



Town of Old Saybrook, Connecticut

Part B Registration

Stormwater Management Plan

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

Permit Number GSM00078

Table of Contents

Section A	Overview of Plan and Contact Information
Section B	Summary of Plan Contents
Section C	Details of Minimum Control Measures, BMPs and Work Performed
Section D	Responsible Party Assignments

Section A

Date Prepared: 12/18/2008

For questions regarding this report contact:

Lawrence Bonin
Town Hall 302 Main Street
Old Saybrook, CT 06475

Stormwater Program Permit Information

1. Permitting Authority: CTDEP Bureau of Water Management	
2. Permit Number: GSM000078	3. Permit Type: General Permit
4. Permit Name: Old Saybrook CTDEP MS4 Permit	
5. Date Issue: 1/9/2004	6. Date Expire: 1/8/2009

General Information for MS4 Operator

1. Operator Name:	Michael A. Pace		
2. Operator Title:	First Selectman		
3. Represented Entity:	Town of Old Saybrook		
4. Mailing Address:	Town Hall, 302 Main Street		
5. Mail City, State, Zip:	Old Saybrook, CT 06475		
6. Phone Number:	(860) 395-3123		
7. E-Mail Address:	mpace@town.old-saybrook.ct.us		
8. Co-Permitting With:	Not Applicable		
9. Population: 10,367	Households: 4,184	Area (sq mi): 22	
10. Official Website:	http://www.oldsaybrookct.org/		

General Information for Primary Contact Person

1. Name:	Lawrence Bonin
2. Title:	Public Works Superintendent
3. Phone Number	(860) 395-3186
4. E-Mail Address:	lbonin@town.old-saybrook.ct.us

General Information for Secondary Contact Person

1. Name:	Christine Nelson
2. Title:	Town Planner
3. Phone Number	(860) 395-3131
4. E-Mail Address:	cnelson@town.old-saybrook.ct.us

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
Ragged Rock Creek Cold Spring Brook Mud Creek Fishing Brook Hagar Creek	Springdale Pond Obed Heights Reservoir Deitch Pond North Cove South Cove Connecticut River Cedar Swamp Pequot Swamp Pond Chalkers Millpond Ingham Pond Mill Meadows	4000 Connecticut River 5101 Oyster River 5000 South Central Shoreline Long Island Sound

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		
Develop Educational Resources	8/1/2006	1/8/2009
Expand Educational Resources	1/1/2007	1/8/2009
Pollution Reduction		
Storm Drain Marker Program	8/9/2004	1/10/2005
	8/1/2006	1/8/2009
Public Participation/Involvement		
Community Clean-ups		
	8/1/2006	1/8/2009
Create a Volunteer Organization		
	8/1/2006	1/8/2009
Public Information - Print Media		
	1/3/2005	1/8/2009
Public Information - Website Media		
	1/9/2004	1/8/2009
Illicit Discharge Detection and Elimination		
Household Hazardous Waste Collection		
	1/9/2004	1/8/2009
Implement an Illicit Discharge Detection and Elimination Program		
	8/1/2006	1/8/2009
Implement an Information Management System for Tracking Illicit Discharges		
	8/1/2006	1/8/2009
Recycling Program		
	1/9/2004	1/8/2009
Stormwater Ordinance		
	8/1/2006	1/8/2009
Stormwater Outfall Mapping - Year Four		
	1/1/2007	12/30/2007
Stormwater Outfall Mapping - Year Three		
	8/1/2006	12/28/2006
Stormwater Outfall Mapping - Year Two		
	8/1/2006	12/29/2006
Stormwater Sampling		
	6/28/2005	1/8/2009
Train Employees		

	8/1/2006	1/8/2009
Construction Site Runoff Control		
Continue Inspection Program		
	1/9/2004	1/8/2009
Information Management System		
	1/9/2004	1/8/2009
Make Developers Aware of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities		
	1/9/2004	1/8/2009
Maximum Compliance		
	1/9/2004	1/8/2009
Regulatory Mechanism		
	1/9/2004	1/8/2009
Site Plan Review		
	1/9/2004	1/8/2009
Staff Training		
	1/9/2004	1/8/2009
Post-Construction Runoff Control		
Develop and Implement BMP Strategies		
	8/1/2006	1/8/2009
Identification of BMPs		
	1/9/2004	1/8/2009
Long Term Operation and Maintenance of Stormwater BMPs		
	1/9/2004	1/8/2009
Reduced Impervious Areas		
	1/9/2004	1/8/2009
Pollution Prevention/Good Housekeeping		
Annual Catch Basin Cleaning		
	1/9/2004	1/1/2009
Annual Street Sweeping		
	1/9/2004	1/8/2009
Continue Maintenance Schedule		
	1/9/2004	1/8/2009
Employee Training Materials		
	1/9/2004	1/8/2009
Information Management System		
	1/9/2004	1/8/2009
Pollution Reduction		
	1/9/2004	1/8/2009
Repair, Retrofit or Upgrade Conveyances, Structures and Outfalls		
	1/9/2004	1/8/2009

