STORMWATER MANAGEMENT PLAN

Town of Nahant, Massachusetts

FINAL

November 2003

FAY, SPOFFORD & THORNDIKE
Engineers • Scientists • Planners • Landscape Architects • Surveyors

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Introduction

SWMP Overview

Under the National Pollutant Discharge Elimination System (NPDES) stormwater program, operators of regulated small municipal separate storm sewer systems (MS4s) require authorization to discharge stormwater under an NPDES permit. The Town of Nahant, located within an Urbanized Area as identified by the latest Decennial (2000) census and designated as a regulated community, is applying for coverage under NPDES General Permit for Stormwater Discharges (Attachment A). In order to obtain permit coverage, the Town is required to develop a stormwater management program (SWMP) designed to reduce the discharge of pollutants from Nahant's MS4 to the maximum extent practicable; protect water quality, and satisfy the water quality requirements of the Clean Water Act and Massachusetts Water Quality Standards. The SWMP includes six minimum control measures that are addressed separately in this document. The minimum control measures are as follows:

1. Public Education and Outreach
2. Public Involvement and Participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Stormwater Runoff Control
5. Post Construction Stormwater Management in New Construction and Redevelopment
6. Pollution Prevention and Good Housekeeping in Municipal Operations

In order to apply for coverage under a General Permit, the Town must submit a Notice of Intent to the U.S Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (DEP). The NOI provides information pertaining to the permit applicant; including the applicant's eligibility for a General Permit and a listing all receiving waters within the community. In addition, the NOI provides a summary of, and implementation schedule for, the Town's SWMP.

Prior to submitting a NOI the Town must confirm that it is eligible for coverage under the General Permit by establishing that discharges from its storm drain system do not adversely impact endangered species, critical habitat and historic properties. In addition, the Town must perform research to identify all of its receiving waters and identify those that have been classified as Water Quality Impaired Waters by the MADEP. The following sections briefly summarize the results of research performed to assess the Town's eligibility and investigations conducted to document the status of the Town's impaired waters.

Eligibility Criteria

There are no endangered or threatened species or critical habitat located in proximity to Nahant's MS4 or to the points where authorized discharges reach the receiving waters. As a result, the Town of Nahant meets the Endangered Species Act (ESA) eligibility criterion "A" as outlined in Addendum A of the NPDES General Permit for Stormwater Discharges from Small MS4s. The Rare Species by County and Rare Species by Town published by the Massachusetts Natural Heritage & Endangered Species Program (NHESP) (last updated 3/1/2003), the Threatened and Endangered Species System (TESS) database for the State of Massachusetts (last viewed on 5/27/2003) published by the U.S. Fish & Wildlife Service, and 50 CFR Parts 17 and 226 were all referenced to make this determination. For further information on the Town of Nahant's eligibility see Attachment B.

The Town of Nahant is in compliance with the National Historic Preservation Act (NHPA) eligibility criteria for the NPDES General Permit for Stormwater Discharges from Small MS4s. In order to make this determination, the Town produced a map that delineated all known stormwater outfalls and the State Register of Historic Places Datalayers within the Town's municipal boundaries. The Historic Places Datalayers were downloaded from MassGIS in May 2003 and include National Register Districts, National Historic Landmarks, National Register Individual Properties, and Preservation Restrictions. There are no historic properties identified in the path of Nahant's MS4 stormwater discharges or allowable non-stormwater discharges and the Town does not propose the construction of any structural BMPs for coverage under this permit. Because there were no historical sites eligible for listing on the National Register included in the datalayer, the Town requested confirmation from the Massachusetts Historical Commission (MHC) that the outfalls identified on the Outfall Location Map did not impact any historical sites eligible for listing. The Town also requested that MHC verify that all sites currently listed on the National Register had been identified on the Town's map. A letter received from the MHC confirming this information has been included in Attachment C.

Discharges to Water Quality Impaired Waters

According to the Massachusetts Year 2002 Integrated List of Waters, there are two waterbodies along Nahant's shoreline identified as impaired waters requiring Total Maximum Daily Load (TMDL) limits. The attached table lists the impaired waterbodies, their state identification number, size, and pollutant of concern. Because this document is currently in draft form, Arthur Johnson of the Massachusetts Department of Environmental Protection (DEP) was contacted to verify this information. Confirmation that these waterbodies would maintain their current designation was received in the form of an electronic email on July 21, 2003.

Nahant Category 5 - Waters Requiring A TMDL

Name	Segment I.D.	Size	Pollutant of Concern
Lynn Harbor	MA93-23_2002	6.67 sq. miles	Pathogens
Nahant Bay	MA93-24_2002	5.27 sq. miles	Pathogens

As identified in Section C of the Notice of Intent (NOI), the Town of Nahant has twenty-four direct discharges from the municipal storm drainage system to these impaired waterbodies. While there are no specific structural BMPs proposed to address the specific impairments of this waterbody, the overall goal of the Town's SWMP is to reduce the discharge of pollutants from the storm drain system to all receiving waters, including those listed as impaired in the Massachusetts Year 2002 Integrated List of Waters. The following sections briefly summarize how the various components of the Town's SWMP will improve the quality of stormwater discharged to the receiving waters.

The Town's planned public education efforts and public participation activities will raise awareness throughout the community regarding the impacts of non-point source pollution on the receiving waterbodies and will educate the public on methods to reduce this type of pollution. It is expected that as the public becomes more aware of the Community's water quality issues and the responsibilities expected of them and others in the Community, they will modify their behaviors to help improve water quality of all receiving waters.

Meeting the requirements of the Illicit Discharge Detection and Elimination minimum control measure will enable the Town in eliminating any illicit discharges to the storm drainage system. Such untreated discharges contribute high levels of pollutants, including heavy metals, toxics, oil and grease, solvents, nutrients, viruses, and bacteria to receiving waterbodies thereby degrading water quality and threatening the health of aquatic wildlife.

Because polluted stormwater runoff from construction sites often includes sediments, solids and sanitary wastes, phosphorous, nitrogen, pesticides, oil and grease, and construction debris it can become a serious contributor of pollutants to the Town's impaired waters. The BMPs proposed to meet the Construction Site Stormwater Runoff minimum control measure will assist in controlling this type of polluted runoff to all waters, with special attention being directed to the Town's impaired waters and other areas of environmental concern.

Similarly, stormwater runoff flowing over areas altered by development can also pick up harmful sediment and chemicals such as oil and grease, pesticides, heavy metals, and nutrients and deposit them to Nahant's receiving waters. The increased impervious surface that results from new developments in the community also interrupts the natural cycle of water so that it no longer gradually infiltrates through vegetation and soil but instead increases the quantity of water that is delivered to the receiving waters during a storm event. The proposed BMPs for the Post-Construction Stormwater Management in New Development and Redevelopment minimum control measure will assist the Town in controlling both the quality and quantity of stormwater runoff from these new developments. The Town will closely review new development and redevelopment projects that propose to discharge stormwater runoff to the Town's impaired waters, or other areas of environmental concern, and mitigate the potential for an increase in the pollutants of concern.

The goal of the Pollution Prevention and Good Housekeeping for Municipal Operations minimum control measure is to improve and protect the quality of receiving waters by improving the performance of municipal operations and DPW facility management. Proposed BMPs such as formalizing the street sweeping and catch basin cleaning programs and conducting a DPW employee training program will assist in reducing the type of pollutants that collect on streets, parking lots, and DPW storage and vehicle maintenance areas.

Total Maximum Daily Load Allocations

The MADEP is responsible under Massachusetts General Law (MGL) Chapter 21 for monitoring the State's waters, identifying those waters that are impaired, and developing a plan to bring them back into compliance with the Massachusetts Surface Water Quality Standards. Once a waterbody is identified as impaired, the DEP is required by the Federal Clean Water Act to develop a Total Maximum Daily Load (TMDL) for the impaired waterbody. The process of developing a TMDL includes identifying the causes and source(s) of the pollutant from direct discharges and indirect discharges, determining the maximum amount of the pollutant that can be discharged to the impaired waterbody to meet water quality standards, and developing the plan to meet that goal. As mentioned in the previous section, the Massachusetts Year 2002 Integrated List of Waters identifies two waterbodies along Nahant's shoreline as impaired waters requiring a TMDL. Currently there is no approved TMDL for Lynn Harbor or Nahant Bay and the DEP has not included a schedule for their development in the 2002 Integrated List of Waters. The Town will assess the best method of addressing any TMDLs developed for Nahant's impaired waterbodies once they are approved.

The Town of Nahant is not located in an area identified as "high" or "medium" in the December 13, 2001 Massachusetts Water Resources Commission's report entitled Stressed Basins in Massachusetts. At the time of this Stressed Basin Analysis, there was inadequate coverage of stream gages to all the river basins in Massachusetts and as a result there were areas where no conclusion could be made about the degree of stress to certain basins. The Town of Nahant is located in such a basin. The lack of adequate coverage of stream gages to this area resulted in no designation being assigned in the area of Nahant.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Watershed Management

BRP WM 08A NPDES Stormwater General Permit

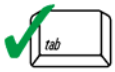
Notice of Intent for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)

W040989
Transmittal Number

Facility ID (if known)

A. Instructions

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Submission of this Notice of Intent constitutes notice that the entity named at item B1. of this form intends to be authorized by the DEP General Permit issued jointly with EPA for stormwater discharges from the small municipal separate storm sewer system (MS4), in the location identified at item B2. of this form. Submission of the Notice of Intent also constitutes notice that the party identified at item B1. has read, understands and meets the eligibility conditions of Part I.B. of the NPDES Small MS4 General Permit, agrees to comply with all applicable terms and conditions of the NPDES Small MS4 General Permit, and understands that continued authorization to discharge is contingent on maintaining eligibility for coverage. **In order to be granted coverage, all information required on BRP WM 08A, including the Stormwater Management Program Summary and Time Frames form, must be completed. Please read the permit and make sure you comply with all requirements, including the requirement to develop and implement a stormwater management program.**

B. Applicant Information

1. Small MS4 Operator/Owner Information:

Mr. Mark Cullinan, Town Administrator
Name

334 Nahant Road
Mailing Address

Nahant
City/Town

MA
State

781-581-9927
Telephone Number

tnahant@aol.com
Email (if available)

2. Municipality Name

Town of Nahant
City/Town

3. Legal Status:

☐ Federal ☒ City/Town ☐ State ☐ Tribal ☐ Private

☐ Other public entity:
Specify Public Entity

4. Other regulated MS4(s) within municipal boundaries:

5. Based on the instructions provided in Part I of the NPDES Small MS4 General Permit, have the eligibility criteria for “listed species” and critical habitat been met?

☒ yes ☐ pending ☐ no

B. Applicant Information (cont.)

6. Based on the instructions provided in Part I of the NPDES Small MS4 General Permit, have the eligibility criteria for protection of historic properties been met?

☒ yes ☐ pending ☐ no

Note: Section C may be duplicated to accommodate a larger list of receiving waters

C. Names of (Presently Known) Receiving Waters

Receiving Water:	No. of Outfalls	Listed as Impaired?	Impairment
Lynn Harbor (Name)	9 (Number)	☒ Yes ☐ No	Pathogens (Specify)
Nahant Bay (Name)	15 (Number)	☒ Yes ☐ No	Pathogens (Specify)
Massachusetts Bay (Name)	2 (Number)	☐ Yes ☒ No	(Specify)
Nahant Harbor (Name)	10 (Number)	☐ Yes ☒ No	(Specify)
Broad Sound (Name)	2 (Number)	☐ Yes ☒ No	(Specify)
wet. trib. to Lowlands Marsh (Name)	7 (Number)	☐ Yes ☒ No	(Specify)
drainage ditch trib. to K. Green Marsh (Name)	1 (Number)	☐ Yes ☒ No	(Specify)
Kelly Green Marsh (Name)	4 (Number)	☐ Yes ☒ No	(Specify)
wetland trib. to Thicket (Name)	3 (Number)	☐ Yes ☒ No	(Specify)
wet trib. to Nahant Harbor (Name)	1 (Number)	☐ Yes ☒ No	(Specify)
(Name)	(Number)	☐ Yes ☐ No	(Specify)
(Name)	(Number)	☐ Yes ☐ No	(Specify)
(Name)	(Number)	☐ Yes ☐ No	(Specify)
(Name)	(Number)	☐ Yes ☐ No	(Specify)
(Name)	(Number)	☐ Yes ☐ No	(Specify)
(Name)	(Number)	☐ Yes ☐ No	(Specify)
(Name)	(Number)	☐ Yes ☐ No	(Specify)
(Name)	(Number)	☐ Yes ☐ No	(Specify)
(Name)	(Number)	☐ Yes ☐ No	(Specify)

D. Stormwater Management Program Summary

1. Public Education:

BMP ID #		
1-1		
Place Educational Info on the Town's Web Site	See Attached Responsible Dept./Person Name	See Attached Specify Measurable Goal
1-2		
Conduct Annual HHW Collection Day	See Attached Responsible Dept./Person Name	See Attached Specify Measurable Goal
1-3		
Intensify the Existing Pet Waste Mgmt. Campaign	See Attached Responsible Dept./Person Name	See Attached Specify Measurable Goal
1-4		
Distribute Educ. Info. Targeted to Businesses	See Attached Responsible Dept./Person Name	See Attached Specify Measurable Goal
1-5		
Promote Water Conservation Practices for Homeowners	See Attached Responsible Dept./Person Name	See Attached Specify Measurable Goal

2. Public Participation:

BMP ID #		
2-1		
Public Presentation, Access to Draft and Comments	See Attached Responsible Dept./Person Name	See Attached Specify Measurable Goal
2-2		
Conduct Public Presentation & Receive Comment on Report	See Attached Responsible Dept./Person Name	See Attached Specify Measurable Goal
2-3		
Provide Support to Local Cleanup Activities	See Attached Responsible Dept./Person Name	See Attached Specify Measurable Goal
BMP ID #		
Specify Best Management Practice	Responsible Dept./Person Name	Specify Measurable Goal
BMP ID #		
Specify Best Management Practice	Responsible Dept./Person Name	Specify Measurable Goal

D. Stormwater Management Program Summary (Cont.)

3. Illicit Discharge Detection and Elimination:

BMP ID #	Specify Best Management Practice	Responsible Dept./Person Name	Specify Measurable Goal
3-1	Complete the Town Storm Drain System Map	See Attached	See Attached
3-2	Adopt illict Discharge & Connection SW By-law	See Attached	See Attached
3-3	Develop Illicit Discharge Detection & Elim. Plan	See Attached	See Attached
3-4	Formalize Town's Storm Drain Stenciling Program	See Attached	See Attached

4. Construction Site Runoff Control:

BMP ID #	Specify Best Management Practice	Responsible Dept./Person Name	Specify Measurable Goal
4-1	Adopt a Stormwater Mgmt. & Land Disturbance By-law	See Attached	See Attached
4-2	Develop a Site Inspection Form & Conduct Inspections	See Attached	See Attached
4-3	Develop & Implement a Citizen Complaint Hotline	See Attached	See Attached

D. Stormwater Management Program Summary (Cont.)

5. Post Construction Runoff Control:

BMP ID #	Specify Best Management Practice	Responsible Dept./Person Name	Specify Measurable Goal
5-1	Adopt By-law Governing Post Const. SW Management	See Attached	See Attached

6. Municipal Good Housekeeping:

BMP ID #	Specify Best Management Practice	Responsible Dept./Person Name	Specify Measurable Goal
6-1	Develop a Formal Training Prgm. for DPW Staff	See Attached	See Attached
6-2	Formalize Catch Basin Cleaning Program	See Attached	See Attached
6-3	Formalize Existing Parking Lot & Street Sweeping Program	See Attached	See Attached
6-4	Develop a Vehicle & Equip. Maintenance Policy	See Attached	See Attached
6-5	Develop a Vehicle & Equip. Cleaning Policy	See Attached	See Attached
	See Attached for Additional BMPs		

D. Stormwater Management Program Summary (cont.)

D. Stormwater Management Program Summary (cont.)

7. BMPs for Meeting TMDL:

BMP ID #	Specify Best Management Practice	Responsible Dept./Person Name	Specify Measurable Goal

E. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Mark Cullinan, Town Administrator
Printed Name

Mark F Cullinan
Signature

7/24/03
Date

Public Education and Outreach

BMP		*Measurable Goals*	*Responsible Parties*
1-1	***Place Educational Information on the Town's Web Site***	▪ Post stormwater related information on the Nahant Public Services web site. ▪ Update web site regularly.	Nahant Town Administrator Nahant Webmaster
1-2	***Conduct an Annual Household Hazardous Waste Collection Day***	▪ Co-sponsor an annual Household Hazardous Waste Collection Day. ▪ Continue to develop the Household Hazardous Waste Collection Day flyer on an annual basis for availability at the Nahant Town Hall and other municipal buildings. ▪ Annually send a press release advertising the event to the Harbor Review and other local newspaper and track which newspapers published it. ▪ Advertise the annual event on the Nahant public cable access Channel 8 Bulletin Board. ▪ Maintain and update the Town's web page. ▪ Track the amounts and types of waste collected each year. ▪ Track the number of Nahant vehicles that participate in the event each year.	Nahant Department of Public Works Nahant Webmaster
1-3	***Intensify the Existing Pet Waste Management Campaign***	▪ Update fact sheets to include information regarding the effects of pet wastes on water quality and what pet owners can do to reduce water pollution. ▪ Distribute updated fact sheets with dog licenses, dog license renewals, and at the Town sponsored Spring rabies clinic. ▪ Track the number of fact sheets distributed annually. ▪ Track the number of violations issued per year. ▪ Post pet waste management information on the Town's web site. ▪ Establish "pet waste stations" at the designated "Dog Beach". ▪ Track the number and location of new signs posted that advertise the Town's pet waste removal by-law.	Nahant Animal Control Department Town Clerk's Office Nahant Department of Public Works

1-4	***Distribute Educational Information Targeted to Community Businesses***	▪ Develop an educational flyer targeted to local businesses. ▪ Distribute the educational flyer to 100% of the businesses in the municipality. ▪ Post the informational flyer on the Town's website.	Nahant Town Administrator Nahant Webmaster
1-5	***Promote Water Conservation Practices for Homeowners***	▪ Track the number of dye tablets distributed by the Board of Selectmen's Office. ▪ Track the number of water-efficiency kits issued by the Board of Selectmen's Office. ▪ Post water conservation information on the DPW's web page. ▪ Post water conservation posters at Town Hall and the public library. ▪ Include water conservation bill inserts with the September 2003 water bill. ▪ Track the number of additional bill inserts mailed each year of the permit term. ▪ Issue an annual press release to local newspapers to promote water conservation.	Nahant Department of Public Works Nahant Board of Selectmen's Office.
1-6	***Conduct Metal Recycling Day Events & White Goods Pickup***	▪ Sponsor six metal recycling day events annually. ▪ Produce an annual flyer that outlines the Metal Recycling Day schedule for that year and make flyers available at Town Hall and the DPW Facility. ▪ Advertise each Metal Recycling Day event on Nahant's public cable access television station, Channel 8, Bulletin Board. ▪ Maintain and update the Metal Recycling Day and white goods pick up services information on the Town's web site. ▪ Track the amounts and types of waste collected at each Metal Recycling Day event. ▪ Track the amounts and types of white goods collected each year by the white goods pick up service.	Nahant Department of Public Works Nahant Webmaster

Public Involvement and Participation

BMP		*Measurable Goals*	*Responsible Parties*
2-1	***Public Presentation, Access to Draft SWMP & Receipt of Comments***	▪ Hold an SWMP Informational Meeting. ▪ Make draft SWMP available to the public and conduct public meeting and comment period. ▪ Finalize SWMP. ▪ Make the final SWMP accessible to the public via the Town's public library and web page.	Nahant Town Administrator Nahant Webmaster
2-2	***Conduct Public Presentation & Receive Comment on Annual Report***	▪ Prepare annual reports. ▪ Send an annual press release advertising the event and the status of the Town's SWMP to local newspapers and track whether or not it was published. ▪ Advertise the public presentation on the Nahant Public Access Bulletin Board (Channel 8). ▪ Conduct a public presentation and receive comments on the annual report. ▪ Make records of meeting available to public. ▪ Submit an annual report to both the EPA and MA DEP.	Nahant Town Administrator
2-3	***Provide Support to Local Cleanup Activities***	▪ Draft and distribute an annual letter to offering assistance with local cleanup activities to neighborhood associations, homeowner associations, beach associations, and civic groups active in Nahant. ▪ Place information contained in letter on the Town's official website. ▪ Track which entities the letters are sent to each year. ▪ Track the number of cleanup activities the DPW assists in conducting each year. ▪ Track the number of cleanup participants at each activity the DPW assists in conducting. ▪ Track which areas of Town are cleaned by each activity the DPW assists in conducting. ▪ Track the quantity of waste collected as a result of the cleanup activity.	Nahant Department of Public Works Nahant Conservation Commission

Illicit Discharge Detection and Elimination

BMP		*Measurable Goals*	*Responsible Parties*
3-1	***Complete the Town's Storm Drain System Map***	▪ Map twenty percent of the Town's Storm Drainage system each year beginning in the Spring of 2004. ▪ Draft and take to Town Meeting an amendment to the Zoning Bylaw that would require the project proponents for any project regulated by Site Plan Review to submit a copy of the as-built plans to the Planning Board in digital format. ▪ Draft and take to Town Meeting an amendment to the Nahant Subdivision Rules and Regulations that would require project proponents to submit a copy of the subdivision's as-built plans to the Planning Board in digital format. ▪ Continuously update the storm drainage system map(s) as new components are added to the municipal storm drainage system.	Nahant Town Administrator Town Clerk Nahant Planning Board Nahant Department of Public Works
3-2	***Adopt an Illicit Discharge & Connection Stormwater By-Law***	▪ Draft the Illicit Discharge and Connection Stormwater Bylaw. ▪ Take the Illicit Discharge and Connection Stormwater By-Law to Town Meeting for acceptance. ▪ Track the number of enforcement actions taken. ▪ Track the number of street opening permits.	Nahant Town Administrator Town Clerk
3-3	***Develop a Formal Illicit Discharge Detection and Elimination Plan***	▪ Develop an Illicit Discharge Detection and Elimination Plan. ▪ Conduct dry-weather field screening of outfalls and track the number of surveys indicating a possible illicit connection. ▪ Trace the source of potential illicit discharges. ▪ Track the number of illicit connections found. ▪ Track the number of illicit connections repaired/replaced. ▪ Report on the success of obtaining alternative funding to assist in illicit connection removal.	Nahant Department of Public Works

3-4 Formalize the Town's Storm Drain Stenciling Program	▪ Identify areas where stenciling will take place and establish schedule for the activity. ▪ Track the number of drains stenciled each year. ▪ Summarize the condition of the inlets surveyed. ▪ Submit a press release to the Harbor Review.	Nahant Department of Public Works

Construction Site Stormwater Runoff Control

BMP		*Measurable Goals*	*Responsible Parties*
4-1	***Adopt a Stormwater Management and Land Disturbance By-law***	▪ Draft the Stormwater Management and Land Disturbance By-law. ▪ Take the Stormwater Management and Land Disturbance By-law to Town Meeting for acceptance. ▪ Track the number of enforcement actions taken.	Nahant Conservation Commission Nahant Town Administrator
4-2	***Develop a Site Inspection Form and Conduct Site Inspections***	▪ Develop a Site Inspection Form that reflects the ESCP requirements. ▪ Track the frequency of inspections conducted for each site. ▪ Track the completion of inspection forms. ▪ Track the number of failed ESC BMPs discovered on each site.	Nahant Conservation Commission
4-3	***Develop and Implement a Citizen Complaint Hotline***	▪ Establish the Citizen Complaint Hotline. ▪ Advertise the Citizen Complaint Hotline. ▪ Track the number of complaints received via the Citizen Complaint Hotline. ▪ Track the problems/incidents remedied as a result of the Citizen Complaint Hotline.	Nahant Department of Public Works Nahant Webmaster

Post Construction Stormwater Management in New Development & Redevelopment

BMP	*Measurable Goals*	*Responsible Parties*
5-1 Adopt a By-law Governing Post Construction Stormwater Management of New Developments and Redevelopments	▪ Draft the Bylaw Governing Post-Construction Stormwater Management of New Developments & Redevelopments. ▪ Take the Bylaw Governing Post-Construction Stormwater Management of New Developments & Redevelopments to Town Meeting for acceptance.	Nahant Town Administrator Town Clerk

Pollution Prevention & Good Housekeeping in Municipal Operations

BMP	*Measurable Goals*	*Responsible Parties*
6-1 Develop a Formal Training Program for DPW Staff	▪ Develop the DPW employee-training manual. ▪ Conduct training sessions with all current employees. ▪ Train all new DPW employees in accordance with the training manual. ▪ Track employees trained in accordance to the training manual. ▪ Conduct refresher training for employees after every two years of employment.	Nahant Department of Public Works Supervisor Nahant Town Administrator
6-2 Formalize the Catch Basin Cleaning Program	▪ Award biennial catch basin cleaning contract. ▪ Document biennial cleaning activities.	Nahant Department of Public Works
6-3 Formalize the Existing Parking Lot and Street Sweeping Program	▪ Conduct an inventory of all municipal streets and parking lots. ▪ Track the number of times the inventoried municipal streets and parking lots are swept each year. ▪ Maintain an accurate log of sweepings collected and method of disposal. ▪ Re-evaluate storage practices and make improvements in order to ensure compliance with the MADEP BWP Reuse and Disposal of Street Sweepings Policy. ▪ Update inventory of municipal streets and parking lots as needed.	Nahant Department of Public Works
6-4 Develop a Vehicle & Equipment Maintenance Policy	▪ Develop and implement a vehicle and equipment maintenance policy and incorporate policy requirements into the DPW employee-training program.	Nahant Department of Public Works Supervisor
6-5 Develop a Vehicle & Equipment Cleaning Policy	▪ Construct two new wash bays at the Flash Road facility. ▪ Develop and implement a vehicle and equipment cleaning policy. ▪ Incorporate policy requirements into the DPW employee-training manual and provide to the Town's Police Department and Fire Department.	Nahant Department of Public Works

6-6	***Develop a Landscape and Lawn Care Policy***	▪ Develop and implement a landscape and lawn care policy. ▪ Provide the policy to DPW staff and lawn care providers contracted by the DPW. ▪ Provide the policy to the Kelly Greens Golf Course management company.	Nahant Department of Public Works
6-7	***Develop and Implement a SPRP for the Flash Road Facility***	▪ Complete and implement the use of the Spill Prevention and Response Plan for the Flash Road facility. ▪ Identify and train key individuals in the area of spill prevention, response and cleanup. ▪ Develop an emergency spill containment and cleanup kit. ▪ Post a summary of the Spill Prevention and Response Plan at various locations throughout facility. ▪ Conduct an annual review of the Spill Prevention and Response Plan. ▪ Track the number of spill and leak incidents at the facility and the actions taken for each incident.	Nahant Department of Public Works
6-8	***Apply for Funding to Conduct Pollution Remediation Activities in Nahant Thicket Watershed***	▪ Apply to CZM by July 30, 2003 for CPR funding to implement the pollution remediation activities proposed in the Nahant Thicket watershed. ▪ If awarded funding for the CPR FY04 grant round, proceed with project implementation for completion by June 30, 2004.	Nahant Town Administrator Massachusetts Audubon Society
6-9	***Formalize the Bear Pond/Golf Course Drainage Ditch Maintenance Program***	▪ Develop an operation and maintenance (O&M) plan for the Bear Pond pump station and 36-inch outfall. ▪ Track maintenance activities for the Bear Pond pump station and 36-inch outfall. ▪ Develop a formal Drainage Ditch Maintenance Program. ▪ Apply to the Nahant Conservation Commission for an Order of Conditions every three years in order to conduct activities outlined in the Town's Formal Drainage Ditch Maintenance program. ▪ Track the scheduled maintenance activities of the Drainage Ditch Maintenance Program.	Nahant Department of Public Works

Bureau of Resource Protection - Watershed Management

BRP WM 08A NPDES Stormwater General Permit Notice of Intent
for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)
F. Storm Water Management Program TIME FRAMES

Transmittal Number W040989

Facility ID (if known)

	PERMIT YEAR ONE				PERMIT YEAR TWO				PERMIT YEAR THREE				PERMIT YEAR FOUR				PERMIT YEAR FIVE				
BMP ID #	Spring 03	Summer 03	Fall 03	Winter 03-04	Spring 04	Summer 04	Fall 04	Winter 04-05	Spring 05	Summer 05	Fall 05	Winter 05-06	Spring 06	Summer 06	Fall 06	Winter 06-07	Spring 07	Summer 07	Fall 07	Winter 07-08	Next Permit
1-1		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
1-2	X				X				X				X				X				
1-3					X	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
1-4						X															
1-5			X	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
1-6	—	—	—		—	—	—		—	—	—		—	—	—		—	—	—		
2-1		X																			
2-2					X				X				X				X				
2-3					X				X				X				X				
3-1					—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
3-2								X	X												
3-3				X	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
3-4		X				X				X				X				X			
4-1								X	X												
4-2									X												
4-3							X														
5-1								X	X												
6-1							X	—	—	—	—	—	—	—	—	—	—	—	—	—	
6-2			X	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
6-3					X	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
6-4							X														
6-5			X				X														
6-6							X														
6-7											X										
6-8		X																			
6-9						X	—	—	—	X	—	—	—	—	—	—	—	—	—	—	—	

Figure 1: Town of Nahant Master Utility Plan

Figure 2: GIS Based Outfall Location Map

Figure 3: "In Progress" GIS Storm Drainage System Map

Public Education and Outreach

Required Elements

- *The permitee must implement a public education program to distribute educational materials to the community. The public education program must provide information concerning the impact of stormwater discharges on water bodies. It must address steps and/or activities that the public can take to reduce the pollutants in stormwater runoff.*

Proposed Public Education and Outreach Plan

BMP 1-1	*Post Educational Information on the Town Web Site*
BMP 1-2	*Conduct an Annual Household Hazardous Waste Collection Day*
BMP 1-3	*Intensify the Pet Waste Management Campaign*
BMP 1-4	*Distribute Educational Material Targeted to Community Businesses*
BMP 1-5	*Promote Water Conservation Practices to Homeowners*
BMP 1-6	*Conduct Metal Recycling Day Events*

BMP 1-1 Place Educational Information on the Town's Web Site

BMP Description

Recognizing that the Internet was increasingly becoming a powerful means of communication, the Town of Nahant established a community web site in 2002. Interested persons can access the web site at www.nahant.org to obtain information about Town government, public services, community news, and recreation. In order to expand upon the Town's public education program, information regarding stormwater issues will also be posted on the web site.

