Town of Chester, Connecticut

Part B Registration

Stormwater Management Plan

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

Table of Contents

Date Prepared: 3/10/2005

For questions regarding this report contact:
Martin L. Heft
203 Middlesex Avenue, Post Office Box 218
Chester, CT 06412-0218

Stormwater Program Permit Information	
1. Permitting Authority: CTDEP Bureau of Water Management	
2. Permit Number: GSM000058	**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:	Martin L. Heft		
2. Operator Title:	First Selectman		
3. Represented Entity:	Town of Chester		
4. Mailing Address:	203 Middlesex Avenue, Post Office Box 218		
5. Mail City, State, Zip:	Chester, CT 06412-0218		
6. Phone Number:	(860) 526-0013		
7. E-Mail Address:	FirstSelectman@chesterct.com		
8. Co-Permitting With:	Not Applicable		
9. Population: 3,743	**Households:** 1,510	**Area (sq mi):** 16	
10. Official Website:	www.chesterct.com		

General Information for Primary Contact Person	
1. Name:	Martin L. Heft
2. Title:	First Selectman
3. Phone Number	(860) 526-0013
4. E-Mail Address:	FirstSelectman@chesterct.com

General Information for Secondary Contact Person	
1. Name:	Josephine Costanzo-Nicholson
2. Title:	Administrative Assistant
3. Phone Number	(860) 526-0013
4. E-Mail Address:	AdminAsst@chesterct.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**
Burr Brook Pattaconk Brook Waterhouse Brook	Cedar Lake Deep Hollow Reservoir - Connecticut Water Company Dueses Pond Jennings Pond Pattaconk Reservoir - State of Connecticut DEP Upper Pond Waterhouse Pond - Connecticut Water Company	4000 Connecticut River 4017 Chester Creek 4018 Deep 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		
	1/9/2004	12/31/2004
Expand Educational Resources		
	1/9/2004	1/8/2009
Pollution Reduction		
	6/8/2004	12/16/2004
Pollution Reduction		
	12/2/1997	1/8/2009
Storm Drain Marking Program		
	6/8/2004	12/16/2004
Public Participation/Involvement		
Community Clean-Ups		
	6/8/2004	12/16/2004
Continue a Volunteer Organization		
	1/9/2004	1/8/2009
Establish a Citizen Panel		
	1/9/2004	1/8/2009
Establish Citizen Watch Groups		
	1/10/2005	1/8/2009
Public Involvement - Public Access Television Media		
	1/9/2004	1/8/2009
Stormwater Issues - Print Media		
	1/9/2004	1/8/2009
Illicit Discharge Detection and Elimination		
Continuation of Detection and Elimination Efforts		
	1/9/2004	1/8/2009
Detection and Elimination		
	6/8/2004	1/8/2009
Household Hazardous Waste Collection		
	1/9/2004	1/8/2009
Implement an Information Management System for Tracking Illicit Discharges		
	6/8/2004	12/16/2004
Initial Identification of Illicit Discharge Sources		
	1/10/2005	1/8/2009
Recycling Program		
	8/5/2003	1/8/2009
Storm Sewer System Outfall Map		

	1/10/2005	1/6/2006
Stormwater Ordinance/Regulatory Mechanism		
	1/10/2005	1/6/2006
Stormwater Sampling		
	12/7/2004	12/8/2004
Train Employees		
	1/10/2005	1/6/2006
Construction Site Runoff Control		
Continue Construction Inspection Program		
	1/9/2004	1/8/2009
Continue Staff Training		
	1/9/2004	1/8/2009
Information Management System in Place		
	1/9/2004	1/8/2009
Maximum Compliance		
	1/9/2004	1/9/2009
Regulatory Mechanism		
	1/9/2004	1/8/2009
Post-Construction Runoff Control		
Identification of BMPs		
	6/8/2004	1/29/2005
Monitor Stormwater Sampling Results - Improved Water Quality		
	1/10/2005	2/2/2005
Publication of BMPs		
	1/10/2005	1/6/2006
Reduced Impervious Areas		
	1/11/2005	1/8/2009
Stormwater Runoff Program		
	2/3/2005	2/4/2005
Pollution Prevention/Good Housekeeping		
Develop Pollution Prevention Plan		
	1/10/2005	1/29/2005
Employee Training Materials		
	1/9/2004	1/8/2009
Incorporation of BMPs into Regulations and the Plan of Development		
	1/10/2005	1/8/2009
Information Management System		
	1/9/2004	1/8/2009
Maintenance Program Effectiveness		
	1/9/2004	1/8/2009
Maintenance Schedule		
	1/9/2004	1/8/2009
Repair, Retrofit or Upgarde Stormwater Conveyances, Structures and Outfalls		
	1/9/2004	1/8/2009

