps can be eliminated. The maximum depth of structure shall not exceed 12 feet from the top of grate elevation. Catch basin sumps are not to be utilized on storm sewer systems which are 36 inches or larger in diameter.
3. Utilize outlet protection such as riprap energy dissipaters, scour holes, check dams, erosion control matting, and vegetative linings in outlet channels.

4. Utilize hydrodynamic separators designed to treat the "first flush." The system and separators must be designed to accommodate the peak flow for the system. The separators are to be installed "offline" and have a by-pass system to convey the peak discharge for the design storm.
5. Utilize detention ponds, sedimentation basins and retention ponds. The facilities shall incorporate the use of forebays where appropriate for maintenance purposes.
6. Utilize infiltration basins
7. Utilize bioretention to filter pollutants
8. Utilize detention and retention basins to reduce peak flows and volumes for post development conditions.

Non- structural measures
1. Incorporating the use of vegetation (i.e. tress, plantings, landscape areas, etc.) in the development of site designs.
2. BMP inspection and maintenance activities

The Federal Environmental Protection Agency Guidance calls for implementing policies or ordinances, which encourage infill development. This is typical circumstance in East Hartford due to the lack of undeveloped open space.
All facilities will be designed and constructed in accordance with the Town's Manual of Technical Design, Zoning Regulations, Subdivision Regulations and Connecticut Guidelines for Soil Erosion Control, DEP Bulletin 34, 2002 and latest supplemental

Post-construction storm water management in areas undergoing new development or redevelopment is necessary because runoff from these areas has been shown to significantly effect receiving water bodies. Many studies indicate that prior planning and design for the minimization of pollutants in post-construction storm water discharges is the most cost-effective approach to storm water quality management.

There are generally two forms of substantial impacts of post-construction runoff. The first is caused by an increase in the type and quantity of pollutants in storm water runoff. As runoff flows over areas altered by development, it picks up harmful sediment and chemicals such as oil and grease, pesticides, heavy metals, and nutrients (e.g., nitrogen and phosphorus). These pollutants often become suspended in runoff and are carried to receiving waters, such as lakes, ponds, and streams. Once deposited, these pollutants can enter the food chain through small aquatic life, eventually entering the tissues of fish and humans. The second kind of post-construction runoff impact occurs by increasing the quantity of water delivered to the water body during storms. Increased impervious surfaces interrupt the natural cycle of gradual percolation of water through vegetation and soil. Instead, water is collected from surfaces such as asphalt and concrete and routed to drainage systems where large volumes of runoff quickly flow to the nearest receiving water. The effects of this process include stream bank scouring and downstream flooding, which often lead to a loss of aquatic life and damage to property.

Number of BMPs associated with control measure:

6

Important Dates:

Earliest Start Date: 7/1/2004

End Date: 10/31/2008

Details of BMPs and Work Performed for Them

Develop and Implement Post-construction BMP Strategy

Responsible Party: M. Denise Horan, Town Engineer

Start Date: 4/1/2005	End Date: 6/29/2006

Permits Years during which activities are scheduled:

Year 1 Year 2 Year 3 **X** Year 4 Year 5

Name of Separate Implementing Entity:
Not Applicable

BMP Description:
The Town will evaluate and develop a list of best management practices which take into account the existing conditions found in the Town. The BMP's will include measures to improve storm water quality from sites over the long term.

Has Goal Been Accomplished: NO

Work Performed

Date: 3/5/2007	Responsible Party: Nicholas Casparino, Civil Engineer

2006 Development of Post-construction BMP Strategy
The Town's original schedule called for the post-development BMP strategies to be developed in 2006. The Town is in the process of developing the appropriate stormwater ordinance. A decision was made to develop the BMP strategies in conjunction with the development of the stormwater ordinance. The current schedule calls for the post-development BMP strategies to be completed by June 2008.

Date: 1/2/2007	Responsible Party: Nicholas Casparino, Civil Engineer

2007 Development of Post-construction BMP Strategy
The process to develop and implement the adoption of post-construction BMP's has been delayed until the final language of the stormwater ordinance has been developed. The appropriate BMP's will be developed and coordinated with the final language of the ordinance.

The work is scheduled to begin in 2008.

Date: 1/2/2008	Responsible Party: Nicholas Casparino, Civil Engineer

2008 Development of Post-construction BMP Strategy
The process to develop and implement the adoption of post-construction BMP's has been delayed until the final language of the stormwater ordinance has been developed. The appropriate BMP's will be developed and coordinated with the final language of the ordinance.

The work is scheduled to begin in 2009.

Date: 12/16/2009	Responsible Party: Nicholas Casparino, Civil Engineer

2009 Development of Post-Construction BMP Strategy
The process to develop and implement the adoption of post-construction BMP's has been delayed until the final language of the stormwater ordinance has been developed. The appropriate BMP's will be developed and coordinated with the final language of the ordinance.

The proposed Stormwater Ordinance was referred to the Town Council Ordinance in December of 2009. At this time we are waiting there decision.

Date: 12/15/2010	Responsible Party: Nicholas Casparino, Civil Engineer

2010 Development of Post-Construction BMP Strategy
The Current Stormwater Ordinance was passed on 12-14-10. The ordinance was amended and does not include Post Construction Regulations. At this time we are looking at alternatives and consulting with the Town attorneys as how to address the situation.

Date: 1/6/2011	Responsible Party: Nicholas Casparino, Civil Engineer
2011 Development of Post-Construction BMP Strategy Due to staffing cut backs the Town is looking at alternatives as time allows.	

Develop Post-construction Ordinance or Regulation

Responsible Party: M. Denise Horan, Town Engineer	
Start Date: 7/1/2004	End Date: 6/30/2006

Permits Years during which activities are scheduled:

Year 1 Year 2 Year 3 **X** Year 4 Year 5

Name of Separate Implementing Entity:
Not Applicable

BMP Description:
The Town will review the existing local ordinances to insure compliance with Federal law. The Town will consider if implementation of a model storm water ordinance is warranted.

Has Goal Been Accomplished: NO

Work Performed

Date: 11/1/2004	Responsible Party: Nicholas Casparino, Engineering Technician

2004 Post-construction Ordinance / Regulation Development
The Engineering Division has begun the review process of the Town's existing Land Use regulations and ordinances. The existing regulations are being reviewed to insure the regulations are in conformance with MS4 requirements.

The Town's current post development requirements in the existing land use regulations and ordinances are very limited. The Town will explore the best mechanism to incorporate the MS4 requirements into the Town's regulations and ordinances. The Engineering Division will be working with other Town Departments and the Administration to develop the most appropriate mechanism to modify the Town's requirements. Initial efforts are to bring some of the other Town's regulations / ordinances that do not require major revisions to bring them into compliance. Another important process that must take place is an investigation of the best management practices that are appropriate for East Hartford's existing conditions. The final recommendations will be developed in conjunction with the selection of the appropriate BMP's.

The review process is ongoing.

Date: 3/1/2005	Responsible Party: Nicholas Casparino, Civil Engineer

2005 Post-construction Ordinance or Regulation
The Engineering Division is currently reviewing the Town's existing Land Use regulations and ordinances. The existing regulations are being reviewed to insure the regulations and ordinances are in conformance with MS4 requirements.

The Town's current post development requirements in the existing land use regulations and ordinances are very limited. The Town is exploring the best mechanism to incorporate the MS4 requirements into the Town's regulations and ordinances. The Engineering Division will be working with other Town Departments and the Administration to develop the most appropriate mechanism to modify the Town's requirements. Initial efforts are to bring some of the other Town's regulations / ordinances that do not require major revisions to bring them into compliance. Another important process that must take place is an investigation of the best management practices that are appropriate for East Hartford's existing conditions. The final recommendations will be developed in conjunction with the selection of the

appropriate BMP's.

The review process is ongoing.

Date: 1/3/2006	Responsible Party: Nicholas Casparino, Civil Engineer

2006 Post-construction Ordinance
The Engineering Division has completed a review of the Town's existing ordinances with respect to the Stormwater Phase 2 requirements.

The Town's existing ordinances do not adequately address stormwater quality associated with post-construction maintenance activities. A decision has been made to develop a comprehensive stormwater ordinance to address the Phase 2 requirements. The Town is in the process of developing the appropriate stormwater ordinance.

The Town's original schedule called for the post-development ordinance to be developed in 2006. A decision was made to develop a comprehensive ordinance that will cover all aspects of the Phase 2 requirements. The post-development requirements will be incorporated into the overall ordinance. The Town is in the process of developing the appropriate stormwater ordinance. The current schedule calls for the stormwater ordinance development to be completed by December 2007.

Date: 1/2/2007	Responsible Party: Nicholas Casparino, Civil Engineer

2007 Post-construction Ordinance / Regulation
A draft storm water ordinance has been drafted and submitted to Public Works and the Town's Corporation Counsel's office for their input. Engineering staff have met with representatives from Corporation Counsel to provide input and develop an appropriate schedule to adopt the ordinance. Once the draft ordinance has been finalized at a staff level the document will be forwarded to the Town Council for their action. The ordinance is proposed to be adopted in 2008.

Date: 1/1/2008	Responsible Party: Nicholas Casparino, Civil Engineer

2008 post-construction Ordinance / Regulation
The towns illicit discharge ordinance has been reviewed by the corporation counsel office and is currently being revised to go before the ordinance and fees committee the spring of 2009.

Date: 12/16/2009	Responsible Party: Nicholas Casparino, Civil Engineer

2009 Post Construction Ordinance / Regulation
The proposed Stormwater Ordinance was referred to the Town Council Ordinance in December of 2009. At this time we are waiting there decision.

Date: 12/14/2010	Responsible Party: Nicholas Casparino, Civil Engineer

2010 Post Construction Ordinance / Regulations
The Current Stormwater Ordinance was passed on 12-14-10. The ordinance was amended and does not include Post Construction Regulations. At this time we are looking at alternatives.

Date: 1/7/2011	Responsible Party: Nicholas Casparino, Civil Engineer

2011Post Construction Ordinance / Regulations
Due to staffing cut backs the Town is looking at alternatives as time allows.

Develop Procedures to Track the Effectiveness of the Program

Responsible Party: M. Denise Horan, Town Engineer

Start Date: 1/1/2008	End Date: 10/31/2008

Permits Years during which activities are scheduled:

Year 1 Year 2 Year 3 Year 4 Year 5 **X**

Name of Separate Implementing Entity:
Not Applicable

BMP Description:

The Town will develop and implement procedures to track the effectiveness of the program including compliance, complaint tracking, BMP's, and structural measures
Has Goal Been Accomplished: NO

Work Performed

Date: 1/3/2008	Responsible Party: Nicholas Casparino, Civil Engineer
2008 Program Effectivness This work item has been delayed due to limited resources. The Town plans to address this item in the upcoming year and will be completed by the end of 2009.	
Date: 1/6/2009	Responsible Party: Nicholas Casparino, Civil Engineer
2009 Program Effectiveness This work item has been delayed due to limited resources. The Town plans to address this item in the upcoming year and will be completed by the end of 2009.	
Date: 12/22/2010	Responsible Party: Nicholas Casparino, Civil Engineer
2010 Program Effectiveness This work item has been delayed due to limited resources. The Town plans to address this item in the upcoming year.	
Date: 1/3/2011	Responsible Party: Nicholas Casparino, Civil Engineer
2011 Program Effectiveness This work item has been delayed due to limited resources. The Town plans to address this item as additional resources become available, and will be completed as time allows.	