The Town has decided to locate information relating to stormwater issues and the status of the Town's SWMP within the Public Services link located on the Town's official website. Information placed on these web pages will include the Town's SWMP, all stormwater related press releases issued by the Town, information regarding the Town's pet waste management campaign *(BMP 1-3)* and information regarding local environmental events such as the Storm Drain Stenciling Activities *(BMP 3-4),* and the Household Hazardous Waste Collection Day *(BMP 1-2)*. Upon completion, the Town's Illicit Discharge Detection and Connection Stormwater By-law *(BMP 3-2)* and the Stormwater Management and Land Disturbance By-law *(BMP 4-1)* will be made available for viewing on the website. The Citizen Complaint Hotline *(BMP 4-3)* will also be made available via the Town's web site. This web page will also include a variety of links to web sites containing pertinent environmental information. Among these will be a link to the Safer Waters in Massachusetts (SWIM) web site, www.nahant.org/swim the Massachusetts Coastal Zone Management-North Shore Information web site, www.state.ma.us/czm/ns.htm, and the Massachusetts Audubon Society web site, www.massaudubon.org.

In order to further promote water conservation practices within the Town, water conservation information will be posted on the Town's website *(BMP 1-1)* via the Public Services web site. Information available on this web page will include instructions on how to obtain free water-efficiency kits, direct links to the Massachusetts Water Resources Authority (MWRA) Home Water Saving Tips and Gardening and Landscaping Water Conservation Tips web pages, and other relevant water conservation information.

Primary Audience

General public

Measurable Goals

- Post stormwater related information on the Nahant Public Services web site.
- Update web site regularly.

Responsible Parties

Nahant Town Administrator, Webmaster

Implementation Strategies

All information to be posted on the Nahant web site will be directed to the Town Administrator who will coordinate with the Town's Webmaster to organize the posting of the information.

Timeline

New information will be continuously posted and updated on the Nahant web site, as outlined above, throughout the permit term.

Annual Evaluation

The Town Administrator will be responsible for preparing a summary of the information posted on the Town's web site that includes an assessment of the progress made towards achieving the identified measurable goals.

BMP 1-2 Conduct an Annual Household Hazardous Waste Collection Day

BMP Description

Over the last five years the Nahant Department of Public Works (DPW) has sponsored an annual Household Hazardous Waste (HHW) Collection Day and will continue to do so during the month of June each year throughout the permit term. The Town will use the event as a vehicle to raise awareness throughout the community about the potential impacts that hazardous household materials have on water quality when they are not stored or disposed of properly. The Town's 2003 HHW Collection Day event marked the beginning of a partnership between Nahant and Swampscott in conducting an annual co-sponsored HHW Collection Day event. Sponsoring the events jointly provides economic benefit to both communities. The event will alternate on an annual basis between the Swampscott DPW facility on Paradise Road and the Nahant DPW facility on Flash Road, allowing residents of both communities a convenient location and safe method to properly dispose of household hazardous waste. In addition, Nahant residents can also drop-off used oil and antifreeze at the DPW facility on Flash Road throughout the year, this service is provided free of charge.

The Town will continue to advertise the HHW Collection Day event in flyers that outline the date and time of the upcoming event and a listing of the materials that will be accepted. These flyers are produced by the DPW and are made available to Nahant residents at the Town Hall and various municipal buildings in Nahant. Additionally, the HHW Collection Day event will be advertised in the form of a press release to the Harbor Review, a free publication that is delivered to every home and business in Nahant, as well as other local newspapers. Information regarding the proper methods of storing household hazardous wastes, what impacts these hazardous materials can potentially have on the environment if they are improperly disposed and procedures for disposal of household hazardous wastes will be included in the press release in addition to the details of the event and a listing of the materials that will be accepted.

The City's website, www.nahant.org will be updated to include the annual HHW Collection Day press releases as well as links to the Massachusetts Department of Environmental Protection (MADEP) and U.S. Environmental Protection Agency (EPA) web sites pertaining to household hazardous waste. Details of the HHW Collection Day event will continue to be advertised on the websites Town Calendar in addition to a listing of materials to be accepted. Via the information provided on the website, residents will be able to learn about the detrimental effects of household hazardous waste, alternatives to HHW, where and how to properly dispose of HHW and much more. Details of the event will continue to be advertised on the public cable access television station, Channel 8, Bulletin Board in order to disseminate the information to as many residents as possible.

Primary Audience

Nahant residents

Measurable Goals

- Co-sponsor an annual Household Hazardous Waste Collection Day.
- Continue to develop the Household Hazardous Waste Collection Day flyer on an annual basis for availability at the Nahant Town Hall and other municipal buildings.
- Annually send a press release advertising the event to the Harbor Review and other local newspaper and track which newspapers published it.
- Advertise the annual event on the Nahant public cable access Channel 8 Bulletin Board.
- Maintain and update the Town's web page.
- Track the amounts and types of waste collected each year.
- Track the number of Nahant vehicles that participate in the event each year.

Responsible Parties

Nahant Department of Public Works (DPW), Webmaster

Implementation Strategies

The Nahant DPW maintains the budget for the HHW Collection Day and will continue to coordinate the event. Responsibilities of the Nahant DPW include developing and distributing the annual HHW Collection Day press release, contacting the public cable access station and coordinating with the Town's Webmaster in order to post event information as outlined above. The Nahant DPW will also be responsible for printing and distributing the Household Hazardous Waste Collection Day flyer, and obtaining a summary of the vehicle count and wastes collected at the annual events.

Timeline

The event will take place on an annual basis during the month of June starting during the 2003 permit year to the end of the permit term.

Annual Evaluation

The Nahant DPW will prepare a summary of the household hazardous waste collection event for inclusion in the annual report to the NPDES Phase II permitting authorities. The summary will include an assessment of the progress towards achieving the identified measurable goals.

BMP 1-3 Intensify the Existing Pet Waste Management Campaign

BMP Description

Pet waste that is not properly disposed of can wash into nearby waterbodies or be carried by stormwater runoff into storm drains. The Town's storm drains are not connected to the Lynn Sewage Treatment Plant but rather drain directly into local ponds, brooks and the ocean. The untreated animal feces can become a significant source of runoff pollution. Pet wastes contain nutrients that promote weed and algae growth. Increased levels of algae lower the dissolved oxygen level of the water bodies, while increasing levels of ammonia. When combined with warm temperatures, the low oxygen levels and ammonia can produce conditions that are detrimental to the health of fish and other aquatic life. In addition, pet wastes carry bacteria, viruses, and parasites that pose risks to human health, threaten wildlife, and may result in temporary beach closures. In an effort to reduce this type of non-point source pollution, the Town will intensify the existing pet waste management campaign.

Currently, the Town Clerk's Office distributes a fact sheet summarizing the local dog by-laws and related information with every new dog license and dog license renewal that is mailed out. This fact sheet outlines the bylaws for dog licensure, leashing, prohibited activities and penalties for any violations. The Town's by-laws indicate that dog owners are required to remove pet waste from all public and private property, designate areas where dog walking is prohibited, and identify fines that will be imposed for each offence. In 2002, 410 dog licenses were issued and 50 "pooper scooper" violations fines handed out. The Town will begin distributing an updated version of this fact sheet that also includes information regarding the effects of pet wastes on water quality and what pet owners can do to reduce water pollution. For example, the fact sheet will identify appropriate methods for disposing of pet waste such as scooping and flushing the waste down the toilet or sealing the waste in plastic bags and throwing it into the trash. These fact sheets will also be distributed to the attendees of the Town's Spring Rabies Clinic that approximately attracts 15 attendees each year. The information on the fact sheet will also be posted on the Town's web site.

Annually the Town's Animal Control Department will issue a press release to the Harbor Review and other local newspapers that will include information regarding the Town's by-laws pertaining to dogs, the effects of pet wastes on water quality and techniques for appropriate pet waste disposal. The press release will also include a summary of the number and location of violations issued over the current year and how it compares with those issued the previous year. This department has posted signs that identify the Town's requirements for pet waste removal and fines for violation of this requirement at local beaches and parks. During the Summer of 2003 additional signs will be posted in various locations in Town that have been identified as having had numerous violations of the pet waste removal by-law. Additional signage efforts will continue as needed.

The Town has established a portion of Nahant Beach as the community "Dog Beach." This beach is open year round for Nahant licensed dogs to exercise unleashed during designated hours of the day. From May through September dogs are prohibited from all other beaches and from October through April dogs are allowed on all other beaches but only leashed. As a result, the "Dog Beach" receives the greatest number of canine visitors on the island. The Town of Nahant will establish an appropriate number of "pet waste stations" along the designated "Dog Beach." These stations will include educational signage regarding pet waste, waste receptacles, and a supply of disposal waste collection bags.

While the fact sheets and pet waste stations are designed to educate the Town's pet owners, the goal of the pet management campaign is to heighten awareness regarding pet waste management throughout the Town. Information posted on the Town's web site, signage advertising the local bylaw, the pet waste stations, and an annual press releases to local newspapers will assist in educating the general public of the importance of proper pet waste management techniques. Residents can further participate in the pet waste management campaign by using the Town's Complaint Hotline *(BMP 4-3)* to assist the Town's Police Officers and Animal Control Officers in targeting specific areas where violations of this nature may occur frequently.

Primary Audience

General public

Measurable Goals

- Update fact sheets to include information regarding the effects of pet wastes on water quality and what pet owners can do to reduce water pollution.
- Distribute updated fact sheets with dog licenses, dog license renewals, and at the Town sponsored Spring rabies clinic.
- Track the number of fact sheets distributed annually.
- Track the number of violations issued per year.
- Post pet waste management information on the Town's web site.
- Establish "pet waste stations" at the designated "Dog Beach".
- Track the number and location of new signs posted that advertise the Town's pet waste removal by-law.

Responsible Parties

Nahant Animal Control Department, Town Clerk's Office, Department of Public Works (DPW)

Implementation Strategies

The Animal Control Department will update the fact sheet summarizing the local dog by-laws and related information in conjunction with the Clerk's Office that will ensure its distribution with every new dog license and dog license renewal that is mailed out. The Animal Control Department will also work with the Town's Webmaster to ensure that the information on the updated fact sheet is posted on the official Nahant website. The Town's Animal Control Department will issue an annual press release as outlined above, continue to enforce the Town's pet waste removal bylaw, establish the "pet waste stations" at the "Dog Beach" and place additional signage where necessary.

Timeline

The Animal Control Department will update the fact sheet summarizing the local dog by-laws and related information and the Clerk's Office will incorporate the updated fact sheets into the regular licensure mailings by the Summer of 2003. The updated fact sheets will be distributed at the Town's rabies clinics beginning in the Spring of 2004. The Animal Control Department will set up and maintain the "pet waste station" at the "Dog Beach" each year throughout the permit term beginning in the Spring of 2004. The Department of Public Works will post new signs throughout the Town during the Summer of 200__, additional signs will be posted as needed provided the availability of funding.

Annual Evaluation

The Animal Control Department will be responsible for preparing a summary of the activities conducted for this BMP that include an assessment of the progress made towards achieving the identified measurable goals.

BMP 1-4 Distribute Educational Information Targeted to Community Businesses

BMP Description

Local businesses will receive an educational flyer, developed and distributed by the Town of Nahant, during the summer of 2004. The flyer will provide a definition of stormwater and will frame stormwater concerns from the Community's perspective as it discusses potential impacts by businesses on stormwater quality and flow. The flyers are meant to be both educational and motivational tools, to increase awareness of stormwater in the business community and to challenge businesses to take steps towards stormwater quality improvements in their own business practices. The flyer will include information regarding improved housekeeping in parking areas, litter management in loading docks, maintenance of grease traps, stores carrying and promoting environmentally friendly products, employee training and other similar activities. In addition to the distribution of the flyer to each of Nahant's seventeen local businesses, the Town's web site will have the flyer posted (BMP 1-1).

Primary Audience

Nahant businesses, General public

Measurable Goals

- Develop an educational flyer targeted to local businesses.
- Distribute the educational flyer to 100% of the businesses in the municipality.
- Post the informational flyer on the Town's website.

Responsible Parties

Nahant Town Administrator, Webmaster

Implementation Strategies

The Town Administrator will maintain the responsibility for drafting and creating the layout of the flyer that the seventeen local businesses will receive. In addition, an electronic copy of the educational flyer will be provided to the Town's Webmaster for posting on the Community's website.

Timeline

The educational flyers will be distributed to local businesses and posted on the Town's website in the summer of 2004.

Annual Evaluation

The Town Administrator will be responsible for preparing a summary of this education and outreach BMP that includes an assessment of the progress made towards achieving the identified measurable goals.

BMP 1-5 Promote Water Conservation Practices for Homeowners

BMP Description

Water Services are provided to the Town's residents through a cooperative effort between the Massachusetts Water Resources Authority (MWRA) and the Nahant Department of Public Works (DPW). The Town's Water Conservation Program was originally created to help reduce the demand on the MWRA's water sources. Achievement of a successful water conservation campaign within the town could reduce the frequency of sanitary sewer surcharges, the load on the Lynn Sewage Treatment Plant (tributary to the Lynn Harbor) and the need to expand the existing municipal sewer system.

Nahant will continue to actively promote water conservation practices to all residents throughout the year. Public education materials developed by the MWRA are available throughout the year at the Board of Selectmen's Office in Town Hall. These materials include but are not limited to dye tablets used to test toilets for leaks, the Home Water Conservation Guide, Facts About Outdoor Water Conservation and Stop Leaks/Save Water flyers. In the future, the Board of Selectmen's Office will also assists residents in obtaining free water conservation kits that are available through the MWRA. These kits include a water efficient showerhead, toilet tank dams, faucet aerators, and leak detection information that can be used to check for faucet, shower and toilet leaks.

In order to expand its water conservation efforts the Town's DPW will issue a press release to local newspapers in the Spring of each year throughout the permit term. This annual press release will focus on the benefits of water conservation, the availability of educational materials and water conservation kits to Nahant residents, and the status of the Department of Public Works Leak Detection Program. The DPW will place "Green Lawns and Gardens" posters at various locations within Town Hall and at the public library. The posters are supplied by the MWRA and provide the reader with useful tips for conserving water outdoors. The MWRA has also made water conservation bill inserts available to the Town. The MWRA bill inserts, are brochures that emphasize water efficient fixtures and appliances for the home and will be incorporated into the water bills during September of the 2003 permit year. The Town will distribute other water bill inserts during subsequent permit years if they are made available by the MWRA. The Town will also post water conservation information on the Public Services web page, which can be accessed at www.Nahant.org. Information on how to obtain free water-efficiency kits, links to the MWRA Home Water Saving Tips (www.mwra.com/04water/html/watsav.htm), the Gardening and Landscaping Water Conservation Tips (www.mwra.com/04water/html/gardening.htm), and other relevant water conservation information will be available on this web page.

Primary Audience

All residents and businesses

Measurable Goals

- Track the number of dye tablets distributed by the Board of Selectmen's Office.
- Track the number of water-efficiency kits issued by the Board of Selectmen's Office.
- Post water conservation information on the Town's web page.
- Post water conservation posters at Town Hall and the public library.
- Include water conservation bill inserts with the September 2003 water bill.
- Track the number of bill inserts mailed each year of the permit term.
- Issue an annual press release to local newspapers to promote water conservation.

Responsible Parties

Nahant Department of Public Works (DPW), Board of Selectmen's Office.

Implementation Strategies

The Nahant DPW will continue water conservation practices throughout the year by providing various educational materials, dye tablets, and assisting residents in obtaining water-efficiency kits via the Board of Selectmen's Office. In addition to these efforts, the DPW will issue an annual press release during the Spring of each year as outlined above. The DPW will post water conservation posters at various public locations and include water conservation bill inserts with the resident's water bill given that the MWRA provides the Town with these materials. The DPW will also work with the Town's MIS Department to expand and continuously update its existing web page to include a variety of water conservation information.

Timeline

Existing efforts made by the DPW to promote water conservation practices will take place throughout each year from the present to the end of the permit term. Beginning in the Spring of 2005 the DPW will issue an educational press release to local newspapers each Spring throughout the permit term.

The DPW educational bill inserts will be incorporated into the Town's September water bill during the 2003 permit year and during subsequent permit years if they are made available by the MWRA. Water conservation posters will be placed in public locations throughout the Town during the Summer of 2003 as outlined above and updated if and when the MWRA provides new posters. Water conservation information will be added to the DPW's website by the Spring of 2004.

Annual Evaluation

The Nahant DPW will prepare a summary of this BMP, which will include an assessment of the progress towards achieving the identified measurable goals.

BMP 1-6 Conduct Metal Recycling Day Events & White Goods Pickup

BMP Description

The Nahant Department of Public Works (DPW) sponsors six Metal Recycling Day events every year. The Metal Recycling Days are scheduled on the last Saturday of every month from May through October and will be conducted throughout the permit term. The events will regularly take place at the Town's Public Works Facility on Flash Road, allowing residents a convenient location to properly dispose of metals, televisions, computer monitors and microwaves. The Town also provides curbside pick up of white goods including stoves, refrigerators, clothes washer and dryers, dishwashers, hot water heaters and other metal jacket appliances. Residents interested in the curbside pick up of white goods must contact Town Hall in order to schedule an appointment for the pick up. The Metal Recycling Day events and pick up of white goods serves as a means of informing residents about the appropriate methods of disposing of items that are not collected with the regular weekly trash pick up, thereby reducing incidents of illegal dumping within the Town and to its coastal waters

In order to advertise the Metal Recycling Day events, the DPW produces an annual flyer that outlines the drop off schedule for the year and a listing of the materials that will be accepted. This flyer is made available to Nahant residents at the DPW facility and at various departments in the Town Hall throughout the year. This same information will also be placed on the public cable access television station, Channel 8, Bulletin Board and on the Town's web site. The White goods curbside pickup service is currently advertised and will continue to be advertised on the Town's web site. The DPW will work with the Town Webmaster to ensure that the information regarding these services is maintained on the website.

Primary Audience

Nahant residents

Measurable Goals

- Sponsor six metal recycling day events annually.
- Produce an annual flyer that outlines the Metal Recycling Day schedule for that year and make flyers available at Town Hall and the DPW Facility.
- Advertise each Metal Recycling Day event on Nahant's public cable access television station, Channel 8, Bulletin Board.
- Maintain and update the Metal Recycling Day and white goods pick up services information on the Town's web site.
- Track the amounts and types of waste collected at each Metal Recycling Day event.
- Track the number of Nahant vehicles/residents that participate in each Metal Recycling Day event.
- Track the amounts and types of white goods collected each year by the white goods pick up service.
- Track the number of Nahant residents that participate in the white goods pick up service.

Responsible Parties

Nahant Department of Public Works (DPW), Webmaster

Implementation Strategies

The Nahant DPW maintains the budget for the Metal Recycling Day and will continue to coordinate the events. The DPW will produce a summary of the wastes collected and number of vehicle/residents participating during each event. The DPW will also be responsible for developing the Metal Recycling Day flyer, contacting the local cable access station and the City's web master in order to post event information as outlined above.

The Nahant DPW will continue to provide the white goods pick up services for the Town. This department will maintain responsibility for coordinating the service and tracking the number of residents serviced and amount of white goods collected.

Timeline

The Metal Recycling Day events will take place six times each year on the last Saturday of each month between May and October throughout the permit term. The white goods pick up services are available to Nahant residents throughout the permit term.

Annual Evaluation

The Nahant DPW will prepare a summary of the Metal Recycling Day events and white goods pick up services that occur each year including an assessment of the progress towards achieving the identified measurable goals.

Public Involvement and Participation

Required Elements

All Public Involvement activities must comply with state public notice requirements at MGL Chapter 39 Section 23B.

- *The Permittee must provide an opportunity for the public to participate in the development, implementation and review of the Storm Water Management Program (SWMP).*
- *Activities may also include a stream monitoring by volunteers or the formation of a stormwater management committee.*

Public Involvement During SWMP Development & Implementation

BMP 2-1	*Public Presentation, Access to Draft SWMP & Receipt of Comments*
BMP 2-2	*Conduct Public Presentation & Receive Comments on Annual Report*
BMP 2-3	*Provide Support to Local Cleanup Activities*

BMP 2-1 Public Presentation, Access to Draft SWMP & Receipt of Comments

BMP Description

An informational press release concerning the status of the Town's Stormwater Management Program (SWMP) was prepared by the Town and submitted to the Harbor Review for publication. This press release introduced the Draft SWMP to the public and publicized the placement of this document at designated locations and the opportunity to provide written public comment on the plan. In addition to being submitted to the local newspaper, the informational press release was posted at the Clerk's office and on the Town's official web page. The Town's draft SWMP was made available for public review beginning on Monday, August 18, 2003 at the Nahant Public Library, the Department of Public Works facility, the Town Clerk's Office and via the Town's official web site *(BMP 1-1)*.

On Thursday, August 14, 2003, the Town conducted an informational meeting in conjunction with the regularly scheduled Board of Selectmen meeting. The public meeting notification complied with the state public notice requirements as specified in MGL Chapter 39 Section 23B. A Public Notice of the informational meeting was filed with the Town Clerk and a copy was posted in Clerk's Office for over forty-eight hours. The informational meeting provided interested persons with the opportunity to offer written and/or oral comments during the meeting on the draft SWMP for the official record. Accurate records will be maintained of the meeting, setting forth the date, time, place, and persons in attendance. Documentation of this meeting, including a copy of the meeting minutes has been included in Attachment D. Written comments on the draft SWMP were accepted by the Town Administrator through Thursday, October 23, 2003.

The SWMP informational presentation and public review period was established for two purposes. The first was to ensure adequate public review, input and support of the Stormwater Management Plan. Comments received during the informational presentation and the review period were used by the Town to make decisions about the final SWMP. The second purpose was to begin educating residents and businesses about the importance of their role in achieving the overall goals of this program. The Town will use the final SWMP as an educational tool throughout the permit term making it available at the library and on the Town's website.

Primary Audience

General public

Measurable Goals

- Make draft SWMP available to the public and conduct public meeting and comment period.
- Finalize SWMP.
- Make the final SWMP accessible to the public via the Town's public library and web page.

Responsible Parties

Nahant Town Administrator, Webmaster

Implementation Strategies

The Town Administrator and Board of Selectmen coordinated and conducted the public meeting and comment period as well as made the draft SWMP available to the public. The Town Administrator worked with the Webmaster to place the draft SWMP on the Town's website, and will update the website with the Final SWMP during the Winter of 2003. The Town Administrator provided the Nahant Public Library with a copy of the Town's draft and final SWMP for the public to access as outlined above.

Timeline

A draft of the Town's SWMP program was located at the Town Library, DPW Facility, Clerk's Office and on the Town's web page beginning on Monday, August 18, 2003 through Thursday, October 23, 2003 for review by the public. An informational presentation was held on Thursday, August 14, 2003 and written public comment was accepted through Thursday, October 23, 2003. The final SWMP will become available at the Nahant Public Library and on the Town's web site by the Winter of 2003.

Annual Evaluation

The Town Administrator will prepare an assessment of the progress towards achieving the identified measurable goal.

BMP 2-2 Conduct Public Presentation & Receive Comment on Annual Report

BMP Description

The NPDES General Permit for Stormwater Discharges from Small MS4s requires Towns to submit an annual report that will contain information regarding the Stormwater Management Plan (SWMP) activities of the previous calendar year. Each year, the Town will conduct a public presentation of the information to be included in the annual report and solicit comment from the public regarding the program. The presentations will cover the report's content, which includes the status of compliance with the permit conditions, an assessment of the appropriateness of the selected BMPS and progress made towards achieving the associated measurable goals. Conducting the public presentations will serve to ensure adequate public review, input and support of the ongoing SWMP.

The public presentation will be advertised in a posting at the Clerk's office, on the Town's web page *(BMP 1-1)*, on Nahant's Public Access Channel 8 Bulletin Board, and via a press release to the Harbor Review and other local newspapers. The press release will also provide information on the status of the Town's SWMP and indicate that the public meeting will provide interested persons with the opportunity to offer written and/or oral comments regarding the ongoing program for the official record. All public meeting notifications will comply with the state public notice requirements as specified in MGL Chapter 39 Section 23B. A Public Notice for each meeting will be filed with the Town clerk and a copy will be posted in clerk's office for over forty-eight hours. In addition, meetings will be advertised as a Public Notice in the Harbor Review and other local newspapers. Accurate records will be maintained of each meeting, setting forth the date, time, place, and persons in attendance. Meeting minutes will be made available to the public at the Town Clerks Office, the Nahant Public Library and via the Town's web site. The annual public presentations regarding the status of the Town's SWMP will serve as a tool to continue educating residents and businesses about the importance of their role in achieving the overall goals of the program.

Primary Audience

General public

Measurable Goals

- Prepare annual reports.
- Send an annual press release advertising the event and the status of the Town's SWMP to local newspapers and track whether or not it was published.
- Advertise the public presentation on the Nahant Public Access Bulletin Board (Channel 8).
- Conduct a public presentation and receive comments on the annual report.
- Make records of meeting available to public.
- Submit an annual report to both the EPA and MA DEP.

Responsible Parties

Nahant Town Administrator

Implementation Strategies

The Town Administrator has been identified as the operator of the small MS4 and as a result will maintain the responsibility of compiling the Town's annual report. The Town Administrator will also coordinate, present and receive comments from the public meeting.

Timeline

The first report is due on the first anniversary of the effective permit date, May 1, 2004, and annually thereafter. The Town's permit will expire five years from the effective date therefore the last report required under this permit will be submitted such that it meets the May 1, 2008 deadline. The Town will conduct one public presentation and receive comments for each annual report prior to the report's submission. Public presentations will be noticed and advertised as indicated above prior to its occurrence.

Annual Evaluation

The Town Administrator will prepare a summary of the public presentation and comments received that includes an assessment of the progress made towards achieving the identified measurable goals.

BMP 2-3 Provide Support to Local Cleanup Activities

BMP Description

In order to promote stormwater awareness the Town will offer assistance to any group conducting a local cleanup activity. The Town will advertise this assistance in the form of a letter offering to provide a dumpster, trash pick up services, and safety items such as cones, vests and signage to groups conducting cleanup events. The Town will also cover the tipping fee required to dispose of the collected waste. The Nahant Conservation Commission and DPW will work together to establish an appropriate list of neighborhood associations, homeowner associations, beach associations, and civic groups where the annual letter will be sent. The Town's availability to assist in local cleanup activities will also be posted on the Nahant official web site in order to communicate the information to a broader range of interested persons. In recent years, the Town has provided similar services to local beach cleanups. Events such as this have a three-fold impact by cleaning up the community, giving cleanup volunteers a sense of ownership in their community, and raising awareness in the community at large. The Town hopes that publicizing the DPW's availability will encourage more frequent volunteer cleanup events throughout Nahant.

Primary Audience

General public

Measurable Goals

- Draft and distribute an annual letter to offering assistance with local cleanup activities to neighborhood associations, homeowner associations, beach associations, and civic groups active in Nahant.
- Place information contained in letter on the Town's official website.
- Track which entities the letters are sent to each year.
- Track the number of cleanup activities the DPW assists in conducting each year.
- Track the number of cleanup participants at each activity the DPW assists in conducting.
- Track which areas of Town are cleaned by each activity the DPW assists in conducting.
- Track the quantity of waste collected as a result of the cleanup activity.

Responsible Parties

Nahant Department of Public Works (DPW), Conservation Commission

Implementation Strategies

The Nahant DPW and the Conservation Commission will work together to establish an appropriate list of local neighborhood associations, homeowner associations, beach associations, and civic groups where the annual letter will be sent. The Conservation Commission will draft the letter on behalf of the DPW and DPW will coordinate the assistance to be provided at each event including the trash disposal of the waste collected during the event.

Timeline

The cleanup assistance letter will be distributed each Spring beginning in 2004.

Annual Evaluation

The Nahant Conservation Commission, with assistance from the DPW, will prepare a summary of the success of the event. The summary will include an assessment of the progress towards achieving the identified measurable goals.

Illicit Discharge Detection and Elimination

Required Elements

The permittee must develop, implement and enforce a program to detect and eliminate illicit discharges. An illicit discharge is any discharge to a municipal separate storm sewer that is not composed entirely of stormwater. Exceptions are discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal sewer system), allowable non stormwater discharges described at Part I.F. and discharges resulting from fire fighting activities.

- *If not already existing, the permittee must develop a storm sewer map. At a minimum, the map must show the location of all outfalls and the names of all waters that receive discharges from those outfalls. Additional elements may be included on the map, such as, location of catch basins, location of manholes, and location of pipes within the system. Initial mapping should be based on all existing information available to the permittee including Town records and drainage maps. Field surveys may be necessary to verify existing records and locate all outfalls.*

- *To the extent allowable under state or local law, the permittee must effectively prohibit, through an ordinance or other regulatory mechanism, non-stormwater discharges into the system and implement appropriate enforcement procedures and actions. If a regulatory mechanism does not exist, development and adoption of such a mechanism must be included as part of the stormwater management program.*

- *The permittee must develop and implement a plan to detect and address non-stormwater discharges including illegal dumping, into the system.*

- *The permittee must inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper waste disposal.*

- *The non-stormwater discharges listed in Part I.F of the permit must be addressed if they are identified as being significant contributors of pollutants.*

Outfall Location Map

BMP 3-1	*Complete the Town's Storm Drainage Map*

Ordinance

BMP 3-2	*Develop and Adopt an Illicit Discharge and Connection Stormwater By-Law*

Illicit Discharge Detection and Elimination Plan

BMP 3-3	*Develop a Formal Illicit Discharge Detection and Elimination Plan*

Public Education

BMP 3-4	*Formalize the Town's Storm Drain Stenciling Program*
BMP 1-2	*Conduct an Annual Household Hazardous Waste Collection Day*
BMP 1-6	*Conduct Metal Recycling Day Events*
BMP 2-3	*Provide Support to Local Cleanup Activities*
BMP 4-3	*Develop and Implement a Citizen Complaint Hotline*

Address Non-Stormwater Discharges

The Town has not identified any of the non-stormwater discharges listed in Part I.F of the permit as being significant contributors of pollutants to the municipal stormwater system.