Train Employees		
	1/3/2005	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:

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

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

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:

5

Important Dates:

Earliest Start Date: 12/2/1997

End Date: 1/8/2009

Details of BMPs and Work Performed for Them

Develop Educational Resources

Responsible Party: Martin Heft, First Selectman

Start Date: 1/9/2004	End Date: 12/31/2004

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:
Town Residents

BMP Description:
Qualifying Local Program

Direct Mail

Chester Events quarterly newsletter is mailed to all 2100 postal patrons in the Town. Included with each newsletter is a section on Public Roads and Bridges that describes upcoming projects and scopes of work. Issues also contain articles on pollution, groundwater runoff and various educational topics from the Chester Inland Wetlands and Watercourses Agency.

Watershed Maps

Provide better access to watershed subregional basin maps and surface water flow direction maps.

Installed pdf format maps developed by the CTDEP and UConn NEMO onto the Town of Chester Stormwater Phase II webpage in the Services and Information section of the town website.

Household Hazardous Waste Program

Installed Household Hazardous Waste Program information onto the Town of Chester Stormwater Phase II Webpage in the Services and Information section of the town website.

Recycling and Bulky Waste Program

Installed Recycling and Bulky Waste Program information onto the Town of Chester Stormwater Phase II webpage in the Services and Information section of the town website.

Septic System Care

Installed Septic System Care information onto the Town of Chester Stormwater Phase II webpage in the Services and Information section of the town website.

Provide stormwater education links on the Town of Chester Stormwater Phase II webpage in the Services and Information section of the town website.

Has Goal Been Accomplished: YES

Work Performed

Expand Educational Resources

Responsible Party: Martin Heft, First Selectman

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 ☐ This goal is for developing infra-structure resource to support your public education and outreach program. ☐ Continue to build an informational website that describes storm water issues. ☐ Develop a school curricula that can be used to educate students about storm water issues.
Has Goal Been Accomplished: YES

Work Performed

Pollution Reduction	
Responsible Party: Lee Vito, Town Sanitarian	
Start Date: 6/8/2004	End Date: 12/16/2004
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: Deli/Restaurant Owners	
BMP Description: Qualifying Local Program ☐ This goal is used to help in your efforts to reduce pollution being introduced into your storm water sewer system. ☐ Restaurants are prohibited from dumping grease and other pollutants down storm sewer drains.	
Has Goal Been Accomplished: YES	

Work Performed

Pollution Reduction	
Responsible Party: Martin Heft, First Selectman	
Start Date: 12/2/1997	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 Chester Residents	
BMP Description: Qualifying Local Program ☐ This goal is used to help increase your efforts to reduce pollution being introduced into your stormwater sewer system.	

A certain percentage reduction in litter and/or animal waste detected in stormwater discharges.

The Town of Chester adopted an Ordinance Concerning Removal of Animal Wastes with violations punishable by a fine of $50 pursuant to a Town Meeting held on December 2, 1997.

Has Goal Been Accomplished: YES

Work Performed

Storm Drain Marking Program	
Responsible Party: Patricia Pendergast, Planning and Zoning Commission Member	
Start Date: 6/8/2004	End Date: 12/16/2004
Permits Years during which activities are scheduled: Year 1 **X** Year 2 Year 3 Year 4 Year 5	
Name of Separate Implementing Entity: Patricia Pendergast	
BMP Description: Obtain and install storm drain markers provided by the CTDEP Long Island Sound Fund to catch basin frames. 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: YES	

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 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:

6

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: Martin Heft, First Selectman

Start Date: 6/8/2004 | End Date: 12/16/2004

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:
Harbor Management Commission Members, Chester Land Trust Members

BMP Description:
Involve a certain percentage of the community through this organization to help in community clean-ups of Chester Creek and Town Center.

