



Town of Hebron, Connecticut

Part B Registration

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

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Section A

Date Prepared: 2/1/2005

For questions regarding this report contact:

Andrew Tierney

15 Gilead Street, Post Office Box 156

Hebron, CT 06248-0156

Stormwater Program Permit Information

1. Permitting Authority: CTDEP Bureau of Water Management	
2. Permit Number: GSM000101	3. Permit Type: General Permit
4. Permit Name: General Permit for the Discharge of Stormwater from Small MS4s	
5. Date Issue: 1/9/2004	6. Date Expire: 1/8/2009

General Information for MS4 Operator

1. Operator Name:	Victoria Avelis		
2. Operator Title:	Chairman, Board of Selectman		
3. Represented Entity:	Town of Hebron		
4. Mailing Address:	15 Gilead Street, Post Office Box 156		
5. Mail City, State, Zip:	Hebron, CT 06248-0156		
6. Phone Number:	(860) 228-5971		
7. E-Mail Address:	vavelis@hebronct.com		
8. Co-Permitting With:	Not Applicable		
9. Population: 8,610	Households: 2,993	Area (sq mi): 38	
10. Official Website:	http://www.hebronct.com/		

General Information for Primary Contact Person

1. Name:	Andrew Tierney
2. Title:	Public Works Superintendent
3. Phone Number	(860) 228-2871
4. E-Mail Address:	hebronroadboss@aol.com

General Information for Secondary Contact Person

1. Name:	Michael O'Leary
2. Title:	Town Planner
3. Phone Number	(860) 228-5971
4. E-Mail Address:	moleary@hebronct.com

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
West Branch Daniels Brook Senate Brook	Bishop Swamp Warner Swamp Daly Swamp Merrow Swamp Warner Pond Amston Lake Jones Street Pond Holbrook Pond Robinson Pond Woods Pond Clubhouse Pond	3107 Burnap Brook 3108 Hop River 4701 Raymond Brook 4702 Judd Brook 4705 Jeremys River 4706 Fawn Brook 4707 Blackledge River

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		
	8/9/2004	1/8/2009
Expand Educational Resources		
	1/3/2005	1/8/2009
Pollution Reduction		
	8/9/2004	1/8/2009
Storm Drain Markers		
	4/4/2005	1/8/2009
Public Participation/Involvement		
Community Clean-ups		
	9/9/2004	1/8/2009
Create a Volunteer organization		
	4/11/2005	1/8/2009
Establish Citizen Watch Groups		
	1/10/2005	1/8/2009
Website Media - Print Media		
	1/10/2005	1/8/2009
Illicit Discharge Detection and Elimination		
Continuation of Detection and Elimination Efforts		
	1/10/2005	1/8/2009
Detection and Elimination		
	1/10/2005	1/8/2009
Implement an Information Management System for Tracking Illicit Discharges		
	1/10/2005	1/8/2009
Initial Identification of Illicit Discharge Sources		
	1/10/2005	1/1/2009
Recycling Program		
	1/9/2004	1/8/2009
Storm Sewer System Map		
	10/4/2004	1/8/2009
Stormwater Regulatory Mechanism		
	1/10/2005	1/6/2006
Stormwater Sampling		
	1/10/2005	7/19/2004
Train Employees		
	1/9/2004	6/11/2004
Construction Site Runoff Control		

Continue Inspection Program		
	1/9/2004	1/8/2009
Information Management System in Place		
	7/9/2004	1/8/2009
Maximum Compliance		
	1/9/2004	1/8/2009
Ordinance / Regulatory Mechanism		
	1/9/2004	1/8/2009
Staff Training		
	2/9/2005	1/8/2009
Post-Construction Runoff Control		
Identification of BMPs		
	1/3/2005	1/1/2009
Improved Water Quality		
	1/9/2006	1/8/2009
Publication of BMPs		
	1/7/2005	1/8/2009
Reduced Impervious Areas		
	1/7/2005	1/8/2009
Pollution Prevention/Good Housekeeping		
Catch Basin Cleaning		
	1/9/2004	1/8/2009
Continue Pollution Prevention Plan		
	1/9/2004	1/8/2009
Employee Training Materials		
	1/9/2004	1/8/2009
Information Management System		
	1/9/2004	1/8/2009
Maintenance Program Effectiveness		
	1/9/2004	1/8/2009
Street Sweeping		
	1/9/2004	1/8/2009
Train Employees		
	1/9/2004	1/8/2009

Section C

Public Education and Outreach

Descriptive Text:

To satisfy this minimum control measure, the operator of a regulated small MS4 needs to:

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1. 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 can be taken to reduce storm water pollution; and

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2. Determine the appropriate best management practices (BMPs) and measurable goals for this minimum control measure.