Develop Program to Ensure Long-term Operation and Maintenance of BMP's

Responsible Party: M. Denise Horan, Town Engineer	
Start Date: 7/1/2006	End Date: 8/31/2007
Permits Years during which activities are scheduled: Year 1 Year 2 Year 3 Year 4 **X** Year 5	
Name of Separate Implementing Entity: Not Applicable	
BMP Description: The Town will incorporate measures during the site development phase of a project to insure that long-term operation and maintenance activities are developed for the properties owners to follow after the construction phase is done.	
Has Goal Been Accomplished: NO	

Work Performed

Date: 1/2/2007	Responsible Party: Nicholas Casparino, Civil Engineer
2007 Program Development for Long-term Operation / Maintenance The process to develop requirements to insure long-term operational and maintenance plans are developed is on-going. This activity is being coordinated with the development of the stormwater ordinance. The final requirements will be developed once the stormwater ordinance is approved. The work is scheduled to continue through 2008.	
Date: 1/2/2008	Responsible Party: Nicholas Casparino, Civil Engineer
2008 Program Development for Long-Term Operation & Maintenance of BMP's The process to develop requirements to insure long-term operational and maintenance plans are developed is on-going. This activity is being coordinated with the development of the stormwater ordinance. The final requirements will be developed once the stormwater ordinance is approved. The work is scheduled to continue through 2009.	

Date: 12/16/2009	Responsible Party: Nicholas Casparino, Civil Engineer
2009 Program Development for Long-Term Operation & Maintenance of BMP's The process to develop requirements to insure long-term operational and maintenance plans are developed is on-going. This activity is being coordinated with the development of the stormwater ordinance. The final requirements will be developed once the stormwater ordinance is approved. The proposed Stormwater Ordinance was referred to the Town Council Ordinance in December of 2009. At this time we are waiting there decision.	
Date: 12/15/2010	Responsible Party: Nicholas Casparino, Civil Engineer
2010 Program for Long Ter-Term Operation & Maintenance of BMP's The Current Stormwater Ordinance was passed on 12-14-10. The ordinance was amended and does not include Post Construction Regulations. At this time we are looking at alternatives and consulting with the Town attorneys as how to address the situation. The process to develop requirements to insure long-term operational and maintenance plans on-going.	
Date: 1/5/2011	Responsible Party: Nicholas Casparino, Civil Engineer
2011 Program for Long Term Operation & Mainteneance of BMPs As the Program Progress's the Town will continue to monitor it and make necessary changes that are needed to make it more efficient.	
Date: 1/2/2012	Responsible Party: Nicholas Casparino, Civil Engineer
2012 Program for Long Term Operation & Maintenance of BMP's As the Program progresses, the Town will continue to monitor it and make necessary changes that are needed to make it more efficient.	
Date: 1/1/2013	Responsible Party: Timothy Bockus, Director of Public Works
2013 Program for Long Term Operation & Maintenance of BMP's As the Program progresses, the Town will continue to monitor it and make necessary changes that are needed to make it more efficient.	
Date: 1/1/2014	Responsible Party: Timothy Bockus, Director of Public Works
2014 Program for Long Term Operation & Maintenance of BMP's As the Program progresses, the Town will continue to monitor it and make necessary changes that are needed to make it more efficient.	
Date: 1/1/2015	Responsible Party: Timothy Bockus, Director of Public Works
2015 Program for Long Term Operation & Maintenance of BMP's As the Program progresses, the Town will continue to monitor it and make necessary changes that are needed to make it more efficient.	
Date: 1/1/2016	Responsible Party: Timothy Bockus, Director of Public Works
2016 Program for Long Term Operation & Maintenance of BMP's As the Program progresses, the Town will continue to monitor it and make necessary changes that are needed to make it more efficient. To date no TMDL's have been established for receiving waterbodies in the Town.	

Public Hearing / Comment Process to Implement Proposed Regulations

Responsible Party: M. Denise Horan, Town Engineer	
Start Date: 7/1/2007	End Date: 1/31/2008
Permits Years during which activities are scheduled: Year 1 Year 2 Year 3 Year 4 **X** Year 5	
Name of Separate Implementing Entity: Not Applicable	

BMP Description:
The Town will hold Public Hearings and comply with all notice requirements during the updating of the Town's regulations and ordinances.

Has Goal Been Accomplished: NO

Work Performed

Date: 1/2/2007	Responsible Party: Nicholas Casparino, Civil Engineer

2007 Public Hearing / Comment Process
The public hearing process has been delayed until the final language of the stormwater ordinance has been developed. The appropriate public hearings will be held during the adoption of the ordinance as well as the land use modifications.

Public hearings will be held during 2008 on various components of the program.

Date: 1/1/2008	Responsible Party: Nicholas Casparino, Civil Engineer

2008 Public Hearing / Comment Process
The public hearing process has been delayed until the final language of the stormwater ordinance has been developed. The appropriate public hearings will be held during the adoption of the ordinance as well as the land use modifications.

Public hearings will be held during 2009 on various components of the program.

Date: 12/17/2009	Responsible Party: Nicholas Casparino, Civil Engineer

2009 Public Hearing / Comment Process
The public hearing process has been delayed until the final language of the stormwater ordinance has been developed. The appropriate public hearings will be held during the adoption of the ordinance as well as the land use modifications.

The proposed Stormwater Ordinance was referred to the Town Council Ordinance in December of 2009. At this time we are waiting there decision.

Date: 12/14/2010	Responsible Party: Nicholas Casparino, Civil Engineer

2010 Public Hearing / Comment Process
The appropriate public hearings were held during the adoption of the ordinance.

Date: 1/3/2011	Responsible Party: Nicholas Casparino, Civil Engineer

2011 Public Hearing / Comment Process
During the whole process the town has conformed with all public hearing and FOI requirements.

Review Land Use Regulations to meet MS4 Permit Requirements and E&S Guidelines

Responsible Party: M. Denise Horan, Town Engineer

Start Date: 7/1/2004	End Date: 3/30/2006

Permits Years during which activities are scheduled:

Year 1 Year 2 **X** Year 3 **X** Year 4 Year 5

Name of Separate Implementing Entity:
Not Applicable

BMP Description:
The Town will review the existing local regulations and ordinances to determine the required modifications to be in compliance the State and Federal requirements.

Discuss the program requirements with other Town Departments to receive feedback and assistance in developing a comprehensive plan for the project.

Has Goal Been Accomplished: NO

Work Performed	
Date: 11/1/2004	Responsible Party: Nicholas Casparino, Engineering Technician
2004 Land Use Regulation Modifications The Engineering Division has begun the review process of the Town's existing Land Use Regulations. The existing regulations are being reviewed to insure the regulations are in conformance with MS4 requirements. The Connecticut Erosion & Sedimentation Guidelines are incorporated into the land use regulations by reference. Further emphasis on the post-construction recommendations found in the Erosion Control guidelines will be incorporated into the local regulations. The review process is ongoing.	
Date: 2/1/2005	Responsible Party: Nicholas Casparino, Civil Engineer
2005 Land Use Regulation Modifications The Engineering Division is reviewing the Town's existing Land Use Regulations. The existing regulations are being reviewed to insure the regulations are in conformance with MS4 requirements. The Connecticut Erosion & Sedimentation Guidelines are incorporated into the land use regulations by reference. Further emphasis on the post-construction recommendations found in the Erosion Control guidelines will be incorporated into the local regulations. The review process is ongoing.	
Date: 1/3/2006	Responsible Party: Nicholas Casparino, Civil Engineer
2006 Land Use Regulation Modifications The Town's original Phase 2 called for this item to be completed in 2006. This item has been delayed in part by the decision to adopt a stormwater ordinance. One of the main reasons for this decision is the lack of enforcement provisions available to the Town under the enabling legislation for land use regulations. The comprehensive stormwater ordinance is currently being developed. The ultimate land use regulation modifications will be developed to be consistent with the provisions of the stormwater ordinance. The development of the modifications will continue as the ordinance requirements are developed. The tentative schedule for the land use regulations has been modified to summer 2008.	
Date: 1/2/2007	Responsible Party: Nicholas Casparino, Civil Engineer
2007 Land Use Regulation Modifications The process to modify the existing land use regulations have been delayed until the final version of the stormwater ordinance is developed. The modifications to the regulations will be coordinated with the final language of the ordinance. The work is scheduled to begin in 2008.	
Date: 1/1/2008	Responsible Party: Nicholas Casparino, Civil Engineer
2008 Land Use Regulation Modifications The process to modify the existing land use regulations have been delayed until the final version of the stormwater ordinance is developed. The modifications to the regulations will be coordinated with the final language of the ordinance. The work is scheduled to begin in 2009.	
Date: 12/16/2009	Responsible Party: Nicholas Casparino, Civil Engineer
2009 Land Use Regulation Modifications The process to modify the existing land use regulations have been delayed until the final version of the stormwater ordinance is developed. The modifications to the regulations will be coordinated with the final language of the ordinance.	

The proposed Stormwater Ordinance was referred to the Town Council Ordinance in December of 2009. At this time we are waiting there decision.

Date: 12/14/2010	Responsible Party: Nicholas Casparino, Civil Engineer
2010 Land Use Regulation Modifications The Current Stormwater Ordinance was passed on 12-14-10. The ordinance was amended and does not include Post Construction Regulations. At this time we are looking at alternatives and consulting with the Town attorneys as how to address the situation.	

Date: 1/4/2011	Responsible Party: Nicholas Casparino, Civil Engineer
2011 Land Use Regulation Modifications Due to staffing cut backs the Town is looking at alternatives as time allows.	

Pollution Preventation / Good House Keeping

Descriptive Text:

Minimum Control Measure No. 6

This minimum control measure is critical to the success of the stormwater management program as it helps to improve or protect receiving water quality be evaluating, altering, and maintaining Town facility operations.

This measure requires the Town to examine and subsequently alter its own actions to help reduce the amount and type of pollutants that collect on roadways, parking lots, open spaces, storage, and vehicle maintenance areas, and all Town maintained facilities which ultimately discharge into local waterways.

Program Requirements

1. Development and implementation of an operation and maintenance program, including BMP's practices that will have the ultimate goal of preventing or reducing pollutant runoff from Town operations.

2. Utilize training materials that are currently available from the EPA, State and other organizations. This program shall include employee training to prevent and reduce stormwater pollution from activities such as park and open space maintenance, fleet and building maintenance, stormwater system maintenance and construction activities.

3. Development and implementation of a program to sweep all streets and all Town owned facilities at least once a year as soon as possible after snowmelt.

4. Development and implementation of a program to evaluate and, if necessary, clean catch basins and other stormwater structures that accumulate sediment at least once a year.

5. Develop and implementation of a program to evaluate and, if necessary, prioritize, retrofitting or upgrading of storm drainage systems.

6. Develop and implementation of a program to monitor and sample stormwater outfalls.

Operation and Maintenance Program

These measures are intended to improve the efficiency of these programs through appropriate maintenance practices, internal procedures, and scheduling. Proper development and implementation of these programs reduce the risk of water quality problems. There are several elements that are essential for the success of an operation and maintenance program including training, record keeping, internal reporting, maintenance, and preventative maintenance.