Has Goal Been Accomplished: YES

Work Performed

Continue a Volunteer Organization

Responsible Party: Martin Heft, First Selectman

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:
Harbor Management Commission Members, Chester Land Trust Members

BMP Description:
Qualifying Local Program

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

Has Goal Been Accomplished: YES

Work Performed

Establish a Citizen Panel

Responsible Party: Martin Heft, First Selectman

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:
Inland Wetlands and Watercourses Agency Members, Planning and Zoning Commission Members

BMP Description:
Qualifying Local Program

Create a citizen panel that will be used to discuss and come up with plans for different storm water issues.

Use this panel for citizen discussion of various viewpoints and provide input concerning appropriate storm water management policies and BMPs.

Has Goal Been Accomplished: YES
Work Performed

Establish Citizen Watch Groups	
Responsible Party: Martin Heft, First Selectman	
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: Planning and Zoning Commission Members, Inland Wetlands and Watercourses Agency 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	

Public Involvement - Public Access Television Media	
Responsible Party: Martin Heft, First Selectman	
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: Public Access Televison Station	
BMP Description: Qualifying Local Program ☐ Public Access Television spots aired promoting storm water program participation.	
Has Goal Been Accomplished: YES	
Work Performed	

Stormwater Issues - Print Media	
Responsible Party: Martin Heft, First Selectman	
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: Chester Residents	
BMP Description: Qualifying Local Program ☐ Notify citizens of stormwater Issues in print media. ☐ Chester Events Quarterly newesletter is mailed to all 2,100 postral patrons in Chester. Included with each newsletter is a section on Public Roads and Bridges that describes upcoming projects and scopes	

of work. The newsletter also contains articles on pollution. groundwater runoff and various topics from the Inland Wetlands and Watercourses Agency.
Has Goal Been Accomplished: YES

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:

10

Important Dates:

Earliest Start Date: 8/5/2003

End Date: 1/8/2009

Details of BMPs and Work Performed for Them

Continuation of Detection and Elimination Efforts

Responsible Party: Lee Vito, Town Sanitarian

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 LocalProgram

Continue 'Illicit Discharge Detection and Elimination' efforts.

Has Goal Been Accomplished: YES

Work Performed

Detection and Elimination

Responsible Party: Lee Vito, Town Sanitarian

Start Date: 6/8/2004 | 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

Continue the illicit Discharge Detection and Elimination efforts and include in the annual report what illicit discharges were found, which ones were eliminated and what remedial actions were taken.

Has Goal Been Accomplished: YES

Work Performed

Household Hazardous Waste Collection

Responsible Party: Martin Heft, First Selectman

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:
Chester Residents

BMP Description:
Qualifying Local Program

The Town of Chester particiates in the Estuary Region Household Hazardous Waste Facility. The facility is open on sixteen Saturdays from 9:00 A.M. to 1:00 P.M. from May to October.

The Estuary Region Household Hazardous Waste Facility accepts the following items from the household:

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.

The Estuary Region Household Hazardous Waste Facility accepts the following items from the garage:

Propane Torch Cylinders, Old Chemistry Sets, Transmission Fluid, Gasoline, Kerosene, Waxes, Polishes, Brake Fluid and Rust Preventatives.

The Estuary Region Household Hazardous Waste Facility accepts the following items from the workshop:

Rust Preventitives, Wood Preservatives, Wood Strippers, Oil-Based Paints, Lead-Based Paints, Paint Thinners, Degreasers, Solvents and Sealants.

The Estuary Region Household Hazardous Waste Facility accepts the following items from the yard and garden:

Weed Killers, Insect Sprays, Rodent Poisons, Muriatic Acid, Pool Chemicals and Cesspool Cleaners.

Has Goal Been Accomplished: NO

Work Performed

Implement an Information Management System for Tracking Illicit Discharges

Responsible Party: Wade Thomas, Hydrogeologist

Start Date: 6/8/2004	End Date: 12/16/2004

Permits Years during which activities are scheduled:

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

Name of Separate Implementing Entity:
Not Applicable

BMP Description:
Develop an information Management System that 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: YES

Work Performed

Initial Identification of Illicit Discharge Sources	
Responsible Party: Wade Thomas, Hydrogeologist	
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: David Campbell	
BMP Description: Begin process of identifying potential sources from where illicit discharges can emanate. Areas to look for are: 1. Industrial areas and marine service providers. 2. Areas where there are large concentrations of intensely developed septic systems.	
Has Goal Been Accomplished: NO	

Work Performed

Recycling Program	
Responsible Party: Martin Heft, First Selectman	
Start Date: 8/5/2003	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 Chester Residents and Businesses	
BMP Description: Qualifying Local Program Continue the Recycling and Bulky Waste Program for commonly dumped household wastes includng cardboard, batteries, glass, metal food containers, newspapers, office paper, crankcase oil, scrap metals, brush and leaves.	
Has Goal Been Accomplished: YES	

Work Performed

Storm Sewer System Outfall Map	
Responsible Party: Wade Thomas, Hydrogeologist	
Start Date: 1/10/2005	End Date: 1/6/2006
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 Survey & Technical Services, Inc., David Campbell	
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 town 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.