Section C

Public Education and Outreach

Descriptive Text:

(A) Required throughout the Municipality:

(i) Implement a public education program to distribute educational materials to the community, or conduct equivalent outreach activities about the impacts of storm water discharges on local waterbodies and the steps that the public can take to reduce pollutants in storm water runoff. 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: 8/9/2004

End Date: 1/8/2009

Details of BMPs and Work Performed for Them

Develop Educational Resources

Responsible Party: Christine Nelson, Town Planner				
Start Date: 8/1/2006			End Date: 1/8/2009	
Permits Years during which activities are scheduled:				
Year 1	Year 2	Year 3 X	Year 4	Year 5
Name of Separate Implementing Entity: Town of Old Saybrook Webmaster				
BMP Description: Develop an infra-structure resource to support the public education and outreach program				
Obtain the free ASIST Macromedia Flash Public Education Tools entitled "Introduction to Stormwater", "Lawn Care", and "Citizen Involvement" and add to the Town of Old Saybrook website. Notify the Town of Old Saybrook residents of the information by print media contained in the local newspaper.				
Has Goal Been Accomplished: NO				

Work Performed

Expand Educational Resources

Responsible Party: Christine Nelson, Town Planner				
Start Date: 1/1/2007			End Date: 1/8/2009	
Permits Years during which activities are scheduled:				
Year 1	Year 2	Year 3	Year 4 X	Year 5 X
Name of Separate Implementing Entity: Old Saybrook Science Teachers, Town of Old Saybrook Webmaster				
BMP Description: Develop a school curricula that can be used to educate students about stormwater issues				
Add stormwater links to the Town Website				
Consider recommending that the Old Saybrook Board of Education purchase an EnviroScape Coastal Model to use in science classes to educate students on point and nonpoint sources of pollution.				
Has Goal Been Accomplished: NO				

Work Performed

Pollution Reduction

Responsible Party: Michael Pace, First Selectman				
Start Date: 8/9/2004			End Date: 1/10/2005	
Permits Years during which activities are scheduled:				
Year 1	Year 2	Year 3 X	Year 4 X	Year 5 X
Name of Separate Implementing Entity: Old Saybrook Resident Pet Owners				
BMP Description: Consider enacting an Ordinance Concerning Removal of Animal Waste				
This goal is used to help increase your efforts to reduce pollution being introduced into your storm				

water sewer system.

Has Goal Been Accomplished: NO

Work Performed

Storm Drain Marker Program

Responsible Party: Stephen Lockett, WPCA Coordinator

Start Date: 8/1/2006

End Date: 1/8/2009

Permits Years during which activities are scheduled:

Year 1

Year 2

Year 3 X

Year 4 X

Year 5 X

Name of Separate Implementing Entity:

Conservation Commission Members

BMP Description:

Consider obtaining and installing storm drain markers provided by the CTDEP Long Island Sound Fund to catch basin heads. The 3-3/4" x 8" round cornered rectangular tri-color markers alert passers-by that a catch basin and storm drainage system "DRAINS TO WATERWAYS AND LONG ISLAND SOUND, NO DUMPING".

Has Goal Been Accomplished: NO

Work Performed

Public Participation/Involvement

Descriptive Text:

(A) Required throughout the Municipality:

(i) Comply with state and local public notice requirements and Freedom of Information requirements when implementing a Public Involvement/Participation program. Where notice requirements are inconsistent, the notice provisions for the most notice and opportunity for public comment shall be followed.

(ii) Develop a Public Involvement/Participation program that includes the public in developing, implementing, and reviewing the Stormwater Management Plan.

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 provide 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:

4

Important Dates:

Earliest Start Date: 1/9/2004

End Date: 1/8/2009

Details of BMPs and Work Performed for Them**Community Clean-ups**

Responsible Party: Stephen Lockett, WPCA Coordinator

Start Date: 8/1/2006

End Date: 1/8/2009

Permits Years during which activities are scheduled:

Year 1

Year 2

Year 3 **X**Year 4 **X**Year 5 **X**

Name of Separate Implementing Entity:

Oyster River Coalition

BMP Description:

Involve a certain percentage of the community through this organization to help in community clean-ups.

Has Goal Been Accomplished: NO

Work Performed**Create a Volunteer Organization**

Responsible Party: Stephen Lockett, WPCA Coordinator

Start Date: 8/1/2006

End Date: 1/8/2009

Permits Years during which activities are scheduled:

Year 1

Year 2

Year 3 **X**Year 4 **X**Year 5 **X**

Name of Separate Implementing Entity:

Oyster River Coalition, Boy Scouts, Girl Scouts

BMP Description:

The volunteer organization created will be used to help identify outfalls, find illicit discharges and install storm drain markers.