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

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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

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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: Andrew Tierney, Public Works Superintendent

Start Date: 8/9/2004

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:

Town of Hebron Webmaster

BMP Description:

Develop an infra-structure resource to support the public education and outreach program. Purchase "Introduction to Stormwater", "Lawn Care" and "Citizen Involvement" from ASIST and install on the Town of Hebron Website. Provide links to EPA, Center for Watershed Protection and other stormwater sites on the Town of Hebron Website.

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Develop brochures to support the Public Meetings - Print Media Goal in the Public Participation and Involvement Minimum Control Measure.

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Has Goal Been Accomplished: NO

Work Performed**Expand Educational Resources**

Responsible Party: Andrew Tierney, Public Works Superintendent

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:

Town of Hebron Webmaster

BMP Description:

This goal is for developing infra-structure resource to support your public education and outreach program.

☐

Develop a school curricula that can be used to educate students about storm water issues.

Has Goal Been Accomplished: NO

Work Performed**Pollution Reduction**

Responsible Party: Andrew Tierney, Public Works Superintendent

Start Date: 8/9/2004

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:

Town of Hebron Sanitarian

BMP Description:	
Qualifying Local Program	
<input type="checkbox"/> This goal is used to help in your efforts to reduce pollution being introduced into your storm water sewer system.	
<input type="checkbox"/> A certain percentage of restaurants are no longer dumping grease and other pollutants down storm sewer drains.	
Has Goal Been Accomplished: YES	
Work Performed	

Storm Drain Markers				
Responsible Party: Andrew Tierney, Public Works Superintendent				
Start Date: 4/4/2005		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:				
Eagle Scouts, Girl Scouts, RHAM Science Students				
BMP Description:				
Obtain markers from the CTDEP and Install on catch basin heads that read "Drains to Waterways and Long Island Sound, No Dumping".				
Has Goal Been Accomplished: NO				
Work Performed				

Public Participation/Involvement

Descriptive Text:

To satisfy this minimum control measure, the operator of a regulated small MS4 must:

- ☐ 1. Comply with applicable State, Tribal, and local public notice requirements; and
- ☐ 2. Determine the appropriate best management practices (BMPs) and measurable goals for this minimum control measure.
- ☐ 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: 9/9/2004

End Date: 1/8/2009

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

Responsible Party: Andrew Tierney, Public Works Superintendent

Start Date: 9/9/2004

End Date: 1/8/2009

Permits Years during which activities are scheduled:

Year 1

Year 2

Year 3

Year 4

Year 5

Name of Separate Implementing Entity:

RHAM Science Students, River Groups, Interested Residents

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: Andrew Tierney, Public Works Superintendent

Start Date: 4/11/2005

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:

RHAM High School Science Students, Boy Scouts, Girl Scouts, Land Use Commission Members

BMP Description:

The volunteer organization created will be used to install storm drain markers.

Has Goal Been Accomplished: NO

Work Performed**Establish Citizen Watch Groups**

Responsible Party: Andrew Tierney, Public Works Superintendent

Start Date: 1/10/2005

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:

Land Use Commission Members

BMP Description:

Establish citizen watch groups in a certain percentage of neighborhoods and complete outreach to every different population sector.