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.

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 Chester. 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.

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 Chester.

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 Chester.

Has Goal Been Accomplished: NO

Work Performed

Stormwater Ordinance/Regulatory Mechanism

Responsible Party: Martin Heft, First Selectman

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:
Nathan L. Jacobson & Associates, Inc., Town Legal Counsel

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:

1. Fines

2. Civil Penalties

Has Goal Been Accomplished: NO

Work Performed

Stormwater Sampling	
Responsible Party: David Campbell, Environmental Analyst	
Start Date: 12/7/2004	End Date: 12/8/2004
Permits Years during which activities are scheduled: Year 1 **X** Year 2 Year 3 Year 4 Year 5	
Name of Separate Implementing Entity: Not Applicable	
BMP Description: Stormwater monitoring shall be conducted by the Town of Chester annually starting in 2004. 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 Chester 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: YES	

Work Performed

Train Employees	
Responsible Party: Wade Thomas, Hydrogeologist	
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: Department of Public Works Employees	
BMP Description: Design and administer a training program to Department of Public Works Employees that will help them to identify illicit discharges. Nathan L. Jacobson & Associates, Inc, will provide John Divis, Department of Public Works Road Foreman, two publications on Illicit Discharge Detection and Elimination for his use to train Department of Public Works Employees on how to recognize illicit discharges. The two publications are Illicit Discharge Detection and Elimination Manual, A Handbook for Municipal	

Officials, published by the New England Interstate Water Pollution Control Commission and Illicit Discharge Detection and Elimination Manual: A Guidance Manual for Program Development and Technical Assessments by The Center for Watershed Protection and Dr. Robert Pitt.

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;

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

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

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

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

Table 1
Pollutants Commonly Discharged From Construction Sites

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

Number of BMPs associated with control measure:

5

Important Dates:

Earliest Start Date: 1/9/2004

End Date: 1/9/2009

Details of BMPs and Work Performed for Them

Continue Construction Inspection Program

Responsible Party: Joseph Dillon, Project 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:
Not Applicable

BMP Description:
Qualifying Local Program

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

Construction sites will also be inspected for soil erosion and sediment control measure effectiveness. Measures will modified and implemented based on performance. New soil erosion and sediment control measures will be employed as they become available.

Has Goal Been Accomplished: YES

Work Performed

Continue Staff Training

Responsible Party: Nathan L. Jacobson & Associates Inc., Town 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:
Not Applicable

BMP Description:
Qualifying Local Program

Continue staff training by attendance of programs organized by the CTDEP and other soil erosion and sediment control organizations.

Has Goal Been Accomplished: YES

Work Performed

Information Management System in Place

Responsible Party: Nathan L. Jacobson & Associates Inc., Town 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:
Site Contractors

BMP Description:
An information management system designed to track information submitted by the public and record inspections of construction sites will continue in the form of Field Reports which will be maintained by Nathan L. Jacobson & Associates, Inc. with copies provided to the Town of Chester

Review site inspection procedures that are used by staff in the performance of construction site inspections and make modifications.
Has Goal Been Accomplished: YES
Work Performed

Maximum Compliance	
Responsible Party: Nathan L. Jacobson & Associates Inc., Town Engineer	
Start Date: 1/9/2004	End Date: 1/9/2009
Permits Years during which activities are scheduled: Year 1 **X** Year 2 **X** Year 3 **X** Year 4 **X** Year 5 **X**	
Name of Separate Implementing Entity: Site Contractors	
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: Martin Heft, First Selectman	
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: Engineers/Site Contractors	
BMP Description: Qualifying Local Program The Town of Chester currently has a regulatory mechanism in place in the form of Section 55 - Erosion and Sediment Control Plan Regulations of the Planning & Zoning Regulations. The regulation will provide the ability to regulate polluted runoff that emanates from construction sites with a cumulative disturbance of more than one-half acre. Update Section 55 - Erosion and Sediment Control Plan Regulations of the Planning & Zoning Regulations to incorporate reference to the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control.	
Has Goal Been Accomplished: NO	
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:

5

Important Dates:

Earliest Start Date: 6/8/2004

End Date: 1/8/2009

Details of BMPs and Work Performed for Them

Identification of BMPs

Responsible Party: Martin Heft, First Selectman

Start Date: 6/8/2004 | End Date: 1/29/2005

Permits Years during which activities are scheduled:

Year 1 Year 2 Year 3 Year 4 Year 5

Name of Separate Implementing Entity:
Wade Thomas

BMP Description:
From the 2004 Connecticut Stormwater Quality Manual identify and develop a mix of Structural and Non-Structural BMPs that are appropriate. 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.

Has Goal Been Accomplished: NO

Work Performed

Monitor Stormwater Sampling Results - Improved Water Quality

Responsible Party: Wade Thomas, Hydrogeologist

Start Date: 1/10/2005 | End Date: 2/2/2005

Permits Years during which activities are scheduled:

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

Name of Separate Implementing Entity:
Not Applicable

BMP Description:
Compile the data for the first year of stormwater sampling. Continue to collect six samples annually and compile the data and compare the results with the year one results. Identify areas where water quality has improved. In those areas where water quality has not improved identify the potential sources of the problem and investigate them. Use this new information to adjust the plan of action.

Has Goal Been Accomplished: YES

Work Performed

Publication of BMPs

Responsible Party: Martin Heft, First Selectman

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:
Plannning and Zoning Commission, inland Wetlands and Watercourses Agency

BMP Description:
Incoporate reference to the 2004 Connecticut Stormwater Quality Manual into Section 5.10 - Storm Water Runoff of the Subdivision Regulations.

Has Goal Been Accomplished: NO

Work Performed

Reduced Impervious Areas	
Responsible Party: Martin Heft, First Selectman	
Start Date: 1/11/2005	End Date: 1/8/2009
Permits Years during which activities are scheduled: Year 1 Year 2 X Year 3 Year 4 X Year 5 X	
Name of Separate Implementing Entity: Planning and Zoning Commission	
BMP Description: Consider revising the Planning and Zoning Regulations and the Subdivision Regulations to allow for reduced pavement width or utilization of porous pavement for construction of subdivision roads and driveways.	
Has Goal Been Accomplished: NO	

Work Performed

Stormwater Runoff Program	
Responsible Party:	
Start Date: 2/3/2005	End Date: 2/4/2005
Permits Years during which activities are scheduled: Year 1 Year 2 Year 3 Year 4 Year 5	
Name of Separate Implementing Entity: Not Applicable	
BMP Description: Develop, implement, amd 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 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.	
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:

8

Important Dates:

Earliest Start Date: 1/9/2004

End Date: 1/8/2009

Details of BMPs and Work Performed for Them

Develop Pollution Prevention Plan

Responsible Party: Martin Heft, First Selectman

Start Date: 1/10/2005	End Date: 1/29/2005

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:
Develop 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: Martin Heft, First Selectman

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

Maintain 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 our own organization.

Has Goal Been Accomplished: YES

Work Performed

Incorporation of BMPs into Regulations and the Plan of Development

Responsible Party: Martin Heft, First Selectman

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:
Not Applicable

BMP Description:
Incorporate BMPs contained in the 2004 Connecticut Stormwater Quality Manual into the Planning and Zoning Regulations, Subdivision Regulations and the Plan of Development.

Has Goal Been Accomplished: NO

Work Performed

Information Management System	
Responsible Party: John Divis, Road Foreman	
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 the information management system 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 on these inventory items.	
Has Goal Been Accomplished: YES	

Work Performed

Maintenance Program Effectiveness	
Responsible Party: John Divis, Road Foreman	
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: Qualiying Local Program ☐ Identify the number of facilities and controls that have received maintenance. Document the overall compliance with the schedule and explain any discrepancies.	
Has Goal Been Accomplished: YES	

Work Performed

Maintenance Schedule	
Responsible Party: Martin Heft, First Selectman	
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: Street Sweeping and Catch Basin Cleaning Subcontractors	
BMP Description: Qualifying Local Program ☐	

Develop and implement a program to sweep all streets once a year as soon as possible after snowmelt.

The Town of Chester conducts street sweeping for all town roads once per year. The Town of Chester conducts street sweeping for Chester Town Center monthly from May - October.