BMP 3-1 Complete the Town's Storm Drain System Map

BMP Description

The Town of Nahant has actively maintained a Master Utility Plan (Refer to Figure 1) that illustrates the municipal water, sanitary sewer, and storm drainage system. While all of the Town's outfalls have been identified on this utility map, the storm drainage component is incomplete. The existing Master Utility Plan places the Town in compliance with the mapping requirements of the general permit (Part II B.3.a.), which states that at a minimum the map must show the location of all outfalls and the names of all waters that receive discharges from those outfalls.

Throughout the permit term, the Town will work to both expand and improve the existing storm drainage map. The conversion of the Master Utility Plan into a GIS based format was completed in March of 2003. The electronic GIS shape files associated with the catch basins, drain manholes and storm drains on this Master Utility Plan, and information available from MassGIS, Town records, and data collected via field surveys were compiled to develop a GIS based storm drainage system map. All roadways, waterbodies and wetlands located within the municipal boundaries have been illustrated on the map as well as all municipal outfalls and receiving waterbodies. A GIS based Outfall Location Map has been included in Figure 2 of the Stormwater Management Program (SWMP) and the "In-Progress" Storm Drainage System Map has been included in Figure 3.

Throughout the permit term the Town will conduct a storm drain facility inventory and survey in order to map the areas of the existing storm drainage system that are incomplete and are not included in the "In-Progress" Storm Drainage System Map. The Town has recently completed a series of drainage projects in the area of Bear Pond and within Willow Road. Rather than surveying the storm drainage facilities associated with these projects, the Town will have the as-built plans digitized and converted into a GIS format for inclusion in the "In-Progress" Storm Drainage System Map. The efforts put forth to map the existing storm drainage system will begin in the Spring of 2004 and occur at a rate of twenty percent per year, thereby completing eighty percent of the Town's storm drainage system mapping by the end of year five of the permit term. The Town will also draft an amendment to the Zoning Bylaw that would require the project proponents for any project regulated by Site Plan Review to submit a copy of the as-built plans to the Planning Board in digital format. The digital plans would be required to reference the datum for the MassGIS database, North American Datum 1983 (NAD83), and provide units in feet. This amendment would allow the Town to easily add any new storm drainage components to the Town's Storm Drainage System Map. The Town will also draft a comparable amendment to the Nahant Subdivision Rules and Regulations, thus requiring projects regulated by these rules to also provide electronic as-built plans in a similar format.

The Town's Storm Drainage System Map that has been converted to a GIS format has the ability to be linked to an external database in order to maintain inspection and maintenance records for various components of the storm drainage system. Future efforts will involve obtaining additional GIS software licenses, GIS training for various municipal staff, and maintaining inspection and maintenance records for the storm drainage system using the GIS databases. Due to the current fiscal climate, the Town has not cited these efforts as a part of the SWMP for this permit term. These efforts will be considered if and when funding becomes available.

Measurable Goals

- Map twenty percent of the Town's Storm Drainage system each year beginning in the Spring of 2004.
- Draft and take to Town Meeting an amendment to the Zoning Bylaw that would require the project proponents for any project regulated by Site Plan Review to submit a copy of the as-built plans to the Planning Board in digital format.
- Draft and take to Town Meeting an amendment to the Nahant Subdivision Rules and Regulations that would require project proponents to submit a copy of the subdivision's as-built plans to the Planning Board in digital format.
- Continuously update the storm drainage system map(s) as new components are added to the municipal storm drainage system.

Responsible Parties
Nahant Town Administrator, Town Clerk, Planning Board, Department of Public Works

Implementation Strategies
The Town Administrator and the Planning Board, assisted by the Town Clerk, will draft the amendments to both the Zoning By-Law and the Nahant Subdivision Rules and Regulations. The Planning Board, will hold a public hearing regarding the amendments and later submit them to Town Meeting for action. Upon adoption of the amendments, the Planning Board will be responsible for passing the electronic files of the as-built plans to the Town Administrator for inclusion in the Town's Storm Drainage Map. The Town Administrator will work with the DPW to conduct the storm drainage facility inventory and survey or contract the services of an independent entity to conduct said services. The DPW will also work with the Town Administrator to continuously update the Storm Drainage System Map as new or corrected information regarding the municipal storm drainage system becomes available.

Timeline
The amendments to both the Zoning By-Law and the Nahant Subdivision Rules and Regulations will be drafted and submitted to Town Meeting by the Spring of 2004. The Town will begin its storm drainage facility inventory and survey in the Spring of 2004 and will have mapped a minimum of eighty percent of its storm drainage system by the end of the permit term.

Annual Evaluation
The Nahant DPW will prepare a summary of the progress made on updating the outfall location map. The summary will include an assessment of the progress towards achieving the identified measurable goals.

BMP Description

Illicit discharges to the municipal separate storm sewer system will result in contaminated wastewater entering the receiving waterbodies prior to receiving treatment from a wastewater treatment plant. Illicit discharges can result from sanitary sewer services that are illegally connected to the storm drainage system, illegal dumping practices, and improper disposal of sewage from recreational activities such as boating or camping. The Town will draft an Illicit Discharge and Connection Stormwater By-Law that will serve as a mechanism to prohibit illicit discharges from entering the municipal separate storm sewer system. The by-law will prohibit illicit connections and discharges to the municipal storm drainage system, obstructions of the municipal storm drainage system, and establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance. The by-law will also provide for appropriate enforcement procedures and actions to be taken in the event of a violation.

Primary Audience

Developers, Contractors, General Public

Measurable Goals

- Draft the Illicit Discharge and Connection Stormwater Bylaw.
- Take the Illicit Discharge and Connection Stormwater By-Law to Town Meeting for acceptance.
- Track the number of enforcement actions taken.
- Track the number of street opening permits.

Responsible Parties

Nahant Town Administrator, Town Clerk, Building Inspector

Implementation Strategies

The Nahant Town Administrator, assisted by the Town Clerk, will begin drafting the Illicit Discharge and Connection Stormwater By-Law and present it for a vote of acceptance the annual Town Meeting. Upon being adopted, the Department of Public Works and Building Department will administer, implement and enforce the provisions of the ordinance.

Timeline

The Illicit Discharge and Connection Stormwater By-Law will be drafted by the Winter of 2004-2005 and presented at the annual Town Meeting in April of 2005.

Annual Evaluation

The Town Administrator will prepare a summary that includes the progress made towards drafting the Stormwater By-Law and an assessment of the progress towards achieving the identified measurable goals.

BMP 3-3 Develop a Formal Illicit Discharge Detection and Elimination Plan

BMP Description

The Town of Nahant currently has no formal Illicit Discharge Detection and Elimination Plan (IDDEP). However, the Department of Public Works (DPW) conducts a periodic survey of the Town's storm drainage outfalls. During the surveys an inspector examines each drainage outfall for signs of damage, blockage, or discharge of non-stormwater flows. All issues are addressed immediately by the DPW, however, a standard method of inspection and documentation has not been established for the purposes of identifying and resolving instances of discharges of non-stormwater flows. As a component of the SWMP the Town will develop and implement a formal IDDEP that will include the following components: identifying priority areas, tracing the source of an illicit discharge, and removing the source of an illicit discharge.

Identifying priority areas

The Town will use available information to identify potential priority areas. Local environmental groups will be contacted in order to solicit any available sampling data, information on local waterbodies and potential problem areas. The Town will assess complaints received regarding illegal dumping or discharges suspected of being contaminated. The Town's commercial and industrial sectors will be assessed in order to identify those areas having discharges, which could have the greatest impacts to water quality. Older areas of Town will also be assessed due to the increased potential of having deteriorated sanitary and storm drain infrastructure, which could result in infiltration problems to the storm drainage system. The Massachusetts Integrated List of Waters will be reviewed in order to obtain pertinent information from the 303(d) list and 305(b) report.

Tracing the Source of an Illicit Discharge

Once the priority areas have been determined the Town will conduct regularly scheduled dry-weather surveys of outfalls to look for non-stormwater flows. The Town has developed an Outfall Inspection Form in order to standardize the outfall inspections; a draft of this form has been attached. Once outfalls with evidence of illicit discharges have been identified, the DPW will work to detect the source of the discharge. The DPW will utilize techniques such as manhole inspections, video monitoring, smoke testing, dye testing, chemical testing and tracking illegal dumping activities in order to identify the source of the illicit discharges.

Removing the Source of an Illicit Discharge

The Town will respond to the discovery of an illegal connection in a graduated manner, beginning with efforts to obtain voluntary compliance. The Town will seek voluntary compliance by notifying the responsible party of the illicit connection, its environmental consequences, the applicable regulations and information on how the situation can be remedied. If the responsible party fails to voluntarily comply with the Town requirements, then enforcement measures as outlined in the Illicit Discharge and Connection Stormwater By-law (***BMP 3-2***) will be followed. Recognizing that the cost of reconnecting the illicit connection to the sanitary sewer system may make voluntary compliance difficult, the Town will explore the possibility of providing assistance with these costs using municipal public works funds or state or federal grants.

The Town will attempt to prevent illegal dumping by raising awareness throughout the community and by enforcement measures outlined in the Illicit Discharge and Connection Stormwater By-law (***BMP 3-2***). The Town will continue to co-sponsor an annual Household Hazardous Waste Collection Day (***BMP 1-2***), six Metal Recycling Days each year (***BMP 1-6***), and accept both used oil and antifreeze throughout the year at the DPW facility. The Town will also publicize an illegal dumping reporting hotline (***BMP 4-3***) via the Town's web page and the local cable access Bulletin Board on Channel 8. And by proactively seeking opportunities to assist groups (***BMP 2-3***) with community cleanups the Town is hoping to help promote a sense of responsibility for water resources in the public and reduce instances of littering.

Measurable Goals

- Develop an Illicit Discharge Detection and Elimination Plan.
- Conduct dry-weather field screening of outfalls and track the number of surveys indicating a possible illicit connection.
- Trace the source of potential illicit discharges.
- Track the number of illicit connections found.
- Track the number of illicit connections repaired/replaced.
- Report on the success of obtaining alternative funding to assist in illicit connection removal.

Responsible Parties

Nahant Department of Public Works (DPW)

Implementation Strategies

The DPW will work to develop an effective IDDEP that the Town can easily implement given the limited funds and staff available. An essential component of the plan will include developing a schedule to conduct dry-weather field screening of all outfalls identified in the regulated area. Any additional outfalls that are located during this activity will also be investigated. Investigation results will be reviewed for indications of potential illicit discharges; the sources will be traced and remedied.

Throughout the implementation of the IDDEP the Town will assess and evaluate the efficiency and feasibility of the plan. The Town will identify areas of the IDDEP requiring improvement and make efforts to enhance the plan's effectiveness.

Timeline

The DPW will develop the IDDEP by Winter 2003-2004. Regularly occurring dry weather field screening will begin in the Spring of 2004. Illicit discharge source location and removal will be addressed subsequent to reviewing investigation results throughout the permit term.

Annual Evaluation

The DPW will prepare a summary of the Illicit Discharge Detection and Elimination Plan development and implementation. The summary will include an assessment of the progress towards achieving the identified measurable goals.

BMP 3-4 Formalize the Town's Storm Drain Stenciling Program

BMP Description

Stenciling storm drain inlets with a simple phrase like "Drains to the Ocean" is an effective way to identify the connection between the drain inlets and the receiving waterbodies. The purpose of the message is to raise public awareness to help deter littering and other practices that contribute to non-point source pollution. Over the past _____ years, the Town's Department of Public Works (DPW) has administered a storm drain stenciling program throughout the community and will continue to do so on an annual basis throughout the permit term.

There are hundreds of drain inlets in the Town and stenciling all of them would be costly and have less of an effect than selecting drains based on specific criteria. The Town will identify environmentally sensitive areas, areas where illegal dumping has been recorded in the past and areas of high pedestrian traffic to be the focus of the activity. Public works employees will conduct the storm drain labeling in order to eliminate the liability and safety concerns that would arise if a volunteer were to conduct the activity. As the DPW employees conduct the stenciling they will also note the condition of the inlets, such as whether they are clogged with debris or show signs of dumping and respond to these observations accordingly.

The Town will send a press release to the Harbor Review that explains the purpose of the Storm Drain Stenciling Program and offers tips on how citizens can reduce non-point source pollution to urban runoff by modifying certain behaviors. Publicizing the intention of these stenciled messages will help educate members of the community about the importance of their role in the community's environmental management.

Primary Audience

General public

Measurable Goals

- Identify areas where stenciling will take place and establish schedule for the activity.
- Track the number of drains stenciled each year.
- Summarize the condition of the inlets surveyed.
- Submit a press release to the Harbor Review.

Responsible Parties

Nahant Department of Public Works (DPW)

Implementation Strategies

Prior to stenciling the drain inlets a representative of the DPW will assess the most effective areas to conduct the activity and draft a press release for submission to the local newspapers. Upon identifying the drain inlets to be stenciled the DPW staff will conduct the activity and note the condition of the inlets.

Timeline

Stencils will require repainting every one to two years due to the effects of weather and traffic. The DPW will conduct stenciling activities on an annual basis during the Summer months of the permit term.

Annual Evaluation

The DPW will prepare a summary of the stenciling activities that include an assessment of the progress towards achieving the identified measurable goals.

Required Elements

The permittee must develop, implement, and enforce a program to reduce pollutants in any stormwater runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. The permittee must include disturbances less than one acre if part of a larger common plan.

The permittee does not need to apply its construction provisions to projects that receive a waiver from EPA under the provisions of 40 CFR§122.26(b)(15)(i).

- *To the extent allowable under state law, an ordinance or other regulatory mechanism to require sediment and erosion control at construction sites. If such an ordinance does not exist, development and adoption of an ordinance must be part of the program.*
- *Sanctions to ensure compliance with the program. To the extent allowable under state law or local law sanctions may include either monetary or non-monetary penalties.*
- *Requirements for construction site operators to implement a sedimentation and erosion control program which includes BMPs that are appropriate for the conditions at the construction site, including efforts to minimize the area of the land disturbance.*
- *Required control of wastes, including but not limited to, discarded building materials, concrete truck washout, chemicals, litter, and sanitary wastes.*
- *Procedures for site plan review including procedures which incorporate consideration of potential water quality impacts. The site plan review should include procedures for preconstruction review.*
- *Procedures for receipt and consideration of information submitted by the public.*
- *Procedures for inspections and enforcement of control measures at construction sites.*

Proposed BMPs

BMP 4-1 Develop an Erosion and Sedimentation Control By-Law
BMP 4-2 Develop a Site Inspection Form and Conduct Inspections
BMP 4-3 Develop a Citizen Complaint Hotline

BMP 4-1 Adopt a Stormwater Management and Land Disturbance By-law

BMP Description

Erosion and sedimentation that results from work on construction sites can lead to reduced water quality and other environmental degradation. The Town will develop and implement a Stormwater Management and Land Disturbance By-law that will serve as a mechanism to prevent unmitigated stormwater from areas altered by development from entering the municipal separate storm sewer system.

The by-law will require a Land Disturbance Permit be obtained for any activity that results in the disturbance of an area equal to or greater than half (½) acre of land that drains to the municipal separate storm sewer system. Construction of projects that disturb an area less than half (½) acre that drains to the municipal separate storm sewer system, will only be regulated under this requirement if the project is part of a larger common plan of development that disturbs greater than half (½) acre.

In order to obtain the permit the by-law will mandate that a project proponent develop and submit an Erosion and Sedimentation Control Plan (ESCP) to the Conservation Commission. The by-law will further stipulate that no work can proceed without an approved ESCP. The by-law would outline the requirements and procedures for the submission, review and approval of an ESCP, ESCP design criteria, and procedures for inspection and enforcement. The stormwater control measures proposed in the ESCP must be maintained at the site during all phases of construction. Inspections would serve as a mechanism to determine the overall effectiveness of the ESCP and ensure the proper implementation of the approved plan. The by-law would provide the designated inspector access to the property as deemed necessary to make regular inspections of the ESCP measures on the site. A standard inspection form will be developed and the by-law will require that the inspection report forms be completed during the inspections and submitted to the Conservation Commission.

Any violation of the terms of a permit issued under this by-law would result in the project's land disturbance permit being suspended or revoked. Violations of the by-law will be subject to a fine for each offense. The by-law will include a mechanism that allows the Town to retain the services of a professional engineer or other agent to inspect the ESC measures and make the developer responsible for the funds needed to cover the cost of conducting and scheduling the inspections.

Primary Audience

Developers, Contractors, General Public

Measurable Goals

- Draft the Stormwater Management and Land Disturbance By-law.
- Take the Stormwater Management and Land Disturbance By-law to Town Meeting for acceptance.
- Track the number of enforcement actions taken.

Responsible Parties

Nahant Conservation Commission, Town Administrator

Implementation Strategies

The Nahant Conservation Commission, with assistance from the Town Administrator, will begin drafting the Stormwater Management and Land Disturbance By-law and present it for a vote of acceptance at the annual Town Meeting. Upon being adopted, the Conservation Commission will administer, implement and enforce the provisions of the By-law.

Timeline

The Nahant Conservation Commission, with assistance from the Town Administrator, will draft the Stormwater Management and Land Disturbance By-law by the Winter of 2004-2005 and take it to the annual Town Meeting in the Spring of 2005.

Annual Evaluation

The Conservation Commission will prepare a summary that includes the progress made towards drafting the Stormwater Management and Land Disturbance By-law and an assessment of the progress towards achieving the identified measurable goals.

BMP 4-2 Develop a Site Inspection Form and Conduct Site Inspections

BMP Description

During construction, erosion and sedimentation control (ESC) measures are rendered ineffective if they are not installed or maintained properly. In order to ensure the effectiveness of construction site ESC measures, regular inspections must be conducted. Inspections will be conducted at various stages of the construction process including clearing and grubbing, rough grading, building/roadway construction, finish grading and final stabilization. ESC Inspection Forms will be developed to assist the inspector in documenting the ongoing inspection and maintenance. ESC Inspection Forms will identify the project site and the stage of construction.

Inspection of the ESC measures for all regulated projects will occur as outlined in the Stormwater Management and Land Disturbance By-law ***(BMP 4-1).*** The Conservation Commission will be authorized to retain the services of a professional engineer or other agent to inspect the ESC measures and make the developer responsible for the funds needed to cover the cost of scheduling and conducting the inspections. This inspector would be responsible for completing the ESC Inspection Form and submitting it to the Conservation Commission.

Primary Audience

Developer, Contractor

Measurable Goals

- Develop a Site Inspection Form that reflects the ESCP requirements.
- Track the frequency of inspections conducted for each site.
- Track the completion of inspection forms.
- Track the number of failed ESC BMPs discovered on each site.

Responsible Parties

Nahant Conservation Commission

Implementation Strategies

The Conservation Commission will develop the ESC Site Inspection Form and implement the use of the form upon adoption of the Stormwater Management and Land Disturbance By-law ***(BMP 4-1).***

Timeline

The Conservation Commission will draft the site inspection form by the Spring of 2005. Inspections for the ESC measures on all sites will be implemented upon adoption of the Stormwater Management and Land Disturbance By-law ***(BMP 4-1).***

Annual Evaluation

The Conservation Commission will prepare a summary of the development and implementation of the ESC site inspection forms that includes an assessment of the effectiveness of conducting the inspections and progress made towards achieving the identified measurable goals.

BMP 4-3 Develop and Implement a Citizen Complaint Hotline

BMP Description

The Town will establish a Citizen Complaint Hotline in the form of an electronic complaint form that will be accessible via the Town's website (www.nahant.org). The Citizen Complaint Hotline will provide a means for concerned citizens to contact the appropriate authority when they see a water quality problem on a construction site or anywhere else in the Town. The electronic form, which will be linked to the Department of Public Works (DPW) computer system, will request information about the individual placing the complaint, information regarding the alleged violation, and information describing any vehicles involved in the allegation.

The DPW will train its own staff to operate the hotline. Complaints received via the hotline will be investigated within 48 hours of receipt. If the responsible party can be identified the investigating team will inform them of the problem, offer methods for future disposal and direct the responsible party to resolve the problem. If the responsible party does not resolve the issue, an enforcement action will be taken in accordance with either the proposed Illicit Discharge and Connection Stormwater By-Law *(BMP 3-2)* or the Stormwater Management & Land Disturbance By-Law *(BMP 4-1)*. All actions taken related to the complaint will be documented.

The Town will advertise the hotline regularly on public cable access Channel 8 Bulletin Board and the Town's web page. The hotline will also be advertised every six months via paid advertisements in the Harbor Review. Residents that do not have personal access to the Internet can use public computers available at the Nahant Public Library to make complaints via the electronic hotline or call a specially designated telephone number at the DPW to document the complaint.

Primary Audience

General Public

Measurable Goals

- Establish the Citizen Complaint Hotline.
- Advertise the Citizen Complaint Hotline.
- Track the number of complaints received via the Citizen Complaint Hotline.
- Track the problems/incidents remedied as a result of the Citizen Complaint Hotline.

Responsible Parties

Nahant Department of Public Works (DPW), Town Webmaster

Implementation Strategies

The DPW will work with the Town's Webmaster to develop the electronic document that will be linked to the Department of Public Works (DPW) to serve as the Citizen Complaint Hotline. The DPW will establish a phone line to receive complaints from concerned citizens. The hotline will be staffed during the DPW's business hours

Timeline

The DPW and Webmaster will have the Citizen Complaint Hotline up and running by Fall 2004. Upon establishing the Citizen Complaint Hotline the Town will begin the advertising campaign as outlined above.

Annual Evaluation

The DPW will prepare a summary of the development of the Citizen Complaint Hotline that documents the progress towards achieving the identified measurable goals.

Post Construction Stormwater Management in New Development & Redevelopment

Required Elements

The permittee must develop, implement and enforce a program to address stormwater runoff from new development and redevlopment projects that disturb greater than one acre and discharge into the municipal system. The program must include projects less than one acre if the project is part of a larger common plan of development which disturbs greater than one acre.

- *To the extent allowable under state and local law, an ordinance or other regulatory mechanism to address post construction runoff from new development and redevelopment. If such an ordinance does not exist, development and adoption of an ordinance must be part of the program.*
- *Procedures to ensure adequate long term operation and maintenance of best management practices.*
- *Procedures to ensure that any controls that are in place will prevent or minimize impacts to water quality.*

Future Efforts

BMP 5-1 *Adopt a By-Law Governing Post-Construction Stormwater Management of New Development & Redevelopment*

BMP 5-1 Adopt a By-law Governing Post Construction Stormwater Management of New Developments and Redevelopments

BMP Description

The Town will develop and implement a Bylaw Governing Post-Construction Stormwater Management of New Developments & Redevelopments projects. This bylaw will require practices to control stormwater runoff from new and redeveloped sites and ensure the adequate long-term operation and maintenance of any structural best management practices included in new and redeveloped sites.

The by-law will require a Stormwater Management Permit be obtained for any activity that will alter the drainage characteristics of one or more acres of land draining to the Town's separate storm sewer system. New developments and redevelopments that alter the drainage characteristics of an area less than one acre which drains to the municipal separate storm sewer system, will only be regulated under this requirement if the project is part of a larger common plan of development that alters the drainage characteristics of greater than one acre.

In order to obtain the permit the by-law will mandate that a project proponent develop and submit an application package that includes a stormwater management plan and operations and maintenance (O&M) plan. The proposed project's stormwater management plan shall meet specific criteria outlined within the bylaw which will include those standards set forth in the Massachusetts DEP Stormwater Management Policy Handbook and Technical Handbook. The approved O&M plan will remain on file with the Town and will include a maintenance agreement between the Town and the owners of the proposed stormwater management system. The by-law will establish the Town's legal authority to ensure compliance with the O&M plan.

Primary Audience

Developers, Contractors, General Public

Measurable Goals

- Draft the Bylaw Governing Post-Construction Stormwater Management of New Developments & Redevelopments.
- Take the Bylaw Governing Post-Construction Stormwater Management of New Developments & Redevelopments to Town Meeting for acceptance.

Responsible Parties

Nahant Town Administrator, Town Clerk

Implementation Strategies

The Nahant Town Administrator, assisted by the Town Clerk, will begin drafting the Bylaw Governing Post-Construction Stormwater Management of New Developments & Redevelopments and present it for a vote of acceptance the annual Town Meeting. Upon being adopted, the Planning Board will administer, implement and enforce the provisions of the ordinance.

Timeline

The Bylaw Governing Post-Construction Stormwater Management of New Developments & Redevelopments will be drafted by the Winter of 2004-2005 and presented at the annual Town Meeting in April of 2005.

Pollution Prevention & Good Housekeeping in Municipal Operations

Required Elements

- *Develop and implement a program with a goal of preventing and/or reducing pollutant runoff from municipal operations. The program must include an employee-training component.*
- *Include, at a minimum, maintenance activities for the following: parks and open space; fleet and building; new construction and land disturbance; and stormwater system maintenance.*
- *Develop schedules for municipal maintenance activities described above.*
- *Develop inspection procedures and schedules for long-term structural controls.*

Employee Training Program

BMP 6-1 Develop and Implement a Formal Employee-Training Program

Municipal Maintenance Activities

BMP 6-2 Formalize the Existing Catch Basin Cleaning Program
BMP 6-3 Formalize the Existing Parking Lot and Street Sweeping Program
BMP 6-4 Develop & Implement a Vehicle & Equipment Maintenance Policy
BMP 6-5 Develop & Implement a Vehicle & Equipment Cleaning Policy
BMP 6-6 Develop & Implement a Landscape and Lawn Care Policy
BMP 6-9 Formalize the Bear Pond/Golf Course Drainage Maintenance Program

Other

BMP 6-7 Develop & Implement a Spill Prevention & Response Plan (SPRP) for the DPW Facility
BMP 6-8 Apply for a CPR Grant to Fund the Proposed Pollution Remediation Nahant Thicket Project

BMP 6-1 Develop a Formal Training Program for DPW Staff

BMP Description

A formal training program for the Department of Public Works (DPW) staff will be established to teach employees about stormwater management, potential sources of contaminants, and Best Management Practices (BMPs). The training program will instill all personnel with a thorough knowledge of good housekeeping techniques and materials management practices in an effort to prevent pollutant runoff from municipal operations. The Town will create a training manual that will serve as a method of documenting the Town's policies regarding these topics.

Employee training regarding good housekeeping practices will encompass the Town's policies regarding fleet maintenance *(BMP 6-5)*, vehicle washing *(BMP 6-6)*, illegal dumping, catch basin cleaning *(BMP 6-2),* parking lot and street sweeping *(BMP 6-3)*, lawn care *(BMP 6-6)*, and salt storage and application procedures. DPW employees that will be completing and maintaining records as required by various programs and policies will also be trained to update records correctly.

Failure to properly store and handle hazardous materials increases the probability of accidental spills occurring. The material management practices component of the training program will establish policies and procedures for proper storage, handling and disposal of wastes and familiarize employees with the DPW facility's Spill Prevention and Response Plan (SPRP) *(BMP 6-7).*

Primary Audience

DPW Staff

Measurable Goals

- Develop the DPW employee-training manual.
- Conduct training sessions with all current employees.
- Train permanent new DPW employees in accordance with the training manual.
- Track employees trained in accordance to the training manual.
- Conduct refresher training for employees after every two years of employment.

Responsible Parties

Nahant Department of Public Works (DPW) Supervisor, Town Administrator

Implementation Strategies

The DPW Supervisor will work with the Town Administrator to develop the DPW employee-training manual. The DPW Supervisor will conduct all employee-training activities. The DPW Supervisor will continuously track employees that have been formally trained and will provide refresher training to employees every two years of employment.

Timeline

The DPW Supervisor will have the formal training manual completed by the Fall of 2004 and schedule training for all current DPW employees immediately following the manual's completion. Permanent new hires to the DPW will be trained in accordance to with the Training manual within the first month of employment. The DPW Supervisor will track all training conducted and identify employees for retraining.

Annual Evaluation

The DPW Supervisor will prepare a summary of the formal training program's development and implementation that includes an assessment of the efficiency and feasibility of conducting the training as planned and progress towards achieving the identified measurable goals.

BMP 6-2 Formalize the Catch Basin Cleaning Program

BMP Description

Catch basins are equipped with a sump below the invert of the outlet pipe to collect solids and prevent debris from clogging the storm drain piping system or being washed into the receiving waterbodies. Catch basins must be cleaned periodically to maintain this ability to trap sediment. Removing sediment, decaying debris, and trash from catch basins has aesthetic and water quality benefits, including reducing foul odors, reducing suspended solids, and reducing the load of oxygen-demanding substances that reach the receiving waters. Presently, the Town conducts catch basin cleaning activities on a biennial basis. As a component of its SWMP, the Town will formalize the existing catch basin cleaning program in order to establish an organized method of tracking and documenting these cleaning activities.

The Town does not own the appropriate equipment for conducting catch basin cleaning activities and contracts private companies to clean the catch basins located within the roadways, municipal parking lots, and miscellaneous town owned properties. The Town's standard catch basin cleaning contract requires contractors to complete the biennial cleaning over a two-day period in October. The contractors are required to keep detailed daily records of the work conducted and an ongoing working map. Records should clearly identify the catch basin/manhole location as specified in the contract, the condition of the structure and whether or not it requires repair. Records will be provided to the Town where they will be maintained for a period of at least five years. The formal catch basin cleaning program will allow the Town to maintain the records of these cleanings for a period of at least five years during the implementation of an active contract.

Sediment and debris removed from catch basins and manholes must be disposed of in a proper manner in order to avoid any detrimental environmental impacts. According to the Massachusetts Department of Environmental Protection's (DEP) Summary of Regulations Governing Catch Basin Cleanings (October 28, 1997), see Attachment E, catch basin cleanings are classified as solid waste and must be handled and disposed of in accordance with all DEP regulations, policies and guidance. Catch basin cleanings collected from separate storm drainage systems are only required to test for contamination of hazardous materials if there is an indication that the catch basin cleanings may have been contaminated. The contract will state that the contractor is responsible for determining whether the waste is hazardous waste and ensuring that transport and disposal operations of the collected catch basin cleanings are conducted in compliance with all applicable laws, rules and regulations of the Federal and State government, regulations of the Nahant Board of Health and Town By-Laws.