Has Goal Been Accomplished: NO

Work Performed**Website Media - Print Media**

Responsible Party: Andrew Tierney, Public Works Superintendent

Start Date: 1/10/2005

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: Town of Hebron Webmaster				
BMP Description: Purchase and install Public Education Tools consisting of "Introduction to Stormwater", "Lawn Care" and "Citizen Involvement" onto the Town of Hebron website. <input type="checkbox"/> Notify citizens of website stormwater education media in the River East newspaper.				
Has Goal Been Accomplished: NO				
Work Performed				

Illicit Discharge Detection and Elimination

Descriptive Text:

Recognizing the adverse effects illicit discharges can have on receiving waters, the final rule requires an operator of a regulated small MS4 to develop, implement and enforce an illicit discharge detection and elimination program. This program must include the following:

- ☐ 1. A storm sewer system map, showing the location of all outfalls and the names and location of all waters of the United States that receive discharges from those outfalls;
- ☐ 2. Through an ordinance, or other regulatory mechanism, a prohibition (to the extent allowable under State or local law) on non-storm water discharges into the MS4, and appropriate enforcement procedures and actions;
- ☐ 3. A plan to detect and address non-storm water discharges, including illegal dumping, into the MS4;
- ☐ 4. The education of public employees, businesses, and the general public about the hazards associated with illegal discharges and improper disposal of waste; and
- ☐ 5. The determination of appropriate best management practices (BMPs) and measurable goals for this minimum control measure.

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:

9

Important Dates:

Earliest Start Date: 1/9/2004
End Date: 1/8/2009

Details of BMPs and Work Performed for Them**Continuation of Detection and Elimination Efforts**

Responsible Party: Andrew Tierney, Public Works Superintendent

Start Date: 1/10/2005

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:

Nathan I. Jacobson & Associates, Inc.

BMP Description:

Building on the work begun in the year 1 goal 'Detection and Elimination' efforts will continue so that by the end of year 5 most illicit discharges will have been detected and eliminated.

Has Goal Been Accomplished: NO

Work Performed**Detection and Elimination**

Responsible Party: Andrew Tierney, Public Works Superintendent

Start Date: 1/10/2005

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:

Hebron Property Owners, Hebron WPCA, Nathan L. Jacobson & Associates, Inc.

BMP Description:

Building on work performed in the first year a certain percentage of illicit discharges will now have been detected and eliminated. Detection and elimination efforts will be documented so that an end of year report will detail all illicit discharges that were found, which ones were eliminated and what remedial actions were taken.

Has Goal Been Accomplished: NO

Work Performed**Implement an Information Management System for Tracking Illicit Discharges**

Responsible Party: Steven Knauf, Chatham Health District Sanitarian

Start Date: 1/10/2005

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:

Nathan L. Jacobson & Associates, Inc.

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:

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1. The number of outfalls screened

☐

2. The number of illicit discharges discovered during outfall screening.

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3. The number of illicit discharges discovered as a result of citizen complaints.

<input type="checkbox"/>	4. The number of illicit discharges that were resolved.
<input type="checkbox"/>	5. The number of Dye or Smoke tests conducted.
Has Goal Been Accomplished: NO	

Work Performed

Initial Identification of Illicit Discharge Sources					
Responsible Party: Andrew Tierney, Public Works Superintendent					
Start Date: 1/10/2005			End Date: 1/1/2009		
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: Nathan L. Jacobson & Associates, Inc.					
BMP Description: Begin process of identifying potential sources from where illicit discharges can emanate. Areas to look for are:					
<input type="checkbox"/>					
1. The intensely developed Amston Lake area.					
Has Goal Been Accomplished: NO					

Work Performed

Recycling Program					
Responsible Party: Andrew Tierney, Public Works Superintendent					
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: Town of Hebron Residents					
BMP Description: Qualifying Local Program					
<input type="checkbox"/>					
Continue the recycling program.					
<input type="checkbox"/>					
The Town of Hebron participates in the Capital Region East Operating Committee (CREOC) serving the residents of Glastonbury, Hebron, Manchester, Marlborough, Somers, Stafford and Vernon.					
<input type="checkbox"/>					
The Town of Hebron participated in a CREOC Household Hazardous Waste Collection on 04/03/04, 04/17/04, 05/08/04, 05/22/04, 06/05/04, 06/19/04, 09/11/04, 09/25/04, 10/09/04, 10/23/04 and 11/06/04 from 8:00 A.M. to 1:00 P.M. which included a mercury thermometer exchange, safe disposal of oil and lead based paints, stains acids, automotive fluids, insecticides, herbicides, fertilizers, chemicals, household cleaning products, and other hazardous materials which accumulate in the home, basement or garage.					
<input type="checkbox"/>					
The Town of Hebron also participated in an Electronics Collection Day on 05/15/04 and 09/18/04 at the Hazardous Waste Facility in Manchester which included collection of computer processing units, computer monitors, printers, fax machines, televisions, stereo equipment and cell phones. All collected					

materials were recycled or salvaged.