Has Goal Been Accomplished: NO

Work Performed**Public Information - Print Media**

Responsible Party: Stephen Lockett, WPCA Coordinator

Start Date: 1/3/2005

End Date: 1/8/2009

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:

Old Saybrook Residents

BMP Description:

Qualifying Local Program

Notify citizens of stormwater issues in print media.

Has Goal Been Accomplished: NO

Work Performed**Public Information - Website Media**

Responsible Party: Stephen Lockett, WPCA Coordinator

Start Date: 1/9/2004

End Date: 1/8/2009

Permits Years during which activities are scheduled:					
Year 1	Year 2	Year 3	Year 4	Year 5	
X	X	X	X	X	
Name of Separate Implementing Entity: Old Saybrook Webmaster					
BMP Description: Qualifying Local Program					
<p>The Town of Old Saybrook Water Pollution Control Authority currently has Stormwater Newsletter Articles on the Water Pollution Control Authority website (http://oswpca.org). The Newsletters serve to educate Town of Old Saybrook residents about stormwater issues. The Water Pollution Control Authority website also contains Ordinance #75, adopted at a Town Meeting held September 14, 1999, requiring all residents to pump out their septic tanks at least once every five years</p> <p>The Water Pollution Control Authority website stormwater page also contains the following stormwater links:</p> <p>the EPA website and the Jordan Cove (Waterford) Urban Watershed Project</p>					
Has Goal Been Accomplished: YES					
Work Performed					

Illicit Discharge Detection and Elimination

Descriptive Text:

(A) Required Throughout the Municipality:

(i) Implement an ordinance or other regulatory mechanism to effectively prohibit non-stormwater discharges, except as provided in Section 3(a)(2) of the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems, into the MS4, as well as sanctions to ensure compliance, to the extent allowable under State or local law;

(ii) inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste; and

(iii) by the end of the third year of the general permit, expand the map required by subsection (B)(i) below to identify on such map all outfalls of 15" or greater where such outfalls are located anywhere within each municipality;

(B) Required Within the Urbanized Area:

(i) by the end of the second year of the General Permit, develop a map or series of maps at a minimum scale of 1" = 2,000' and a maximum scale of 1" = 100' showing all stormwater discharges from a pipe or conduit with a diameter of 15" or greater (or equivalent cross-sectional area) owned or operated by the Town of Old Saybrook. For each discharge the following information shall be included:

a. Type, material, and size of conveyance, outfall or channelized flow;

b. The name and Surface Water Quality Classification of the immediate surface waterbody or wetland to which the stormwater runoff discharges;

c. If the outfall does not discharge directly to a named waterbody, the name of the nearest named

waterbody to which the outfall eventually discharges;

d The name of the watershed in which the discharge is located

(ii) By the end of the fourth year of the General Permit, expand the map required by subsection (B)(i) above to identify on the map all outfalls of 12" or greater that are located within the Urbanized Area;

(iii) Develop, implement and enforce a program to detect and eliminate existing illicit discharges, as defined in 40CFR 122.26(b)(2), into the MS4; and

(iv) Develop and implement a plan to detect and address future non-stormwater discharges, including illegal dumping, to the MS4

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 waterbodies. 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:

10

Important Dates:

Earliest Start Date: 1/9/2004

End Date: 1/8/2009

Details of BMPs and Work Performed for Them

Household Hazardous Waste Collection

Responsible Party:				
Start Date: 1/9/2004		End Date: 1/8/2009		
Permits Years during which activities are scheduled:				
Year 1 X	Year 2 X	Year 3 X	Year 4 X	Year 5
Name of Separate Implementing Entity: Connecticut River Estuary Regional Planning Agency				
BMP Description: Qualifying Local Program				
<p>The Town of Old Saybrook participates in the Estuary Region Household Hazardous Waste Facility located in Essex, Connecticut. The facility is open on selected Saturdays from 9:00 A.M. to 1:00 P.M. from late April to late October.</p> <p>The Estuary Region Household Hazardous Waste Facility accepts the following items from the household:</p> <p>Drain Cleaners, Metal Polish, Oven Cleaners, Floor Cleaners, Mothballs, Photo Chemicals, Full and Partially Full Aerosol Cans, Arts & Crafts Supplies, Household Batteries, Asbestos Floor Tiles, Water Reactive Compounds and a Mercury Thermometer/Digital Thermometer Exchange.</p> <p>The Estuary Region Household Hazardous Waste Facility accepts the following items from the garage:</p> <p>Propane Torch Cylinders, Old Chemistry Sets, Transmission Fluid, Gasoline, Kerosene, Waxes, Polishes, Brake Fluid and Rust Preventatives.</p> <p>The Estuary Region Household Hazardous Waste Facility accepts the following items from the workshop:</p> <p>Rust Preventatives, Wood Preservatives, Wood Strippers, Oil-Based Paints, Lead-Based Paints, Paint Thinners, Degreasers, Solvents and Sealants.</p> <p>The Estuary Region Household Hazardous Waste Facility accepts the following items from the yard and garden:</p> <p>Weed Killers, Insect Sprays, Rodent Poisons, Muriatic Acid, Pool Chemicals and Cesspool Cleaners.</p> <p>It is anticipated that the Town of Old Saybrook will continue to participate in the Household Hazardous Waste Collection Program.</p> <p>CRERPA also holds an Electronics Collection Day once per year.</p>				
Has Goal Been Accomplished: YES				