Throughout the permit term, the DPW will assess and evaluate the efficiency and feasibility of conducting the cleanings as outlined above. The DPW will identify areas of the program requiring improvement and make efforts to enhance the program's effectiveness.

Primary Audience

Municipal employees

Measurable Goals

- Award biennial catch basin cleaning contract.
- Document biennial cleaning activities.

Responsible Parties

Nahant Department of Public Works (DPW)

Implementation Strategies

The DPW will request the funding from the Town in order to award the contract for the biennial catch basin cleaning activities. The catch basin cleaning contract

Timeline
The Town's formal catch basin cleaning program will be implemented in the Fall of 2003.

Annual Evaluation
The DPW will prepare a summary of the formalization of the Catch Basin Cleaning Program that includes an assessment of the efficiency and feasibility of conducting the cleanings planned and progress towards achieving the identified measurable goals.

BMP 6-3 Formalize the Existing Parking Lot and Street Sweeping Program

BMP Description

Street sweeping on a regular basis will remove sediment, debris, and other pollutants from roads and parking lot surfaces therefore reducing the pollutant load that enters the catch basins and is ultimately carried to receiving waters. The Town of Nahant owns one Timco vacuum type street sweeper and currently sweeps all municipal streets and parking lots a minimum of four times each year. The existing program will be formalized in order to establish an organized method of tracking and documenting these sweeping activities.

Currently municipal street and parking lot sweeping activities occur according to an informal schedule. The Town's twenty miles of roadway and municipal parking lots are swept four times during the year, the first sweeping occurring after the Spring snow melt, generally during the month March. The second and third sweeping activities of the year coincide with national holidays; streets are swept in May prior to Memorial Day and then again in July prior to Independence Day. The final sweeping of the year occurs in the fall following the Town's leaf pick up activities, which occur anytime between late September and early November. Each sweeping event is completed in approximately two days, with the sweepers averaging ten roadway miles per day plus municipal parking lots in the area.

The sweeping activities for municipal streets and parking lots are tracked according to the area of Town they are located within. The DPW has established three distinct regions by which the sweeping activities are divided; these are Little Nahant, Bass Point, and North Nahant/Nahant Road. In order to better document these activities the DPW will create an inventory of all the municipal streets and parking lots throughout Town and track sweeping activities on a street-by-street and lot-by-lot basis for each region of Town. At the end of each sweeping shift, the operator of the street sweeper will submit a report to the DPW Director indicating which of the scheduled streets and lots were swept. In order to ensure that all of the Town's streets and lots are swept according to the schedule, any missed areas will be scheduled for sweeping during the following day. The DPW Director will accurately track the parking lots and streets swept, the frequency of sweeping, and the amount of debris collected during sweeping activities.

An effective Parking Lot and Street Sweeping Program not only ensures the frequency of sweeping but also the proper disposal of the swept materials. Currently, the DPW tests all sweepings in order to determine whether or not they should be classified as hazardous waste. Sweepings found to be hazardous waste are disposed of in accordance with the Massachusetts Hazardous Waste Regulations, 310 CMR 30. All other sweepings are either reused or discarded in accordance with the Massachusetts Department of Environmental Protection Bureau of Waste Prevention's Reuse and Disposal of Street Sweepings Policy (BWP-94.092). This policy has been included in Attachment F. Prior to reuse or disposal, the street sweepings are temporarily stored at the DPW yard on Flash Road. Sweepings are stored in a low covered area that is surrounded by haybales. The DPW will re-evaluate their storage practices and make any necessary improvements in order to ensure compliance with the storage conditions required by Reuse and Disposal of Street Sweepings Policy (BWP-94.092).

Primary Audience

Municipal Staff

Measurable Goals

- Conduct an inventory of all municipal streets and parking lots.
- Track the number of times the inventoried municipal streets and parking lots are swept each year.
- Maintain an accurate log of sweepings collected and method of disposal.
- Re-evaluate storage practices and make improvements in order to ensure compliance with the MADEP BWP Reuse and Disposal of Street Sweepings Policy.
- Update inventory of municipal streets and parking lots as needed.

Responsible Parties
Nahant Department of Public Works (DPW)

Implementation Strategies
The DPW will develop the municipal streets and parking lot inventory and update it as needed. The DPW will sweep all municipal streets and parking lots a minimum of four times each year and track these activities as outlined above. The DPW will undertake measures necessary in order to ensure compliance with the Massachusetts Department of Environmental Protection Bureau of Waste Prevention Reuse and Disposal of Street Sweepings Policy.

Timeline
The DPW will continue to sweep municipal streets and parking lots accordance to the existing schedule. An inventory of municipal streets and parking lots will be completed by the Spring of 2004 upon which the DPW will begin maintaining logs of the frequency each street and parking lot is swept and the amount of sweepings collected. During the Spring of 2004 the DPW will assess it's compliance with the Reuse and Disposal of Street Sweepings Policy. The DPW has not yet evaluated its practices relevant to this policy, however, if it is determined that the DPW's practices are non-compliant with the policy, a plan for reaching compliance will be developed and implemented. Should this be the case, it is anticipated that compliance would be reached prior to the end of the permit term.

Annual Evaluation
The DPW will prepare a summary of the Parking Lot and Street Sweeping Program implementation that includes an assessment of the efficiency and feasibility of conducting the cleanings planned and progress towards achieving the identified measurable goals.

BMP 6-4 Develop a Vehicle & Equipment Maintenance Policy

BMP Description

The Town will establish a formal policy that enforces the use of measures that prevent or minimize contamination of stormwater runoff from all areas used for vehicle and equipment maintenance. Because all vehicle and equipment maintenance activities for the Town are conducted at the Department of Public Works (DPW) facility on Flash Road, this policy will be directed to DPW employees. The proposed policy will include measures such as performing all maintenance activities indoors, using drip pans, keeping an organized inventory of materials used in the shop, draining all parts of fluid prior to disposal, prohibiting wet clean up practices if these practices would result in the discharge of pollutants to stormwater drainage systems, using dry cleanup methods, minimizing run on and runoff of stormwater to maintenance areas.

Establishing a formal policy regarding the DPW's vehicle and equipment maintenance activities will provide the Town with a method of clearly identifying acceptable procedures for these activities and communicating this information to the DPW staff. The information contained in this policy will be incorporated into the good housekeeping component of the employee-training program and refresher training sessions ***(BMP 6-1)***.

Primary Audience

Nahant Department of Public Works employees

Measurable Goals

- Develop and implement a vehicle and equipment maintenance policy and incorporate policy requirements into the DPW employee-training program.

Responsible Parties

Nahant Department of Public Works (DPW) Supervisor

Implementation Strategies

The DPW Supervisor will develop the DPW vehicle and equipment maintenance policy and ensure that this policy is placed in the employee-training manual.

Timeline

The DPW Supervisor will develop and implement the formal DPW vehicle and equipment maintenance policy by the Fall of 2004. This policy will be incorporated into the formal training program ***(BMP 6-1)*** upon its anticipated completion in the Fall of 2004.

Annual Evaluation

The DPW Supervisor will prepare a summary of the formal DPW vehicle and equipment maintenance policy's development and implementation that includes an assessment of the progress towards achieving the identified measurable goals.

BMP 6-5 Develop a Vehicle & Equipment Cleaning Policy

BMP Description

The Town will establish a formal policy that enforces the use of measures that prevent or minimize contamination of stormwater runoff from all areas used for vehicle and equipment cleaning. Outdoor vehicle and equipment washing has the potential to result in high loads of nutrients, metals, and hydrocarbons during dry weather conditions. The proposed policy will include measures such as performing cleaning activities indoors, covering the cleaning operations, ensuring that all wash water drains to the proper collection system, sending vehicles to a commercial car wash, washing vehicles over an impermeable surface, and using biodegradable soaps.

The Town is currently in the process of constructing two wash bays at the Flash Road facility. Floor drains in the wash bays will collect the wash water and direct it to a controlled gas and oil separation chamber prior to being discharged to the Nahant sanitary sewer system. A detail of the Massachusetts Department of Environmental Protection standard gas and oil separation chamber that will be used at the Flash Road facility has been included in Attachment G. The DPW will complete the construction of the wash bays by the Fall of 2003. The proposed policy will ensure that all DPW vehicle-washing activities will be conducted within the new wash bays and will establish practical methods for addressing the vehicle washing practices for vehicles operated by the Police Department and Fire Department.

The DPW also operates and maintains a variety of other equipment, each requiring a specific technique for cleaning. It has been general practice to conduct all cleaning activities at the Flash Road facility indoors and take special consideration to ensure that the wash water is disposed of properly. The DPW will conduct an assessment of all equipment that requires cleaning and document the acceptable cleaning procedures within the proposed policy.

Establishing a formal policy regarding the municipal vehicle and equipment cleaning activities will provide the Town with a method of clearly identifying acceptable procedures for these activities and communicating this information to the appropriate municipal staff. The information contained in this policy will be incorporated into the good housekeeping component of the employee-training program and refresher training sessions *(BMP 6-1)* as well as provided to the Town's Police Department and Fire Department.

Primary Audience

Nahant Department of Public Works, Police Department, Fire Department

Measurable Goals

- Construct two new wash bays at the Flash Road facility.
- Develop and implement a vehicle and equipment cleaning policy.
- Incorporate policy requirements into the DPW employee-training manual and provide to the Town's Police Department and Fire Department.

Responsible Parties

Nahant Department of Public Works (DPW)

Implementation Strategies

The DPW will retain the services of a licensed site professional to witness the installation of the new wash bay at the Flash Road facility. The DPW will develop the DPW Vehicle and Equipment Cleaning Policy and ensure that this policy is incorporated into the employee-training program. The DPW will also provide the policy to the Police Department, Fire Department any other departments that are responsible for vehicle washing.

Timeline
Construction of the new wash bays at the Flash Road will be complete by the Fall of 2003. This policy will be incorporated into the formal training program *(BMP 6-1)* and distributed to the appropriate Town departments upon its anticipated completion in the Fall of 2004.

Annual Evaluation
The DPW will prepare a summary of the formal DPW vehicle and equipment cleaning policy's development and implementation that includes an assessment of the progress towards achieving the identified measurable goals.

BMP 6-6 Develop a Landscape and Lawn Care Policy

BMP Description

The Town will establish a Landscape and Lawn Care Policy to control the stormwater impacts of the Town's lawn care practices. The Department of Public Works (DPW) is responsible for the maintaining public green spaces, athletic fields, cemeteries, and school grounds in Town. The landscape and lawn care activities for these properties are generally outsourced to a licensed lawn care contractor. A management company selected by the Board of Selectman maintains the municipal Kelly Greens Golf Course.

While phosphorous and nitrogen containing fertilizers are used to provide nutrients necessary for plant growth, an excess of these nutrients can contribute to the source of stormwater pollution causing eutrophication in the receiving waters. The Town's policy will establish accepted management practices to reduce risks of nutrient pollution to the receiving waters. The policy will include guidance that recommends applying fertilizers at the minimum rate and to the minimum area needed, working the fertilizer deeply into the soil to reduce exposure of nutrients to stormwater runoff, applying fertilizer at lower application rates with a higher application frequency, base fertilizer application on soil tests, and applying organic based fertilizers.

Because the presence of pesticides and herbicides in stormwater runoff can be detrimental to aquatic organisms the Town's policy will also provide guidance that is intended to reduce the amount of pesticides and herbicides that come into contact with stormwater. The policy will be used to educate the DPW staff, contracted lawn care providers and golf course management about the appropriate techniques for the storage and application of pesticides and herbicides. The policy will include guidance that recommends that pesticides be stored in a dry covered area, curbs or berms should be provided to contain pesticides in case of spillage, recommended application rates and methods should be followed, spot-treatment methods should be used for the control of weeds and insects, and equipment and absorbent materials should be available in areas where pesticides and herbicides are stored and used in order to contain and clean up any accidental spills

The information contained in this policy will be incorporated into the good housekeeping component of the employee-training program and refresher training sessions *(BMP 6-1)* as well as provided to the Town's contracted lawn care provider and the Kelly Greens Golf Course management company.

Primary Audience

Nahant Department of Public Works, Contracted Lawn Care Professionals, Kelly Greens Golf Course Management

Measurable Goals

- Develop and implement a landscape and lawn care policy.
- Provide the policy to DPW staff and lawn care providers contracted by the DPW.
- Provide the policy to the Kelly Greens Golf Course management company.

Responsible Parties

Nahant Department of Public Works (DPW), Kelly Greens Golf Course Management

Implementation Strategies

The DPW will work with the Kelly Greens Golf Course management to develop the Town's landscape and lawn care policy. The DPW will also ensure that this policy is placed in the employee-training manual and that it is given to any lawn care providers contracted by the Town and to the Kelly Greens Golf Course management.

Timeline

The Town's landscape and lawn care policy will be developed and implemented by the Fall of 2004.

Annual Evaluation

The DPW will prepare a summary of the Town's landscape and lawn care policy's development and implementation that includes an assessment of the progress towards achieving the identified measurable goals.

BMP 6-7 Develop and Implement a SPRP for the Flash Road Facility

BMP Description

The Town's Department of Public Works (DPW) facility, located on Flash Road, currently does not have a formal Spill Prevention and Response Plan (SPRP). The Nahant Fire Department responds to any incidents of accidental spills that occur inland and the Coast Guard responds to incidents impacting coastal waters. A SPRP would specify materials handling procedures and storage requirements as well as identify cleanup procedures for areas and processes in which spills may potentially occur. The plan will reduce the likelihood of a spill occurring and provide a quick and efficient way to deal with any spills that do occur in order to minimize accidental pollutant releases that could contaminate stormwater runoff. The drainage system for DPW discharges (directly/indirectly) to the Town's central drainage ditch, which is tributary to Nahant Harbor. The SPRP would assist in controlling any discharge of pollutants to this waterbody.

The Town will develop a SPRP that will include a description of the facility, a site plan containing pertinent information, notification procedures to be used in the event of a spill, specific instructions for cleanup, preventative maintenance procedures for equipment, and a single designated person who has overall responsibility for spill response. A component of the plan will be to create an emergency spill containment and cleanup kit that includes items that are appropriate to the type and quantities of materials stored at the Flash Road facility. A summary of the facilities plan will be posted at appropriate points in the building, such as areas with high potential for spills, the break room, and meeting areas. Municipal staff employed at the facility will be trained as part of the DPW employee-training program (*BMP 6-1*). The facility's SPRP will be reviewed annually and following any spills to evaluate the plans level of success and how it can be improved. The plan will also be updated when a new material is introduced to the facility.

Primary Audience

DPW Employees

Measurable Goals

- Complete and implement the use of the Spill Prevention and Response Plan for the Flash Road facility.
- Identify and train key individuals in the area of spill prevention, response and cleanup.
- Develop an emergency spill containment and cleanup kit.
- Post a summary of the Spill Prevention and Response Plan at various locations throughout facility.
- Conduct an annual review of the Spill Prevention and Response Plan.
- Track the number of spill and leak incidents at the facility and the actions taken for each incident.

Responsible Parties

Nahant Department of Public Works (DPW)

Implementation Strategies

The DPW will contract out the services of developing the Spill Prevention and Response Plan for the Flash Road facility. Upon plan completion a member of the DPW staff will be made responsible for the implementation of the Spill Prevention and Response Plan and maintaining all associated records.

Timeline

The DPW will develop and implement all components of the Spill Prevention and Response Plan by Fall 2005.

Annual Evaluation

The DPW will prepare a summary of the Spill Prevention and Response Plan development that includes an assessment of the progress towards achieving the identified measurable goals.

BMP 6-8 Apply for Funding to Conduct Pollution Remediation Activities in Nahant Thicket Watershed

BMP Description

The Town will apply to the Massachusetts Office of Coastal Zone Management (CZM) for a Coastal Pollutant Remediation Program (CPR) grant to fund the pollution remediation activities proposed in the Nahant Thicket watershed. The Town's plan proposes to reduce the amount of pollutants reaching the Nahant Harbor by (1) removing pollutant-laden sediments from stormwater via a "BaySaver" unit prior to entering the Thicket at two of the three entrance points and (2) directing the first flush of runoff from this watershed to a series of "Cultec-Rechargers" in order to remove fecal coliform bacteria and other dissolved pollutants. The Town has already completed the proposed design plan, which includes the engineering drawings, stormwater management calculations and soil borings data. The Nahant Thicket Pollution Remediation Plan engineering drawings have been included in Attachment H.

This is the Town's second application to the CZM for funding of this project. As a component of the original CPR application for the 2003 fiscal year, the Town of Nahant worked with the Massachusetts Audubon Society and Safer Waters in Massachusetts (SWIM) to compete water quality testing for four stormwater discharge points adjacent to the Nahant Thicket. This sampling was conducted from the Fall of 2000 the Summer of 2001 and was partially funded by the CPR program. The water quality data reports indicated that stormwater runoff containing high fecal coliform bacteria and somewhat high TSS counts were entering the Thicket at three locations. The CZM denied the Town's original request for funding because there was not enough evidence supporting the fact that the high fecal coliform counts were a result of stormwater runoff. Over the last year, the Massachusetts Audubon Society and SWIM performed optical brightener testing at seven monitoring stations adjacent to the Thicket. The goal of the additional monitoring was to confirm that these high fecal coliform counts were not caused by inflow from the sanitary sewer system. The Town will apply for CPR funding by the July 30, 2003 deadline in order to implement this project during the 2004 fiscal year.

Primary Audience

General public

Measurable Goals

- Apply to CZM by July 30, 2003 for CPR funding to implement the pollution remediation activities proposed in the Nahant Thicket watershed.
- If awarded funding for the CPR FY04 grant round, proceed with project implementation for completion by June 30, 2004.

Responsible Parties

Nahant Town Administrator, Massachusetts Audubon Society

Implementation Strategies

A representative from the Massachusetts Audubon Society will work closely with the Town Administrator to compile and submit the CPR grant application by July 30, 2003.

Timeline

The CPR grant application will be submitted to CZM by July 30, 2003. If the Town of Nahant is awarded the grant for the Nahant Thicket Remediation Project, the terms of the grant require that the project be completed by June 30, 2004.

Annual Evaluation

The Town Administrator will be responsible for preparing a summary of the Town's success in obtaining CPR funding for the FY04 grant round and including an assessment of the progress made towards achieving all identified measurable goals.

BMP 6-9 Formalize the Bear Pond/Golf Course Drainage Ditch Maintenance Program

BMP Description

The pump station at Bear Pond and the 36-inch corrugated metal pipe outfall (with a 30-inch PVC liner) will receive ongoing maintenance throughout the year. Special inspections of the 36-inch outfall will be performed after major storms to determine if cleaning is necessary to remove sand and gravel deposits. Stormwater runoff from the Lowlands, Ward Road, Flash Road, Spring Road, including adjacent side streets, is discharged via roadway catch basins and underground drainage systems to the golf course drainage ditch between Ward Road and Bear Pond. Because this ditch predominantly receives roadway runoff, it is classified as a roadway ditch and requires the routine maintenance of a typical roadway ditch. The Town will formalize the Drainage Ditch Maintenance Program that will serve to enhance and maintain the existing storage capacity of the drainage ditch, Bear Pond, and its associated sub-ponds to prevent flooding of the adjacent residential homes and streets.

The drainage ditch maintenance program will consist of removing the accumulation of sediments and other debris deposited by stormwater to the drainage ditch located between the Lowlands and Bear Pond and its associated sub-ponds. In addition to this dredging work, overgrown vegetation (mainly fragmities) will be cutback, and existing culverts will be repaired or replaced as necessary. Maintenance work will be performed only after hay bales are installed as sediment control devices. The proposed activities will not result in the loss of any isolated wetland, bordering vegetative wetland, land under water or land subject to flooding. The proposed maintenance activities will not result in dredged material being discharged to any resource area. Therefore this program will be exempt from the Massachusetts Department of Environmental Protection's (DEP) Stormwater Policy.

The maintenance activities will be conducted in three phases. The first phase will consist of maintenance work on the first 2,535 linear feet of drainage ditch and all associated drainage pipes. The second phase will consist of maintenance work on the remaining 2,545 linear feet of drainage ditch and all associated drainage pipes. The third phase will consist of maintenance work on Bear Pond and its five sub-ponds. The DPW will complete one phase of maintenance each year, thereby requiring three years to complete the maintenance of the Town's drainage ditch system. In order to conduct the required maintenance activities, the DPW must continuously apply to the Nahant Conservation Commission for an Order of Conditions. Because the maintenance program requires three years to complete the DPW need only apply once every three years, with the application coinciding with the beginning of each new cycle.

Primary Audience

Department of Public Works Staff

Measurable Goals

- Develop an operation and maintenance (O&M) plan for the Bear Pond pump station and 36-inch outfall.
- Track maintenance activities for the Bear Pond pump station and 36-inch outfall.
- Develop a formal Drainage Ditch Maintenance Program.
- Apply to the Nahant Conservation Commission for an Order of Conditions every three years in order to conduct activities outlined in the Town's Formal Drainage Ditch Maintenance program.
- Track the scheduled maintenance activities of the Drainage Ditch Maintenance Program.

Responsible Parties

Nahant Department of Public Works (DPW)

Implementation Strategies

The DPW will develop and implement an O&M plan for the Bear Pond pump station and 36-inch outfall. The DPW will also maintain the responsibility for developing a formal Drainage Ditch Maintenance Program, applying to the Nahant Conservation Commission for an Order of Conditions in order to conduct the scheduled maintenance activities, and tracking the maintenance activities.

Timeline

The DPW will develop and implement and O&M plan for the Bear Pond pump station and 36-inch outfall by the Summer of 2004. The Town's formal Drainage Ditch Maintenance Program will be formalized and fully implemented by the Summer of 2005. The DPW will apply to the Nahant Conservation Commission for an Order of Conditions to conduct the maintenance activities, as outlined above, every three years beginning in the Summer of 2005.

Annual Evaluation

The Department of Public Works will be responsible for preparing a summary of the formalization of the Town's Drainage Ditch Maintenance Program and the O&M plans for the Bear Pond pump station and 36-inch outfall. The summary will include an assessment of the progress made towards achieving all identified measurable goals.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
GENERAL PERMIT FOR STORM WATER DISCHARGES
FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS

Authorization to discharge under the National Pollutant Discharge Elimination System

In accordance with the provisions of the Clean Water Act, as amended, (33 U.S.C. §1251 et. seq. (the Act) operators of small municipal separate storm sewer systems, located in the areas specified in Parts I.A.2., 3.,.and 4 are authorized to discharge in accordance with the conditions and requirements set forth herein.

Only operators of storm water discharges from small municipal separate storm sewer systems in the general permit area who submit a Notice of Intent and a storm water management program in accordance with Part I.E. of this permit and obtain written authorization from EPA are authorized under this general permit.

This permit becomes effective on May 1, 2003.

This permit and authorization to discharge expire at midnight five years from the effective date.

Signed this 18 day of April 2003

_____

Linda M. Murphy, Director
Office of Ecosystem Protection
United States Environmental Protection Agency
One Congress Street - Suite 1100
Boston, Massachusetts 02114

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
GENERAL PERMIT FOR STORM WATER DISCHARGES
FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS

Authorization to discharge under the National Pollutant Discharge Elimination System

In accordance with the provisions of the Clean Water Act, as amended, (33 U.S.C. §1251 et. seq. (the Act) operators of small municipal separate storm sewer systems, located in the area specified in Part I.A.1, Commonwealth of Massachusetts, are authorized to discharge in accordance with the conditions and requirements set forth herein.

Only operators of storm water discharges from small municipal separate storm sewer systems in the general permit area who submit a Notice of Intent and a storm water management program in accordance with Part I.E. of this permit and obtain written authorization from EPA are authorized under this general permit.

This permit becomes effective on May 1, 2003.

This permit and authorization to discharge expire at midnight five years from the effective date.

Signed this 18 day of April 2003

Linda M. Murphy, Director
Office of Ecosystem Protection
United States Environmental Protection Agency
One Congress Street - Suite 1100
Boston, Massachusetts 02114

Glenn Haas, Director
Division of Watershed Management
Bureau of Resource Protection
Massachusetts Department of Environmental Protection
One Winter Street
Boston, MA 02108

PART I

A. Area of Coverage: Small municipal separate storm sewer systems (MS4s) located within

1. Commonwealth of Massachusetts;
2. State of New Hampshire;
3. Indian Country lands within the States of Connecticut, Massachusetts, and Rhode Island; and
4. Federal Facilities within the State of Vermont.

B. Eligibility criteria:

1. This permit authorizes the discharge of storm water from small MS4s defined at 40 CFR §122.26(b)(16). This includes small MS4s designated under 40 CFR §122.32(a)(1) and 40 CFR §122.32(a)(2). The permittee is authorized to discharge under this permit if:

(a). The permittee is the operator of a small MS4 within the permit areas described in Part I.A;
(b). The permittee is not a large or medium MS4 defined in 40 CFR §§122.26(b)(4) or (7);
(c). The municipality is located fully or partially in an urbanized area as determined by the latest Decennial Census by the Bureau of Census; and
(d). The permittee submits a Notice of Intent in accordance with Part I.E. of this permit and obtains written authorization from EPA.

Small municipal separate storm sewer system means all separate storm sewers that are:

(a) owned or operated by the United States, a State, city town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity and Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States.
(b) not defined as large or medium municipal separate storm sewer systems pursuant to 40 CFR §122.26(b)(4) and (b)(7) or designated under 40 CFR §122.26(a)(1)(v).
(c) This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospitals or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

2. The following storm water discharges are not authorized by this permit:
(a) Discharges that are mixed with sources of non-storm water unless such non-storm water discharges are:
i. In compliance with a separate NPDES permit, or
ii. Determined by EPA not to be a substantial contributor of pollutants to waters of the U.S.
(b) Storm water discharges associated with industrial activity as defined in 40 CFR§122.26(b)(14)(i)-(ix) and (xi).
(c) Storm water discharges associated with construction activity as defined in 40 CFR§122.26(b)(14)(x) or 40 CFR §122.26(b)(15).
(d) Storm water discharges currently covered under another permit, including discharges covered under other regionally issued general permits.
(e) Discharges or discharge related activities that may adversely affect any species that are listed as endangered or threatened under the Endangered Species Act (ESA) or result in the adverse modification or destruction of habitat that is designated as critical under the ESA.

i. Coverage under this permit is available only if the storm water discharges, allowable non-storm

water discharges, and discharge related activities do not adversely affect any species that are listed as endangered or threatened ("listed") under the ESA or result in the adverse modification or destruction of habitat that is designated as critical under the ESA ("critical habitat"). Submission of a signed NOI will be deemed to constitute certification of eligibility.

ii. "Discharge related activities" include: activities which cause, contribute to, or result in storm water point source pollutant discharges; and measures to control storm water discharges, including the siting, construction and operation of best management practices (BMPs) to control, reduce or prevent storm water pollution.
iii. In order to demonstrate eligibility, the permittee must use the guidance in Addendum A and the most recent Endangered and Threatened Species County-Species List available from EPA. Eligibility must be determined prior to submission of the NOI. The most current list is available at: http://www.epa.gov/npdes/. The permittee must meet one or more of the criteria described below for the entire term of the permit. The information used to determine eligibility must be maintained as part of the Storm Water Management Program.
- Criterion A: No endangered or threatened species or critical habitat are in proximity to the MS4 or the points where authorized discharges reach the receiving waters; or
- Criterion B: In the course of a separate federal action involving the MS4, formal or informal consultation with the U.S. Fish and Wildlife Service (FWS) and/or the National Marine Fisheries Service (NMFS) under Section 7 of the ESA has been concluded and that consultation:
-Addressed the effects of the MS4 storm water discharges, allowable non-storm water discharges, and discharge related activities on listed species and critical habitat; and
- The consultation resulted in either a no jeopardy opinion or a written concurrence by FWS and/or NMFS on a finding that the storm water discharges, allowable non-storm water discharges, and discharge related activities are not likely to adversely affect listed species or critical habitat; or
- Criterion C: The activities are authorized under Section 10 of the ESA and that authorization addresses the effects of the storm water discharges, allowable non-storm water discharges, and discharge related activities on listed species and critical habitat; or
- Criterion D: Using the best scientific and commercial data available, the effects of the storm water discharges, allowable non-storm water discharges, and discharge related activities on listed species and critical habitat have been evaluated. Based on those evaluations, a determination is made by the permittee and affirmed after review by EPA that the storm water discharges, allowable non-storm water discharges, and discharge related activities will not affect any federally threatened or endangered species or designated critical habitat.
- Criterion E: The storm water discharges, allowable non-storm water discharges, and discharge related activities were already addressed in another operator's certification of eligibility which includes the MS4 activities. If certification is under this criteria, the permittee agrees to comply with any measures or controls upon which the other operator's certification was based.

iv. The permitting authority may require any permittee or applicant to provide documentation of the determination of eligibility for this permit where the EPA or the FWS and/or NMFS determines that there is a potential impact on listed species or critical habitat.

v. A discharge is not authorized if the discharge or discharge related activities cause a prohibited "take" of endangered or threatened species (as defined under Section 3 of the ESA and 50 CFR 17.3), unless such actions are authorized by FWS or NMFS under sections 7 or 10 of the ESA.

vi. Discharges are not authorized where the discharge or discharge related activity are likely to jeopardize the continued existence of any species that are listed as endangered or threatened under the ESA or result in the adverse modification or destruction of habitat that is designated as critical under the ESA.

vii. Operators who conduct informal consultation to meet the eligibility requirements of Criterion

B are automatically designated as non-Federal representatives under this permit. See 50 CFR §402.08. Operators who choose to conduct informal consultation as a non-Federal representative must notify EPA and the appropriate service office in writing of that decision.

(f) Discharges whose direct or indirect impacts may adversely affect any Essential Fish Habitat.

(g) Discharges, or implementation of a storm water management program, which adversely effects properties listed or eligible to be listed on the National Register of Historic Places. The permittee must determine eligibility prior to submission of the Notice of Intent. The permittee should follow the guidance detailed in Addendum B. Discharges may be eligible for coverage under this permit if the permittee is in compliance with requirements of the National Historic Preservation Act and has coordinated any necessary activities to avoid or minimize impacts. These requirements must be coordinated with the State Historic Preservation Officer. Information used to determine eligibility must be maintained as part of the Storm Water Management Program.