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CREOC also has a Leaf Composting Program which accepts leaves collected in paper bags at the curb from March 15 to January 15.

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The Town Transfer Station collects items to be recycled including newspapers and magazines, cardboard, glass, metal, HDPE 2 and PETE 1 plastic beverage and food containers, lead acid batteries, NiCad rechargeable batteries, motor oil, antifreeze, tires, scrap metal (including empty aerosol cans, paint cans and gas cylinders), bulky waste, and yard waste.

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Has Goal Been Accomplished: YES

Work Performed

Storm Sewer System Map

Responsible Party: Andrew Tierney, Public Works Superintendent

Start Date: 10/4/2004

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:

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.

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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 Hebron. 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.

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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 Hebron.

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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.

Has Goal Been Accomplished: NO

Work Performed

Stormwater Regulatory Mechanism

Responsible Party: Michael O'Leary, Town Planner

Start Date: 1/10/2005

End Date: 1/6/2006

Permits Years during which activities are scheduled:

Year 1

Year 2 **X**

Year 3

Year 4

Year 5

Name of Separate Implementing Entity:

Planning & Zoning Commission

BMP Description:

Develop an ordinance or other regulatory mechanism that will prohibit (to the extent allowable under State or local law) all non-storm water discharges into the MS4. This ordinance will include appropriate enforcement procedures and actions such as:

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1. Fines

☐

2. Civil penalties

Has Goal Been Accomplished: NO

Work Performed

Stormwater Sampling

Responsible Party: Andrew Tierney, Public Works Superintendent

Start Date: 1/10/2005

End Date: 7/19/2004

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:

Nathan L. Jacobson & Associates, Inc.

BMP Description:

Stormwater monitoring shall be conducted by the Town of Hebron 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 Hebron that the drainage area of each outfall is representative of the overall nature of the respective land use type.

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Parameters to be monitored for each sample include:

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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: Andrew Tierney, Public Works Superintendent					
Start Date: 1/9/2004			End Date: 6/11/2004		
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. <input type="checkbox"/> The Town of Hebron currently has a program to administer a training program to employees that will help them to identify illicit discharges. <input type="checkbox"/> Andrew Tierney, Public Works Superintendent will make Public Woprk Employees aware of methods to detect illicit dischrages as contained in the NEIWPCC publication "Illicit Discharge Detection and Elimination Manual, A Handbook for Municipalities".					
Has Goal Been Accomplished: NO					

Work Performed

Construction Site Runoff Control

Descriptive Text:

The Phase II Final Rule requires an operator of a regulated small MS4 to develop, implement, and enforce a program to reduce pollutants in storm water runoff to their MS4 from construction activities that result in a land disturbance of greater than or equal to one acre.

The small MS4 operator is required to:

- ☐ 1. Have an ordinance or other regulatory mechanism requiring the implementation of proper erosion and sediment controls, and controls for other wastes, on applicable construction sites;
- ☐ 2. Have procedures for site plan review of construction plans that consider potential water quality impacts;
- ☐ 3. Have procedures for site inspection and enforcement of control measures;

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4. Have sanctions to ensure compliance (established in the ordinance or other regulatory mechanism);

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5. Establish procedures for the receipt and consideration of information submitted by the public; and

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6. Determine the appropriate best management practices (BMPs) and measurable goals for this minimum control measure.

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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.

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Table 1

Pollutants Commonly Discharged From Construction Sites

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Sediment

Solid and sanitary wastes

Phosphorous (fertilizer)

Nitrogen (fertilizer)

Pesticides

Oil and grease

Concrete truck washout

Number of BMPs associated with control measure:

5

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: John Soderberg, 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:

Not Applicable

BMP Description:

Qualifying Local Program

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Continue inspections of construction sites to determine the overall compliance that is being achieved by construction operators.