Record Keeping

The Town will begin a program to keep detailed records for various operations covered by the permit. Records will include documentation, information, and data necessary for the preparation of yearly reports. The following is a list of topics for which records will be kept:

- Public Education
- Illicit Discharges (including corrective measures)
- Water Quality Monitoring
- Employee Training
- Storm Drainage facility Inspection
- Street Sweeping
- Catch Basin Cleaning

The Pollution Prevention/Good Housekeeping for municipal operations minimum control measure is a key element of the small MS4 storm water management program. This measure requires the small MS4 operator to examine and subsequently alter their own actions to help ensure a reduction in the amount and type of pollution that: (1) collects on streets, parking lots, open spaces, and storage and vehicle maintenance areas and is discharged into local waterways; and (2) results from actions such as environmentally damaging land development and flood management practices or poor maintenance of storm sewer systems. While this measure is meant primarily to improve or protect receiving water quality by altering municipal or facility operations, it also can result in a cost savings for the small MS4 operator, since proper and timely maintenance of storm sewer systems can help avoid repair costs from damage caused by age and neglect

Number of BMPs associated with control measure:

5

Important Dates:

Earliest Start Date: 4/1/2004

End Date: 1/9/2009

Details of BMPs and Work Performed for Them

Catch Basin Cleaning Program

Responsible Party: Timothy Bockus, Director of Public Works

Start Date: 7/1/2004	End Date: 1/9/2009

Permits Years during which activities are scheduled:

Year 1 **X** Year 2 **X** Year 3 **X** Year 4 **X** Year 5 **X**

Name of Separate Implementing Entity:
Not Applicable

BMP Description:
Catch basins must be cleaned to maintain their ability to trap sediment, and consequently their ability to prevent flooding.

The Town will initiate a catch basin maintenance program that will consist of inspecting and if necessary the cleaning of catch basins on a regularly scheduled basis. The Town will use the following criteria for inspecting and cleaning catch basins:

- The Town will attempt to annually clean all catch basins that have reached at least half of the capacity of the sump.
- The Town will keep records on the number of tons of material removed from various catch basins
- The Town will conduct routine inspections, on a representative number of catch basins, to determine the condition of the structures and subsequently required maintenance

The results (goals) from this activity will be tracked and reported to the DEP in the Town's yearly report.

Has Goal Been Accomplished: YES

Work Performed

Date: 4/1/2004	Responsible Party: Richard Toce, Assistant Director Of Public Works

2004 Catch Basin Cleaning Program
The Public Works Department has a contract with New England Sweeping to clean all Town owned catch basins. The contract began on July 1, 2004 and continues through June 30, 2005. As of December 22, 2004, 4,206 catch basins have been cleaned under the contract. The remaining catch basins, which number approximately 3700, are scheduled to be cleaned during the spring of 2005.

There are no records as to the number of tons of material collected from the cleaning of the catch basins as disposal of material is included in the contract price.

As part of minimum control measure # 3, the Engineering Division is in the process of developing a map indicating all existing storm drainage structures, pipe runs, and drainage outfalls throughout the Town. The drainage structures and pipes are being located using a GPS system. As part of the location work, the type of structure, materials, and condition of each structure is being recorded. This information will be forwarded to the Public Works Department.

Date: 7/1/2005	Responsible Party: Richard Toce, Assistant Director Of Public Works

2005 Catch Basin Cleaning Program
The Public Works Department has a contract with New England Sweeping to clean all Town owned catch basins. The contract began on July 1, 2005 and continues through June 30, 2006. During calendar year 2005, 3,806 catch basins have been cleaned under the contract. During the last two years, all Town owned catch basins have been cleaned at least once. Beginning in the spring of 2006, the contractor will go back and start the cleaning process over. It is estimated that one-half of all Town owned catch basins are cleaned annually.

There are no records as to the number of tons of material collected from the cleaning of the catch basins as disposal of material is included in the contract price.

As part of minimum control measure # 3, the Engineering Division is in the process of developing a series of map indicating all existing Town owned storm drainage structures, pipe runs. As part of the location work the coordinates, pipe size, materials, overall condition and a photograph of each structure has been recorded. An identification number has also been assigned to each structure. The drainage structures and pipes have been located using a "global positioning system". When completed, this information will be forwarded to the Public Works Department.

Date: 7/1/2006	Responsible Party: Richard Toce, Assistant Director Of Public Works

2006 Catch basin Cleaning Program
2006 Catch Basin Cleaning Program
The Public Works Department has a contract with New England Sweeping to clean all Town owned catch basins. The contract began on July 1, 2006 and continues through June 30, 2007. During calendar year 2006, 3,228 catch basins have been cleaned under the contract. During the last three years, all Town owned catch basins have been cleaned more than once. Beginning in the spring of 2007, the contractor will go back and start the cleaning process over. It is estimated that one-half of all Town owned catch basins are cleaned annually.

During calendar year 2006, 522 tons of material was collected from the cleaning of the catch basins. The collected material was disposed of at an approved site.

As part of minimum control measure # 3, the Engineering Division is in the process of developing a series of map indicating all existing Town owned storm drainage structures, pipe runs and drainage outfalls. The data is being plotted on base mapping supplied by the Metropolitan District Commission. As part of the location work, coordinates, pipe size, materials, overall condition and a photograph of each structure has been recorded. An identification number has also been assigned to each structure. The drainage structures and pipes have been located using a "global positioning system". To date, it is estimated that 90% of the maps and information has been completed. When completed, this information will be forwarded to the Public Works Department for disposition.

Date: 4/16/2007	Responsible Party: Richard Toce, Assistant Director Of Public Works

2007 Catch Basin Cleaning Program
The Public Works Department has a contract with New England Sweeping to clean all Town owned catch basins. The contract began on July 1, 2006 and continues through June 30, 2007. During calendar year 2007, 1,717 catch basins have been cleaned under the contract. During the last four years, all Town owned catch basins have been cleaned more than once.
The Town of East Hartford has purchased a new truck and inductor for cleaning catch basins. Beginning in the spring of 2008, the Town will continue with the cleaning process. It is estimated that one-half of all Town owned catch basins will cleaned annually.

During calendar year 2007, 207 tons of material was collected from the cleaning of the catch basins. The collected material was disposed of at an approved site.

As part of minimum control measure # 3, the Engineering Division is in the process of developing a series of map indicating all existing Town owned storm drainage structures, pipe runs and drainage outfalls. The data is being plotted on base mapping supplied by the Metropolitan District Commission. As part of the location work, coordinates, pipe size, materials, overall condition and a photograph of each structure has been recorded. An identification number has also been assigned to each structure. The drainage structures and outlets have been located using utilizing sub meter "global positioning system" observations. To date, it is estimated that 90% of the maps and information has been completed. When completed, this information will be forwarded to the Public Works Department for disposition.

Date: 4/15/2008	Responsible Party: Richard Toce, Assistant Director Of Public Works

2008 Catch Basin Cleaning Program
The Public Works Department has purchased a new vacuum truck for cleaning catch basins. During calendar year 2008, 2,529 catch basins have been cleaned by Town forces. During the last five years all Town owned catch basins have been cleaned more than once. Beginning in the spring of 2009, the Town will continue with the cleaning process. It is estimated that one-half of all Town owned catch basins are cleaned annually.

During calendar year 2008, it was estimated that 200 tons of material was collected from the cleaning of the catch basins. The collected material was disposed of at an approved site.

As part of minimum control measure # 3, the Engineering Division has developed a series of maps indicating all existing Town owned storm drainage structures, pipe runs and drainage outfalls. The data is plotted on base mapping supplied by the Metropolitan District Commission. As part of the location work, coordinates, pipe size, materials, overall condition and a photograph of each structure has been recorded. An identification number has also been assigned to each structure. The drainage structures and outlets have been located using utilizing sub meter "global positioning system" observations. To date the maps and information has been completed. This information has been forwarded to the Public Works Department for disposition.

Date: 1/22/2009	Responsible Party: Frank Cipolla, Highway Supervisor

2009 Catch Basin Cleaning Program
The Public Works Department has purchased a new vacuum truck for cleaning catch basins. During calendar year 2008, 2,529 catch basins have been cleaned by Town forces. During the last five years all Town owned catch basins have been cleaned more than once. Beginning in the spring of 2010, the Town will continue with the cleaning process. It is estimated that one-half of all Town owned catch basins are cleaned annually.

During calendar year 2009, it was estimated that 100 tons of material was collected from the cleaning of the catch basins. The collected material was disposed of at an approved site.

As part of minimum control measure # 3, the Engineering Division has developed a series of maps indicating all existing Town owned storm drainage structures, pipe runs and drainage outfalls. The data is plotted on base mapping supplied by the Metropolitan District Commission. As part of the location work, coordinates, pipe size, materials, overall condition and a photograph of each structure has been recorded. An identification number has also been assigned to each structure. The drainage structures and outlets have been located using utilizing sub meter "global positioning system" observations. To date the maps and information has been completed. This information has been forwarded to the Public Works Department for disposition.

Date: 4/6/2010	Responsible Party: Frank Cipolla, Highway Supervisor

2010 Catch Basin Cleaning Program
During calendar year 2010, the Town completed its annual street sweeping program along with the sweeping of all parking lots owned by the Town. All 155 miles of Town maintained roads were swept at least once during the year. Additional street sweeping efforts were done on a as needed basis.

The Town removed approximatley 280 tons from the street and basins during the 2010 calender year.

Date: 4/5/2011	Responsible Party: Frank Cipolla, Highway Supervisor

2011 Catch Basin Cleaning Program
During calendar year 2011, the Town completed its annual Catch Basin program along with the parking lots owned by the Town. All Town owned basins were cleaned at least once during the year. Additional catch basin cleaning efforts were done on a as needed basis.

Date: 4/2/2012	Responsible Party: Paul Forrest, Highway Services Manager

2012 Catch Basin Cleaning Program

In 2012 the Town staff cleaned 1497 catch basins.

The Town removed approximately 92 tons of material from the streets, town-owned parking lots, and catch basins during the 2012 calender year.

Collected material was disposed of at an approved site.

Date: 1/1/2013	Responsible Party: Paul Forrest, Highway Services Manager

2013 Catch Basin Cleaning Program
During calendar year 2013, the Town completed its annual Catch Basin program along with the parking lots owned by the Town. All Town owned basins were cleaned at least once during the year. Additional catch basin cleaning efforts and repairs were done on an as needed basis.

Date: 4/1/2014	Responsible Party: Paul Forrest, Highway Services Manager

2014 Catch Basin Cleaning Program
During calendar year 2014, the Town completed its annual Catch Basin program along with the parking lots owned by the Town. All Town owned basins were cleaned at least once during the year. Additional catch basin cleaning efforts and repairs were done on an as needed basis.

Date: 1/1/2015	Responsible Party: Paul Forrest, Highway Services Manager

2015 Catch Basin Cleaning Program
During calendar year 2015, municipal crews cleaned 818 town owned catch basins.

Date: 1/1/2016	Responsible Party: Paul Forrest, Highway Services Manager

2016 Catch Basin Cleaning Program
During calendar year 2015, municipal crews cleaned approximately 670 town owned catch basins.

Develop Training Program for Muncipal Employees

Responsible Party: Billy Taylor, Public Works Director

Start Date: 7/1/2004	End Date: 1/9/2009

Permits Years during which activities are scheduled:

Year 1 **X** Year 2 **X** Year 3 **X** Year 4 **X** Year 5 **X**

Name of Separate Implementing Entity:
Not Applicable

BMP Description:
The Town's existing continuing employee education training program will add a stormwater management component; discuss potential sources of contaminants, water quality issues, best management practices, and good house keeping at Town facilities.