(h) Discharges to territorial seas, the contiguous zone, and the oceans unless such discharges are in compliance with the ocean discharge criteria of 40 CFR 125 subpart M.

(i) Discharges prohibited under 40 CFR 122.4. This includes discharges not in compliance with the state's antidegradation policy.

(j) Discharges mixed with non-storm water except those discharges which are in compliance with another NPDES permit or are an allowable non-storm water discharge as discussed in Part I.F.

(k) Discharges that would cause or contribute to instream exceedance of water quality standards. The storm water management program must include a description of the BMPs that will be used to ensure that this will not occur. EPA, MA DEP , or NH DES may require corrective action or an application for an individual permit or alternative general permit if an MS4 is determined to cause an instream exceedance of water quality standards.

(l) Discharges of any pollutant into any water for which a Total Maximum Daily Load (TMDL) has been established or approved by the EPA unless the discharge is consistent with the TMDL. This eligibility condition applies at the time of submission of the NOI. If conditions change after submission of the NOI, coverage may continue provided the applicable requirements of Part 1.C. are met. In order to remain eligible for this permit, any limitations, conditions and requirements applicable to discharges authorized by this permit, must be incorporated into the storm water management program. This may include monitoring and reporting. Discharges not eligible for this permit, must apply for an individual or alternative NPDES general permit.

C. Discharges to Water Quality Impaired Waters

1. The permittee must determine whether storm water discharges from any part of the MS4 contribute, either directly or indirectly, to a 303(d) listed water body.

2. The storm water management program must include a section describing how the program will control the discharge of the pollutants of concern and ensure that the discharges will not cause an instream exceedance of the water quality standards. This discussion must specifically identify control measures and BMPs that will collectively control the discharge of the pollutant(s) of concern. Pollutant(s) of concern refer to the pollutant identified as causing the impairment.

D. Total Maximum Daily Load Allocations

If a TMDL has been approved for any water body into which the MS4 discharges, the permittee must:

1. Determine whether the approved TMDL is for a pollutant likely to be found in storm water discharges from the MS4.

2. Determine whether the TMDL includes a pollutant waste load allocation (WLA), BMP recommendations or other performance requirements for storm water discharges. This storm water WLA may be expressed in the TMDL as a gross allotment for the impaired water body. Or, provided no specific WLA for the MS4 exists, determine if a Performance Agreement or Memorandum of Understanding has been established between the MS4, EPA , and MA DEP or NH DES which modifies the BMPs or performance standards of the TMDL. Such Memoranda are posted on the TMDL websites. The Massachusetts site is: http://www.state.ma.us/dep/brp/wm/tmdl.htm The New Hampshire site is: http://www.des.state.nh.us/wmb/TMDL

3. If the MS4 is required to implement storm water waste load allocation provisions of the TMDL, the permittee must assess whether the WLA is being met through implementation of existing storm water control measures or if additional control measures are necessary. The permittee's assessment of whether the WLA is being met is expected to focus on the adequacy of the permittee's storm water controls (implementation and maintenance), not on the response of the receiving water.

4. Highlight in the storm water management program and annual reports all control measures currently being implemented or planned to be implemented to control pollutants of concern identified in approved TMDLs. Also include a schedule of implementation for all planned controls. Document the assessment which demonstrates that the WLA will be met including any calculations, maintenance log books, or other appropriate controls.

E. Obtaining Coverage

1. Small MS4s seeking coverage under this permit, must submit a Notice of Intent which contains the following information:

(a). Name of person responsible for overall coordination of the storm water management program, mailing address and phone number
(b). Name of municipality and state. For municipalities seeking coverage under Part V. of this permit, only identify the name of the agency, the city or town, and the state in which it is located.
(c). Identify the legal status of the operator of the MS4 as either, Federal, State, Tribal, county, or other Public Entity. If the municipality is a city or town, indicate if there are other MS4s within its boundaries such as state highways, universities, prisons.
(d). Identify the names of all known waters that receive a discharge from the MS4. If known, indicate the number of outfalls to each water.
(e). Using the guidance in Addendum A, describe how the eligibility criteria for listed species and critical habitat have been met.
(f). Using the guidance in Addendum B describe how the requirements to protect historic properties have been met.
(g). Identify best management practices for each minimum control measure described in Part II B (1-6); Part III B(1-6); Part IV. B(1-6) or Part V.B(1-6)., depending upon the type of MS4.
(h). Identify measurable goals for each best management practice described in paragraph (g) above including implementation time frames and contact person..
(i). The NOI must be signed by an appropriate official (see Part VI. G. of this permit). The NOI must contain the following certification:
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false

information, including the possibility of fine and imprisonment for knowing violations.

Print the name of the appropriate official, followed by signature, and date.

Municipalities in Massachusetts must use the form designated by the Massachusetts Department of Environmental Protection (MA DEP). The form is available at http://www.state.ma.us/dep/brp/stormwtr/strmfms.htm or by contacting MA DEP at 508/792-7470. The permit code for the form is BRP WM 08 A EPA does not require the use of this form, but will accept information submitted on this form. All signatures must be originals.

Municipalities in New Hampshire should use the form developed by the New Hampshire Department of Environmental Services. The form is available at: http://www.des.state.nh.us/StormWater/. EPA does not require the use of this form, but will accept information submitted on this form. All signatures must be originals.

2. The Notice of Intent must be submitted by March 10, 2003, if designated under 40 CFR 122.32(a)(1)- those MS4s located fully or partially in an urbanized area; or within 180 days of notice, if designated under 40 CFR 122.32(a)(2), unless granted a longer period of time by EPA;

3. Submission of Notice of Intent

(a) All permittees must submit the Notice of Intent to EPA-Region I at the following address:
United States Environmental Protection Agency
Municipal Assistance Unit (CMU)
One Congress Street – Suite 1100
Boston, Massachusetts 02114-2023

(b) MS4s located in Massachusetts, subject to Part II, Part IV, or Part V, except Indian lands, must also submit a copy of the NOI to the MA DEP at the following address:
Massachusetts Department of Environmental Protection
Division of Watershed Management
627 Main Street
Worcester, Massachusetts 01608

The appropriate fee must accompany the submission to MA DEP. The application fee is $60.00. A fee exemption applies to any Massachusetts city, town or state agency. The fee does apply to Massachusetts state authorities.

(c) MS4s located in New Hampshire subject to Part III, Part IV or Part V, must also submit a copy of the NOI to the New Hampshire Department of Environmental Services (NH DES) at the following address:
New Hampshire Department Environmental Services
Water Division
Wastewater Engineering Bureau
P.O. Box 95
Concord, New Hampshire 03302-0095

New Hampshire may also adopt this permit as a state permit pursuant to RSA 485-A:13,I.(a).

4. Effective date of coverage. The authorization to discharge begins on the date of receipt of EPA's written authorization. The initial written receipt will detail the completeness of the submission. The permittee may be contacted by either EPA or MA DEP/NHDES at a later date requesting additional or updated information concerning the storm water management program. The initial response will not provide detailed comments on the submission.

5. A municipality is not prohibited from submitting a Notice of Intent after the dates provided in paragraph E.2. However, if a late NOI is submitted, authorization is only for discharges that occur after permit coverage is granted. The permitting authority reserves the right to take appropriate enforcement actions for any unpermitted discharges.

F. Allowable Non-Storm Water Discharges

The following non-storm water discharges are authorized provided it has been determined by the permittee that they are not significant contributors of pollutants to the MS4. If these discharges are identified as significant contributors to the MS4, they must be addressed in the Illicit Discharge Detection and Elimination minimum control measure described in Parts II, III, IV and V.

1. water line flushing,
2. landscape irrigation,
3. diverted stream flows,
4. rising ground waters,
5. uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)),
6. uncontaminated pumped ground water,
7. discharge from potable water sources,
8. foundation drains,
9. air conditioning condensation,
10. irrigation water, springs,
11. water from crawl space pumps,
12. footing drains,
13. lawn watering,
14. individual resident car washing,
15. flows from riparian habitats and wetlands,
16. dechlorinated swimming pool discharges,
17. street wash water, and
18. Residential building wash waters, without detergents.

Discharges or flows from fire fighting activities occur during emergency situations. The permittee is not expected to evaluate fire fighting discharges with regard to pollutant contributions. Therefore, these discharges are authorized as allowable non-storm water discharges, unless identified, by EPA, as significant sources of pollutants to Waters of the U.S..

PART II
MASSACHUSETTS SMALL MS4 STORM WATER MANAGEMENT PROGRAM

A. Storm Water Management Program

The permittee must develop, implement and enforce a program to reduce the discharge of pollutants from the MS4 to the maximum extent practicable; protect water quality, and satisfy the water quality requirements of the Clean Water Act and Massachusetts Water Quality Standards.

1. The permittee must develop a storm water management program implementing the minimum measures described in Paragraph II.B.

2. All elements of the storm water management program must be implemented by the expiration date of this permit.

3. Implementation of one or more of the minimum measures may be shared with another entity, or the entity may fully implement the measure(s). When another entity fully implements a minimum control measure for the permittee, the following applies:

(a.) the other entity, in fact, implements the control measure;
(b.) the particular control measure, or component of that measure is at least as stringent as the corresponding permit requirement.
(c.) The other entity agrees to implement the control measure on the permittee's behalf. A legally binding written acceptance of this obligation is expected. This obligation must be maintained as part of the storm water management program. If the other entity agrees to report on the minimum measure, the permittee must supply the other entity with the reporting requirements contained in this permit under Part II.E.
(d) The permittee remains responsible for permit compliance and implementation of the minimum measure if the other entity fails to do it.

4. Permittee may use the following state program to implement some of the requirements of Part II.B.4 and Part II.B.5: The Massachusetts Department of Environmental Protection, Wetland Protection Act (MGL Chapter 131, Section 40) Storm Water Management Policy

(a) Standard 8 of the Policy may be used for the minimum control measure regarding construction site storm water runoff control, Part II.B.4(c). Standards 2, 3, 4, and 7 of the Policy may be used for the minimum control measure regarding post construction storm water management in development and redevelopment, Part II.B.5. The permittee may not apply this criterion outside of the jurisdiction of the Wetlands Protection Act unless the municipality has specifically provided for such in local by-laws.
(b) Additional information available at: http://www.state.ma.us/dep/brp/stormwtr/stormpub.htm

5. For each minimum measure, the permittee must:

(a.) identify the person(s) or department responsible for the measure;
(b.) identify all Best Management Practices (BMPs) for the measure;
(c.) identify measurable goals for each BMP. Identify time lines and milestones for implementation.

6. EPA's BMP menu found at http://www.epa.gov/npdes/menuofbmps/menu.htm and EPA's guidance on measurable goals, found at http://www.epa.gov/npdes/stormwater/measurablegoals/index.htm, may be used in the development of the storm water management program.

B. Minimum Control Measures

1. Public education and outreach. The permittee must implement a public education program to distribute educational material to the community. The public education program must provide information concerning the impact of storm water discharges on water bodies. It must address steps and/or activities that the public can take to reduce the pollutants in storm water runoff.

The following should be included in the education and outreach efforts:

(a.) information regarding both industrial and residential activities including illegal dumping into storm drains.

(b.) coordination with local groups (i.e. watershed associations, or schools)

(c.) materials for outreach/education may include, but are not limited to, pamphlets; fact sheets; brochures; public service announcements; storm drain stenciling and newspaper advertisements.

(d.) topics may include, but are not limited to, litter disposal, pet waste, household hazardous waste disposal, proper use of fertilizer and pesticides, and effects of impervious areas on water bodies. (This list is intended to provide examples, the permittee is encouraged to use a variety of activities for public education.)

2. Public involvement and participation. All public involvement activities must comply with state public notice requirements at MGL Chapter 39 Section 23B and local public notice requirements.

(a.) The permittee must provide opportunity for the public to participate in the implementation and review of the storm water management program.

(b.) Activities may also include volunteer stream monitoring or formation of a storm water management committee. (These are examples of public involvement activities, the permittee is encouraged to use a wide range of activities to maximize public involvement.)

3. Illicit discharge detection and elimination. The permittee must develop, implement and enforce a program to detect and eliminate illicit discharges. An illicit discharge is any discharge to a municipal separate storm sewer that is not composed entirely of storm water. Exceptions are discharges pursuant to a NPDES permit (other that the NPDES permit for discharges from the municipal sewer system), allowable non storm water discharges described at Part I.F. and discharges resulting from fire fighting activities.

(a.) If not already existing, the permittee must develop a storm sewer system map. At a minimum, the map must show the location of all outfalls and the names of all waters that receive discharges from those outfalls. Additional elements may be included on the map, such as, location of catch basins, location of manholes, and location of pipes within the system. Initial mapping should be based on all existing information available to the permittee including city records and drainage maps. Field surveys may be necessary to verify existing records and locate all outfalls.

(b.) To the extent allowable under state or local law, the permittee must effectively prohibit, through an ordinance or other regulatory mechanism, non storm water discharges into the system and implement appropriate enforcement procedures and actions. If a regulatory mechanism does not exist, development and adoption of such a mechanism must be included as part of the storm water management program.

(c.) The permittee must develop and implement a plan to detect and address non -storm water discharges, including illegal dumping, into the system.

The illicit discharge plan must contain the following elements:

i. Procedures to identify priority areas. This includes areas suspected of having illicit discharges, for example: older areas of the city, areas of high public complaints and areas of high recreational value or high environmental value such as beaches and drinking water sources.

ii. Procedures for locating illicit discharges (i.e. visual screening of outfalls for dry weather discharges, dye or smoke testing)

iii. Procedures for locating the source of the discharge and procedures for the removal of the source.

iv. Procedures for documenting actions and evaluating impacts on the storm sewer system subsequent to the removal.

(d.) The permittee must inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper waste disposal.

(e.) The non-storm water discharges listed in Part I.F. must be addressed if they are identified as being significant contributors of pollutants to the small MS4.

4. Construction site storm water runoff control. The permittee must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. The permittee must include disturbances less than one acre if part of a larger common plan.

The permittee does not need to apply its construction program provisions to projects that receive a waiver from EPA under the provisions of 40 CFR§122.26(b)(15)(i).

At a minimum, the program must include:

(a.) To the extent allowable under state or local law, an ordinance or other regulatory mechanism to require sediment and erosion control at construction sites. If such an ordinance does not exist, development and adoption of an ordinance must be part of the program.

(b.) Sanctions to ensure compliance with the program. To the extent allowable under state or local law sanctions may include both monetary or non-monetary penalties.

(c.) Requirements for construction site operators to implement a sediment and erosion control program which includes BMPs that are appropriate for the conditions at the construction site, including efforts to minimize the area of the land disturbance.

(d.) Requirements for the control of wastes, including but not limited to, discarded building materials, concrete truck wash out, chemicals, litter, and sanitary wastes.

(e.) Procedures for site plan review including procedures which incorporate consideration of potential water quality impacts. The site plan review should include procedures for preconstruction review.

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

(g.) Procedures for inspections and enforcement of control measures at construction sites.

5. Post construction storm water management in new development and redevelopment.

The permittee must develop, implement and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than one acre and discharge into the municipal system.

The program must include projects less than one acre if the project is part of a larger common plan of development which disturbs greater than one acre.

The post construction program must include:

(a.) To the extent allowable under state or local law, an ordinance or other regulatory mechanism to address post construction runoff from new development and redevelopment. If such an ordinance does not exist, development and adoption of an ordinance must be part of the program.

(b.) Procedures to ensure adequate long term operation and maintenance of best management practices.

(c.) Procedure to ensure that any controls that are put in place will prevent or minimize impacts to water quality.

6. Pollution prevention and good housekeeping in municipal operations.

The permittee must

(a.) Develop and implement a program with a goal of preventing and/or reducing pollutant runoff from municipal operations. The program must include an employee training component.

(b.) Include, at a minimum, maintenance activities for the following : parks and open space (areas such as public golf course and playing fields); fleet maintenance, building maintenance; new construction and land disturbance; and road way drainage system maintenance and storm water system maintenance.

(c.) Develop schedules for municipal maintenance activities described in paragraph (b) above.

(d) Develop inspection procedures and schedules for long term structural controls.

7. Cooperation between interconnected municipal separate storm sewer systems is encouraged. The permittee should identify interconnections within the system. The permittee should attempt to work cooperatively with an interconnected municipality in instances of discharges impacting a system.

8. The permittee must evaluate physical conditions, site design, and best management practices to promote groundwater recharge and infiltration where feasible in the implementation of the control measures described above. During the implementation of the storm water management program, the permittee must address recharge and infiltration for the minimum control measures, as well as any reasons for electing not to implement recharge and infiltration. Loss of annual recharge to ground water should be minimized through the use of infiltration measures to the maximum extent practicable. Permittees in areas identified as "high" or "medium" in the most recent Massachusetts Water Resources Commission's *Stressed Basins in Massachusetts* report in effect at the time the permittee submits a Notice of Intent and accompanying storm water management program, must minimize the loss of annual recharge to ground water from new development and redevelopment, including but not limited to drainage improvements done in conjunction with road improvements, street drain improvement projects and flood mitigation projects, consistent with Standard 3 of the Storm Water Management Policy in areas both within and outside of the jurisdiction of the Massachusetts Wetlands Protection Act.
(See http://www.state.ma.us/dem/programs/intbasin/stressed_basin)

9. MS4s which discharge to coastal waters with public swimming beaches should consider these waters a priority in implementation of the storm water management program. Refer to Part IX , State 401 Certification Requirements, for additional requirements.

C. Public Drinking Water Supply Requirements

1. MS4s which discharge to public drinking water sources and their protection areas (Class A and B surface waters used for drinking water and wellhead protection areas) should consider these waters a priority in implementation of the storm water management program.

2. Discharges to public drinking water supply sources and their protection areas (Zones I, II, Wellhead Protection Areas, Zone A, B, and C as defined in 310 CMR 22.00) should provide pretreatment and spill control capabilities to the extent feasible.

3. Direct discharges to Class A waters and Zone I wellhead protection areas (as defined in 310 CMR 22.02) should be avoided to the extent feasible.

D. Program Evaluation

1. The permittee must annually evaluate the compliance of the storm water management program with the conditions of this permit.

2. The permittee must evaluate the appropriateness of the selected BMPs in efforts towards achieving the defined measurable goals. The storm water management program may be changed in accordance with the following provisions:

(a). Changes adding (but not subtracting or replacing) components, controls or requirements to the SWMP may be made at any time upon written notification to EPA and MA DEP

(b). Changes replacing an ineffective or infeasible BMP specifically identified in the SWMP with an alternative BMP may be requested in writing to EPA and MA DEP at any time. Unless denied, changes proposed in accordance with the criteria below shall be deemed approved and may be implemented 60 days from submittal of the request. If the request is denied, EPA or MA DEP, as applicable, will send you a written explanation of the denial.

(c). Modification requests, must include the following information:
i. an analysis of why the BMP is ineffective or infeasible (including cost prohibitive)
ii. expectations on the effectiveness of the replacement BMP, and
iii. an analysis of why the replacement BMP is expected to achieve the goals of the BMP to be replaced.
iv. Change requests or notifications must be in writing and signed in accordance with the signatory requirements of Part VI.

3. EPA or MA DEP may require changes to the SWMP as needed to:

(a). Address impacts on receiving water quality caused or contributed to by discharges from the MS4;

(b). To include more stringent requirements necessary to comply with new Federal statutory or regulatory requirement; or

(c). To include such other conditions deemed necessary to comply with the goals and requirements of the CWA.

(d). Any changes requested by EPA or MA DEP will be in writing and will set forth the schedule for the permittee to develop the changes and offer the opportunity to propose alternative program changes to meet the objective of the requested modification.

E. Record Keeping

1. All records required by this permit must be kept for a period of at least five years. Records include information used in the development of the storm water management program, any monitoring, copies of reports, and all data used in the development of the notice of intent.

2. Records need to be submitted only when specifically requested by the permitting authority.

3. The permittee must make the records relating to this permit available to the public, including the storm water management program. The public may view the records during normal business hours. The permittee may charge a reasonable fee for copying requests.

F. Reporting

1. The permittee must submit an annual report. The initial report is due one year from the effective date of this permit and annually thereafter. The reports should contain information regarding activities of the previous calendar year. Reports should be submitted to both EPA and MA DEP at the following addresses:

United States Environmental Protection Agency
Water Technical Unit
P.O. Box 8127
Boston, MA 02114

and

Massachusetts Department of Environmental Protection
Division of Watershed Management
627 Main Street
Worcester, Massachusetts 01608

2. The following information must be contained in the annual report:

(a) A self assessment review of compliance with the permit conditions.

(b) An assessment of the appropriateness of the selected BMPs.

(c) An assessment of the progress towards achieving the measurable goals.

(d) A summary of results of any information that has been collected and analyzed. This includes any type of data.

(e) A discussion of activities for the next reporting cycle.

(f) A discussion of any changes in identified BMPs or measurable goals.

(g) Reference any reliance on another entity for achieving any measurable goal.

G. State Permit Conditions

This permit is issued jointly by the U.S. Environmental Protection Agency and the Massachusetts Department of Environmental Protection under federal and state law, respectively. As such, all the terms and conditions of this permit are hereby incorporated into and constitute a discharge permit issued by the Commissioner of the MA DEP pursuant to M.G.L. Chap. 21, §43 and under regulations found at 314 CMR 3.00. Regulations found at 314 CMR 3.19 (Standard Permit Conditions) are incorporated into this permit by reference.

To the extent allowable by their respective laws and regulations, each agency shall have the independent right to enforce the terms and conditions of this permit. Any modification, suspension or revocation of this permit shall be effective only with respect to the agency taking such action, and shall not affect the validity or status of this permit as issued by the other agency, unless and until each agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this permit is declared invalid, illegal or otherwise issued in violation of the state law such permit shall remain in force and effect under federal law as a NPDES permit issued by the U.S. Environmental Protection Agency. In the event this permit is declared invalid, illegal or otherwise issued in violation of federal law, this permit shall remain in full force and effect under state law as a permit issued by the Commonwealth of Massachusetts.

PART III
NEW HAMPSHIRE SMALL MS4
STORM WATER MANAGEMENT PROGRAM
(This part also applies to Indian Lands in MA, CT, and RI .)

A. Storm Water Management Program

The permittee must develop, implement and enforce a program to reduce the discharge of pollutants from the MS4 to the maximum extent practicable; protect water quality, and satisfy the water quality requirements of the Clean Water Act and state water quality standards

1. The permittee must develop a storm water management program implementing the minimum measures described in Paragraph III.B.

2. All elements of the storm water management program must be implemented by the expiration date of this permit.

3. Implementation of one or more of the minimum measures may be shared with another entity, or the entity may fully implement the measure. When another entity fully implements a minimum control measure for the permittee, the following applies:

(a.) the other entity, in fact, implements the control measure;
(b.) the particular control measure, or component of that measure is at least as stringent as the corresponding permit requirement.
(c.) The other entity agrees to implement the control measure on the permittee behalf. A legally binding written acceptance of this obligation is expected. This obligation must be maintained as part of the storm water management program. If the other entity agrees to report on the minimum measure, the permittee must supply the other entity with the reporting requirements contained in this permit under Part III.E.
(d) The permittee remains responsible for permit compliance and implementation of the minimum measure if the other entity fails to do it.

4. For each minimum measure, the permittee must:

(a.) identify the person(s) or department responsible for the measure;
(b.) identify Best Management Practices (BMPs) for the measure;
(c.) identify measurable goals for each BMP. Identify time lines and milestones for implementation.

5. EPA's BMP menu found at:
http://www.epa.gov/npdes/menuofbmps/menu.htm and EPA's guidance on measurable goals, found at: http://www.epa.gov/npdes/stormwater/measurablegoals/index.htm, may be used in the development of the storm water management program.

B. Minimum Control Measures

1. Public education and outreach. The permittee must implement a public education program to distribute educational material to the community. The public education program must provide information concerning the impact of storm water discharges on water bodies. It must address steps and/or activities that the public can take to reduce the pollutants in storm water runoff.

The following should be included in education and outreach efforts:

(a.) information regarding industrial, commercial, and residential activities including illegal dumping into storm drains.
(b.) coordinate activities with local groups (i.e. watershed associations, or schools)

(c.) materials for outreach/education may include, but are not limited to, pamphlets; fact sheets; brochures; public service announcements; storm drain stenciling and newspaper advertisements.
(d.) topics may include, but are not limited to, litter disposal, pet waste, household hazardous waste disposal, proper use of fertilizer and pesticides. (This list is intended to provide examples of education topics, the permittee is encouraged to use a variety of methods for public education.)

2. Public Involvement and participation. All public involvement activities in the State of New Hampshire must comply with state public notice requirements, RSA-91A. Activities must also comply with local and Tribal requirements, as appropriate.

(a.) The permittee must provide opportunity for the public to participate in the development, implementation and review of the storm water management program.
(b) Activities may also include volunteer stream monitoring or formation of a storm water management committee. (These are examples of public involvement activities, the permittee is encouraged to use a wide range of activities to maximize public involvement.)

3. Illicit discharge detection and elimination. The permittee must develop, implement and enforce a program to detect and eliminate illicit discharges. An illicit discharge is any discharge to a municipal separate storm sewer that is not composed entirely of storm water. Exceptions are discharges pursuant to a NPDES permit (other that the NPDES permit for discharges from the municipal sewer system), allowable non storm water discharges described at Part I.F. and discharges resulting from fire fighting activities.

(a.) If not already existing, the permittee must develop a storm sewer system map. At a minimum, the map must show the location of all outfalls and the names of all waters that receive discharges from those outfalls. Additional elements may be included on the map, such as, location of catch basins, location of manholes, and location of pipes within the system. Initial mapping should be based on all existing information available to the permittee including city records and drainage maps. Field surveys may be necessary to verify existing records and locate all outfalls.

(b.) To the extent allowable under state, Tribal or local law, the permittee must effectively prohibit, through an ordinance or other regulatory mechanism, non-storm water discharges into the system and implement appropriate enforcement procedures and actions. If a regulatory mechanism does not exist, development and adoption of such a mechanism must be included as part of the storm water management program.

(c.) The permittee must develop and implement a plan to detect and address non storm water discharges, including illegal dumping, into the system.

The illicit discharge plan must contain the following elements:
i. Procedures to identify priority areas. This includes areas suspected of having illicit discharges, for example: older areas of the city, areas of high public complaints and areas of high recreational value or high environmental value such as beaches and drinking water sources.
ii. Procedures for locating illicit discharges (i.e. visual screening of outfalls for dry weather discharges, dye or smoke testing)
iii. Procedures for locating the source of the discharge and procedures for the removal of the source.
iv. Procedures for documenting actions and evaluating impact on the storm sewer system subsequent to the removal.

(d.) The permittee must inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper waste disposal.

(e.) The non-storm water discharges listed in Part I.F. must be addressed if they are identified as being significant contributors of pollutants to the MS4.

4. Construction site storm water runoff control. The permittee must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. The permittee must include disturbances less than one acre if part of a larger common plan.

The permittee does not need to apply its construction program provisions to projects that receive a waiver from EPA under the provisions of 40 CFR§122.26(b)(15)(i).

At a minimum, the program must include:

(a.) To the extent allowable under state, Tribal or local law, an ordinance or other regulatory mechanism to require sediment and erosion control at construction sites. If such an ordinance does not exist, development and adoption of an ordinance must be part of the program.

(b.) Sanctions to ensure compliance with the program. To the extent allowable under state, Tribal or local laws, sanctions may include both monetary or non-monetary penalties.

(c.) Requirements for construction site operators to implement a sediment and erosion control program which includes BMPs that are appropriate for the conditions at the construction site.

(d.) Requirements for the control of wastes, including but not limited to, discarded building materials, concrete truck wash out, chemicals, litter, and sanitary wastes.

(e.) Procedures for site plan review including procedures which incorporate consideration of potential water quality impacts. The site plan review should include procedures for preconstruction review.

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

(g.) Procedures for inspections and enforcement of control measures at construction sites.

5. Post construction storm water management in new development and redevelopment.

The permittee must develop, implement and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than one acre and discharge into the municipal system.

The program must include projects less than one acre if the project is part of a larger common plan of development.

The post construction program must include:

(a.) To the extent allowable under state, Tribal or local law, an ordinance or other regulatory mechanism to address post construction runoff from new development and redevelopment. If such an ordinance does not exist, development and adoption of an ordinance must be part of the program.

(b.) Procedures to ensure adequate long term operation and maintenance of best management practices.

(c.) Procedure to ensure that any controls that are in place will prevent or minimize impacts to

water quality.

6. Pollution prevention and good house keeping in municipal operations.
The permittee must

(a.) Develop and implement a program with a goal of preventing and/or reducing pollutant runoff from municipal operations. The program must include an employee training component.

(b.) Include, at a minimum, maintenance activities for the following : parks and open space (area such as public golf courses and athletic fields); fleet maintenance, building maintenance; new construction and land disturbance; roadway drainage system maintenance and storm water system maintenance.

(c.) Develop schedules for municipal maintenance activities described in paragraph (b) above.

(d) Develop inspection procedures and schedules for long term structural controls.

7. Cooperation between interconnected municipal separate storm sewer systems is encouraged. The permittee should identify interconnections within the system. The permittee should attempt to work cooperatively with an interconnected municipality in instances of discharges impacting a system.

8. MS4s which discharge to coastal waters with public swimming beaches should consider these waters a priority in implementation of the storm water management program.

9. The permittee must evaluate physical conditions, site design, and best management practices to promote groundwater recharge an infiltration where feasible in the implementation of the control measures described above. During the implementation of the storm water management program, the permittee must address recharge and infiltration for the minimum control measures, as well as any reasons for electing not to implement recharge and infiltration. Loss of annual recharge to ground water should be minimized through the use of infiltration measures to the maximum extent practicable.

C. Public Drinking Water Supply Requirements

1. MS4s which discharge to public drinking water sources and their protected areas (Class A and B surface waters used for drinking water and wellhead protection areas) should consider these waters a priority in implementation of the storm water management program.

2. Discharges to public drinking water supply sources and their protection areas (wellhead protection areas, Class A and B waters) should provide pretreatment and spill control capabilities to the extent feasible.