Work Performed

Implement an Illicit Discharge Detection and Elimination Program

Responsible Party: Stephen Lockett, Coordinator	
Start Date: 8/1/2006	End Date: 1/8/2009

Permits Years during which activities are scheduled:					
Year 1	Year 2	Year 3 X	Year 4 X	Year 5 X	
Name of Separate Implementing Entity: Not Applicable					
BMP Description: Required Throughout the Municipality: Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste; and Required within the Urbanized Area: Develop, implement and enforce a program to detect and eliminate existing illicit discharges, as defined in 40CFR 122.26(b)(2), into the MS4. Develop and implement a plan to detect and address future non-stormwater discharges, including illegal dumping, to the MS4.					
Has Goal Been Accomplished: NO					

Work Performed

Implement an Information Management System for Tracking Illicit Discharges

Responsible Party: Scott Martinson, Sanitarian					
Start Date: 8/1/2006			End Date: 1/8/2009		
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: An information Management System will be used to document all important information gathered concerning illicit discharge detection, elimination and actions taken. This information will be included in annual reports and will detail the following: 1. The number of Outfalls Screened 2. The number of illicit discharges discovered during outfall screening. 3. The number of illicit discharges discovered as a result of citizen complaints. 4. The number of illicit discharges that were resolved. 5. The number of Dye or Smoke tests conducted.					
Has Goal Been Accomplished: NO					

Work Performed

Recycling Program

Responsible Party: Lawrence Bonin, Director of Public Works					
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Start Date: 1/9/2004	End Date: 1/8/2009
Permits Years during which activities are scheduled:	
Year 1 <input checked="" type="checkbox"/>	Year 2 <input checked="" type="checkbox"/>
Year 3 <input checked="" type="checkbox"/>	Year 4 <input checked="" type="checkbox"/>
Year 5 <input checked="" type="checkbox"/>	
Name of Separate Implementing Entity: Old Saybrook Residents	
BMP Description: Qualifying Local Program	
The Town of old Saybrook will continue the recycling program Items accepted include:	
Metal Items: Bicycles, Stoves, Washing Machines, Dishwashers, Freezers, Refrigerators and Air Conditioners,	
Newspaper/Cardboard: Paper Bags and Corrugated Cardboard,	
Junk Mail: Magazines, Colored Paper, Computer Paper and Catalogs,	
Glass/Cans/Plastic: Glass Jars, Food Cans, Plastic Containers,	
and Pure Waste Oil.	
Has Goal Been Accomplished: YES	
Work Performed	

Stormwater Ordinance	
Responsible Party: Michael Pace, First Selectman	
Start Date: 8/1/2006	End Date: 1/8/2009
Permits Years during which activities are scheduled:	
Year 1	Year 2
Year 3 <input checked="" type="checkbox"/>	Year 4 <input checked="" type="checkbox"/>
Year 5 <input checked="" type="checkbox"/>	
Name of Separate Implementing Entity: Board of Selectmen/Town Legal Counsel	
BMP Description: Required Throughout the Municipality:	
Implement an ordinance or other regulatory mechanism to effectively prohibit non-stormwater discharges, except as provided in Section 3(a)(2) of the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems, into the MS4, as well as sanctions to ensure compliance, to the extent allowable under State or local law.	
Has Goal Been Accomplished: NO	
Work Performed	

Stormwater Outfall Mapping - Year Four	
Responsible Party:	
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 <input checked="" type="checkbox"/>
Year 5	

Name of Separate Implementing Entity:
Not Applicable

BMP Description:
By the end of the fourth year of the General Permit, expand the mapping to identify all outfalls 12" or greater that are located within the Urbanized Area of Old Saybrook.

Has Goal Been Accomplished: NO

Work Performed

Stormwater Outfall Mapping - Year Three

Responsible Party:

Start Date: 8/1/2006 End Date: 12/28/2006

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:
By the end of the third year of the General Permit, expand mapping to identify all outfalls 15" or greater within the entire Town of Old Saybrook.