Has Goal Been Accomplished: NO

Work Performed**Information Management System in Place**

Responsible Party: John Soderberg, Wetlands Enforcement Officer

Start Date: 7/9/2004

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 an information management system designed to track information submitted by the public and record staff inspections of construction sites will be put in place.

☐

Develop site inspection procedures that will be used by staff in the performance of construction site inspections.

Has Goal Been Accomplished: NO

Work Performed**Maximum Compliance**

Responsible Party: John Soderberg, 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:

Not Applicable

BMP Description:

Qualifying Local Program

<input type="checkbox"/>	Continue the inspection program until the maximum compliance possible is achieved. Compliance and non-compliance will be documented through the Information Management System.
Has Goal Been Accomplished: NO	
Work Performed	

Ordinance / Regulatory Mechanism					
Responsible Party: Michael O'Leary, 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: Planning & Zoning Commission					
BMP Description: Qualifying Local Program					
<input type="checkbox"/> Under the extent allowable by law an ordinance or other regulatory mechanism will be put in place that will provide the ability to regulate polluted runoff that emanates from construction sites. <input type="checkbox"/> The Town of Hebron currently has Soil Erosion and Sediment Control requirements in the Planning & Zoning Regulations and the Subdivision Regulations. The Planning & Zoning Regulations and the Subdivision Regulations will be updated to reflect effective BMPs contained in the 2000 Connecticut Department of Transportation Drainage Manual, 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, 2004 Connecticut Stormwater Quality Manual, The Practice of Watershed Protection and Controlling Urban Runoff: A practical Manual for Planning and Designing Urban BMPs.					
Has Goal Been Accomplished: NO					
Work Performed					

Staff Training					
Responsible Party: Michael O'Leary, Town Planner					
Start Date: 2/9/2005			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: John Soderberg, Wetlands Enforcement Officer					
BMP Description: Qualifying Local Program					
<input type="checkbox"/> Continue to arrange to train staff in Construction inspection procedures. <input type="checkbox"/> Attend CTDEP Inland Wetlands Official Training Sessions.					
Has Goal Been Accomplished: YES					
Work Performed					

Post-Construction Runoff Control

Descriptive Text:

The Phase II Final Rule requires an operator of a regulated small MS4 to develop, implement, and enforce a program to reduce pollutants in post-construction runoff to their MS4 from new development and redevelopment projects that result in the land disturbance of greater than or equal to 1 acre. The small MS4 operator is required to:

- ☐ 1. Develop and implement strategies which include a combination of structural and/or non-structural best management practices (BMPs);
- ☐ 2. Have an ordinance or other regulatory mechanism requiring the implementation of post-construction runoff controls to the extent allowable under State, Tribal or local law,
- ☐ 3. Ensure adequate long-term operation and maintenance of controls;
- ☐ 4. Determine the appropriate best management practices (BMPs) and measurable goals for this minimum control measure.

☐ 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: 1/3/2005

End Date: 1/8/2009

Details of BMPs and Work Performed for Them**Identification of BMPs**

Responsible Party: Michael O'Leary, Town Planner

Start Date: 1/3/2005

End Date: 1/1/2009

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:

Nathan L. Jacobson & Associates, Inc.

BMP Description:

Identify and develop a mix of Structural and Non-Structural BMPs that are appropriate for this geographic area. This BMP list will include BMPs suited for both redevelopment and new development. These BMPs will also be used in the 'Construction Site Runoff Control' minimum measure.

☐ The Town of Hebron will revise the Planning & Zoning Regulations and the Subdivision Regulations to reflect effective Post-Construction BMPs contained in the 2000 Connecticut Department of Transportation Drainage Manual, 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, 2004 Connecticut Stormwater Quality Manual, The Practice of Watershed Protection and Controlling Urban Runoff: A Practical Manual for Planning and Designing Urban BMPs.

Has Goal Been Accomplished: NO

Work Performed**Improved Water Quality**

Responsible Party: Andrew Tierney, Public Works Superintendent

Start Date: 1/9/2006

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:

Nathan L. Jacobson & Associates, Inc.