3. Direct discharges to Class A waters and the sanitary radius to supply wells (defined in EnV-Ws 378.06, EnV-Ws 372.13) should be avoided to the extent feasible.

D. Program Evaluation

1. The permittee must annually evaluate the compliance of the storm water management program with the conditions of this permit.

2. The permittee must evaluate the appropriateness of the selected Best Management Practices in efforts towards achieving the defined Measurable Goals. The SWMP may be changed in accordance with the following provisions:

(a). Changes adding (but not subtracting or replacing) components, controls or requirements to the SWMP may be made at any time upon written notification to EPA.

(b.) Changes replacing an ineffective or infeasible BMP specifically identified in the SWMP with an alternative BMP may be requested at any time. Unless denied, changes proposed in accordance with the criteria below shall be deemed approved and may be implemented 60 days from submittal of the request. If the request is denied, EPA will send a written explanation of the denial.

(c.) Modification requests, must include the following information:

i. an analysis of why the BMP is ineffective or infeasible (including cost prohibitive)

ii. expectations on the effectiveness of the replacement BMP, and

iii. an analysis of why the replacement BMP is expected to achieve the goals of the BMP to be replaced.

iv. Change requests or notifications must be in writing and signed in accordance with the signatory requirements of Part VI.

3. EPA or NHDES may require changes to the SWMP as needed to:

(a.) Address impacts on receiving water quality caused or contributed to by discharges from the MS4;

(b.) To include more stringent requirements necessary to comply with new Federal statutory or regulatory requirement; or

(c.) To include such other conditions deemed necessary to comply with the goals and requirements of the CWA.

(d.) Any changes requested by EPA or NHDESwill be in writing and will set forth the schedule for the permittee to develop the changes and offer the opportunity to propose alternative program changes to meet the objective of the requested modification.

E. Record Keeping

1. All records required by this permit must be kept for a period of at least five years. Records include information used in the development of the storm water management program, any monitoring, copies of reports, and all data used in the development of the notice of intent.

2. Records need to be submitted only when specifically requested by the permitting authority.

3. The permittee must make the records relating to this permit available to the public, including the storm water management program. The public may view the records during normal business hours. The permittee may charge a reasonable fee for copying requests.

F. Reporting

1. The permittee must submit an annual report. The initial report is due one year from the effective date of this permit and annually thereafter. The reports should contain information regarding activities of the previous calendar year. Reports must be submitted to EPA at the following address:

United States Environmental Protection Agency
Water Technical Unit
P.O. Box 8127
Boston, MA 02114

Municipalities located in the State of New Hampshire, must also submit reports to the New Hampshire Department of Environmental Services at the following address:

New Hampshire Department of Environmental Services
Water Division
Wastewater Engineering Bureau
P.O. Box 95
Concord, New Hampshire 03302-0095

2. The following information must be contained in the annual report:

(a) A self assessment review of compliance with the permit conditions.

(b) An assessment of the appropriateness of the selected BMPs.

(c) An assessment of the progress towards achieving the measurable goals.

(d) A summary of results of any information that has been collected and analyzed. This includes any type of data.

(e) A discussion of activities for the next reporting cycle.

(f) A discussion of any changes in identified BMPs or measurable goals.

(g) Reference any reliance on another entity for achieving any measurable goal.

PART IV
NON-TRADITIONAL SMALL MS4 -STORM WATER MANAGEMENT PROGRAM
(This covers federal, county, or state owned small MS4s located in any of the areas described in Part I.A. of this permit)

A. Storm Water Management Program

The permittee must develop, implement and enforce a program to reduce the discharge of pollutants from the MS4 to the maximum extent practicable; protect water quality, and satisfy the water quality requirements of the Clean Water Act and state water quality standards.

1. The permittee must develop a storm water management program implementing the minimum measures described in Paragraph IV.B.

2. All elements of the storm water management program must be implemented by the expiration date of this permit.

3. Implementation of one or more of the minimum measures may be shared with another entity, or the entity may fully implement the measure. When another entity fully implements a minimum measure for the permittee, the following applies:

(a.) the other entity, in fact, implements the control measure,
(b.) the particular control measure, or component of that measure is at least as stringent as the corresponding permit requirement.
(c.) The other entity agrees to implement the control measure on the permittee behalf. A legally binding written acceptance of this obligation is expected. This obligation must be maintained as part of the storm water management program. If the other entity agrees to report on the minimum measure, the permittee must supply the other entity with the reporting requirements contained in this permit under Part IV.E.
(d) The permittee remains responsible for permit compliance and implementation of the minimum measure if the other entity fails to do it.

4. For each minimum measure, the permittee must:

(a.) identify the person(s) or department responsible for the measure;
(b.) identify Best Management Practices (BMPs) for the measure;
(c.) identify measurable goals for the BMP. The permittee may also identify an overall goal for the measure. Time lines and milestones for implementation of BMPs should be identified.

5. The following EPA websites may be used in the development of BMPs and measurable goals. EPA's BMP menu: http://www.epa.gov/npdes/menuofbmps/menu.htm EPA's guidance on measurable goals: http://www.epa.gov/npdes/stormwater/measurablegoals/index.htm

B. Minimum Control Measures

1.. Public education and outreach. The permittee must implement a public education program to distribute educational material to the community. For the purposes of this permit, a community consists of the people who use the facility. For example, at a university it would be the faculty, other staff, students, and visitors. The public education program must provide information concerning the impact of storm water discharges on water bodies. It must address steps and/or activities that the community can take to reduce the pollutants in storm water runoff.

The following should be included in education and outreach efforts:

(a.) information regarding activities that occur at the facility, including illegal dumping into storm drains.
(b.) activities may be coordinated with local groups (i.e. watershed associations, or schools).

(c.) materials for outreach/education may include, but are not limited to, pamphlets; fact sheets; brochures; public service announcements; storm drain stenciling and newspaper advertisements.
(d.) encourage cooperative efforts with neighboring municipalities, watershed associations and others.

2. Public Involvement and participation. All public involvement activities must comply with state public notice requirement. In Massachusetts the public notice requirements are at MGL Chapter 39, Section 23B. In New Hampshire, the public notice requirements are at RSA 91A.

(a.) The permittee must provide opportunity for the public to participate in the implementation and review of the storm water management program.

3. Illicit discharge detection and elimination. The permittee must develop, implement and enforce a program to detect and eliminate illicit discharges. An illicit discharge is any discharge to a municipal separate storm sewer that is not composed entirely of storm water. Exceptions are discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal sewer system), allowable non-storm water discharges described at Part I.F. and discharges resulting from fire fighting activities.

(a.) If not already existing, the permittee must develop a storm sewer system map. At a minimum, the map must show the location of all outfalls and the names of all waters that receive discharges from those outfalls. Additional elements may be included on the map, such as, location of catch basins, location of manholes, and location of pipes within the system. Initial mapping should be based on all existing information available to the permittee including facility records, city records, and drainage maps. Field surveys may be necessary to verify existing records and locate all outfalls.

(b.) To the extent allowable under state law, the permittee must effectively prohibit, through regulatory mechanisms available to the permittee, non storm water discharges into the system and implement appropriate enforcement procedures and actions. If a regulatory mechanism does not exist, development and adoption of such a mechanism must be included as part of the storm water management program. The permittee should evaluate existing procedures, policies, and authorities pertaining to connections to its separate storm sewer system. These may be used to assist in the development of the required regulatory mechanism.

If an illicit discharger fails to comply with procedures or policies established at the facility, the permittee may seek assistance from EPA or the state agency in enforcing this provision of the permit.

(c.) The permittee must develop and implement a plan to detect and address non -storm water discharges, including illegal dumping, into the system.

The illicit discharge plan must contain the following elements:
i. Procedures to identify priority areas. This includes areas suspected of having illicit discharges, for example: older areas of the city, areas of high public complaints and areas of high recreational value or high environmental value such as beaches and drinking water sources.
ii. Procedures for locating illicit discharges (i.e. visual screening of outfalls for dry weather discharges, dye or smoke testing).
iii. Procedures for locating the source of the discharge and procedures for the removal of the source.
iv. Procedures for documenting actions and evaluating the impact on the storm sewer system subsequent to the removal.

(d.) The permittee must inform users of system and the general public of hazards associated with illegal discharges and improper waste disposal.

(e.) The non-storm water discharges listed in Part I.F. must be addressed if they are identified as being significant contributors of pollutants to the MS4.

4. Construction site storm water runoff control. The permittee must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. The permittee must include disturbances less than one acre if part of a larger common plan.

The permittee does not need to apply its construction program provisions to projects that receive a waiver from EPA under the provisions of 40 CFR§122.26(b)(15)(i).

At a minimum, the program must include:

(a.) To the extent allowable under state law, a regulatory mechanism to require sediment and erosion control at construction sites. If such a mechanism does not exist, development and adoption of a mechanism must be part of the program. The permittee should evaluate existing procedures, policies, and authorities pertaining to activities occurring on its property, these may be used to assist in the development of the required regulatory mechanism. If attempts to enforce this part of their program are ineffective, the permittee may seek assistance from EPA or the state agency for enforcement of this provision .

(b.) Sanctions to ensure compliance with the program. To the extent allowable under state law sanctions may include both monetary or non-monetary penalties.

(c.) Requirements for construction site operators to implement a sediment and erosion control program which includes best management practices that are appropriate for the conditions at the construction site. The overall goal of a sediment and erosion control plan is to retain sediment on site, to the extent practicable. A sediment and erosion control plan should, at a minimum, include provisions to address maintenance and inspection of BMPs, and long and short term stabilization practices.

(d.) Require control of wastes, including but not limited to, discarded building materials, concrete truck wash out, chemicals, litter, and sanitary wastes.

(e.) Procedures for site plan review including procedures which incorporate consideration of potential water quality impacts. The site plan review should include procedures for preconstruction review.

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

(g.) Procedures for inspections and enforcement of control measures at construction sites.

5. Post construction storm water management in new development and redevelopment.

The permittee must develop, implement and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than one acre and discharge into the MS4.

The program must include projects less than one acre if the project is part of a larger common plan of development.

The post construction program must include:

(a.) To the extent allowable under state law, a regulatory mechanism to address post construction runoff from new development and redevelopment. If such a mechanism does not exist, development and adoption of a mechanism must be part of the program. The permittee should evaluate existing procedures and policies concerning activities occurring on its property. These may be used to assist in development of the required regulatory mechanism. If attempts to enforce this provision of the program are ineffective, the permittee may seek assistance from EPA or the state agency in enforcing this provision.

(b.) Procedures to ensure adequate long term operation and maintenance of best management practices.

(c.) Procedure to ensure that any controls that are put in place will prevent or minimize impacts to water quality.

6. Pollution prevention and good housekeeping in community/facility operations.

The permittee must

(a.) Develop and implement a program with a goal of preventing and/or reducing pollutant runoff from community/facility operations. The program must include an employee training component.

(b.) Include, at a minimum, maintenance activities for the following : parks and open space; fleet maintenance, building maintenance; new construction and land disturbance; road way drainage system maintenance, and storm water system maintenance.

(c.) Develop schedules for maintenance activities described in paragraph (b) above.

(d) Develop inspection procedures and schedules for long term structural controls.

7. Cooperation with interconnected municipal separate storm sewer systems is encouraged. The permittee should identify interconnections within the system. These interconnections include both those leaving the system and those entering the system. The permittee should attempt to work cooperatively with an interconnected municipality in instances of discharges impacting either system.

8. MS4s which discharge to coastal waters with public swimming beaches should consider these waters a priority in implementation of the storm water management program.

9. The permittee should consider opportunities for ground water recharge and infiltration in implementation of the control measures described above.
The permittee must evaluate physical conditions, site design, and best management practices to promote groundwater recharge and infiltration where feasible in the implementation of the control measures described above. During the implementation of the storm water management program, the permittee must address recharge and infiltration for the minimum control measures as well as any reasons for electing not to implement recharge and infiltration. Loss of annual recharge to ground water should be minimized through the use of infiltration measures to the maximum extent practicable.
Massachusetts Only: Permittee in areas identified as "high" or "medium" in the most recent Massachusetts Water Resources Commission's *Stressed Basins in Massachusetts* report in effect at the time the permittee submits a Notice of Intent and accompanying storm water management program, must minimize the loss of annual recharge to ground water from new development and redevelopment, including but not limited to drainage improvements done in conjunction with road improvements, street drain improvement projects and flood mitigation projects, consistent with Standard 3 of the Storm Water Management Policy in areas both within and outside of the jurisdiction of the Massachusetts Wetlands Protection Act.

(See http://www.state.ma.us/dem/programs/intbasin/stressed_basin)

C. Public Drinking Water Supply Requirements

1. MS4s which discharge to public drinking water sources and their protection areas (Class A and B surface waters used for drinking water and wellhead protection areas) should consider these waters a priority in implementation of the storm water management program.

2. Discharges to public drinking water supply sources and their protection areas (wellhead protection areas, Class A and Class B waters) should provide pretreatment and spill control capabilities to the extent feasible.

3. Direct discharges to Class A waters and the sanitary radius to public supply wells should be avoided the extent feasible.

D. Program Evaluation

1.The permittee must annually evaluate the compliance of the storm water management program with the conditions of this permit.

2.The permittee must evaluate the appropriateness of the selected Best Management Practices in efforts towards achieving the defined Measurable Goals. The SWMP may be changed in accordance with the following provisions:

(a.) Changes adding (but not subtracting or replacing) components, controls or requirements to the SWMP may be made at any time upon written notification to EPA and MA DEP.
(b.) Changes replacing an ineffective or infeasible BMP specifically identified in the SWMP with an alternative BMP may be requested in writing to EPA and MA DEP at any time. Unless denied, changes proposed in accordance with the criteria below shall be deemed approved and may be implemented 60 days from submittal of the request. If the request is denied, EPA or MA DEP, as applicable, will send you a written explanation of the denial.
(c.) Modification requests, must include the following information:
i. an analysis of why the BMP is ineffective or infeasible (including cost prohibitive)
ii. expectations on the effectiveness of the replacement BMP, and
iii. an analysis of why the replacement BMP is expected to achieve the goals of the BMP to be replaced.
iv. Change requests or notifications must be in writing and signed in accordance with the signatory requirements of Part VI.

3. EPA or the state agency may require changes to the SWMP as needed to:
(a.) Address impacts on receiving water quality caused or contributed to by discharges from the MS4,
(b.) To include more stringent requirements necessary to comply with a new Federal statutory or regulatory requirement; or
(c.) To include such other conditions deemed necessary to comply with the goals and requirements of the CWA.
(d.) Any changes requested by EPA or MA DEP/ NH DES will be in writing and will set forth the time schedule for the permittee to develop the changes and offer the opportunity to propose alternative program changes to meet the objective of the requested modification.

E. Record Keeping

1. All records required by this permit must be kept for a period of five years. Records include information used in the development of the storm water management program, any monitoring, copies of reports, and all data used in the development of the notice of intent.

2.Records need to be submitted only when specifically requested by the permitting authority.

3. The permittee must make the records relating to this permit available to the public, including the storm water management program. The public may view the records during normal business hours. The permittee may charge a reasonable fee for copying requests.

F. Reporting

1.The permittee must submit an annual report. The initial report is due one year from the effective date of this permit and annually thereafter. The reports should contain information regarding activities of the previous calendar year. Reports should be submitted to EPA. At the following address:

United States Environmental Protection Agency
Water Technical Unit
P.O. Box 8127
Boston, Massachusetts, 02114

Massachusetts MS4s must also submit reports to:

Massachusetts Department of Environmental Protection
Division of Watershed Management
627 Main Street
Worcester, Massachusetts 01608

New Hampshire MS4s must submit reports to:

New Hampshire Department of Environmental Services
Water Division
Wastewater Engineering Bureau
P.O. Box 95
Concord, New Hampshire 03302-0095

2. The following information must be contained in the annual report:

(a) A self assessment review of compliance with the permit conditions

(b) An assessment of the appropriateness of the selected BMPs.

(c) An assessment of the progress towards achieving the measurable goals

(d) A summary of results of any information that has been collected and analyzed. This includes any type of data.

(e) A discussion of activities for the next reporting cycle.

(f) A discussion of any changes in identified BMPs or measurable goals.

(g) Reference any reliance on another entity for achieving any measurable goal.

G. Massachusetts State Permit Conditions

This permit is issued jointly by the U.S. Environmental Protection Agency and the Massachusetts Department of Environmental Protection under federal and state law, respectively. As such, all the terms and conditions of this permit are hereby incorporated into and constitute a discharge permit issued by the Commissioner of the MA DEP pursuant to M.G.L. Chap. 21, §43 and under regulations found at 314 CMR 3.00. Regulations found at 314 CMR 3.19 (Standard Permit Conditions) are incorporated into this permit by reference.

To the extent allowable by their respective laws and regulations, each agency shall have the independent right to enforce the terms and conditions of this permit. Any modification, suspension or revocation of this permit shall be effective only with respect to the agency taking such action, and shall not affect the validity or status of this permit as issued by the other agency, unless and until each agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this permit is declared invalid, illegal or otherwise issued in violation of the state law such permit shall remain in force and effect under federal law as a NPDES permit issued by the U.S. Environmental Protection Agency. In the event this permit is declared invalid, illegal or otherwise issued in violation of federal law, this permit shall remain in full force and effect under state law as a permit issued by the Commonwealth of Massachusetts. Refer to Part IX for 401 Certification Requirements.

PART V
TRANSPORTATION MS4 - STORM WATER MANAGEMENT PROGRAM
(This part applies to state and county agencies who maintain roadways, highways and other thoroughfares in the state including but not limited to Massachusetts Highway Department and New Hampshire Department of Transportation)

A. Storm Water Management Program

The permittee must develop, implement and enforce a program to reduce the discharge of pollutants from the MS4 to the maximum extent practicable; protect water quality, and satisfythe water quality requirements of the Clean Water Act and state water quality standards

1. The permittee must develop a storm water management program implementing the minimum measures described in Paragraph V.B.

2. All elements of the storm water management program must be implemented by the expiration date of this permit.

3. Implementation of one or more of the minimum measures may be shared with another entity, or the entity may fully implement the measure. When another entity fully implements a minimum measure for the permittee, the following applies

(a.) the other entity, in fact, implements the control measure;
(b.) the particular control measure, or component of that measure is at least as stringent as the corresponding permit requirement.
(c.) The other entity agrees to implement the control measure on the permittee behalf. A legally binding written acceptance of this obligation is expected. This obligation must be maintained as part of the storm water management program. If the other entity agrees to report on the minimum measure, the permittee must supply the other entity with the reporting requirements contained in this permit under Paragraph V.E.
(d) The permittee remains responsible for permit compliance and implementation of the minimum measure if the other entity fails to do it.

4. For each minimum measure, the permittee must:

(a.) identify the person(s) or department responsible for the measure;
(b.) identify Best Management Practices (BMPs) for the measure;
(c.) identify measurable goals for each best management practice. The permittee may also identify an overall goal for each measure. Time lines and milestones for implementation of BMPs should be identified.

5. The following EPA websites may be used in the development of BMPs and measurable goals. EPA's BMP menu: http://www.epa.gov/npdes/menuofbmps/menu.htm EPA's guidance on Measurable goals: http://www.epa.gov/npdes/stormwater/measurablegoals/index.htm

Minimum Control Measures

1. Public education and outreach. The permittee must implement a public education program to distribute educational material to the community. For the purposes of this permit, a community consists of the people who use the facility. For a transportation agency, this would include employees, contractors, and general public. The public education program must provide information concerning the impact of storm water discharges on water bodies. It must address steps and/or activities that the community can take to reduce the pollutants in storm water runoff.

The following should be included in education and outreach efforts:

(a.) information regarding activities that occur within the facility, including illegal dumping into storm drains.

(b.) coordinate activities with local groups (i.e. watershed associations, or schools)

(c.) materials for outreach/education may include, but are not limited to, pamphlets; fact sheets; brochures; public service announcements; storm drain stenciling and newspaper advertisements.

(d.) encourage cooperative efforts with neighboring municipalities, watershed associations and others.

2. Public involvement and participation. All public involvement activities must comply with state public notice requirement.

(a.) The permittee must provide opportunity for the public to participate in the development, implementation and review of the storm water management program. In Massachusetts, the public notice requirements are at Chapter 39, Section 23B. In New Hampshire, the public notice requirements are at RSA-91A.

3. Illicit discharge detection and elimination. The permittee must develop, implement and enforce a program to detect and eliminate illicit discharges. An illicit discharge is any discharge to a municipal separate storm sewer that is not composed entirely of storm water. Exceptions are discharges pursuant to a NPDES permit (other that the NPDES permit for discharges from the municipal sewer system), allowable non-storm water discharges described at Part I.F. and discharges resulting from fire fighting activities.

(a.) If not already existing, the permittee must develop a storm sewer system map. At a minimum, the map must show the location of all outfalls and the names of all waters that receive discharges from those outfalls. Due to the magnitude of a transportation agency's drainage system, identification of outfalls may be done on a district basis, and as part of construction and redevelopment projects.

Additional elements may be included on the map, such as, location of catch basins, location of manholes, and location of pipes within the system. Initial mapping should be based on all existing information available to the permittee including project plans, agency records, city records and drainage maps. Field surveys may be necessary to verify existing records and locate all outfalls.

(b.) To the extent allowable under state law, the permittee must effectively prohibit, through a regulatory mechanism, non storm water discharges into the system and implement appropriate enforcement procedures and actions. If a regulatory mechanism does not exist, development and adoption of such a mechanism must be included as part of the storm water management program. The permittee should evaluate existing procedures, policies and authorities pertaining to connections to its separate storm sewer system.

If an illicit discharger fails to comply with procedures or policies established by the agency, the permittee seek assistance from EPA or the state environmental agency in enforcing this provision of the permit.

(c.) The permittee must develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, into the system.

The illicit discharge plan must contain the following elements:

i. Procedures to identify priority areas. This includes areas suspected of having illicit discharges, for example: older areas of a city, areas of high public complaints, and areas of high recreational value or high environmental value such as beaches and drinking water sources.

ii. Procedures for locating illicit discharges (i.e. visual screening of outfalls for dry weather discharges, dye or smoke testing).

iii. Procedures for locating the source of the discharge and procedures for the removal of the source.
iv. Procedures for documenting actions and evaluating the impact on the storm sewer system subsequent to the removal.

(d.) The permittee must inform users of the system and the general public of hazards associated with illegal discharges and improper waste disposal. The permittee must train field inspectors to recognize illicit discharges.

(e.) The non storm water discharges listed in Part I.F. must be addressed if they are identified as being significant contributors of pollutants.

4. Construction site storm water runoff control. The permittee must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. The permittee must include disturbances less than one acre if part of a larger common plan.

The permittee does not need to apply its construction program provisions to projects that receive a waiver from EPA under the provisions of 40 CFR§122.26(b)(15)(i).

At a minimum, the program must include:

(a.) To the extent allowable under state law,a regulatory mechanism to require sediment and erosion control at construction sites. If such a mechanism does not exist, development and adoption of a mechanism must be part of the program. If attempts to enforce this part of their program are ineffective, the permittee may seek assistance from EPA or the state agency for enforcement of this provision.

(b.) Sanctions to ensure compliance with the program. To the extent allowable under state law, sanctions may include both monetary or non-monetary penalties. The transportation agency can consider with-holding payment to contractors who fail to implement appropriate sediment and erosion control plans.

(c.) Requirements for construction site operators to implement a sediment and erosion control program which includes best management practices that are appropriate for the conditions at the construction site. The Massachusetts Erosion and Sediment Control Guidelines for Urban and Suburban Areas may be used as a tool to implement this provision. The New Hampshire Department of Transportation may use the Storm Water Management Sediment and Erosion Control Handbook as a tool to implement this provision.

(d.) Require control of wastes, including but not limited to, discarded building materials, concrete truck wash out, chemicals, litter, and sanitary wastes.

(e.) Procedures for site plan review including procedures which incorporate consideration of potential water quality impacts. The site plan review should include procedures for preconstruction review.

(f.) Procedures for receipt and consideration of information submitted by the public. This may include the opportunities for public comment during the project development process.

(g.) Procedures for inspections and enforcement of control measures at construction sites.

5. Post construction storm water management in new development and redevelopment.
The permittee must develop, implement and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than one acre and discharge into the MS4.

The program must include projects less than one acre if the project is part of a larger common plan of development.

The post construction program must include:

(a.) To the extent allowable under state law, a regulatory mechanism to address post construction runoff from new development and redevelopment. If such a mechanism does not exist, development and adoption of a mechanism must be part of the program. If attempts to enforce this provision of the program are ineffective, the permittee may seek assistance from EPA of the state agency in enforcing this provision.

(b.) Procedures to ensure adequate long term operation and maintenance of best management practices.

(c.) Procedure to ensure that any controls that are in place will prevent or minimize impacts to water quality.

(d) The Massachusetts Highway Department may use the approved Storm Water Management Handbook as a tool to implement this provision.

6. Pollution prevention and good housekeeping in community/facility operations.

The permittee must

(a.) Develop and implement a program with a goal of preventing and/or reducing pollutant runoff from transportation facility operations. The program must include an employee training component.

(b.) Include, at a minimum, maintenance activities for the following : rest areas along interstates; weigh stations; material storage yards; new construction and land disturbance; roadway drainage system maintenance, and storm water system maintenance.

(c.) Develop schedules for maintenance activities described in paragraph (b) above.

(d) Develop inspection procedures and schedules for long term structural controls.

7. Cooperation between interconnected municipal separate storm sewer systems is encouraged. The permittee should identify interconnections within the system. These interconnections include both those leaving the system and those entering the system. The permittee should attempt to work cooperatively with an interconnected municipality in instances of discharges impacting either system.

8. MS4s which discharge to coastal waters with public swimming beaches should consider these waters a priority in implementation of the storm water management program.

9. The permittee should consider opportunities for ground water recharge and infiltration in the implementation of the minimum measures described above.

The permittee must evaluate physical conditions, site design, and best management practices to promote groundwater recharge and infiltration where feasible in the implementation of the control measures described above. During the implementation of the storm water management program, the permittee must address recharge and infiltration for the minimum control measures as well as any reasons for electing not to implement recharge and infiltration. Loss of annual recharge to ground water should be minimized through the use of infiltration measures to the maximum extent practicable.

Massachusetts Only: Permittees in areas identified as "high" or "medium" in the most recent Massachusetts Water Resources Commission's *Stressed Basins in Massachusetts* report in effect at the time the permittee submits a Notice of Intent and accompanying storm water management program, must minimize the loss of annual recharge to ground water from new development and redevelopment, including but not limited to drainage improvements done in conjunction with road improvements, street drain

improvement projects and flood mitigation projects, consistent with Standard 3 of the Storm Water Management Policy in areas both within and outside of the jurisdiction of the Massachusetts Wetlands Protection Act.
(See http://www.state.ma.us/dem/programs/intbasin/stressed_basin)

C. Public Drinking Water Supply Requirements

1. MS4s which discharge to public drinking water sources and their protection areas (Class A and B surface waters used for drinking water and well head protection areas) should consider these waters a priority in implementation of the storm water management program.

2. Discharges to public drinking water supply sources and their protection areas (wellhead protection areas, Class A and Class B waters) should provide pretreatment and spill control capabilities to the extent practicable.

3. Discharges to Class A waters, Zone 1 wellhead protection areas, and the sanitary radius to supply wells should be avoided to the extent feasible.

D. Program Evaluation

1. The permittee must annually evaluate the compliance of the storm water management program with the conditions of this permit.

2. The permittee must evaluate the appropriateness of the selected Best Management Practices in efforts towards achieving the defined Measurable Goals. The SWMP may be changed in accordance with the following provisions:

(a.) Changes adding (but not subtracting or replacing) components, controls or requirements to the SWMP may be made at any time upon written notification to EPA and MADEP.
(b.) Changes replacing an ineffective or unfeasible BMP specifically identified in the SWMP with an alternative BMP may be requested in writing to EPA and MA DEP at any time. Unless denied, changes proposed in accordance with the criteria below shall be deemed approved and may be implemented 60 days from submittal of the request. If the request is denied, EPA or MA DEP, as applicable, will send a written explanation of the denial.
(c.) Modification requests, must include the following information:
i. an analysis of why the BMP is ineffective or infeasible (including cost prohibitive)
ii. expectations on the effectiveness of the replacement BMP, and
iii. an analysis of why the replacement BMP is expected to achieve the goals of the BMP to be replaced.
iv. Change requests or notifications must be in writing and signed in accordance with the signatory requirements of Part VI.

3. EPA or MADEP/NHDES may require changes to the SWMP as needed to:
(a.) Address impacts on receiving water quality caused or contributed to by discharges from the MS4;
(b.) To include more stringent requirements necessary to comply with a new Federal statutory or regulatory requirement; or
(c.) To include such other conditions deemed necessary to comply with the goals and requirements of the CWA.
(d.) Any changes requested by EPA or MADEP/NHDES will be in writing and will set forth the time schedule for the permittee to develop the changes and offer the opportunity to propose alternative program changes to meet the objective of the requested modification

E. Record Keeping

1. All records required by this permit must be kept for a period of at least five years. Records include information used in the development of the storm water management program, any monitoring, copies of reports, and all data used in the development of the notice of intent.

2. Records need to be submitted only when specifically requested by the permitting authority.

3. The permittee should make the records relating to this permit available to the public, including the storm water management program. The public may view the records during normal business hours. The permittee may charge a reasonable fee for copying requests.

F. Reporting

1. The permittee must submit an annual report. The initial report is due one year from the effective date of this permit and annually thereafter. The reports should contain information regarding activities of the previous calendar year. Reports should be submitted to EPA. At the following address:
United States Environmental Protection Agency
Water Technical Unit
P.O. Box 8127
Boston, MA 02114

Massachusetts transportation MS4s must also submit reports to:

Department of Environmental Protection
Division of Watershed Management
627 Main Street
Worcester, Massachusetts 01608

New Hampshire transportation MS4s must also submit reports to:

New Hampshire Department of Environmental Services
Water Division
Wastewater Engineering Bureau
P.O. Box 95
Concord, NH 03302-0095

2. The following information must be contained in the annual report:

(a) A self assessment review of compliance with the permit conditions.

(b) An assessment of the appropriateness of the selected BMPs.