Has Goal Been Accomplished: NO

Work Performed

Stormwater Outfall Mapping - Year Two

Responsible Party: Stephen Lockett, WPCA Coordinator

Start Date: 8/1/2006 End Date: 12/29/2006

Permits Years during which activities are scheduled:

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

Name of Separate Implementing Entity:
Town Staff

BMP Description:
By the end of the second year of the General Permit, develop a map at a minimum scale of 1" = 2,000' and a maximum scale of 1" = 200' showing all stormwater discharges from a pipe or conduit with a diameter of 15" or greater (or equivalent cross-sectional area) owned or operated within the Urbanized Area (UA) of the Town of Old Saybrook. The mapping shall include the type, material and size of conveyance, outfall or channelized flow; The name and Surface Water Classification of the immediate surface waterbody or wetland to which the stormwater runoff discharges; if the outfall does not discharge directly to a named waterbody, the name of the nearest named waterbody to which the outfall eventually discharges; and the name of the watershed in which the discharge is located

The storm sewer system map is meant to demonstrate a basic awareness of the intake and discharge areas of the system. It is needed to help determine the extent of discharged dry weather flows, the possible sources of the dry weather flows, and the particular waterbodies these flows may be affecting. An existing map, such as a topographical map, on which the location of major pipes and outfalls can be clearly presented demonstrates such awareness.

EPA recommends collecting all existing information on outfall locations (e.g., review city records, drainage maps, storm drain maps), and then conducting field surveys to verify locations. It probably will be necessary to walk (i.e., wade through small receiving waters or use a boat for larger waters) the

streambanks and shorelines for visual observation. More than one trip may be needed to locate all outfalls.

The storm sewer system map is meant to demonstrate a basic awareness of the intake and discharge areas of the system. It is needed to help determine the extent of discharged dry weather flows, the possible sources of the dry weather flows, and the particular waterbodies these flows may be affecting. An existing map, such as a topographical map, on which the location of major pipes and outfalls can be clearly presented demonstrates such awareness.

EPA recommends collecting all existing information on outfall locations (e.g., review city records, drainage maps, storm drain maps), and then conducting field surveys to verify locations. It probably will be necessary to walk (i.e., wade through small receiving waters or use a boat for larger waters) the streambanks and shorelines for visual observation. More than one trip may be needed to locate all outfalls.

Has Goal Been Accomplished: NO

Work Performed

Stormwater Sampling

Responsible Party: Stephen Lockett, Coordinator

Start Date: 6/28/2005

End Date: 1/8/2009

Permits Years during which activities are scheduled:

Year 1	Year 2 X	Year 3 X	Year 4 X	Year 5 X
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Name of Separate Implementing Entity:

Cummins Envirotech Inc.

BMP Description:

Stormwater monitoring shall be conducted by the Town of Old Saybrook annually starting in 2005. At least two outfalls shall be sampled from areas that are predominantly industrial, commercial and residential developments for a total of six stormwater sampling events. Each monitored outfall shall be selected based on an evaluation by the Town of Old Saybrook that the drainage area of each outfall is representative of the overall nature of the respective land use type.

Parameters to be monitored for each sample include:

- pH (SU)
- Hardness (mg/l)
- Conductivity (umhos/cm)
- 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 Nitrogen (mg/l)
- Nitrate plus Nitrite Nitrogen (mg/l)
- E coli (colonies/100 ml)
- Uncontaminated Rainfall pH at the time the samples are obtained.

Has Goal Been Accomplished: NO

Work Performed

Train Employees				
Responsible Party: Lawrence Bonin, Director of Public Works				
Start Date: 8/1/2006		End Date: 1/8/2009		
Permits Years during which activities are scheduled:				
Year 1	Year 2	Year 3 X	Year 4 X	Year 5 X
Name of Separate Implementing Entity: Department of Public Works Employees				
BMP Description: Design and administer a training program to employees that will help them to identify illicit discharges.				
Has Goal Been Accomplished: NO				
Work Performed				

Construction Site Runoff Control

Descriptive Text:

(A) Required Throughout the Municipality:

(i) Develop, implement and enforce a program, or modify an existing program, to reduce pollutants in any stormwater runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of stormwater discharges from construction activity disturbing less than one acre shall be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. The program shall include, but not be limited to, the development and implementation of:

a. An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State or local law;

b. 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;

c. Requirements for construction site operators to implement appropriate erosion and sediment control best management practices in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control;

d. Requirements for construction site operators to control waste at the site such as discarded building materials, concrete truck washout wastewater, chemicals, litter, and sanitary waste that may cause adverse impacts to water quality;

e. Procedures for site plan review which incorporate consideration of potential water quality impacts;

f. Procedures for receipt and consideration of information submitted by the public; and

g. Procedures for site inspection and enforcement of control measures

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 Wastewaters

Number of BMPs associated with control measure:

7

Important Dates:

Earliest Start Date: 1/9/2004

End Date: 1/8/2009

Details of BMPs and Work Performed for Them

Continue Inspection Program

Responsible Party: Christina Costa, Enforcement Officer/Assistant Director	
Start Date: 1/9/2004	End Date: 1/8/2009
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: Qualifying Local Program	
Continue random inspections of construction sites.	
Has Goal Been Accomplished: YES	