BMP Description:

Compile the stormwater sampling laboratory results that began in 2004 and continue stormwater sampling through 2008. Tabulate and graph the stormwater sampling results to determine if the ordinance and regulatory mechanisms have been effective in stormwater runoff quality.

Has Goal Been Accomplished: NO

Work Performed**Publication of BMPs**

Responsible Party: Michael O'Leary, Town Planner

Start Date: 1/7/2005

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:

Nathan L. Jacobson & Associates, Inc.

BMP Description:

Codify the BMPs identified in the year one goal 'Identification of BMPs' through regulatory or other appropriate mechanism. Publish the list of BMPs and make them available to developers, citizens and staff.

☐

The Town of Hebron will revise the Planning & Zoning Regulations and the Subdivision Regulations to reflect effective Post-Construction BMPs contained in the 2000 Connecticut Department of Transportation Drainage Manual, 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, 2004 Connecticut Stormwater Quality Manual, The Practice of Watershed Protection and Controlling Urban Runoff: A Practical Manual for Planning and Designing Urban BMPs.

Has Goal Been Accomplished: NO

Work Performed

Reduced Impervious Areas

Responsible Party: Michael O'Leary, Town Planner

Start Date: 1/7/2005

End Date: 1/8/2009

Permits Years during which activities are scheduled:

Year 1

Year 2

Year 3

Year 4

Year 5

Name of Separate Implementing Entity:

Nathan L. Jacobson & Associates, Inc.

BMP Description:

Perform the same analysis of construction projects identified in the year one goal, 'Identification of BMPs', this time using year three construction permit data. Identify the percent of new impervious areas that are attributable to new development projects and compare it with the baseline data developed in year one.

Has Goal Been Accomplished: NO

Work Performed

Pollution Prevention/Good Housekeeping

Descriptive Text:

Recognizing the benefits of pollution prevention practices, the rule requires an operator of a regulated small MS4 to:

☐

1. Develop and implement an operation and maintenance program with the ultimate goal of preventing or reducing pollutant runoff from municipal operations into the storm sewer system;

☐

2. Include employee training on how to incorporate pollution prevention/good housekeeping techniques into municipal operations such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance. To minimize duplication of effort and conserve resources, the MS4 operator can use training materials that are available from EPA, their State or Tribe, or relevant organizations;

☐

3. Determine the appropriate best management practices (BMPs) and measurable goals for this minimum control measure.

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**Catch Basin Cleaning**

Responsible Party: Andrew Tierney, Public Works Superintendent

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:

Catch Basin Cleaning Subcontractor

BMP Description:

Qualifying Local Program

☐

The Town of Hebron subcontracts annual townwide catch basin cleaning which is conducted from in May and June. A Hebron Department of Public Works employee inspects the catch basin cleaning.

☐

Has Goal Been Accomplished: NO

Work Performed**Continue Pollution Prevention Plan**

Responsible Party: Andrew Tierney, Public Works Superintendent

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

☐

The Town of Hebron has developed a comprehensive Pollution Prevention Plan that identifies items such as:

☐

1. BMPs
2. Management Practices and Maintenance Schedules
3. Recycling Efforts
4. Waste Disposal Guidelines
5. Areas of Concern

Has Goal Been Accomplished: NO

Work Performed**Employee Training Materials**

Responsible Party: Andrew Tierney, Public Works Superintendent

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

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

Name of Separate Implementing Entity:

Department of Public Works Employees

BMP Description: Qualifying Local Program	
<input type="checkbox"/> The Town of Hebron has developed a collection of training materials that will be used to educate staff about pollution prevention and good housekeeping. These resources will come from applicable external sources, such as the EPA, and may be supplemented with materials developed by Nathan L. Jacobson & Associates, Inc.	
Has Goal Been Accomplished: NO	
Work Performed	

Information Management System					
Responsible Party: Andrew Tierney, Public Works Superintendent					
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					
<input type="checkbox"/> The Town of Hebron currently has an information management system in place that can be used to track the inventory of stormwater facilities and outfalls. This system is used by staff to schedule and perform inspections, maintenance activities and document any other actions taken.					
Has Goal Been Accomplished: NO					
Work Performed					