(c) An assessment of the progress towards achieving the measurable goals.

(d) A summary of results of any information that has been collected and analyzed. This includes any type of data.

(e) A discussion of activities for the next reporting cycle.

(f) A discussion of any changes in identified BMPs or measurable goals.

(g) Reference any reliance on another entity for achieving any measurable goal.

G. Massachusetts State Permit Conditions

This permit is issued jointly by the U.S. Environmental Protection Agency and the Massachusetts Department of Environmental Protection under federal and state law, respectively. As such, all the terms and conditions of this permit are hereby incorporated into and constitute a discharge permit issued by the Commissioner of the MA DEP pursuant to M.G.L. Chap. 21, §43 and under regulations found at 314 CMR 3.00. Regulations found at 314 CMR 3.19 (Standard Permit Conditions) are incorporated into this permit by reference.

To the extent allowable by their respective laws and regulations, each agency shall have the independent right to enforce the terms and conditions of this permit. Any modification, suspension or revocation of this permit shall be effective only with respect to the agency taking such action, and shall not affect the validity or status of this permit as issued by the other agency, unless and until each agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this permit is declared invalid, illegal or otherwise issued in violation of the state law such permit shall remain in force and effect under federal law as a NPDES permit issued by the U.S. Environmental Protection Agency. In the event this permit is declared invalid, illegal or otherwise issued in violation of federal law, this permit shall remain in full force and effect under state law as a permit issued by the Commonwealth of Massachusetts. Refer to Part IX for 401 Certification Requirements.

PART VI - STANDARD PERMIT CONDITIONS

H. Duty to Comply

1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and is grounds for enforcement action; for permit termination, revocation and reissuance or modification or for denial of a permit application.

2. Penalties for Violations of Permit Conditions

The Director will adjust the civil and administrative penalties listed below in accordance with Civil Monetary Penalty Inflation Adjustment Rule (Federal Register: December 31, 1996, Volume 61, Number 252, pages 69359-69366, as corrected, March 20, 1997, Volume 62, Number 54, pages 13514-13517) as mandated by the Debt Collection Improvement Act of 1996 for inflation on a periodic basis. This rule allows EPA's penalties to keep pace with inflation. The Agency is required to review its penalties at least once every four years thereafter and to adjust them as necessary for inflation according to a specialized formula. The civil and administrative penalties listed below were adjusted for inflation starting in 1996

(a) Criminal

i. Negligent Violations. The CWA provides that any person who negligently violates permit conditions implementing sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation or by imprisonment for not more than 1 year or both.

ii. Knowing Violations. The CWA provides that any person who knowingly violates permit conditions implementing sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than $ 5,000 not more than $50,000 per day of violation, or by imprisonment for not more than 3 years, or both.

iii. Knowing Endangerment. The CWA provides that any person who knowingly violates permit conditions implementing sections 301, 302, 306, 307, 308, 318, or 405 of the Act and who knows at that time that he is placing another person in imminent danger of death or serious bodily injury is subject to a fine of not more than $250,000 or by imprisonment for not more than 15 years, or both.

iv. False statement. The CWA provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan or other document filed or required to be maintained under the Act or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the Act, shall upon conviction, be punished by a fine or not more than $10,000 or by imprisonment for not more that two years, or by both. If a conviction is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than $20,000 per day of violation, or by imprisonment of not more than four years, or by both.

b. Civil penalties- The CWA provides that any person who violates a permit condition implementing sections 301, 302, 306, 306, 307, 318 or 405 of the Act is subject to a civil penalty not to exceed $ 27,500 per day for each violation.

c. Administrative Penalties

The CWA provides that any person who violates a permit condition implementing sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to an administrative penalty, as follows:

i. Class I penalty. Not to exceed $11,000 per violation nor shall the maximum amount exceed $ 27,500.

ii. Class II penalty. Not to exceed $11,000 per day for each day during which the violation continues nor shall the maximum amount exceed $137,500.

B. Continuation of the Expired General Permit

If this permit is not reissued prior to the expiration date, it will be administratively continued in accordance with the Administrative Procedures Act and remain in force and in effect as to any particular permittee as long as the permittee submits a new Notice of Intent two (2) months prior to the expiration of this permit. However, once this permit expires, EPA cannot provide written notification of coverage under this general permit to any permittee who submits a Notice of Intent to EPA after the permit's expiration date. Any permittee who was granted permit coverage prior to the expiration date will automatically remain covered by the continued permit until the earlier of :

(1) Reissuance of this permit, at which time the permittee must comply with the Notice of Intent conditions of the new permit to maintain authorization to discharge; or
(2) The permittee's submittal of a Notice of Termination; or
(3) Issuance of an individual permit for the permittee's discharges; or
(4) A formal permit decision by the Director not to reissue this general permit, at which time the permittee must seek coverage under an alternative general permit or an individual permit.

C. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. Duty to Mitigate

The permittee must take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

F. Duty to Provide Information

The permittee must furnish to the Director or an authorized representative of the Director any information which is requested to determine compliance with this permit. The permittee shall also furnish to the Director upon request, copies of records required to be kept by this permit.

G. Signatory Requirement

i. All applications, reports, or information submitted to the Director shall be signed and certified. (See 40 CFR 122.22)

ii. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation or both.

H. Oil and Hazardous Substance Liability

Nothing in this permit shall be constructed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under section 311 of the CWA or section 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

I. Property Rights

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

J. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to the circumstances, and the remainder of this permit shall not be affected thereby.

K. Requiring an Individual Permit or an Alternative General Permit

i. The Director may require any person authorized by this permit to apply for and/or obtain either an individual NPDES permit or an alternative NPDES general permit. Any interested person may petition the Director to take action under this paragraph. Where the Director requires the permittee to apply for an individual NPDES permit, the Director will notify the permittee in writing that a permit application is required. This notification shall include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for the permittee to file the application, and a statement that on the effective date of issuance or denial of the individual NPDES permit or the alternative general permit as it applies to the individual permittee, coverage under this general permit shall automatically terminate. Applications must be submitted to the Regional Office. The Director may grant additional time to submit the application upon request of the applicant. If the permittee fails to submit in a timely manner an individual NPDES permit application as required by the Director under this paragraph, then the applicability of this permit to the permittee is automatically terminated at the end of the day specified by the Director for application submittal.

ii. Any discharger authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. In such cases, the permittee must submit an individual application in accordance with the requirements of 40 CFR 122.26(c)(1)(ii), with reasons supporting the request, to the Director at the following address: Office of Ecosystem Protection, United States Environmental Protection Agency, One Congress Street- Suite 1100, Boston, Massachusetts 02114. The request may be granted by issuance of any individual permit or an alternative general permit if the reasons cited by the permittee are adequate to support the request.

iii. When an individual NPDES permit is issued to a discharger otherwise subject to this permit, or the discharger is authorized to discharge under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit, whichever the case may be. When an individual NPDES permit is denied to an operator otherwise subject to this permit, or the operator is denied for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the date of such denial, unless otherwise specified by the Director.

L. State/Tribal Environmental Laws

i. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State/Tribal law or regulation under authority preserved by section 510 of the Act.

ii. No condition of this permit releases the permittee from any responsibility or requirements under other environmental statutes or regulations.

M. Proper Operation and Maintenance

The permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls

and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the conditions of the permit.

N. Inspection and Entry

The permittee must allow the Director or an authorized representative of EPA or the State/Tribe, upon the presentation of credentials and other documents as may be required by law, to:

i Enter the permittee premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;

ii Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and

iii Inspect at reasonable times any facilities or equipment (including monitoring and control equipment).

PART VII - DEFINITIONS

Best Management Practices (BMPs) - means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal or drainage from raw material storage.

Commencement of Construction means the initial disturbance of soils associated with clearing, grading or excavating activities or other construction activities.

Control Measure as used in this permit, refers to any BMP or other method, used to prevent or reduce the discharge of pollutants to waters of the United States.
CWA means the Clean Water Act, or the Federal Water Pollution Control Act, 33 U.S.C 1251 *et seq.*

Director means the Regional Administrator of the Environmental Protection Agency or an authorized representative.

Discharge when used without qualification means the "discharge of a pollutant."

Discharge of Storm Water Associated with Construction Activity as used in this permit, refers to a discharge of pollutants in storm water runoff from areas where soil disturbing activities (e.g. clearing, grading, or excavation), construction materials or equipment storage or maintenance (e.g. fill piles, borrow areas, concrete truck washout, fueling) or other industrial storm water directly related to the construction process are located. (See 40 CFR 122.26(b)(14)(x) and 40 CFR 122.26(b)(15) for the two regulatory definition of storm water associated with construction sites).

Discharge of Storm Water Associated with Industrial Activity is defined at 40 CFR 122.26(b)(14).

EPA means the United States Environmental Protection Agency

Facility or Activity means any NPDES "point source" or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the NPDES program.

General Permit means an NPDES permit issued under §122.28 authorizing a category of discharges under the CWA within a geographical area.

Indian Country, as defined in 18 U.S.C. 1151, means : (a) All lands within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation; (b) all dependent Indian communities with the borders of the United States whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a state; and (c) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same. This definition includes all land held in trust for an Indian tribe.

Industrial Activity as used in this permit refers to the eleven categories of industrial activities included in the definition of discharges of storm water associated with industrial activity.

Industrial Storm Water as used in this permit refers to storm water runoff associated with the definition of discharges of storm water associated with industrial activity.

Large municipal separate storm sewer system means all municipal separate storm sewer systems that are either: (i) Located in an incorporated place with a population of 250,000 or mor as determined by the 1990 Decennial Census by the Bureau of the Census; or (ii.) Located in counties listed in Appendix H of 40 CFR 122, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties; or (iii.) Owned or operated by a municipality other than those described in paragraph (b)(4)(i) or (ii) of this section and that are designated by the Director as part of the large or medium municipal separate storm sewer system due to the interrelationship between the discharges of the designated storm sewer and the discharges from

municipal separate storm sewers described under paragraph (b)(4)(i) or (ii) of this section.(Complete definition found at 40 CFR 122.26(b)(4) and incorporated here by reference).

MADEP means Massachusetts Department of Environmental Protection.

Municipality means a city, town, borough, county, parish, district, association, or other public body created by or under State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA.

Medium Municipal Separate Storm Sewer System means all municipal separate storm sewers that are either: (i) Located in an incorporated place with a population of 100,000 or more but less than 250,000, as determined by the 1990 Decennial Census by the Bureau of the Census (Appendix G of this part); or (ii.) Located in the counties listed in Appendix I, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties; or (iii.) Owned or operated by a municipality other than those described in paragraph (b)(4)(i) or (ii) of this section and that are designated by the Director as part of the large or medium municipal separate storm sewer system due to the interrelationship between the discharges of the designated storm sewer and the discharges from municipal separate storm sewers described under paragraph (b)(7)(i) or (ii) of this section.(Complete definition found at 40 CFR 122.26(b)(7) and incorporated here by reference).

Municipal Separate Storm Sewer System means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains); (i.) Owned or operated by a State, city, town, borough, county, parish, district, association or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district, or drainage district, or similar entity or an Indian tribe or an authorized tribal organization or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States; (ii) Designated or used for collecting or conveying storm water; (iii) Which is not a combined sewer; and (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318 and 405 of the CWA. The term includes an "approved program."

NHDES means New Hampshire Department of Environmental Services.

Owner or operator means the owner or operator of any "facility or activity" subject to regulation under the NPDES program.

Point Source means any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete, fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

Pollutant is defined at 40 CFR 122.2. A partial listing from this definition includes: dredged spoil, solid waste, sewage, garbage, sewage sludge, chemical wastes, biological materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial or municipal waste.

Runoff Coefficient means the fraction of total rainfall that will appear at the conveyance as runoff.

State means any of the 50 States, the District of Columbia, Guam, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, the Commonwealth of the Northern Mariana Islands, the Trust Territory of the Pacific Islands, or an Indian Tribe meeting the requirements of 40 CFR 123.31.

Storm Water means storm water runoff, snow melt runoff, and surface runoff and drainage.

Storm Water Associated with Industrial Activity refers to storm water, that if allowed to discharge, would constitute a "discharge of storm water associated with industrial activity" as defined at 40 CFR 122.26(b)(14) and incorporated here by reference.

Waters of the United States means:

1. All waters which are currently used, were used in the past or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.
2. All interstate waters, including interstate wetlands;
3. All other waters such as interstate lakes, rivers, streams, (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes or natural ponds the use, designation or destruction of which would affect or could affect interstate or foreign commerce including any such waters;
    a. Which are or could be used by interstate or foreign travelers for recreational or other purposes.
    b. From which fish or shell fish are or could be taken and sold in interstate or foreign or;
    c. Which are used or could be used for industrial purposes by industries in interstate commerce.
4. All impoundments of waters otherwise defined as waters of the United States under this definition;
5. Tributaries of waters identified in paragraphs (1) through (4) of this definition;
6. The territorial sea; and
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs 1 through 6 of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the United States (such as disposal areas in wetlands) nor resulted from the impoundment of waters of the United States. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by other federal agency for the purposes of the Clean Water Act jurisdiction remains with EPA.

Wetlands means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

PART VIII - REOPENER

If there is evidence indicating that the storm water discharges authorized by this permit cause, have the reasonable potential to cause, or contribute to a violation of a water quality standard, the permittee may be required to obtain an individual permit or an alternative general permit in accordance with Part VI.K of this permit, or the permit may be modified to include different limitations and/or requirements.

Permit modification or revocation will be conducted according to 40 CFR 122.62, 122.63, 122.64 and 124.5.

PART IX - 401 WATER QUALITY CERTIFICATION REQUIREMENTS

Massachusetts:

The Massachusetts Department of Environmental Protection in accordance with the provisions of MGL Ch. 21, s. 26-53, 314 CMR 4.00, 314. CMR 3.00, 314 CMR 9.00 and Section 401 of the Federal Clean Water Act (Public Law 92-500 as amended) issues this Section 401 Water Quality Certification for the *General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems* in Massachusetts. The Department has determined that compliance with the conditions of this permit will result in compliance with applicable water quality standards, as required by the Massachusetts Surface Water Quality Standards regulations (314 CMR 4.00) and with 314 CMR 9.04 and that the permittee will be in compliance with Sections 301, 302, 303, 306 and 307 of the Federal Clean Water Act. The Department issues this Water Quality Certification subject to the following conditions, which are to be added to the final permit as state water quality certification requirements. The conditions outlined below will be presented in the following order:

A. state statutes and regulations relating to water quality and surface water discharges;
B. adherence to the Massachusetts Storm Water Management Policy, March 1997;
C. other state laws, regulations, and policies
D. environmental priority resource areas designated for protection;
E. other Department Directives, and
F. permit compliance

A. State Water Quality Statutes, Regulations and Policies:

1. The permittee shall comply with the Massachusetts Clean Waters Act (Ch. 21 s. 26-53).

2. The permittee shall comply with the conditions in 314 CMR 4.00- Surface Water Quality Standards.

3. The permittee shall comply with the conditions in 314 CMR 3.00- Surface Water Discharge Permit Program.

4. The permittee shall comply with the Wetlands Protection Act, Ch. 131 s. 40 and its regulations, 310 CMR 10.00 and any Order of Conditions issued by a Conservation Commission or Superseding Order of Conditions issued by the Massachusetts Department of Environmental Protection.

B. Department of Environmental Protection Storm Water Management Policy:

1. The permittee shall comply with the Massachusetts Storm Water Management Policy, March 1997 and applicable Storm Water Performance Standards, as prescribed by state regulations promulgated under the authority of the Massachusetts Clean Waters Act, MGL c. 21, ss 23-56 and the Wetlands Protection Act, MGL c. 131 s. 40.

C. Other State Environmental Laws, Regulations, Policies:

1. The permittee shall comply with the Massachusetts Endangered Species Act (MESA)(MGL c. 131A and regulations at 321 CMR 10.00) and any actions undertaken to comply with this storm water permit, shall not result in non-compliance with the MESA.

2. The permittee shall not conduct activities under this permit that will interfere with implementation of mosquito control work conducted in accordance with Chapter 252 including, s. 5A thereunder and DEP Guideline Number BRP G01-02, West Nile Virus Application of Pesticides to Wetland Resource Areas and Buffer Zones, and Public Water Systems.

D. ***Resource Areas Required for priority consideration in Storm Water Management Program***

1. The permittee shall identify discharges to the following resource areas as a priority and indicate in their storm water management program how storm water controls will be implemented. Identified priority areas include:

a. public water supplies

b. public swimming beaches
c. Outstanding Resource Waters (as designated in 314 CMR 4.00)
d. shell fishing areas (open versus closed areas)
e. rivers, ponds, lakes and coastal waters which are on the Department's 303d list of impaired waters
f. cold water fishery river segments as identified in 314 CMR 4.00

E. Other Department Directives:

1. The Department may require the permittee to perform water quality monitoring during the permit term if monitoring is necessary for the protection of public health or the environment as designated under the authority at 314 CMR 3.00.

2. The Department may require one or more permittees covered under this general permit to provide measurable verification of the effectiveness of BMPs and other control measures in the permittee's management program, including water quality monitoring.

3. The Department has determined that compliance with this permit does not protect the permittee from enforcement actions deemed necessary by the Department under its associated regulations to address an imminent threat to the public health, or a significant adverse environmental impact which results in a violation of the Massachusetts Clean Waters Act. Ch. 21 ss 26-53.

4. The Department reserves the right to modify this 401 Water Quality Certification if any changes, modifications or deletions are made to the general permit. In addition, the Department reserves the right to add and/or alter the terms and conditions of its Section 401 Water Quality Certification to carry out its responsibilities during the term of this permit with respect to water quality.

F. Permit Compliance:

1. Should any violation of the Massachusetts Surface Water Quality Standards (314 CMR 4.00) or the conditions of this certification occur, the Department will direct the permittee to correct the violation(s). The Department has the right to take any action as authorized by the General Laws of the Commonwealth to address the violation of this permit or the MA Clean Waters Act and the regulations promulgated thereunder. Substantial civil and criminal penalties are authorized under MGL Ch. 21, Section 42 for discharging into Massachusetts's waters in violation of an order or permit issued by this Department. This certification does not relieve the permittee of the duty to comply with other applicable Massachusetts statues and regulations.

New Hampshire
No additional conditions added.

Addendum A
Endangered Species Guidance

A. Background

In order to meet its obligations under the Clean Water Act and the Endangered Species Act (ESA), and to promote the goals of those Acts, the Environmental Protection Agency (EPA) is seeking to ensure the activities regulated by this small MS4 general permit do not adversely affect endangered and threatened species and critical habitat. Small MS4 operators applying for permit coverage must assess the impacts of their storm water discharges, allowable non-storm water discharges, and discharge-related activities on Federally listed endangered and threatened species ("listed species") and designated critical habitat ("critical habitat"), to ensure that those goals are met. Prior to obtaining general permit coverage, applicants must meet the ESA eligibility provisions of this permit. EPA strongly recommends that applicants follow the guidance in this addendum at the earliest possible stage to ensure that measures to protect listed species and critical habitat are incorporated early in the storm water management program development.

Applicants also have an independent ESA obligation to ensure that their activities do not result in any prohibited "takes" of listed species[1]. Many of the measures required in this general permit and in these instructions to protect species may also assist in ensuring that the applicants activities do not result in a prohibited take of species in violation of section 9 of the ESA. If the MS4 operator has plans or activities in areas where endangered and threatened species are located, they may wish to ensure that they are protected from potential takings liability under ESA section 9 by obtaining an ESA section 10 permit or by requesting formal consultation under ESA section 7. Applicants that are unsure whether to pursue a section 10 permit or a section 7 consultation for takings protection, should confer with the appropriate U.S. Fish and Wildlife Service (FWS)[2] office or the National Marine Fisheries Service (NMFS).

The FWS and NMFS have identified two species of concern, the short nosed sturgeon and the dwarf wedge mussel. These species are found in the Merrimack River and the Connecticut River. Specifically, the sturgeon is in the Connecticut River (main stem) down stream of Turners Falls, Massachusetts. It is in the Merrimack River (main stem) below the Lawrence Dam.

The dwarf wedge mussel is located in the following areas:

1. The Connecticut River, North from Nothumberland, NH south to Dalton, NH
2. Historic location in North Thetford, NH
3. Connecticut River, south and Black River: 16 -18 miles along the CT river form North Hartland, NH to Aschutney, VT as well as 1 mile along the Black River, from the river mouth to Springfield, VT
4. Ashuelt River form below Surry Mt. Dam, 6 -7 miles south to Keane, NH
5. South Branch of Ashuelot River, 0.5 miles in East Swanzey, NH
6. Mill River; approximately 5 miles in Whatley, MA and Hatfield, MA as well as 1-2 miles along Mill River Diversion in Northampton, MA
7. Farmington River, Muddy Brook, Philo Brook and Podunk River; Philo Brook and Muddy Brook in Suffield, CT; Farmington River in North Bloomfield, CT and the Podunk River in South Windsor, CT

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[1] Section 9 of the ESA prohibits any person from "taking" a listed species (e.g., harassing or harming it) unless: (1) the taking is authorized through a "incidental take statement" as part of completion of formal consultation according to ESA section 7; (2) where an incidental take permit is obtained under ESA section 10 (which requires the development of a habitat conservation plan); or (3) where otherwise authorized or exempted under the ESA. This prohibition applies to all entities including private individuals, businesses, and governments.

[2] Discharges to marine waters may require consultation with the National Marine Fisheries Service instead.

Any small MS4 which discharges to these rivers must consult with the Services. EPA may designate the applicants as non-Federal representatives for the small MS4 general permit for the purpose of carrying out informal consultation with NMFS and FWS. By terms of this MS4 permit, EPA has automatically designated operators as non-Federal representatives for the purpose of conducting informal consultations. (See 50 CFR §402.08 and §402.13 and Part I.B.2.(e) of the permit) Permit coverage is only available if the applicant contacts the Services to determine that discharges are not likely to adversely affect listed species or critical habitat and informal consultation with the Services has been concluded and results in a written concurrence by the Services that the discharge is not likely to adversely affect an endangered or threatened species.

B. The ESA Eligibility Process

Before submitting a notice of intent (NOI) for coverage by this permit, applicants must determine whether they meet the ESA eligibility criteria by following the steps in Section "D" of this Addendum. Applicants that cannot meet any of the eligibility criteria, must apply for an individual permit.

C. The ESA Eligibility Criteria

The ESA eligibility requirements of this permit, may be satisfied by documenting that one or more of the following criteria has been met. Upon notification, EPA may direct an applicant to pursue eligibility under Criterion B.

Criterion A: No endangered or threatened species or critical habitat are in proximity to the MS4 or the points where authorized discharges reach the receiving waters.

Criterion B: In the course of a separate federal action involving the MS4, formal or informal consultation with the Fish and Wildlife Service and/or the National Marine Fisheries Service under Section 7 of the ESA has been concluded and that consultation
- Addressed the effects of the MS4 storm water discharges, allowable non-storm water discharges and discharge related activities on listed species and critical habitat; and
The consultation resulted in either a no jeopardy opinion or a written concurrence by FWS and/or NMFS on a finding that the storm water discharges, allowable non-storm water discharges, and discharge related activities are not likely to adversely affect listed species or critical habitat.

Criterion C: The activities are authorized under Section 10 of the ESA and that authorization addresses the effects of the storm water discharges, allowable non-storm water discharges, and discharge related activities on listed species and critical habitat. (Eligibility under this criterion is not likely. This criterion involves an MS4s activities being authorized through the issuance of a permit under section 10 of the ESA and that authorization addresses the effect of the MS4's storm water discharges and discharge related activities on listed species and designated critical habitat. MS4s must follow FWS and/or NMFS procedures when applying for an ESA Section 10 permit (see 50 CFR §17.22(b)(1) for FWS and §222.22 for NMFS). Application instructions for section 10 permits can be obtained by assessing the appropriate websites (www.fws.gov and www.nmfs.noaa.gov) or by contacting the appropriate regional office.)

Criterion D: Using the best scientific and commercial data available, the effects of the storm water discharges, allowable non-storm water discharges, and discharge related activities on listed species and critical habitat have been evaluated. Based on those evaluations, a determination is made by the permittee and affirmed after review by EPA that the storm water discharges, allowable non-storm water discharges, and discharge related activity will not affect any federally threatened or endangered species or designated critical habitat.

Criterion E: The storm water discharges, allowable non-storm water discharges, and discharge related

activities where already addressed in another operator's certification of eligibility which includes the MS4 activities.

D. The Steps To Determine if the ESA Eligibility Criteria Can Be Met

To determine eligibility, you must assess (or have previously assessed) the potential effects of your known storm water discharges, allowable non-storm water discharges and discharge-related activities on listed species and critical habitat, PRIOR to completing and submitting a Notice of Intent (NOI). You must follow the steps outlined below and document the results of your eligibility determination.

Step1. Determine if You Can Meet Eligibility Criterion "A"

Criterion A. You can certify eligibility, according to Criterion A, for coverage by this permit if you can answer "No" to all of the following questions:

- Are there any Endangered Species in your county? Are there any Critical Habitats in your county?

- Are there any Endangered Species or Critical Habitat in proximity to your MS4 or discharge locations?

Use the guidance below to answer these questions, and to: "*Check for Listed Endangered Species in Your County,*" "*Check for Critical Habitat in Your County,*" and "*Check for Proximity to Your MS4 or MS4 Discharge Locations.*"

If you answered "No" to the questions above, you have met ESA eligibility Criterion A. Skip to Step 4.

If you answered "Yes" to either of the questions above, Go to Step 2.

Check for Listed Endangered Species in Your County.

Look at the latest county species list to see if any listed species are found in your county. If you are located close to the border of a county or your MS4 is located in one county and your discharge points are located in another, you must look under both counties. Since species are listed and de-listed periodically, you will need the most current list at the time you are conducting your endangered species assessment.

Check for Critical Habitat in Your County.

Some (but not all) listed species have designated critical habitat. Exact locations of such habitat is provided in the endangered species regulations at 50 CFR part 17 and part 226. To determine if MS4 or discharge locations are within designated critical habitat, you should either:

- Review those regulations (50 CFR Parts 17 and 226) that specific critical habitat. These regulations can be found in many larger libraries or via the Government Printing Office website, www.access.gpo.gov ; or

- Contact the nearest Fish and Wildlife Service (FWS) office or National Marine Fisheries Service (NMFS) office. A list of FWS and NMFS offices for the areas of permit coverage is found in sections "F" and "G", respectively, of this Addendum; or

- Contact the Natural Heritage Program for your state. Heritage programs gather, manage, and distribute detailed information about the biological diversity found within their jurisdictions. They frequently have the most current information on listed species and critical habitat. Contact information for the Heritage program is provided in section "H" of this Addendum.

Check for Proximity to Your MS4 or MS4 Discharge Locations.

You must determine whether listed species or critical habitat are in proximity to your MS4 storm water discharges or allowable non-storm water discharges. Listed species and critical habitat are in proximity when they are:

- Located in the path or immediate area through which or over which point source storm water or allowable non-storm water flows to the point of discharge into the receiving water. This may also include areas where storm water from your MS4 enters groundwater that has a direct hydrological connection to a receiving water (e.g., groundwater infiltrates at your MS4 and re-emerges to enter a surface waterbody within a short period of time.)

- Located in the immediate vicinity of, or nearby, the point of discharge into receiving waters.

- Located in the area of an MS4 where storm water BMPs are planned or are to be constructed.

The area in proximity to be searched/surveyed for listed species will vary with the size of the MS4, the nature and quantity of the storm water discharges, and the type of receiving waters. You should use the method(s) which allow you to determine, to the best of your knowledge, whether listed species are in proximity to your particular MS4. These methods may include:

- Conducting visual inspections. This method may be particularly suitable for MS4s that are smaller in size or MS4s located in non-natural settings such as highly urbanized areas where there is little or no natural habitat. For other MS4s, a visual survey may not be sufficient to determine whether listed species are in proximity.

- Contacting the nearest State Wildlife Agency or U.S. FWS offices. Many endangered and threatened species are found in well-defined areas or habitats. That information is frequently known to state or federal wildlife agencies.

- Contacting local/regional conservation groups such as natural heritage programs (see section H below). These groups inventory species and their locations and maintain lists of sightings and habitats.

- Conducting a formal biological survey. MS4s with extensive storm water discharges may choose to conduct biological surveys as the most effective way to assess whether listed species are located in proximity and whether there are likely adverse effects.

Step 2. Determine If You Can Meet Eligibility Criteria "B", "C", or "E"

Criterion B. You can certify eligibility, according to Criterion B, for coverage by this permit if you can answer "Yes" to all of the following questions:

- Has consultation, under ESA Section 7, already been completed for discharges from your MS4[3]?

- Did the previously completed ESA Section 7 consultation consider all currently listed species and critical habitat and address your storm water, allowable non-storm water, and discharge-related activities?

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[3] A formal or informal ESA Section 7 consultation on this or another federal action (e.g., New source review under NEPA, application for a dredge and fill permit under CWA Sec. 404, application for an individual NPDES permit, etc.) addressed the effects of your MS4 discharges and discharge-related activities on listed species and critical habitat. (See 50 CFR 402.13).

- Did the ESA Section 7 consultation result in either a "no jeopardy" opinion by the Service (for formal consultations) or a concurrence by the Service that your activities would be "unlikely to adversely affect" listed species or critical habitat?

- Do you agree to implement all measures upon which the consultation was conditioned?

If you answered "Yes" to all four questions above, you have met ESA eligibility Criteria B. Skip to Step 4.

If you answered "No" to any of the four questions above, check to see if you can meet Criteria C or E, or Go to Step 3.

Criterion C. You can certify eligibility, according to Criterion C, for coverage by this permit if you can answer "Yes" to all of the following questions:

- Has an ESA Section 10 permit already been issued for discharges from your MS4[4]?

- Does your ESA Section 10 Permit consider all currently listed species and critical habitat, and address your storm water, allowable non-storm water, and discharge related activities, for discharges from your MS4?

If you answered "Yes" to the two questions above, you have met ESA eligibility Criterion

C. Skip to Step 4.

If you answered "No" to either of the two questions above, check to see if you can meet Criterion E, or Go to Step 3.

Criterion E. You can certify eligibility, according to Criterion E, for coverage by this permit if you can answer "Yes" to all of the following questions:

- Did another MS4 operator previously certify ESA eligibility for your MS4 area[5]?