1. The program will consist of scheduled training for construction, maintenance and facility personnel, including both office and field positions. Topics will include sedimentation and erosion control measures and permanent BMP's. The training sessions are intended to train new employees and to remind current employees of operations and procedures. The training sessions will continue in the first year and throughout the program. The existing training program will be reviewed on an annual basis and modified, as required, to keep current with new practices and procedures.

Training seminars will be held to inform Town employees of the requirements associated with the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems. Various training seminars will be held for the following Town employees:
- Public Works
- Street Division
- Fleet Services
- Waste Services

- Facility Maintenance
- Dikes & Cemetery Maintenance
- Parks & Recreation (maintenance department)
- Board of Education (maintenance department)

Topics to be discussed in the training program include the following:
- Stormwater management requirements and procedures.
- Water quality issues.
- Best Management Practices for construction activities including soil erosion and sedimentation control measures.
- Handling and storage of materials such as oil, antifreeze, degreasing and cleaning products.
- Handling and storage of fertilizers and lawn care products.

The employee training program is intended to train new employees and to refresh current employees of operations and procedures. The training programs will continue in the first year and continue annually throughout the program.

The results (goals) from this activity will be tracked and reported to the DEP in the Town's yearly report.

Has Goal Been Accomplished: YES

Work Performed

Date: 4/1/2004	Responsible Party: Richard Toce, Assistant Director Of Public Works

2004 Muncipal Employee Training Program
During the month of April 2004, employee education classes were conducted. Nine supervisors from the Public Works Department were present for the classes. It was then the responsibility for each supervisor to educate and instruct the various employees under their authority.
Beginning in calendar year 2005, the education classes will be expanded to include additional employees along with various Town departments.

Information was provided to the employees on importance of water quality and work procedures which will help to prevent water pollution. The training program is an ongoing process. Further modifications will be made to the training program as new technologies and practices to be developed.

Date: 8/9/2005	Responsible Party: Richard Toce, Assistant Director Of Public Works

2005 Municipal Employee Training Program
During the month of August 2005, mandatory employee education classes were conducted. Four supervisors and 24 employees from the Public Works Department were present for the classes. Throughout the year, it is the responsibility of each supervisor to ensure see that what is learned in the classes are adhered to in the field. All new employees will be required to attend a training course within six months of starting.

Beginning in calendar year 2006, the education classes will be expanded to include additional employees along with various Town departments.

Date: 9/4/2006	Responsible Party: Richard Toce, Assistant Director Of Public Works

2006 municipal Employee Training Program
During the month of September 2006, mandatory employee education classes were conducted. Forty nine employees/supervisors from the Public Works Department, Park Department and the Board of Education were present for the classes. Throughout the year, it is the responsibility of each supervisor to ensure see that what is learned in the classes are adhered to in the field. All new employees will be required to attend a training course within six months of starting.

Date: 2/16/2007	Responsible Party: Richard Toce, Assistant Director Of Public Works

2007 Municipal Employee Training Program
During the months of March 2007 and October 2007, mandatory employee education classes were

conducted. Fifty one employees/supervisors from the Public Works Department, Park Department and the Board of Education were present for the March class. Thirty three employees/supervisors from the Public Works Department, Park Department and the Board of Education were present for the October class. Throughout the year, it is the responsibility of each supervisor to ensure see that what is learned in the classes are adhered to in the field. All new employees are required to attend a training course within six months of starting.

Date: 4/1/2008	Responsible Party: Richard Toce, Assistant Director Of Public Works

2008 Municipal Employee Training Program
During the months of April 2008 and September 2008, mandatory employee education classes were conducted. Thirty six employees/supervisors from the Public Works Department, Park Department and the Board of Education were present for the March class. Sixty employees/supervisors from the Public Works Department, Park Department and the Board of Education were present for the October class. Throughout the year, it is the responsibility of each supervisor to ensure see that what is learned in the classes are adhered to in the field. All new employees are required to attend a training course within six months of starting.

Date: 1/8/2009	Responsible Party: Richard Toce, Assistant Director Of Public Works

2009 Municipal empoyee Training Program
Due to Budget cut backs and lay offs training will continue in 2010.

Date: 1/7/2010	Responsible Party: Billy Taylor, Public Works Director

2010 Municipal Employee Training Program
Due to the ecnomic downturn, lack of funding, and layoffs there has been no additional training in 2010. Training will continue as funding allows.

Date: 1/2/2012	Responsible Party: Timothy Bockus, Director of Public Works

2012 Municipal Employee Training Program
Due to economic factors and a lack of funding, there has been no additional training in 2012. Training will continue in the future as funding allows.

Date: 1/1/2013	Responsible Party: Timothy Bockus, Director of Public Works

2013 Municipal Employee Training Program
Due to economic factors and a lack of funding, there has been no additional training in 2013. Training will continue in the future as funding allows.

Date: 1/1/2014	Responsible Party: Timothy Bockus, Director of Public Works

2014 Municipal Employee Training Program
Due to economic factors and a lack of funding, there has been no additional training in 2014. Training will continue in the future as funding allows.

Date: 1/1/2015	Responsible Party: Timothy Bockus, Director of Public Works

2015 Municipal Employee Training Program
Due to economic factors and a lack of funding, there has been no additional training in 2015. Training will continue in the future as funding allows.

Date: 1/1/2016	Responsible Party: Timothy Bockus, Director of Public Works

2016 Municipal Employee Training Program
Due to economic factors and a lack of funding, there has been no additional training in 2016. Training will continue in the future as funding allows.

Preventative Maintainance Program

Responsible Party: Billy Taylor, Public Works Director

Start Date: 7/1/2004	End Date: 1/9/2009

Permits Years during which activities are scheduled:

Year 1 **X** Year 2 **X** Year 3 **X** Year 4 **X** Year 5 **X**

Name of Separate Implementing Entity:
Not Applicable

BMP Description:
The preventative maintenance program will take a proactive approach to stormwater management and seeks to prevent problems before they occur. This measure involves the inspection, evaluation and replacement or repair of stormwater drainage facilities. Inspection can identify cracks, leaks and other conditions that can cause breakdowns or failures of stormwater structures, which in turn could result in the discharge of pollutants to surface waters either by direct overland flow or through storm drainage systems. The preventative maintenance of storm drainage systems is accomplished through visual inspection conducted as a result of new construction projects, routine maintenance such as catch basin cleaning. Any deficiencies observed will be noted and forwarded to the supervisor. The following is a list of facilities to be inspected:
- Storm drainage pipes
- Catch basins
- Manholes
- Junction chambers
- Sedimentation/gross particle separators
- cross culverts
- Ditches/swales

Structures that have been found to be in need of repair will be repaired and or replaced as the budget permits.

The results (goals) from this activity will be tracked and reported to the DEP in the Town's yearly report.

Has Goal Been Accomplished: YES

Work Performed

Date: 7/1/2004	Responsible Party: Billy Taylor, Public Works Director

2004 Preventative Maintenance Activities
As part of minimum control measure # 3, the Engineering Division is in the process of developing a series of maps showing the location of all existing, Town owned, storm drainage structures, and pipes. The various drainage structures and pipes are being located using a "global positioning system". As part of the location work, a visual inspection of each structure is also being conducted. Data collected on each structure includes: coordinates, the type of structure, photo, type of construction (materials used), and overall condition including any deficiencies. This information will then be forwarded to the Public Works Department for deposition.
During the past year, there was a total of 56 storm drainage structures, that were reported to Public Works Department, were either damaged or in need of repair. Of those reported structures, eighteen have been repaired.

Date: 4/4/2005	Responsible Party: Billy Taylor, Public Works Director

2005 Preventative Maintenence Activities
As part of minimum control measure # 3, the Engineering Division has developed a series of eight (8) maps entitled "N.P.D.E.S. Phase II Permit, Outfall Locations, Prepared for the Environmental Protection Agency". These maps identify the location and pertinent data of all existing, Town owned, storm drainage outfall pipes six (6) inch diameter and larger. The data has been plotted on base mapping supplied by the Metropolitan District Commission

The locations of the outfall pipes were located using a "global positioning system". As part of the location work the coordinates, pipe size, material, overall condition, a photograph of each outfall and the receiving water body was recorded. This information will then be forwarded to the Public Works Department for deposition.

During the past year, there was a total of 138 storm drainage structures, that were reported to Public Works Department, were either damaged or in need of repair. Of those reported structures, 75 have been repaired.

Date: 4/4/2006	Responsible Party: Billy Taylor, Public Works Director

2006 Preventative Maintenance Activities
As part of minimum control measure # 3, the Engineering Division has developed a series of eight (8) maps entitled "N.P.D.E.S. Phase II Permit, Outfall Locations, Prepared for the Environmental Protection Agency". These maps identify the location and pertinent data of all existing, Town owned, storm drainage outfall pipes six (6) inch diameter and larger. The data has been plotted on base mapping supplied by the Metropolitan District Commission

The locations of the outfall pipes were located using a "global positioning system". As part of the location work the coordinates, pipe size, material, overall condition, a photograph of each outfall and the receiving water body was recorded. This information will then be forwarded to the Public Works Department for deposition.

During the past year, there was a total of 83 storm drainage structures that were reported to Public Works Department, that were either damaged or in need of repair. Of those reported structures, 41 have been repaired. In addition there were a total of 12 cave-in's (pipe failures) that were reported to Public Works Department. All 12 cave-in's were repaired.

Date: 4/4/2007	Responsible Party: Billy Taylor, Public Works Director

2007 Preventative Maintenance Activity
As part of minimum control measure # 3, the Engineering Division has developed a series of eight (8) maps entitled "N.P.D.E.S. Phase II Permit, Outfall Locations, Prepared for the Environmental Protection Agency". The maps are at a scale of 1" = 40". These maps identify the location and pertinent data of all existing, Town owned, storm drainage outfall pipes six (6) inch diameter and larger. The data has been plotted on base mapping supplied by the Metropolitan District Commission

The locations of the outfall pipes were located utilizing sub meter "global positioning system" observations. As part of the location work the coordinates, pipe size, material, overall condition, a photograph of each outfall and the receiving water body was recorded. This information will be forwarded to the Public Works Department for deposition.

During the past year, there was a total of 226 storm drainage structures that were reported to Public Works Department, that were either damaged or in need of repair. Of those reported structures, 208 have been repaired. The remaining 18 catch basins will be repaired during calendar year 2008.

Date: 4/2/2008	Responsible Party: Billy Taylor, Public Works Director

2008 Preventative Maintenance Activity
As part of minimum control measure # 3, the Engineering Division has developed a series of eight (8) maps entitled "N.P.D.E.S. Phase II Permit, Outfall Locations, Prepared for the Environmental Protection Agency". The maps are at a scale of 1" = 40". These maps identify the location and pertinent data of all existing, Town owned, storm drainage outfall pipes six (6) inch diameter and larger. The data has been plotted on base mapping supplied by the Metropolitan District Commission

The locations of the outfall pipes were located utilizing sub meter "global positioning system" observations. As part of the location work the coordinates, pipe size, material, overall condition, a photograph of each outfall and the receiving water body was recorded. This information has been forwarded to the Public Works Department for deposition.

During the past year, there was a total of 283 storm drainage structures that were reported to Public

Works Department, that were either damaged or in need of repair. Of those reported structures, 50 have been repaired. The remaining 233 catch basins will be repaired during calendar year 2009.