Work Performed

Information Management System

Responsible Party: Christina Costa, Enforcement Officer/Assistant Director	
Start Date: 1/9/2004	End Date: 1/8/2009
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: Qualifying Local Program	
The Town of Old Saybrook currently has an information management system designed to record staff inspections of construction sites .	
Has Goal Been Accomplished: YES	

Work Performed

Make Developers Aware of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities

Responsible Party: Geoffrey Jacobson, Professional Engineer	
Start Date: 1/9/2004	End Date: 1/8/2009
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: Developers	
BMP Description: Qualifying Local Program	
The Town of Old Saybrook Town Engineer makes Design Engineers and Developers aware of the need for the General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities during the land use review process when applicable.	
Has Goal Been Accomplished: YES	

Work Performed

Maximum Compliance

Responsible Party: Christina Costa, Enforcement Officer/Assistant Director

Start Date: 1/9/2004

End Date: 1/8/2009

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:

Qualifying Local Program

The inspection program will continue until the maximum compliance possible is achieved. Compliance and non-compliance will be documented through the Information Management System.

Has Goal Been Accomplished: YES

Work Performed

Regulatory Mechanism

Responsible Party: Christina Costa, Zoning Enforcement Officer/Inland Wetlands Enforcement Officer

Start Date: 1/9/2004

End Date: 1/8/2009

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:

Board of Selectmen, Town Legal Counsel

BMP Description:

Qualifying Local Program

The Town of Old Saybrook currently has a regulatory mechanism in place that will provides the ability to regulate polluted runoff that emanates from construction sites. The regulations will be revised as current technology allows.

Article VI, Section 67 of the Town of the Old Saybrook Zoning Regulations requires preparation and submission of a Soil Erosion and Sediment Control Plan for a disturbed area of one-half (1/2) acre or more.

Site Plans are reviewed for soil erosion and sediment control and stormwater quantity and quality compliance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control.

Has Goal Been Accomplished: YES

Work Performed

Site Plan Review

Responsible Party: Christina Costa, Enforcement Officer/Assistant Director

Start Date: 1/9/2004

End Date: 1/8/2009

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: Construction Workers
BMP Description: Qualifying Local Program
The Town of Old Saybrook Enforcement Officer/Assistant Planner and the Town Engineer both review site plans as they relate to soil erosion and sediment control.
Has Goal Been Accomplished: YES
Work Performed

Staff Training	
Responsible Party: Christina Costa, Enforcement Officer/Assistant Director	
Start Date: 1/9/2004	End Date: 1/8/2009
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: Qualifying Local Program	
Continue Staff Training in soil erosion and sediment control and construction inspection procedures.	
Has Goal Been Accomplished: YES	
Work Performed	

Post-Construction Runoff Control

Descriptive Text:

(A) Required Throughout the Municipality

(i) Develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the MS4 or directly to waters of the State. This program shall ensure that controls are implemented to require appropriate infiltration practices, reduction of impervious surface, creation of or conversion to sheet flow, measures and/or structures to reduce sediment discharge and any other innovative measures that will prevent or minimize water quality impacts;

(ii) Develop and implement strategies which include a combination of structural and/or non-structural best management practices (BMPs) appropriate for the Town of Old Saybrook;

(iii) Use an ordinance or other regulatory mechanism to address the elements of subsection (i) above regarding post-construction runoff from new development and redevelopment projects to the extent allowable under State or local law; and

(iv) Ensure adequate long-term operation and maintenance of BMPs.

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 waterbodies. 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 waterbody 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 streambank scouring and downstream flooding, which often lead to a loss of aquatic life and damage to property.

Number of BMPs associated with control measure:

4

Important Dates:

Earliest Start Date: 1/9/2004

End Date: 1/8/2009

Details of BMPs and Work Performed for Them

Develop and Implement BMP Strategies

Responsible Party: Michael Pace, First Selectman				
Start Date: 8/1/2006		End Date: 1/8/2009		
Permits Years during which activities are scheduled:				
Year 1	Year 2	Year 3 X	Year 4 X	Year 5 X
Name of Separate Implementing Entity: Board of Selectmen				
BMP Description: Use an ordinance or other regulatory mechanism to address the elements of subsection (i) above regarding post-construction runoff throughout the Town of Old Saybrook from new development and redevelopment projects to the extent allowable under State or local law.				
Has Goal Been Accomplished: NO				

Work Performed

Identification of BMPs

Responsible Party: Geoffrey Jacobson, Professional Engineer				
Start Date: 1/9/2004		End Date: 1/8/2009		
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: Nathan L. Jacobson & Associates, Inc.				
BMP Description: Qualifying Local Program The Town Engineer reviews Site Plans as they relate to stormwater quality and stormwater BMPs as contained in the 2004 Connecticut Stormwater Quality Manual Consider incorporating reference to the 2004 Connecticut Stormwater Quality Manual into the Zoning Regulations and the Subdivision Regulations.				
Has Goal Been Accomplished: YES				

Work Performed

Long Term Operation and Maintenance of Stormwater BMPs

Responsible Party: Lawrence Bonin, Director of Public Works				
Start Date: 1/9/2004		End Date: 1/8/2009		
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: Department of Public Works Employees/Homeowners Associations				
BMP Description: Qualifying Local Program The Town of Old Saybrook currently has a BMP operation and maintenance program in place for town roads.				