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

The Town of Chester cleans all catch basins and storm manholes townwide twice per year.

Has Goal Been Accomplished: YES

Work Performed

Repair, Retrofit or Upgarde Stormwater Conveyances, Structures and Outfalls

Responsible Party: Martin Heft, First Selectman

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

Permits Years during which activities are scheduled:

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

Name of Separate Implementing Entity:
Road Committee

BMP Description:
Qualifying Local Program

Continue to implement a program to evaluate and, if necessary, prioritize for repairing, retrofiting or upgrading the conveyances, structures and outfalls of the MS4.

Has Goal Been Accomplished: YES

Work Performed

Train Employees

Responsible Party: Martin Heft, First Selectman

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:
John Divis, Elizabeth Netsch

BMP Description:
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 form activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance.

Has Goal Been Accomplished: NO

Work Performed

Section D

BMP Assignments by Responsible Party		
Public Education and Outreach		
Martin Heft		
Develop Educational Resources		
	1/9/2004	12/31/2004
Expand Educational Resources		
	1/9/2004	1/8/2009
Lee Vito		
Pollution Reduction		
	6/8/2004	12/16/2004
Martin Heft		
Pollution Reduction		
	12/2/1997	1/8/2009
Patricia Pendergast		
Storm Drain Marking Program		
	6/8/2004	12/16/2004
Public Participation/Involvement		
Martin Heft		
Community Clean-Ups		
	6/8/2004	12/16/2004
Continue a Volunteer Organization		
	1/9/2004	1/8/2009
Establish a Citizen Panel		
	1/9/2004	1/8/2009
Establish Citizen Watch Groups		
	1/10/2005	1/8/2009
Public Involvement - Public Access Television Media		
	1/9/2004	1/8/2009
Stormwater Issues - Print Media		
	1/9/2004	1/8/2009
Illicit Discharge Detection and Elimination		
Lee Vito		
Continuation of Detection and Elimination Efforts		
	1/9/2004	1/8/2009
Detection and Elimination		
	6/8/2004	1/8/2009
Martin Heft		
Household Hazardous Waste Collection		
	1/9/2004	1/8/2009
Wade Thomas		
Implement an Information Management System for Tracking Illicit Discharges		
	6/8/2004	12/16/2004
Initial Identification of Illicit Discharge Sources		

	1/10/2005	1/8/2009
Martin Heft		
Recycling Program		
	8/5/2003	1/8/2009
Wade Thomas		
Storm Sewer System Outfall Map		
	1/10/2005	1/6/2006
Martin Heft		
Stormwater Ordinance/Regulatory Mechanism		
	1/10/2005	1/6/2006
David Campbell		
Stormwater Sampling		
	12/7/2004	12/8/2004
Wade Thomas		
Train Employees		
	1/10/2005	1/6/2006
Construction Site Runoff Control		
Joseph Dillon		
Continue Construction Inspection Program		
	1/9/2004	1/8/2009
Nathan L. Jacobson & Associates Inc.		
Continue Staff Training		
	1/9/2004	1/8/2009
Information Management System in Place		
	1/9/2004	1/8/2009
Maximum Compliance		
	1/9/2004	1/9/2009
Martin Heft		
Regulatory Mechanism		
	1/9/2004	1/8/2009
Post-Construction Runoff Control		
Martin Heft		
Identification of BMPs		
	6/8/2004	1/29/2005
Wade Thomas		
Monitor Stormwater Sampling Results - Improved Water Quality		
	1/10/2005	2/2/2005
Martin Heft		
Publication of BMPs		
	1/10/2005	1/6/2006
Reduced Impervious Areas		
	1/11/2005	1/8/2009
Stormwater Runoff Program		

	2/3/2005	2/4/2005
Pollution Prevention/Good Housekeeping		
Martin Heft		
Develop Pollution Prevention Plan		
	1/10/2005	1/29/2005
Employee Training Materials		
	1/9/2004	1/8/2009
Incorporation of BMPs into Regulations and the Plan of Development		
	1/10/2005	1/8/2009
John Divis		
Information Management System		
	1/9/2004	1/8/2009
Maintenance Program Effectiveness		
	1/9/2004	1/8/2009
Martin Heft		
Maintenance Schedule		
	1/9/2004	1/8/2009
Repair, Retrofit or Upgarde Stormwater Conveyances, Structures and Outfalls		
	1/9/2004	1/8/2009
Train Employees		
	1/3/2005	1/8/2009