Date: 4/16/2009	Responsible Party: Billy Taylor, Public Works Director

2009 Preventative Maintenance Activity
As part of minimum control measure # 3, the Engineering Division has developed a series of eight (8) maps entitled "N.P.D.E.S. Phase II Permit, Outfall Locations, Prepared for the Environmental Protection Agency". The maps are at a scale of 1" = 40". These maps identify the location and pertinent data of all existing, Town owned, storm drainage outfall pipes six (6) inch diameter and larger. The data has been plotted on base mapping supplied by the Metropolitan District Commission

The locations of the outfall pipes were located utilizing sub meter "global positioning system" observations. As part of the location work the coordinates, pipe size, material, overall condition, a photograph of each outfall and the receiving water body was recorded. This information has been forwarded to the Public Works Department for deposition.

Each year there is a list of repairs that compiled. This list is then examined and put into priority they are then fixed on an as needed basis depending on condition and cost. This maintenance program is ongoing.

Date: 4/2/2012	Responsible Party: Timothy Bockus, Director of Public Works

2012 Preventative Maintenance Activities
As part of the 2012 Illicit Detection Dry-Weather Inspection program, the condition of all headwalls, pipes, and outfall areas that were visted was noted and compiled on a spreadhseet. Items needing repair will be prioritized and added to the town's maintenance schedule.

Date: 1/1/2013	Responsible Party: Timothy Bockus, Director of Public Works

2013 Preventative Maintenance Activities
As part of the 2013 Illicit Detection Dry-Weather Inspection program, the condition of all headwalls, pipes, and outfall areas that were visted was noted and compiled on a spreadhseet. Items needing repair will be prioritized and added to the town's maintenance schedule.
89 outfall locations were inspected as part of this effort.

Date: 1/1/2014	Responsible Party: M. Denise Horan, Town Engineer

2014 Preventative Maintenance Activity
As part of the 2014 Illicit Detection Dry-Weather Inspection program, the condition of all headwalls, pipes, and outfall areas that were visted was noted and compiled on a spreadhseet. Items needing repair will be prioritized and added to the town's maintenance schedule.

80 outfall locations were inspected in 2014 as part of this effort.

Date: 1/1/2015	Responsible Party: M. Denise Horan, Town Engineer

2015 Preventative Maintenance Activity
Due to low staffing levels and limited resources, there were no outfalls or structures inspected in 2015.

Date: 1/1/2016	Responsible Party: M. Denise Horan, Town Engineer

2016 Preventative Maintenance Activity
As part of the 2014 Illicit Detection Dry-Weather Inspection program, the condition of all headwalls, pipes, and outfall areas that were visted was noted. Items needing repair will be prioritized and added to the town's maintenance schedule.

45 outfall locations were inspected in 2016 as part of this effort.

Stormwater Monitoring Program

Responsible Party: M. Denise Horan, Town Engineer

Start Date: 7/1/2004	End Date: 1/9/2009

Permits Years during which activities are scheduled:

Year 1 **X** Year 2 **X** Year 3 **X** Year 4 **X** Year 5 **X**

Name of Separate Implementing Entity:
Not Applicable

BMP Description:
The Town of East Hartford will collect stormwater samples, at two representative outfall locations, within an industrial development area, commercial development area and a residential area. Each test location will be selected based on representative use for each area.

Each stormwater sample will be analysed for the following parameters:
PH (SU)
Hardness (mg/l)
Conductivity (umos)
Oil and Grease (mg/l)
Chemical Oxygen Demand (mg/l)
Turbidity (NTU)
Total Suspended Solids (mg/l)
Total Phosphorous (mg/l)
Ammonia (mg/l)
Total Kjeldahl plus Nitrogen (mg/l)
Nitrate plus Nitrite Nitrogen (mg/l)
E. coli (col/100ml)
Uncontaminated rainfall pH will be measured at the time the runoff sample is taken.

Samples will be collected from discharges resulting from a storm event that is greater than 0.1 inch in magnitude and that occurs at least 72 hours after any previous storm event of 0.1 inch or greater. Grab samples will be used for all monitoring. Grab samples will be collected during the first 6 hours of a storm event. The uncontaminated rainfall pH measurement will be taken at the same time. Samples for all discharges will be taken during the same storm event.

The following information will be collected for the storm event monitored:
a) The date, temperature, time of the start of the discharge, time of sampling and magnitude (in inches) of the storm event.
b) The duration between storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event.

All pollutant parameters will be tested in accordance with methods prescribed in Title 40, CFR, Part 136 (1990)

The results (goals) from this activity will be tracked and reported to the DEP in the Town's yearly report.

Has Goal Been Accomplished: YES

Work Performed

Date: 10/4/2004	Responsible Party: Robert Sukosky, Assistant Town Engineer

2004 Stormwater Monitoring & Sampling
The Town of East Hartford has retained the services of EMCON/OWT, Inc to collect six representative stormwater samples and then provide an analysis of each. The methods for collecting samples and testing were performed in accordance with the above referenced methods. The testing results for each sample have been recorded on form entitled "General Permit for the discharge of Stormwater from Small Municipal Separate Storm Sewer System, Stormwater Monitoring Report Form (DEP-PERD-SMR-021)" Copies of the report will be submitted to the DEP under separate copy and as

email attachment with the Town electronic filing.

Date: 11/16/2005	Responsible Party: M. Denise Horan, Town Engineer

2005 Stormwater Monitoring & Sampling
The Town of East Hartford has retained the services of EMCON/OWT, Inc to collect six representative stormwater samples and then provide an analysis of each. The methods for collecting samples and testing were performed in accordance with the above referenced methods. The testing results for each sample have been recorded on form entitled "General Permit for the discharge of Stormwater from Small Municipal Separate Storm Sewer System, Stormwater Monitoring Report Form (DEP-PERD-SMR-021)" Copies of the report will be submitted to the DEP under separate copy.

Date: 11/7/2006	Responsible Party: M. Denise Horan, Town Engineer

2006 Stormwater Monitoring & Sampling
The Town of East Hartford has retained the services of EMCON/OWT, Inc to collect six representative stormwater samples and then provide an analysis of each. The methods for collecting samples and testing were performed in accordance with the above referenced methods. The testing results for each sample have been recorded on form entitled "General Permit for the discharge of Stormwater from Small Municipal Separate Storm Sewer System, Stormwater Monitoring Report Form (DEP-PERD-SMR-021)" Copies of the report will be submitted to the DEP under separate copy.

Date: 9/13/2007	Responsible Party: M. Denise Horan, Town Engineer

2007 Stormwater Monitoring & Sampling
The Town of East Hartford has retained the services of CONOCO to collect six representative stormwater samples and then provide an analysis of each. The methods for collecting samples and testing were performed in accordance with the above referenced methods. The testing results for each sample have been recorded on form entitled "General Permit for the discharge of Stormwater from Small Municipal Separate Storm Sewer System, Stormwater Monitoring Report Form (DEP-PERD-SMR-021)" Copies of the report will be submitted to the DEP under separate copy.

Date: 9/26/2008	Responsible Party: M. Denise Horan, Town Engineer

2008 Stormwater Monitoring & Sampling
The Town of East Hartford has retained the services of CONOCO to collect six representative stormwater samples and then provide an analysis of each. The methods for collecting samples and testing were performed in accordance with the above referenced methods. The testing results for each sample have been recorded on form entitled "General Permit for the discharge of Stormwater from Small Municipal Separate Storm Sewer System, Stormwater Monitoring Report Form (DEP-PERD-SMR-021)" Copies of the report will be submitted to the DEP under separate copy.

Date: 11/4/2009	Responsible Party: M. Denise Horan, Town Engineer

2009 Stormwater Monitoring & Sampling
The Town of East Hartford has retained the services of CONOCO to collect six representative stormwater samples and then provide an analysis of each. The methods for collecting samples and testing were performed in accordance with the above referenced methods. The testing results for each sample have been recorded on form entitled "General Permit for the discharge of Stormwater from Small Municipal Separate Storm Sewer System, Stormwater Monitoring Report Form (DEP-PERD-SMR-021)" Copies of the report will be submitted to the DEP under separate copy.

Date: 10/19/2012	Responsible Party: M. Denise Horan, Town Engineer

2012 Stormwater Monitoring & Sampling
The Town of East Hartford has retained the services of CONOCO to collect six representative stormwater samples and then provide an analysis of each. The methods for collecting samples and testing were performed in accordance with the above referenced methods. The testing results for each sample have been recorded on form entitled "General Permit for the discharge of Stormwater from Small Municipal Separate Storm Sewer System, Stormwater Monitoring Report Form (DEP-PERD-SMR-021)" Copies of the report will be submitted to the DEP under separate copy.

Date: 1/1/2013	Responsible Party: M. Denise Horan, Town Engineer

2013 Stormwater Monitoring & Sampling
The Town of East Hartford has retained the services of Anchor Engineering to collect six representative stormwater samples and then provide an analysis of each. Analysis was performed by Phoenix Environmental Laboratories. The methods for collecting samples and testing were performed in accordance with the above referenced methods. The testing results for each sample have been recorded on form entitled "General Permit for the discharge of Stormwater from Small Municipal Separate Storm Sewer System, Stormwater Monitoring Report Form (DEP-PERD-SMR-021)" Copies of the report will be submitted to the DEP under separate copy.

Date: 1/1/2014	Responsible Party: M. Denise Horan, Town Engineer

2014 Stormwater Monitoring & Sampling
The Town of East Hartford has retained the services of Anchor Engineering to collect six representative stormwater samples and then provide an analysis of each. Analysis was performed by Phoenix Environmental Laboratories. The methods for collecting samples and testing were performed in accordance with the above referenced methods. The testing results for each sample have been recorded on form entitled "General Permit for the discharge of Stormwater from Small Municipal Separate Storm Sewer System, Stormwater Monitoring Report Form (DEP-PERD-SMR-021)" Copies of the report will be submitted to the DEP under separate copy.

Date: 1/1/2015	Responsible Party: M. Denise Horan, Town Engineer

2015 Stormwater Monitoring & Sampling
The Town of East Hartford has retained the services of Anchor Engineering to collect six representative stormwater samples and then provide an analysis of each. Analysis was performed by Phoenix Environmental Laboratories. The methods for collecting samples and testing were performed in accordance with the above referenced methods. The testing results for each sample have been recorded on form entitled "General Permit for the discharge of Stormwater from Small Municipal Separate Storm Sewer System, Stormwater Monitoring Report Form (DEP-PERD-SMR-021)" Copies of the report will be submitted to the DEP under separate copy.

Date: 1/1/2016	Responsible Party: M. Denise Horan, Town Engineer

2016 Stormwater Monitoring & Sampling
The Town of East Hartford has retained the services of Anchor Engineering to collect six representative stormwater samples and then provide an analysis of each. Analysis was performed by Phoenix Environmental Laboratories. The methods for collecting samples and testing were performed in accordance with the above referenced methods. The testing results for each sample have been recorded on form entitled "General Permit for the discharge of Stormwater from Small Municipal Separate Storm Sewer System, Stormwater Monitoring Report Form (DEP-PERD-SMR-021)" Copies of the report will be submitted to the DEP under separate copy.

Street Sweeping Program

Responsible Party: Timothy Bockus, Director of Public Works

Start Date: 4/1/2004	End Date: 1/9/2009

Permits Years during which activities are scheduled:

Year 1 **X** Year 2 **X** Year 3 **X** Year 4 **X** Year 5 **X**

Name of Separate Implementing Entity:
Not Applicable

BMP Description:
. The Town will continue with its practice to sweep all streets, during the early spring, to reduce pollutant loads from road salt and reduce sand export to receiving streams, brooks, and rivers. The Town will also continue with its practice to sweep the parking lots and facilities that are owned by the Town along with all Board of Education properties.