Maintenance Bonds are established where BMP operation and maintenance are performed by Homeowners Associations.

Has Goal Been Accomplished: YES

Work Performed

Reduced Impervious Areas

Responsible Party: Christine Nelson, Town Planner

Start Date: 1/9/2004

End Date: 1/8/2009

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:

Design Engineers and Developers

BMP Description:

Qualifying Local Program

Article VI, Section 62.12.2 of the Town of Old Saybrook Zoning Regulations currently allows for utilization of pervious surfaces in low volume parking and loading areas.

Consider revising the Zoning Regulations, Subdivision Regulations and Design and Construction Specifications to allow for reduced pavement widths, non-curbed roads and reduced catch basins and storm drainage pipe.

Has Goal Been Accomplished: YES

Work Performed

Pollution Prevention/Good Housekeeping

Descriptive Text:

(A) Required Throughout the Municipality

(i) Develop and implement an operation and maintenance program that includes a training component for municipal employees and contractors and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations;

(ii) Using training materials that are available from the EPA, the State or 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, new construction and land disturbances, and stormwater system maintenance;

(iii) Develop and implement a program to sweep all streets at least once a year as soon as possible after snowmelt;

(iv) Develop and implement a program to evaluate and, if necessary, clean catch basins and other stormwater structures that accumulate sediment at least once a year, including a provision to identify and prioritize those structures that may require cleaning more than once a year; and

(v) Develop and implement a program to evaluate and, if necessary, prioritize for repairing, retrofitting or upgrading the conveyances, structures and outfalls of the MS4.

(B) Required Within the Urbanized Area:

(i) Develop and implement a program to evaluate and prioritize those streets that may require sweeping more than once a year.

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:

7

Important Dates:

Earliest Start Date: 1/9/2004

End Date: 1/8/2009

Details of BMPs and Work Performed for Them

Annual Catch Basin Cleaning

Responsible Party: Lawrence Bonin, Director of Public Works				
Start Date: 1/9/2004		End Date: 1/1/2009		
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: Department of Public Works Employees				
BMP Description: Qualifying Local Program				
Continue the townwide spring catch basin and other stormwater structures cleaning program.				
Develop and implement a program to identify and clean those catch basins and drainage structures that may require cleaning more than once a year townwide.				
Has Goal Been Accomplished: YES				

Work Performed

Annual Street Sweeping

Responsible Party: Lawrence Bonin, Director of Public Works				
Start Date: 1/9/2004		End Date: 1/8/2009		
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: Department of Public Works Employees				
BMP Description: Qualifying Local Program				
Continue the townwide annual spring street sweeping program				
Develop and implement a program to identify and sweep those streets within the Urbanized Area that may require sweeping more than once a year.				
Has Goal Been Accomplished: YES				

Work Performed

Continue Maintenance Schedule

Responsible Party: Lawrence Bonin, Director of Public Works				
Start Date: 1/9/2004		End Date: 1/8/2009		
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: Department of Public Works Employees				
BMP Description: Qualifying Local Program				

Continue the maintenance plan and schedule for management of BMPs.
Has Goal Been Accomplished: YES
Work Performed

Employee Training Materials					
Responsible Party: Lawrence Bonin, Director of Public Works					
Start Date: 1/9/2004			End Date: 1/8/2009		
Permits Years during which activities are scheduled:					
Year 1 <input checked="" type="checkbox"/>	Year 2 <input checked="" type="checkbox"/>	Year 3 <input checked="" type="checkbox"/>	Year 4 <input checked="" type="checkbox"/>	Year 5 <input checked="" type="checkbox"/>	
Name of Separate Implementing Entity: Department of Public Works Employees					
BMP Description: Qualifying Local Program					
Continue to develop a collection of training materials that will be used to educate Department of Public Works Employees about pollution prevention, pollution reduction and good housekeeping These resources will come from the EPA and the CTDEP and other sources.					
Has Goal Been Accomplished: YES					
Work Performed					

Information Management System					
Responsible Party: Lawrence Bonin, Director of Public Works					
Start Date: 1/9/2004			End Date: 1/8/2009		
Permits Years during which activities are scheduled:					
Year 1 <input checked="" type="checkbox"/>	Year 2 <input checked="" type="checkbox"/>	Year 3 <input checked="" type="checkbox"/>	Year 4 <input checked="" type="checkbox"/>	Year 5 <input checked="" type="checkbox"/>	
Name of Separate Implementing Entity: Not Applicable					
BMP Description: Qualifying Local Program					
An information management system is currently in place that is used to track the inventory of stormwater facilities and outfalls.					
Has Goal Been Accomplished: YES					
Work Performed					