Maintenance Program Effectiveness					
Responsible Party: Andrew Tierney, Public Works Superintendent					
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					
<input type="checkbox"/> Identify the number of facilities and controls that have received maintenance as a result of the 'Maintenance Schedule'. Document the overall compliance with the schedule and explain any discrepancies.					
Has Goal Been Accomplished: YES					
Work Performed					

Street Sweeping	
Responsible Party: Andrew Tierney, Public Works Superintendent	
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				
BMP Description: Qualifying Local Program <input type="checkbox"/> Develop and implement a program to sweep all streets at least once a year as soon as possible after snowmelt. <input type="checkbox"/> The Town of Hebron currently conducts annual townwide street sweeping starting on, or about, March 15th and completed in early April.				
Has Goal Been Accomplished: YES				
Work Performed				
Train Employees				
Responsible Party: Andrew Tierney, Public Works Superintendent				
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 <input type="checkbox"/> Continue to train staff on pollution prevention and good housekeeping. <input type="checkbox"/> Department of Public Works employees attend training at University of Connecticut training sessions.				
Has Goal Been Accomplished: YES				
Work Performed				

Section D

BMP Assignments by Responsible Party		
Public Education and Outreach		
Andrew Tierney		
Develop Educational Resources		
	8/9/2004	1/8/2009
Expand Educational Resources		
	1/3/2005	1/8/2009
Pollution Reduction		
	8/9/2004	1/8/2009
Storm Drain Markers		
	4/4/2005	1/8/2009
Public Participation/Involvement		
Andrew Tierney		
Community Clean-ups		
	9/9/2004	1/8/2009
Create a Volunteer organization		
	4/11/2005	1/8/2009
Establish Citizen Watch Groups		
	1/10/2005	1/8/2009
Website Media - Print Media		
	1/10/2005	1/8/2009
Illicit Discharge Detection and Elimination		
Andrew Tierney		
Continuation of Detection and Elimination Efforts		
	1/10/2005	1/8/2009
Detection and Elimination		
	1/10/2005	1/8/2009
Steven Knauf		
Implement an Information Management System for Tracking Illicit Discharges		
	1/10/2005	1/8/2009
Andrew Tierney		
Initial Identification of Illicit Discharge Sources		
	1/10/2005	1/1/2009
Recycling Program		
	1/9/2004	1/8/2009
Storm Sewer System Map		
	10/4/2004	1/8/2009
Michael O'Leary		
Stormwater Regulatory Mechanism		
	1/10/2005	1/6/2006
Andrew Tierney		
Stormwater Sampling		
	1/10/2005	7/19/2004

Andrew Tierney		
Train Employees		
	1/9/2004	6/11/2004
Construction Site Runoff Control		
John Soderberg		
Continue Inspection Program		
	1/9/2004	1/8/2009
Information Management System in Place		
	7/9/2004	1/8/2009
Maximum Compliance		
	1/9/2004	1/8/2009
Michael O'Leary		
Ordinance / Regulatory Mechanism		
	1/9/2004	1/8/2009
Staff Training		
	2/9/2005	1/8/2009
Post-Construction Runoff Control		
Michael O'Leary		
Identification of BMPs		
	1/3/2005	1/1/2009
Andrew Tierney		
Improved Water Quality		
	1/9/2006	1/8/2009
Michael O'Leary		
Publication of BMPs		
	1/7/2005	1/8/2009
Reduced Impervious Areas		
	1/7/2005	1/8/2009
Pollution Prevention/Good Housekeeping		
Andrew Tierney		
Catch Basin Cleaning		
	1/9/2004	1/8/2009
Continue Pollution Prevention Plan		
	1/9/2004	1/8/2009
Employee Training Materials		
	1/9/2004	1/8/2009
Information Management System		
	1/9/2004	1/8/2009
Maintenance Program Effectiveness		
	1/9/2004	1/8/2009
Andrew Tierney		
Street Sweeping		
	1/9/2004	1/8/2009
Andrew Tierney		

Train Employees		
	1/9/2004	1/8/2009