- The Town will sweep all roads, parking lots, and facilities at least once every year. The sweeping will be performed as soon as possible after snowmelt.

- The Town will keep records on the number of tons of material removed from streets and parking lots.
- Through out the year, the Town will continue to sweep roadways, parking lots, and other Town facilities, as required, to reduce the amount of sediment and debris from entering storm drainage facilities.

The results (goals) from this activity will be tracked and reported to the DEP in the Town's yearly report.

Has Goal Been Accomplished: YES

Work Performed

Date: 4/1/2004	Responsible Party: Richard Toce, Assistant Director Of Public Works

2004 Street Sweeping Program
During the spring of 2004, the Town completed its annual street sweeping program along with the sweeping of all parking lots owned by the Town. All 155 miles of Town maintained roads were swept at least once during the year. Additional street sweeping efforts were done on an as needed basis.
The Town collected approximately 553 tons of debris during the 2004 sweeping program. The debris collected from the sweeping program was disposed of at an approved site.

Date: 4/14/2005	Responsible Party: Richard Toce, Assistant Director Of Public Works

2005 Street Sweeping Program
During the spring and summer of 2005, the Town completed its annual street sweeping program along with the sweeping of all parking lots owned by the Town. All 155 miles of Town maintained roads were swept at least once during the year. Additional street sweeping efforts were done on an as needed basis.
The Town collected approximately 740 tons of debris during the 2005 sweeping program. The debris collected from the sweeping program was disposed of at an approved site.

Date: 4/7/2006	Responsible Party: Richard Toce, Assistant Director Of Public Works

2006 Street Sweeping Program
During calendar year 2006, the Town completed its annual street sweeping program along with the sweeping of all parking lots owned by the Town. All 155 miles of Town maintained roads were swept at least once during the year. Additional street sweeping efforts were done on a as needed basis.

The Town collected approximately 934 tons of debris during the 2006 sweeping program. The debris collected from the sweeping program was disposed of at an approved site.

Date: 4/17/2007	Responsible Party: Richard Toce, Assistant Director Of Public Works

2007 Street Sweeping Program
During calendar year 2007, the Town completed its annual street sweeping program along with the sweeping of all parking lots owned by the Town. All 155 miles of Town maintained roads were swept at least once during the year. Additional street sweeping efforts were done on a as needed basis.
The Town collected approximately 213 tons of debris during the 2007 sweeping program. The debris collected from the sweeping program was disposed of at an approved site

Date: 4/17/2008	Responsible Party: Richard Toce, Assistant Director Of Public Works

2008 Street Sweeping Program
During calendar year 2008, the Town completed its annual street sweeping program along with the sweeping of all parking lots owned by the Town. All 155 miles of Town maintained roads were swept at least once during the year. Additional street sweeping efforts were done on a as needed basis.
The Town collected approximately 325 tons of debris during the 2008 sweeping program. The debris collected from the sweeping program was disposed of at an approved site.

Date: 4/1/2009	Responsible Party: Frank Cipolla, Highway Supervisor

2009 Street Sweeping Program
During calendar year 2009, the Town completed its annual street sweeping program along with the sweeping of all parking lots owned by the Town. All 155 miles of Town maintained roads were swept at least once during the year. Additional street sweeping efforts were done on a as needed basis.

Date: 4/8/2010	Responsible Party: Frank Cipolla, Highway Supervisor
2010 Street Sweepng Program During calendar year 2010, the Town completed its annual street sweeping program along with the sweeping of all parking lots owned by the Town. All 155 miles of Town maintained roads were swept at least once during the year. Additional street sweeping efforts were done on a as needed basis. The Town removed approximatley 280 tons from the street and basins during the 2010 calender year.	

Date: 4/13/2011	Responsible Party: Frank Cipolla, Highway Supervisor
2011 Street Sweeping Program During calendar year 2011, the Town completed its annual street sweeping program along with the sweeping of all parking lots owned by the Town. All 155 miles of Town maintained roads were swept at least once during the year. Additional street sweeping efforts were done on a as needed basis.	

Date: 4/2/2012	Responsible Party: Paul Forrest, Highway Services Manager
2012 Street Sweeping Program During calendar year 2012, the Town completed its annual street sweeping program along with the sweeping of all parking lots owned by the Town. All 155 miles of Town maintained roads were swept at least once during the year. Additional street sweeping efforts were done on a as needed basis.	

Date: 1/1/2013	Responsible Party: Paul Forrest, Highway Services Manager
2013 Street Sweeping Program During calendar year 2013, the Town completed its annual street sweeping program along with the sweeping of all parking lots owned by the Town. All 155 miles of Town maintained roads were swept at least once during the year. Additional street sweeping efforts were done on a as needed basis.	

Date: 4/1/2014	Responsible Party: Paul Forrest, Highway Services Manager
2014 Street Sweeping Program During calendar year 2014, the Town completed its annual street sweeping program along with the sweeping of all parking lots owned by the Town. All 155 miles of Town maintained roads were swept at least once during the year. Additional street sweeping efforts were done on a as needed basis.	

Date: 1/1/2015	Responsible Party: Paul Forrest, Highway Services Manager
2015 Street Sweeping Program During calendar year 2015, the Town completed its annual street sweeping program along with the sweeping of all parking lots owned by the Town. All 155 miles of Town maintained roads were swept at least once during the year. Additional street sweeping efforts were done on a as needed basis.	

Date: 1/1/2016	Responsible Party: Paul Forrest, Highway Services Manager
2016 Street Sweeping Program During calendar year 2016, the Town completed its annual street sweeping program along with the sweeping of all parking lots owned by the Town. All 155 miles of Town maintained roads were swept at least once during the year. Additional street sweeping efforts were done on a as needed basis.	

Section D

BMP Assignments by Responsible Party		
Public Education and Outreach		
M. Denise Horan		
Brochures / Fact Sheets		
	7/1/2004	1/9/2009
Development of a Library of Educational Materials		
	7/1/2004	1/9/2009
Development of Alternate Information Sources		
	1/1/2005	1/9/2009
Billy Taylor		
Storm Drain Marking Program		
	7/1/2004	1/9/2009
Public Participation/Involvement		
M. Denise Horan		
Comply with State & Local Public Notice and FOI Requirements		
	7/1/2004	1/9/2009
Develop Public Involvement / Participation Program		
	7/1/2004	1/9/2009
Evaluate Public Feedback		
	7/1/2004	1/9/2009
Billy Taylor		
Hazardous Household Waste Collection Program		
	4/1/2004	1/9/2009
M. Denise Horan		
Public Review of the Storm Water Management Plan & Permit Registration		
	6/1/2004	7/7/2004
Research Public Opinion on Water Quality Issues		
	7/1/2004	1/9/2009
Billy Taylor		
Storm Drain Marking Program		
	7/1/2004	1/9/2009
Illicit Discharge Detection and Elimination		
M. Denise Horan		
Develop a Program to Detect & Eliminate Illicit Discharges		
	7/1/2004	1/9/2009
Develop Illicit Discharge Ordinance		
	1/3/2005	6/1/2006
Map Storm Outfalls greater than 12" (Urbanized)		
	1/1/2007	12/30/2007
Map Storm Outfalls greater than 15" (Town wide)		
	1/1/2006	12/31/2006
Map Storm Outfalls greater than 15" (Urbanized)		
	7/1/2004	12/31/2005

Construction Site Runoff Control		
M. Denise Horan		
Develop Appropriate Stormwater Ordinance / Regulations for MS4 Program		
	4/1/2006	3/30/2007
Develop Procedures for Infomation Submitted by the Public		
	4/1/2006	9/30/2006
Develop Procedures to Track the Effectivness of the Program		
	4/1/2008	11/30/2008
Public Hearing & Comment Process for Regulation Modifications		
	4/1/2007	1/31/2008
Review & Revise Site Inspection Procedures		
	6/1/2007	12/30/2007
Review Land Use Regulations to meet MS4 Permit Requirements and E&S Guidelines		
	6/30/2004	3/31/2006
Review Town Ordinances to MS4 Requirements		
	7/1/2004	6/30/2006
Post-Construction Runoff Control		
M. Denise Horan		
Develop and Implement Post-construction BMP Strategy		
	4/1/2005	6/29/2006
Develop Post-construction Ordinance or Regulation		
	7/1/2004	6/30/2006
Develop Procedures to Track the Effectiveness of the Program		
	1/1/2008	10/31/2008
Develop Program to Ensure Long-term Operation and Maintenance of BMP's		
	7/1/2006	8/31/2007
Public Hearing / Comment Process to Implement Proposed Regulations		
	7/1/2007	1/31/2008
Review Land Use Regulations to meet MS4 Permit Requirements and E&S Guidelines		
	7/1/2004	3/30/2006
Pollution Preventation / Good House Keeping		
Timothy Bockus		
Catch Basin Cleaning Program		
	7/1/2004	1/9/2009
Billy Taylor		
Develop Training Program for Muncipal Employees		
	7/1/2004	1/9/2009
Preventative Maintainance Program		
	7/1/2004	1/9/2009
M. Denise Horan		
Stormwater Monitoring Program		
	7/1/2004	1/9/2009
Timothy Bockus		
Street Sweeping Program		

	4/1/2004	1/9/2009

ANCHOR
ENGINEERING SERVICES, INC.

T: 860.633.8770
F: 860.633.5971
www.anchorengr.com

41 Sequin Drive • Glastonbury, CT • 06033

March 8, 2016

Mr. Timothy Bockus
Director of Public Works
Town of East Hartford
740 Main Street
East Hartford, Connecticut 06108

Re: DEEP Phase II MS4 Stormwater General Permit
Stormwater Monitoring Reports: 2016 Monitoring Year Samples

Dear Mr. Bockus:

On February 24, 2016, Anchor Engineering personnel collected stormwater samples at six different Town of East Hartford storm outfalls for MS4 stormwater analysis. The samples were transported under chain-of-custody procedures to Phoenix Environmental Laboratories for chemical analyses.

The analytical results have been received from the laboratory and the data has been transcribed onto six Stormwater Monitoring Report (SMR) forms. An original copy of each SMR form and the corresponding laboratory analytical results are attached. Please review these forms at your earliest convenience.

After you have reviewed and finalized the six SMRs, please sign and date the bottom of each form. Once signed, the six completed SMRs need to be submitted to the Connecticut DEEP as part of your Annual Report (per the current permit). If you have any questions regarding submitting the annual report, you can check the DEEP's web site or call us at (860) 633-8770.