Pollution Reduction					
Responsible Party: Lawrence Bonin, Director of Public Works					
Start Date: 1/9/2004			End Date: 1/8/2009		
Permits Years during which activities are scheduled:					
Year 1 <input checked="" type="checkbox"/>	Year 2 <input checked="" type="checkbox"/>	Year 3 <input checked="" type="checkbox"/>	Year 4 <input checked="" type="checkbox"/>	Year 5 <input checked="" type="checkbox"/>	
Name of Separate Implementing Entity: Department of Public Works					
BMP Description:					

Qualifying Local Program				
Continue the Spring and Fall Leaf Collection Program.				
Has Goal Been Accomplished: YES				
Work Performed				
Repair, Retrofit or Upgrade Conveyances, Structures and Outfalls				
Responsible Party: Lawrence Bonin, Director of Public Works				
Start Date: 1/9/2004			End Date: 1/8/2009	
Permits Years during which activities are scheduled:				
Year 1 <input checked="" type="checkbox"/>	Year 2 <input checked="" type="checkbox"/>	Year 3 <input checked="" type="checkbox"/>	Year 4 <input checked="" type="checkbox"/>	Year 5 <input checked="" type="checkbox"/>
Name of Separate Implementing Entity: Department of Public Works Employees				
BMP Description: Qualifying Local Program				
Continue to implement a program to evaluate and, if necessary, prioritize for repairing, retrofitting or upgrading the conveyances, structures and outfalls of the MS4.				
Has Goal Been Accomplished: YES				
Work Performed				

Section D

BMP Assignments by Responsible Party		
Public Education and Outreach		
Christine Nelson		
Develop Educational Resources		
	8/1/2006	1/8/2009
Expand Educational Resources		
	1/1/2007	1/8/2009
Michael Pace		
Pollution Reduction		
	8/9/2004	1/10/2005
Stephen Luckett		
Storm Drain Marker Program		
	8/1/2006	1/8/2009
Public Participation/Involvement		
Stephen Luckett		
Community Clean-ups		
	8/1/2006	1/8/2009
Create a Volunteer Organization		
	8/1/2006	1/8/2009
Public Information - Print Media		
	1/3/2005	1/8/2009
Public Information - Website Media		
	1/9/2004	1/8/2009
Illicit Discharge Detection and Elimination		
Household Hazardous Waste Collection		
	1/9/2004	1/8/2009
Stephen Luckett		
Implement an Illicit Discharge Detection and Elimination Program		
	8/1/2006	1/8/2009
Scott Martinson		
Implement an Information Management System for Tracking Illicit Discharges		
	8/1/2006	1/8/2009
Lawrence Bonin		
Recycling Program		
	1/9/2004	1/8/2009
Michael Pace		
Stormwater Ordinance		
	8/1/2006	1/8/2009
Stormwater Outfall Mapping - Year Four		
	1/1/2007	12/30/2007
Stormwater Outfall Mapping - Year Three		

	8/1/2006	12/28/2006
Stephen Lockett		
Stormwater Outfall Mapping - Year Two		
	8/1/2006	12/29/2006
Stormwater Sampling		
	6/28/2005	1/8/2009
Lawrence Bonin		
Train Employees		
	8/1/2006	1/8/2009
Construction Site Runoff Control		
Christina Costa		
Continue Inspection Program		
	1/9/2004	1/8/2009
Information Management System		
	1/9/2004	1/8/2009
Geoffrey Jacobson		
Make Developers Aware of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities		
	1/9/2004	1/8/2009
Christina Costa		
Maximum Compliance		
	1/9/2004	1/8/2009
Regulatory Mechanism		
	1/9/2004	1/8/2009
Site Plan Review		
	1/9/2004	1/8/2009
Staff Training		
	1/9/2004	1/8/2009
Post-Construction Runoff Control		
Michael Pace		
Develop and Implement BMP Strategies		
	8/1/2006	1/8/2009
Geoffrey Jacobson		
Identification of BMPs		
	1/9/2004	1/8/2009
Lawrence Bonin		
Long Term Operation and Maintenance of Stormwater BMPs		
	1/9/2004	1/8/2009
Christine Nelson		
Reduced Impervious Areas		
	1/9/2004	1/8/2009
Pollution Prevention/Good Housekeeping		
Lawrence Bonin		
Annual Catch Basin Cleaning		

	1/9/2004	1/1/2009
Annual Street Sweeping		
	1/9/2004	1/8/2009
Continue Maintenance Schedule		
	1/9/2004	1/8/2009
Employee Training Materials		
	1/9/2004	1/8/2009
Information Management System		
	1/9/2004	1/8/2009
Pollution Reduction		
	1/9/2004	1/8/2009
Repair, Retrofit or Upgrade Conveyances, Structures and Outfalls		
	1/9/2004	1/8/2009