Sincerely,

Eric A. Andruk
Environmental Scientist

Paul W. Martell, LEP
Environmental Project Manager

Attachments

General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems

Stormwater Monitoring Report Form

Please send completed form to: STORMWATER GROUP
BUREAU OF MATERIALS MANAGEMENT & COMPLIANCE ASSURANCE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

PERMITTEE INFORMATION

Town: Town of East Hartford

Mailing Address: 740 Main Street, East Hartford, CT 06108

Contact Person: Timothy Bockus Title: Director of Public Works

Phone: (860) 291-7361 Permit Registration #GSM: 000027

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): Woodlawn Circle #1 N:845829.62 E:1042792.74

Please check the appropriate area description: ☐ Industrial ☐ Commercial ☒ Residential

Receiving Water (name, basin): Hockanum River

Time of Start of Discharge: approx. 13:45

Date/Time Collected: 2/24/16 15:35 Water Temperature: approx. 40 deg

Person Collecting Sample: Patrick McKay

Storm Magnitude (inches): 1.53 Storm Duration (hours): approx.7.5

Date of Previous Storm Event: 2/16/16

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	4500-HB/9040	6.72 S.U.	Phoenix
Rain pH	field measure	~6.5 S.U>	field measure
Hardness	E200.7	17.0 mg/L	Phoenix
Conductivity	SM2510B	159 umhos/cm	Phoenix
Oil & Grease	EPA 1664A	1.7 mg/L	Phoenix
COD	SM5220D	43 mg/L	Phoenix
Turbidity	SM2130B	41 NTU	Phoenix
TSS	SM2540D	55 mg/L	Phoenix
TP	SM4500P E	0.30 mg/L	Phoenix
Ammonia	E350.1	0.11 mg/L	Phoenix
TKN	E351.1	0.43 mg/L	Phoenix
NO_3+NO_2	E353.2	0.17 mg/L	Phoenix
E. coli	SM9223B	1190 MPN/100 mls	Phoenix

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Authorized Official: _____
(Print Name)

Signature: _____ Date: 3/15/16

General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems

Stormwater Monitoring Report Form

Please send completed form to: STORMWATER GROUP
BUREAU OF MATERIALS MANAGEMENT & COMPLIANCE ASSURANCE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

PERMITTEE INFORMATION

Town: Town of East Hartford

Mailing Address: 740 Main Street, East Hartford, CT 06108

Contact Person: Timothy Bockus Title: Director of Public Works

Phone: (860) 291-7361 Permit Registration #GSM: 000027

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): Jerry Rd. #1 N:825567.39 E:10321310.97

Please check the appropriate area description: ☐ Industrial ☐ Commercial ☒ Residential

Receiving Water (name, basin): Keeney Cove

Time of Start of Discharge: approx. 13:45

Date/Time Collected: 2/24/16 13:45 Water Temperature: approx. 40 degF

Person Collecting Sample: Patrick McKay

Storm Magnitude (inches): 1.53 Storm Duration (hours): approx.7.5

Date of Previous Storm Event: 2/16/16

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	4500-HB/9040	6.89 S.U.	Phoenix
Rain pH	field measure	~6.5 S.U>	field measure
Hardness	E200.7	8.9 mg/L	Phoenix
Conductivity	SM2510B	135 umhos/cm	Phoenix
Oil & Grease	EPA 1664A	2.3 mg/L	Phoenix
COD	SM5220D	51 mg/L	Phoenix
Turbidity	SM2130B	41 NTU	Phoenix
TSS	SM2540D	56 mg/L	Phoenix
TP	SM4500P E	0.18 mg/L	Phoenix
Ammonia	E350.1	0.12 mg/L	Phoenix
TKN	E351.1	0.68 mg/L	Phoenix
NO_3+NO_2	E353.2	0.06 mg/L	Phoenix
E. coli	SM9223B	41 MPN/100 mls	Phoenix

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Authorized Official: _____
(Print Name)

Signature: _____ Date: 3/15/16

General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems

Stormwater Monitoring Report Form

Please send completed form to: STORMWATER GROUP
BUREAU OF MATERIALS MANAGEMENT & COMPLIANCE ASSURANCE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

PERMITTEE INFORMATION

Town: Town of East Hartford

Mailing Address: 740 Main Street, East Hartford, CT 06108

Contact Person: Timothy Bockus Title: Director of Public Works

Phone: (860) 291-7361 Permit Registration #GSM: 000027

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): School St. #1,2 N:847024.17 E:1036795.21

Please check the appropriate area description: ☐ Industrial ☒ Commercial ☐ Residential

Receiving Water (name, basin): Goodwin Brook

Time of Start of Discharge: approx. 13:45

Date/Time Collected: 2/24/16 15:10 Water Temperature: approx. 40 degF

Person Collecting Sample: Patrick McKay

Storm Magnitude (inches): 1.53 Storm Duration (hours): approx.7.5

Date of Previous Storm Event: 2/16/16

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	4500-HB/9040	6.57 S.U.	Phoenix
Rain pH	field measure	~6.5 S.U>	field measure
Hardness	E200.7	26.2 mg/L	Phoenix
Conductivity	SM2510B	108 umhos/cm	Phoenix
Oil & Grease	EPA 1664A	7.2 mg/L	Phoenix
COD	SM5220D	135 mg/L	Phoenix
Turbidity	SM2130B	170 NTU	Phoenix
TSS	SM2540D	230 mg/L	Phoenix
TP	SM4500P E	0.41 mg/L	Phoenix
Ammonia	E350.1	0.07 mg/L	Phoenix
TKN	E351.1	0.32 mg/L	Phoenix
NO_3+NO_2	E353.2	0.06 mg/L	Phoenix
E. coli	SM9223B	1190 MPN/100 mls	Phoenix

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Authorized Official: (Print Name)

Signature: Date: 3/15/16

General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems

Stormwater Monitoring Report Form

Please send completed form to: STORMWATER GROUP
BUREAU OF MATERIALS MANAGEMENT & COMPLIANCE ASSURANCE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

PERMITTEE INFORMATION

Town: Town of East Hartford

Mailing Address: 740 Main Street, East Hartford, CT 06108

Contact Person: Timothy Bockus Title: Director of Public Works

Phone: (860) 291-7361 Permit Registration #GSM: 000027

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): Remington Rd. #2 N:847948.27 E:1032463.80

Please check the appropriate area description: ☐ Industrial ☒ Commercial ☐ Residential

Receiving Water (name, basin): Goodwin Brook

Time of Start of Discharge: approx. 13:45

Date/Time Collected: 2/24/16 14:32 Water Temperature: approx. 40 deg

Person Collecting Sample: Patrick McKay

Storm Magnitude (inches): 1.53 Storm Duration (hours): approx.7.5

Date of Previous Storm Event: 2/16/16

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	4500-HB/9040	6.82 S.U.	Phoenix
Rain pH	field measure	~6.5 S.U>	field measure
Hardness	E200.7	14.7 mg/L	Phoenix
Conductivity	SM2510B	134 umhos/cm	Phoenix
Oil & Grease	EPA 1664A	5.2 mg/L	Phoenix
COD	SM5220D	81 mg/L	Phoenix
Turbidity	SM2130B	84 NTU	Phoenix
TSS	SM2540D	120 mg/L	Phoenix
TP	SM4500P E	0.20 mg/L	Phoenix
Ammonia	E350.1	0.15 mg/L	Phoenix
TKN	E351.1	0.82 mg/L	Phoenix
NO_3+NO_2	E353.2	0.08 mg/L	Phoenix
E. coli	SM9223B	857 MPN/100 mls	Phoenix

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Authorized Official: _____
(Print Name)

Signature: _____ Date: 3/15/16

General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems

Stormwater Monitoring Report Form

Please send completed form to: STORMWATER GROUP
BUREAU OF MATERIALS MANAGEMENT & COMPLIANCE ASSURANCE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

PERMITTEE INFORMATION

Town: Town of East Hartford

Mailing Address: 740 Main Street, East Hartford, CT 06108

Contact Person: Timothy Bockus Title: Director of Public Works

Phone: (860) 291-7361 Permit Registration #GSM: 000027

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): Cherry St. #2 N:842049.49 E:1026638.30

Please check the appropriate area description: ☒ Industrial ☐ Commercial ☐ Residential

Receiving Water (name, basin): Unknown Watercourse

Time of Start of Discharge: approx. 13:45

Date/Time Collected: 2/24/16 14:10 Water Temperature: approx. 40 degF

Person Collecting Sample: Patrick McKay

Storm Magnitude (inches): 1.53 Storm Duration (hours): approx.7.5

Date of Previous Storm Event: 2/16/16

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	4500-HB/9040	6.82 S.U.	Phoenix
Rain pH	field measure	~6.5 S.U>	field measure
Hardness	E200.7	15.9 mg/L	Phoenix
Conductivity	SM2510B	121 umhos/cm	Phoenix
Oil & Grease	EPA 1664A	3.6 mg/L	Phoenix
COD	SM5220D	58 mg/L	Phoenix
Turbidity	SM2130B	100 NTU	Phoenix
TSS	SM2540D	83 mg/L	Phoenix
TP	SM4500P E	0.22 mg/L	Phoenix
Ammonia	E350.1	0.17 mg/L	Phoenix
TKN	E351.1	0.38 mg/L	Phoenix
NO_3+NO_2	E353.2	0.10 mg/L	Phoenix
E. coli	SM9223B	63 MPN/100 mls	Phoenix

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Authorized Official: _____
(Print Name)

Signature: _____ Date: 3/15/16

General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems

Stormwater Monitoring Report Form

Please send completed form to: STORMWATER GROUP
BUREAU OF MATERIALS MANAGEMENT & COMPLIANCE ASSURANCE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

PERMITTEE INFORMATION

Town: Town of East Hartford

Mailing Address: 740 Main Street, East Hartford, CT 06108

Contact Person: Timothy Bockus Title: Director of Public Works

Phone: (860) 291-7361 Permit Registration #GSM: 000027

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): School St. #3 N:850673.02 E:1035574.38

Please check the appropriate area description: ☒ Industrial ☐ Commercial ☐ Residential

Receiving Water (name, basin): Burnham Brook

Time of Start of Discharge: approx. 13:45

Date/Time Collected: 2/24/16 14:54 Water Temperature: approx. 40 degF

Person Collecting Sample: Patrick McKay

Storm Magnitude (inches): 1.53 Storm Duration (hours): approx.7.5

Date of Previous Storm Event: 2/16/16

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	4500-HB/9040	6.29 S.U.	Phoenix
Rain pH	field measure	~6.5 S.U>	field measure
Hardness	E200.7	12.5 mg/L	Phoenix
Conductivity	SM2510B	93 umhos/cm	Phoenix
Oil & Grease	EPA 1664A	2.7 mg/L	Phoenix
COD	SM5220D	68 mg/L	Phoenix
Turbidity	SM2130B	40 NTU	Phoenix
TSS	SM2540D	110 mg/L	Phoenix
TP	SM4500P E	0.23 mg/L	Phoenix
Ammonia	E350.1	0.11 mg/L	Phoenix
TKN	E351.1	0.35 mg/L	Phoenix
NO_3+NO_2	E353.2	0.06 mg/L	Phoenix
E. coli	SM9223B	75 MPN/100 mls	Phoenix

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Authorized Official: _____
(Print Name)

Signature: _____ Date: 3/15/16

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

March 03, 2016

FOR: Attn: Mr. Scott Atkin
Anchor Engineering
Services, Inc.
41 Sequin Drive
Glastonbury, CT 06033

Sample Information		Custody Information		Date	Time
Matrix:	STORM WATER	Collected by:		02/24/16	15:35
Location Code:	ANCHOR	Received by:	DL	02/24/16	18:02
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	093-21				

Laboratory Data

SDG ID: GBK69360
Phoenix ID: BK69365

Project ID: TOWN OF EAST HARTFORD MS4
Client ID: WOODLAWN CIRCLE #1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hardness (CaCO3)	17.0	0.1	mg/L	1	02/26/16		E200.7
Escherichia Coli	1190	10	MPN/100 mls	10	02/24/16 20:15	tS/KDB/Ct	SM9223B-04
Total Coliforms	11200	10	MPN/100 mls	10	02/24/16 20:15	tS/KDB/Ct	SW9223B
C.O.D.	43	10	mg/L	1	02/25/16	MSF	SM5220D-97
Conductivity	159	5	umhos/cm	1	02/25/16	RWR/KDB	SM2510B-97
Ammonia as Nitrogen	0.11	0.05	mg/L	1	03/01/16	WHM	E350.1
Nitrate-Nitrite (N)	0.17	0.01	mg/L	1	02/26/16	CAL	E353.2
Oil and Grease by EPA 1664	1.7	1.4	mg/L	1	02/26/16	MSF	E1664A
pH	6.72	0.10	pH Units	1	02/25/16 04:02	RWR/KDB	SM4500-H B-00
Nitrogen Tot Kjeldahl	0.43	0.10	mg/L	1	03/01/16	WHM	E351.1
Phosphorus, as P	0.30	0.01	mg/L	1	02/26/16	JR	SM4500PE-99
Total Suspended Solids	55	5.0	mg/L	1	02/26/16	KH	SM2540D-97
Turbidity	41	0.20	NTU	1	02/24/16 19:45	RWR	SM2130B-01
Total Metals Digestion	Completed				02/25/16	AG	

PHOENIX

Environmental Laboratories, Inc.
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Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

March 03, 2016

FOR: Attn: Mr. Scott Atkin
Anchor Engineering
Services, Inc.
41 Sequin Drive
Glastonbury, CT 06033

Sample Information		Custody Information		Date	Time
Matrix:	STORM WATER	Collected by:		02/24/16	13:45
Location Code:	ANCHOR	Received by:	DL	02/24/16	18:02
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	093-21				

Laboratory Data

SDG ID: GBK69360
Phoenix ID: BK69360

Project ID: TOWN OF EAST HARTFORD MS4
Client ID: JERRY ROAD #1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hardness (CaCO3)	8.9	0.1	mg/L	1	02/26/16		E200.7
Escherichia Coli	41	10	MPN/100 mls	10	02/24/16 20:15	tS/KDB/CI	SM9223B-04
Total Coliforms	2250	10	MPN/100 mls	10	02/24/16 20:15	tS/KDB/CI	SW9223B
C.O.D.	51	10	mg/L	1	02/25/16	MSF	SM5220D-97
Conductivity	135	5	umhos/cm	1	02/25/16	RWR/KDB	SM2510B-97
Ammonia as Nitrogen	0.12	0.05	mg/L	1	03/01/16	WHM	E350.1
Nitrate-Nitrite (N)	0.06	0.01	mg/L	1	02/26/16	CAL	E353.2
Oil and Grease by EPA 1664	2.3	1.4	mg/L	1	02/26/16	MSF	E1664A
pH	6.89	0.10	pH Units	1	02/25/16 03:41	RWR/KDB	SM4500-H B-00
Nitrogen Tot Kjeldahl	0.68	0.10	mg/L	1	03/01/16	WHM	E351.1
Phosphorus, as P	0.18	0.01	mg/L	1	02/26/16	JR	SM4500PE-99
Total Suspended Solids	56	5.0	mg/L	1	02/26/16	KH	SM2540D-97
Turbidity	41	0.20	NTU	1	02/24/16 19:45	RWR	SM2130B-01
Total Metals Digestion	Completed				02/25/16	AG	

PHOENIX

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Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

March 03, 2016

FOR: Attn: Mr. Scott Atkin
Anchor Engineering
Services, Inc.
41 Sequin Drive
Glastonbury, CT 06033

Sample Information		Custody Information		Date	Time
Matrix:	STORM WATER	Collected by:		02/24/16	15:10
Location Code:	ANCHOR	Received by:	DL	02/24/16	18:02
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	093-21				

Laboratory Data

SDG ID: GBK69360
Phoenix ID: BK69364

Project ID: TOWN OF EAST HARTFORD MS4
Client ID: SCHOOL ST #1,2

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hardness (CaCO3)	26.2	0.1	mg/L	1	02/26/16		E200.7
Escherichia Coli	1190	10	MPN/100 mls	10	02/24/16 20:15	tS/KDB/Ct	SM9223B-04
Total Coliforms	6870	10	MPN/100 mls	10	02/24/16 20:15	tS/KDB/Ct	SW9223B
C.O.D.	135	10	mg/L	1	02/25/16	MSF	SM5220D-97
Conductivity	108	5	umhos/cm	1	02/25/16	RWR/KDB	SM2510B-97
Ammonia as Nitrogen	0.07	0.05	mg/L	1	03/01/16	WHM	E350.1
Nitrate-Nitrite (N)	0.06	0.01	mg/L	1	02/26/16	CAL	E353.2
Oil and Grease by EPA 1664	7.2	1.4	mg/L	1	02/26/16	MSF	E1664A
pH	6.57	0.10	pH Units	1	02/25/16 03:59	RWR/KDB	SM4500-H B-00
Nitrogen Tot Kjeldahl	0.32	0.10	mg/L	1	03/01/16	WHM	E351.1
Phosphorus, as P	0.41	0.02	mg/L	2	02/26/16	JR	SM4500PE-99
Total Suspended Solids	230	10	mg/L	2	02/26/16	KH	SM2540D-97
Turbidity	170	0.20	NTU	1	02/24/16 19:45	RWR	SM2130B-01
Total Metals Digestion	Completed				02/25/16	AG	

PHOENIX

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Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

March 03, 2016

FOR: Attn: Mr. Scott Atkin
Anchor Engineering
Services, Inc.
41 Sequin Drive
Glastonbury, CT 06033

Sample Information		Custody Information		Date	Time
Matrix:	STORM WATER	Collected by:		02/24/16	14:32
Location Code:	ANCHOR	Received by:	DL	02/24/16	18:02
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	093-21				

Laboratory Data

SDG ID: GBK69360
Phoenix ID: BK69362

Project ID: TOWN OF EAST HARTFORD MS4
Client ID: REMINGTON RD #2

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hardness (CaCO3)	14.7	0.1	mg/L	1	02/26/16		E200.7
Escherichia Coli	857	10	MPN/100 mls	10	02/24/16 20:15	KS/KDB/CI	SM9223B-04
Total Coliforms	4880	10	MPN/100 mls	10	02/24/16 20:15	KS/KDB/CI	SW9223B
C.O.D.	81	10	mg/L	1	02/25/16	MSF	SM5220D-97
Conductivity	134	5	umhos/cm	1	02/25/16	RWR/KDB	SM2510B-97
Ammonia as Nitrogen	0.15	0.05	mg/L	1	03/01/16	WHM	E350.1
Nitrate-Nitrite (N)	0.08	0.01	mg/L	1	02/26/16	CAL	E353.2
Oil and Grease by EPA 1664	5.2	1.4	mg/L	1	02/26/16	MSF	E1664A
pH	6.82	0.10	pH Units	1	02/25/16 03:48	RWR/KDB	SM4500-H B-00
Nitrogen Tot Kjeldahl	0.82	0.10	mg/L	1	03/01/16	WHM	E351.1
Phosphorus, as P	0.20	0.01	mg/L	1	02/26/16	JR	SM4500PE-99
Total Suspended Solids	120	5.0	mg/L	1	02/26/16	KH	SM2540D-97
Turbidity	84	0.20	NTU	1	02/24/16 19:45	RWR	SM2130B-01
Total Metals Digestion	Completed				02/25/16	AG	

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

March 03, 2016

FOR: Attn: Mr. Scott Atkin
Anchor Engineering
Services, Inc.
41 Sequin Drive
Glastonbury, CT 06033

Sample Information		Custody Information		Date	Time
Matrix:	STORM WATER	Collected by:		02/24/16	14:10
Location Code:	ANCHOR	Received by:	DL	02/24/16	18:02
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	093-21				

Laboratory Data

SDG ID: GBK69360
Phoenix ID: BK69361

Project ID: TOWN OF EAST HARTFORD MS4
Client ID: CHERRY ST #2

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hardness (CaCO3)	15.9	0.1	mg/L	1	02/26/16		E200.7
Escherichia Coli	63	10	MPN/100 mls	10	02/24/16 20:15	tS/KDB/CI	SM9223B-04
Total Coliforms	8660	10	MPN/100 mls	10	02/24/16 20:15	tS/KDB/CI	SW9223B
C.O.D.	58	10	mg/L	1	02/25/16	MSF	SM5220D-97
Conductivity	121	5	umhos/cm	1	02/25/16	RWR/KDB	SM2510B-97
Ammonia as Nitrogen	0.17	0.05	mg/L	1	03/01/16	WHM	E350.1
Nitrate-Nitrite (N)	0.10	0.01	mg/L	1	02/26/16	CAL	E353.2
Oil and Grease by EPA 1664	3.6	1.4	mg/L	1	02/26/16	MSF	E1664A
pH	6.82	0.10	pH Units	1	02/25/16 03:45	RWR/KDB	SM4500-H B-00
Nitrogen Tot Kjeldahl	0.38	0.10	mg/L	1	03/01/16	WHM	E351.1
Phosphorus, as P	0.22	0.01	mg/L	1	02/26/16	JR	SM4500PE-99
Total Suspended Solids	83	5.0	mg/L	1	02/26/16	KH	SM2540D-97
Turbidity	100	0.20	NTU	1	02/24/16 19:45	RWR	SM2130B-01
Total Metals Digestion	Completed				02/25/16	AG	

PHOENIX

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Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

March 03, 2016

FOR: Attn: Mr. Scott Atkin
Anchor Engineering
Services, Inc.
41 Sequin Drive
Glastonbury, CT 06033

Sample Information		Custody Information		Date	Time
Matrix:	STORM WATER	Collected by:		02/24/16	14:54
Location Code:	ANCHOR	Received by:	DL	02/24/16	18:02
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	093-21				

Laboratory Data

SDG ID: GBK69360
Phoenix ID: BK69363

Project ID: TOWN OF EAST HARTFORD MS4
Client ID: SCHOOL ST #3

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hardness (CaCO3)	12.5	0.1	mg/L	1	02/26/16		E200.7
Escherichia Coli	75	10	MPN/100 mls	10	02/24/16 20:15	RS/KDB/CI	SM9223B-04
Total Coliforms	2360	10	MPN/100 mls	10	02/24/16 20:15	RS/KDB/CI	SW9223B
C.O.D.	68	10	mg/L	1	02/25/16	MSF	SM5220D-97
Conductivity	93	5	umhos/cm	1	02/25/16	RWR/KDB	SM2510B-97
Ammonia as Nitrogen	0.11	0.05	mg/L	1	03/01/16	WHM	E350.1
Nitrate-Nitrite (N)	0.06	0.01	mg/L	1	02/26/16	CAL	E353.2
Oil and Grease by EPA 1664	2.7	1.4	mg/L	1	02/26/16	MSF	E1664A
pH	6.29	0.10	pH Units	1	02/25/16 03:56	RWR/KDB	SM4500-H B-00
Nitrogen Tot Kjeldahl	0.35	0.10	mg/L	1	03/01/16	WHM	E351.1
Phosphorus, as P	0.23	0.01	mg/L	1	02/26/16	JR	SM4500PE-99
Total Suspended Solids	110	5.0	mg/L	1	02/26/16	KH	SM2540D-97
Turbidity	40	0.20	NTU	1	02/24/16 19:45	RWR	SM2130B-01
Total Metals Digestion	Completed				02/25/16	AG	