- Did the other operator's certification of eligibility consider all currently listed species and critical habitat and address your storm water, allowable non-storm water, and discharge related activities?

- Do you agree to implement all measures upon which the other operator's certification was based?

Before you rely on another operator's certification, you should carefully review that certification along with any supporting information. You also need to confirm that no additional species have been listed or critical habitat designated in the area of your MS4 since the other operator's endangered species assessment was done. If you do not believe that the other operator's certification provides adequate coverage for your MS4, you should provide your own independent endangered species assessment and certification.

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[4] You have a permit under section 10 of the ESA and that authorization addresses the effects of your storm water discharges and discharge-related activities on listed species and critical habitat. You must follow FWS procedures when applying for an ESA section 10 permit (see 50 CFR 17.22(b)(1)).

[5] In order to meet the permit eligibility requirements by relying on another operator's certification of eligibility, the other operator's certification must apply to the location of your MS4 and must address the effects from your storm water discharges, allowable non-storm water discharges, and discharge-related activities on listed species and critical habitat.

If you answered "Yes" to all three questions above, you have met ESA eligibility Criteria

E. Skip to Step 4.

If you answered "No" to any of the three questions above, Go to Step 3.

Step 3. Determine If You Can Meet Eligibility Criterion "D"

Criterion D. You can certify eligibility, according to Criterion D, for coverage by this permit if you can answer "Yes" to all of the following questions:

- Have you determined that your MS4's storm water discharges, allowable non-storm water discharges, and discharge-related activities are "not likely to adversely affect" listed species or critical habitat, and/or have you reached agreement with the U.S. FWS or NMFS on measures to avoid, eliminate, or minimize adverse affects?

- Do you agree to implement all measures upon which the determination was conditioned?

Use the guidance below to understand adverse effect determinations, and to answer these questions.

If you answered "Yes" to the both questions above, you have met ESA eligibility Criterion D. Go to Step 4.

If you answered "No" to either of the questions above you are not eligible for coverage by this permit. You must submit an individual application for your discharges to EPA. (See 40 CFR 122.33(b)(2))

If you are unable to certify eligibility under Criterion A, B, C, or E, you must assess whether your storm water discharges, allowable non-storm water discharges, and discharge-related activities are likely to adversely affect listed species or critical habitat. "Storm water discharge-related activities" include: activities which cause, contribute to, or result in point source storm water pollutant discharges; and measures to control storm water discharges and allowable non-storm water discharges including the siting, construction, operation of best management practices (BMPs) to control, reduce or prevent water pollution. Please be aware that no protection from incidental takings liability is provided under this criterion.

The scope of effects to consider will vary with each MS4. If you are having difficulty in determining whether your MS4 is likely to cause adverse effects to a listed species or critical habitat, you should contact the appropriate office of the FWS, NMFS, or Natural Heritage Program for assistance. In order to complete the determination of effects it may be necessary to follow the consultation procedures in section 7 of the ESA. (See Criterion B information above, and section 7 consultation web link in section F below).

Upon completion of your assessment, document the results of your effects determination. If adverse effects are not likely, you are eligible under criterion "D" - proceed to Step 4 of this Addendum. Your determination may be based on measures that you implement to avoid, eliminate, or minimize adverse affects.

If the determination is "May Adversely Affect." You must contact the FWS and/or NMFS to discuss your findings and measures you could implement to avoid, eliminate, or minimize adverse affects. If you and the Service(s) reach agreement on measures to avoid adverse effects, you are eligible under criteria "D". Any terms and/or conditions to protect listed species and critical habitat that you relied on in order to complete an adverse effects determination, must be incorporated into your Storm Water Management Program (required by the permit) and implemented in order to maintain permit eligibility.

If endangered species issues cannot be resolved. If you cannot reach agreement with the Services on measures to avoid, eliminate, or reduce adverse effects, and the likely adverse effects cannot be otherwise addressed through meeting the other criteria , then you are not eligible for coverage under this general permit. You must seek coverage under an individual permit.

Effects from storm water discharges, allowable non-storm water discharges, and discharge-related activities which could pose an adverse effect include:

- *Hydrological.* Storm water discharges may cause siltation, sedimentation or induce other changes in receiving waters such as temperature, salinity or pH. These effects will vary with the amount of storm water discharged and the volume and condition of the receiving water. Where a discharge constitutes a minute portion of the total volume of the receiving water, adverse hydrological effects are less likely.

- *Habitat.* Excavation, site development, grading, and other surface disturbance activities, including the installation or placement of storm water ponds or BMPs, may adversely affect listed species or their habitat. Storm water associated with MS4 operation may drain or inundate listed species habitat.

- *Toxicity.* In some cases, pollutants in storm water may have toxic effects on listed species.

Step 4. Submit Notice of Intent and Document Results of the Eligibility Determination.

Once the ESA eligibility requirements have been met, and you have determined NHPA eligibility (see Addendum B), you may submit the Notice of Intent (NOI). Signature and submittal of the NOI constitutes your certification, under penalty of law, of your eligibility for permit coverage.

You must include documentation of ESA eligibility in the storm water management program required for the MS4. Documentation required for the various ESA eligibility criteria are as follows:

Criterion A: A copy of the most current county species list pages for the county(ies) where your MS4 and discharges are located. You must also include a statement on how you determined that no listed species or critical habitat are in proximity to your MS4 or MS4 discharge locations.

Criterion B: A copy of the Service's biological opinion or concurrence on a finding of "unlikely to adversely effect" regarding the ESA Section 7 consultation.

Criterion C: A copy of the Service's letter transmitting the ESA Section 10 authorization.

Criterion D: Documentation on how you determined adverse effects on listed species and critical habitat were unlikely.

Criterion E: A copy of the documents originally used by the other operator of your MS4 (or area including your MS4) to satisfy the documentation requirement of Criteria A, B, C or D.

E. Duty To Implement Terms and Conditions Upon Which Eligibility Was Determined

You must comply with any terms and conditions imposed under the ESA eligibility requirements to ensure that your storm water discharges, allowable non-storm water discharges, and discharge-related activities do not pose adverse effects or jeopardy to listed species and/or critical habitat. You must incorporate such terms and conditions into your MS4's Storm Water Management Program as required by the permit. If the ESA eligibility requirements of Part I.E cannot be met, then you may not receive coverage under this permit, and must apply for an individual permit.

F. U.S. Fish and Wildlife Service Offices

National Websites For Endangered Species Information.
Endangered Species Home page: http://endangered.fws.gov/
ESA Section 7 Consultations: http://endangered.fws.gov/consultations/index.html

U.S. FWS Region 5
Division Chief, Endangered Species
U.S. Fish and Wildlife Service
ARD Ecological Services
300 Westgate Center Drive
Hadley, MA 01035-9589

Regional, State, Field and Project Offices
Project Leader, USFWS
Rhode Island Field Office
Shoreline Plaza, Rt 1A
P.O. Box 307
Charlestown, RI 02813

Project Leader, USFWS
Maine Field Office
1033 South Main Street
Old Town, ME 04468

Project Leader, USFWS
New England Field Office
22 Bridge Street, Unit #1
Concord, NH 03301-4986

Project Leader, USFWS
Vermont Field Office
11 Lincoln Street
Winston Prouty Federal Building
Essex Junction, VT 05452

G. National Marine Fisheries Services

Website: http://www.nmfs.gov

Regional Office
Protected Resource Program
National Marine Fisheries Service
Northeast Region
One Blackburn Drive
Gloucester, MA 01930

Field Offices
Milford Field Office
National Marine Fisheries Service
212 Rogers Avenue
Milford, CT 06460

Protected Species Branch
NMFS
Northeast Fisheries Science Center
166 Water Street
Woods Hole, MA 02543

H. Natural Heritage Network

The Natural Heritage Network comprises 75 independent heritage program organizations located in all 50 states, 10 Canadian provinces, and 12 countries and territories located throughout Latin America and the Caribbean. These programs gather, manage, and distribute detailed information about the biological diversity found within their jurisdictions. Developers, businesses, and public agencies use natural heritage information to comply with environmental laws and to improve the environmental sensitivity of economic development projects. Local governments use the information to aid in land use planning.

The Natural Heritage Network is overseen by NatureServe, the Network's parent organization, and is accessable on-line at: http://www.natureserve.org/nhp/us_programs.htm, which provides website and other access to a large number of specific biodiversity centers.

Connecticut Natural Diversity Database
Natural Resources Center
Department of Environmental Protection

79 Elm Street, Store Level
Hartford, CT 06106

Maine Natural Areas Program
Department of Conservation
93 State House Station
Augusta, ME 04333
http://www.state.me.us/doc/mnap/home.htm

Massachusetts Natural Heritage & Endangered Species Program
Division of Fisheries and Wildlife
Route 135
Westborough, MA 01581
508/792-7270

New Hampshire Natural Heritage Inventory
Department of Resources & Economic Development
172 Pembroke Street, P.O. Box 30370
Concord, NH 03302
603/271-3623

Rhode Island Natural Heritage Program
Department of Environmental Management
Division of Planning & Development
83 Park Street
Providence, RI 02903
401/277-2776

Vermont Non-game & Natural Heritage Program
Vermont Fish & Wildlife Department
103 South Main Street, 10 South
Waterbury, VT 05671-0501
802/241-3700

Addendum B
Historic Properties Guidance

Applicants must determine whether their MS4's storm water discharges, allowable non-storm water discharges, or construction of best management practices (BMPs) to control such discharges, has potential to affect a property that is either listed or eligible for listing on the National Register of Historic Places.

For existing dischargers who do not need to construct BMPs for permit coverage, a simple visual inspection may be sufficient to determine whether historic properties are affected. However, for MS4s which are new storm water dischargers and for existing MS4s which are planning to construct BMPs for permit eligibility, applicants should conduct further inquiry to determine whether historic properties may be affected by the storm water discharge or BMPs to control the discharge. In such instances, applicants should first determine whether there are any historic properties or places listed on the National Register or if any are eligible for listing on the register (e.g., they are "eligible for listing").

EPA suggests that applicants first access the "National Register of Historic Places" information listed on the National Park Service's web page: http://www.cr.nps.gov/nr. The addresses for State Historic Preservation Officers are listed in Part II of this addendum. Applicants may also contact city, county or other local historical societies for assistance, especially when determining if a place or property is eligible for listing on the register.

The following three scenarios describe how applicants can meet the permit eligibility criteria for protection

of historic properties under this permit:

(1) If historic properties are not identified in the path of an MS4's storm water and allowable non-storm water discharges or where construction activities are planned to install BMPs to control such discharges (e.g., diversion channels or retention ponds), then the applicant has met the NHPA eligibility criteria of this permit.

(2) If historic properties are identified but it is determined that they will not be affected by the discharges or construction of BMPs to control the discharge, the applicant has met the NHPA eligibility criteria of this permit.

(3) If historic properties are identified in the path of an MS4's storm water and/or allowable non-storm water discharges or where construction activities are planned to install BMPs to control such discharges, and it is determined that there is the potential to adversely affect the property, the applicant can still meet the NHPA eligibility criteria under of this permit, if he/she obtains and complies with a written agreement with the appropriate State or Tribal Historic Preservation Officer which outlines measures the applicant will follow to mitigate or prevent those adverse effects. The contents of such a written agreement must be included in the MS4's Storm Water Management Program.
In situations where an agreement cannot be reached between an applicant and the State Historic Preservation Officer, applicants should contact the Advisory Council on Historic Preservation listed in Part III of this Addendum for assistance.

The term "adverse effects" includes but is not limited to damage, deterioration, alteration or destruction of the historic property or place. EPA encourages applicants to contact the appropriate State or Tribal Historic Preservation Officer as soon as possible in the event of a potential adverse effect to a historic property. Applicants are reminded that they must comply with applicable State, Tribal and local laws concerning the protection of historic properties and places.

A. Internet Information on the National Register of Historic Places

The National Register of Historic Places is the Nation's official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect our historic and archeological resources. Properties listed in the Register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture. The National Register is administered by the National Park Service, which is part of the U.S. Department of the Interior.

An electronic listing of the ``National Register of Historic Places," as maintained by the National Park Service, can be accessed on the Internet at: http://www.cr.nps.gov/nr

B. State Historic Preservation Officers (SHPO)

Connecticut Historical Commission
59 South Prospect Street
Hartford, CT 06106
860/566-3005

Maine Historic Preservation Commission
55 Capital Street, Station 65
Augusta, ME 04333
207/287-2132

Massachusetts Historical Commission
220 Morrissey Boulevard

Boston, MA 02125
617/727-8470
TTD: 1-800-392-6090

New Hampshire Division of Historic Resources
P.O. Box 2043
Concord, NH 03302-2043
603/271-6435
TDD: 1-800-735-2964
Rhode Island Historic Preservation & Heritage Commission
Old State House
150 Benefit Street
Providence, RI 02903
401/222-2678

Vermont Division for Historic Preservation
National Life Building, Drawer 20
Montpelier, VT 05620-0501
802/828-3211

C. Advisory Council on Historic Preservation

The Advisory Council on Historic Preservation (ACHP) is an independent Federal agency that promotes the preservation, enhancement, and productive use of our Nation's historic resources, and advises the President and Congress on national historic preservation policy.

The goal of the National Historic Preservation Act (NHPA), which established ACHP in 1966, is to have Federal agencies act as responsible stewards of our Nation's resources when their actions affect historic properties. ACHP is the only entity with the legal responsibility to encourage Federal agencies to factor historic preservation into Federal project requirements.

As directed by NHPA, ACHP serves as the primary Federal policy advisor to the President and Congress; recommends administrative and legislative improvements for protecting our Nation's heritage; advocates full consideration of historic values in Federal decision making; and reviews Federal programs and policies to promote effectiveness, coordination, and consistency with national preservation policies.

Main Office

Advisory Council on Historic Preservation
Old Post Office Building
1100 Pennsylvania Avenue, NW, Suite 809
Washington, DC 20004
Phone: (202) 606-8503
Fax: (202) 606-8647/8672
E-mail: achp@achp.gov
Internet: http://www.achp.gov/

Endangered Species Act Eligibility Criteria

There are no endangered or threatened species or critical habitat located in proximity to the municipal separate storm sewer system (MS4) or to the points where authorized discharges reach the receiving waters. As a result, the Town of Nahant meets the Endangered Species Act (ESA) eligibility criterion "A" as outlined in Addendum A of the NPDES General Permit for Stormwater Discharges from Small MS4s. The Rare Species by County and Rare Species by Town listings published by the Massachusetts Natural Heritage & Endangered Species Program (NHESP) (last updated 3/1/2003), the Threatened and Endangered Species System (TESS) database for the State of Massachusetts (last viewed on 5/27/2003) published by the U.S. Fish & Wildlife Service, and 50 CFR Parts 17 and 226 were all referenced to make this determination.

The TESS database identified 24 federally listed threatened or endangered species for the State of Massachusetts as of June 25, 2003. The NHESP listing also identifies federally endangered and threatened species however, a disclaimer in the NHESP listing indicates that recent changes in the federal list of endangered and threatened species produced by the U.S. Fish and Wildlife Services are not always reflected in the state NHESP listing. As a result, the federal list of endangered and threatened species produced by the U.S. Fish and Wildlife Services supersedes the state NHESP list of federally endangered and threatened species.

The Town of Nahant and the Town of Lynn, the only municipality bordering Nahant, are both located in Essex County. In close proximity to Nahant's municipal boundaries, while not actually bordering on its municipal boundaries, are Saugus, Revere, and Swampscott. Both Saugus and Revere are located on the opposite side of Lynn Harbor; Saugus is also located in Essex County while Revere is located in Suffolk County. The Town of Swampscott, also in Essex County, is located on the opposite side of Nahant Bay. As a result of its close proximity to Nahant, the NHESP Rare Species by County listing for Suffolk County as well as Essex County were referenced in order to determine if any of the 24 federally endangered or threatened species listed in the TESS database are found within these counties. According to the Rare Species by County listing produced by NHESP, the Shortnose Sturgeon (Acipenser brevirostrum), the Piping Plover (Charadrius melodus), the Bald Eagle (Haliaeetus leucocephalus), Roseate Tern (Sterna dougalli), and Dwarf Wedge Mussel (Alasmidonta heterodon) were identified as federally listed endangered and threatened species found within Essex County. The Suffolk County NHESP listing identified the Piping Plover (Charadrius melodus) and the Peregrine Falcon (Falco peregrinus) as federally listed endangered and threatened species located within the county.

Due to the existence of federally listed threatened and endangered species in both Counties, the NHESP Rare Species by Town listings were referenced for each of the communities bordering and adjacent to Nahant. The NHESP Rare Species by Town listings confirmed that the Piping Plover and Peregrin Falcon were not located within Revere's municipal boundaries. The NHESP Rare Species by Town listings also confirmed that the Shortnose Sturgeon, the Piping Plover, the Bald Eagle, Roseate Tern, and Dwarf Wedge Mussel were not located within Nahant, Lynn, Saugus and Swampscott's municipal boundaries. Because there are no identified federally endangered threatened species located in close proximity to the Town of Nahant or its MS4, it is clear that the Town's regulated outfalls have no adverse impact on the population of any of the listed species located within Essex and Suffolk County. The NHESP listing for Essex County, Suffolk County, and the Town of Nahant, as well as the individual listings for each community adjacent to Nahant, have been attached.

Some federally listed endangered or threatened species have designated critical habitat, the exact locations of which are provided within the endangered species regulations 50 CFR Parts 17 and 226. These regulations were reviewed for any designated critical habitat located within the State of Massachusetts. According to Sections 17.95 and 17.96 of 50 CFR Part 17 (Critical Habitat-Fish and Wildlife and Critical Habitat-Plants) and Section 226.209 of 50 CFR Part 226 (Critical Habitat for Hawksbill Turtle) there are no critical habitat areas located in proximity to Nahant's MS4 or to the points where authorized discharges reach the receiving waters.

U.S. Fish & Wildlife Service

Threatened and Endangered Species System (TESS)

Listings by State and Territory as of 05/27/2003

Massachusetts

Notes:

- *Displays one record per species or population.*
- *Includes experimental populations and similarity of appearance listings.*
- *The range of a listed population does not extend beyond the states in which that population is defined.*
- *Includes non-nesting sea turtles and whales in State/Territory coastal waters.*
- *Includes species or populations under the sole jurisdiction of the National Marine Fisheries Service.*

Go to the Threatened and Endangered Wildlife and Plants Page
Go to the TESS Home Page

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- *Click on the highlighted scientific names below to view a Species Profile for each listing.*

Massachusetts -- 24 listings

Animals -- 21

Status	Listing
E	Beetle, American burying (*Nicrophorus americanus*)
T	Eagle, bald (lower 48 States) (*Haliaeetus leucocephalus*)
T	Plover, piping (except Great Lakes watershed) (*Charadrius melodus*)
E	Puma (=cougar), eastern (*Puma (=Felis) concolor couguar*)
E	Sea turtle, hawksbill (*Eretmochelys imbricata*)
E	Sea turtle, Kemp's ridley (*Lepidochelys kempii*)
E	Sea turtle, leatherback (*Dermochelys coriacea*)
T	Sea turtle, loggerhead (*Caretta caretta*)
E	Sturgeon, shortnose (*Acipenser brevirostrum*)
E	Tern, roseate (northeast U.S. nesting pop.) (*Sterna dougallii dougallii*)
T	Tiger beetle, northeastern beach (*Cicindela dorsalis dorsalis*)
T	Tiger beetle, Puritan (*Cicindela puritana*)
T	Turtle, bog (=Muhlenberg) (northern) (*Clemmys muhlenbergii*)
E	Turtle, Plymouth redbelly (*Pseudemys rubriventris bangsi*)
E	Wedgemussel, dwarf (*Alasmidonta heterodon*)
E	Whale, blue (*Balaenoptera musculus*)
E	Whale, finback (*Balaenoptera physalus*)
E	Whale, humpback (*Megaptera novaeangliae*)
E	Whale, right (*Balaena glacialis (incl. australis)*)
E	Whale, Sei (*Balaenoptera borealis*)
T	Wolf, gray Eastern Distinct Population Segment (*Canis lupus*)

Plants -- 3

Status	Listing
E	Gerardia, sandplain (*Agalinis acuta*)
T	Pogonia, small whorled (*Isotria medeoloides*)
E	Bulrush, Northeastern (*Scirpus ancistrochaetus*)

Town		Taxonomic Group	Scientific Name	Common Name	State Rank	Federal Rank	Most Recent Obs
NAHANT		Vascular Plant	Rumex pallidus	Seabeach Dock	T		18--

Town		Taxonomic Group	Scientific Name	Common Name	State Rank	Federal Rank	Most Recent Obs
LYNN	*	Reptile	Clemmys guttata	Spotted Turtle	SC		1992
LYNN	*	Reptile	Clemmys insculpta	Wood Turtle	SC		1996
LYNN		Bird	Ammodramus henslowii	Henslow's Sparrow	E		1867
LYNN	*	Bird	Sterna hirundo	Common Tern	SC		1998
LYNN		Mussel	Ligumia nasuta	Eastern Pondmussel	SC		1932
LYNN	*	Crustacean	Crangonyx aberrans	Mystic Valley Amphipod	SC		1984
LYNN		Crustacean	Limnadia lenticularis	American Clam Shrimp	SC		1875
LYNN		Butterfly/Moth	Hemileuca maia	Barrens Buckmoth	SC		1934
LYNN		Vascular Plant	Lygodium palmatum	Climbing Fern	SC		1885
LYNN		Vascular Plant	Rumex pallidus	Seabeach Dock	T		

Town		Taxonomic Group	Scientific Name	Common Name	State Rank	Federal Rank	Most Recent Obs
REVERE	*	Bird	Sterna hirundo	Common Tern	SC		1998
REVERE		Beetle	Cicindela duodecimguttata	Twelve-Spotted Tiger Beetle	SC		1914
REVERE		Vascular Plant	Agrimonia pubescens	Hairy Agrimony	T		1913
REVERE		Vascular Plant	Asclepias purpurascens	Purple Milkweed	E		1896
REVERE		Vascular Plant	Asclepias verticillata	Linear-Leaved Milkweed	T		1918
REVERE		Vascular Plant	Elymus villosus	Hairy Wild Rye	E		1909
REVERE		Vascular Plant	Gentiana andrewsii	Andrews' Bottle Gentian	E		1882
REVERE		Vascular Plant	Pedicularis lanceolata	Swamp Lousewort	E		
REVERE		Vascular Plant	Sanicula odorata	Long-Styled Sanicle	T		1910
REVERE		Vascular Plant	Suaeda calceoliformis	American Sea-Blite	SC		1897

Town		Taxonomic Group	Scientific Name	Common Name	State Rank	Federal Rank	Most Recent Obs
SAUGUS	*	Reptile	Clemmys guttata	Spotted Turtle	SC		1993
SAUGUS	*	Reptile	Terrapene carolina	Eastern Box Turtle	SC		1997
SAUGUS		Bird	Cistothorus platensis	Sedge Wren	E		1905
SAUGUS		Beetle	Cicindela purpurea	Purple Tiger Beetle	SC		1915
SAUGUS	*	Beetle	Cicindela rufiventris hentzii	Hentz's Redbelly Tiger Beetle	T		2000
SAUGUS		Vascular Plant	Eriophorum gracile	Slender Cottongrass	T		1924
SAUGUS		Vascular Plant	Rotala ramosior	Toothcup	E		1928
SAUGUS		Vascular Plant	Sagittaria calycina var spongiosa	Estuary Arrowhead	E		1921

Town		Taxonomic Group	Scientific Name	Common Name	State Rank	Federal Rank	Most Recent Obs
SWAMPSCOTT							

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Rare Species by County: Essex

Last Updated on 3/1/2003

Taxonomic Group	Scientific Name	Common Name	State Rank	Federal Rank	Most Recent Obs
Fish	Acipenser brevirostrum	Shortnose Sturgeon	E	LE	1991
Fish	Acipenser oxyrinchus	Atlantic Sturgeon	E	(LT,C)	1990
Fish	Notropis bifrenatus	Bridle Shiner	SC		1999
Amphibian	Ambystoma jeffersonianum	Jefferson Salamander	SC		1921
Amphibian	Ambystoma laterale	Blue-Spotted Salamander	SC		2000
Amphibian	Ambystoma opacum	Marbled Salamander	T		1983
Amphibian	Gyrinophilus porphyriticus	Spring Salamander	SC		1842
Amphibian	Hemidactylium scutatum	Four-Toed Salamander	SC		1999
Amphibian	Scaphiopus holbrookii	Eastern Spadefoot	T		1985
Reptile	Clemmys guttata	Spotted Turtle	SC		2001
Reptile	Clemmys insculpta	Wood Turtle	SC		2000
Reptile	Emydoidea blandingii	Blanding's Turtle	T		2001
Reptile	Malaclemys terrapin	Diamondback Terrapin	T		1979
Reptile	Terrapene carolina	Eastern Box Turtle	SC		1998
Bird	Accipiter striatus	Sharp-Shinned Hawk	SC	(PS)	2000
Bird	Ammodramus henslowii	Henslow's Sparrow	E		1974
Bird	Ammodramus savannarum	Grasshopper Sparrow	T	(PS)	1978
Bird	Asio flammeus	Short-Eared Owl	E		1878
Bird	Asio otus	Long-Eared Owl	SC		1981
Bird	Bartramia longicauda	Upland Sandpiper	E		1994

Bird	Botaurus lentiginosus	American Bittern	E		1992
Bird	Charadrius melodus	Piping Plover	T	(LE,LT)	1996
Bird	Circus cyaneus	Northern Harrier	T		1984
Bird	Cistothorus platensis	Sedge Wren	E		1985
Bird	Gallinula chloropus	Common Moorhen	SC	(PS)	1992
Bird	Haliaeetus leucocephalus	Bald Eagle	E	(PS:LT,PDL)	1999
Bird	Ixobrychus exilis	Least Bittern	E		1992
Bird	Parula americana	Northern Parula	T		1983
Bird	Podilymbus podiceps	Pied-Billed Grebe	E		1982
Bird	Pooecetes gramineus	Vesper Sparrow	T		1982
Bird	Rallus elegans	King Rail	T		1988
Bird	Sterna antillarum	Least Tern	SC	(PS:LE)	1998
Bird	Sterna dougallii	Roseate Tern	E	(PS:LE,LT)	1980
Bird	Sterna hirundo	Common Tern	SC		1998
Bird	Tyto alba	Barn Owl	SC		1993
Bird	Vermivora chrysoptera	Golden-Winged Warbler	E		1991
Segmented Worm	Macrobdella sestertia	New England Medicinal Leech	SC		1976
Mussel	Alasmidonta heterodon	Dwarf Wedgemussel	E	LE	
Mussel	Alasmidonta undulata	Triangle Floater	SC		2000
Mussel	Alasmidonta varicosa	Brook Floater (Swollen Wedgemussel)	E		1841
Mussel	Cincinnatia winkleyi	New England Siltsnail	SC		1990
Mussel	Lampsilis cariosa	Yellow Lampmussel	E		1866
Mussel	Leptodea ochracea	Tidewater Mucket	SC		1992
Mussel	Ligumia nasuta	Eastern Pondmussel	SC		2000
Mussel	Littoridinops tenuipes	Coastal Marsh Snail	SC		1986
Crustacean	Crangonyx aberrans	Mystic Valley Amphipod	SC		1996

Crustacean	Limnadia lenticularis	American Clam Shrimp	SC		1875
Dragonfly/Damselfly	Enallagma laterale	New England Bluet	SC		1998
Dragonfly/Damselfly	Somatochlora georgiana	Coppery Emerald	E		1999
Dragonfly/Damselfly	Somatochlora kennedyi	Kennedy's Emerald	E		1973
Dragonfly/Damselfly	Somatochlora linearis	Mocha Emerald	SC		1973
Beetle	Cicindela duodecimguttata	Twelve-Spotted Tiger Beetle	SC		1944
Beetle	Cicindela purpurea	Purple Tiger Beetle	SC		1944
Beetle	Cicindela rufiventris hentzii	Hentz's Redbelly Tiger Beetle	T		2000
Beetle	Desmocerus palliatus	Elderberry Long-Horned Beetle	SC		1944
Butterfly/Moth	Callophrys hesseli	Hessel's Hairstreak	SC		1989
Butterfly/Moth	Eacles imperialis	Imperial Moth	T		1934
Butterfly/Moth	Hemileuca maia	Barrens Buckmoth	SC		1934
Butterfly/Moth	Metarranthis apiciaria	Barrens Metarranthis Moth	E		1934
Butterfly/Moth	Pieris oleracea	Eastern Veined White	T		1914
Vascular Plant	Arabis missouriensis	Green Rock-Cress	T		1861
Vascular Plant	Arceuthobium pusillum	Dwarf Mistletoe	SC		1903
Vascular Plant	Aristida purpurascens	Purple Needlegrass	T		2000
Vascular Plant	Aristida tuberculosa	Seabeach Needlegrass	T		2000
Vascular Plant	Asclepias purpurascens	Purple Milkweed	E		1883
Vascular Plant	Bidens eatonii	Eaton's Beggar-Ticks	E		1996
Vascular Plant	Bidens hyperborea var colpophila	Estuary Beggar-Ticks	E		1981
Vascular Plant	Bolboschoenus fluviatilis	River Bulrush	SC		1992
Vascular Plant	Calamagrostis pickeringii	Reed Bentgrass	E		1913

Vascular Plant	Cardamine pratensis var palustris	Fen Cuckoo Flower	T		
Vascular Plant	Carex lenticularis	Shore Sedge	T		1917
Vascular Plant	Carex livida var radicaulis	Glaucous Sedge	E		1983
Vascular Plant	Carex recta	Saline Sedge	E		1985
Vascular Plant	Carex typhina	Cat-Tail Sedge	T		1879
Vascular Plant	Corema conradii	Broom Crowberry	SC		1866
Vascular Plant	Crassula aquatica	Pygmyweed	T		1903
Vascular Plant	Cyperus engelmannii	Engelmann's Umbrella-Sedge	T		2000
Vascular Plant	Eleocharis obtusa var ovata	Ovate Spike-Sedge	E		1971
Vascular Plant	Elymus villosus	Hairy Wild Rye	E		2000
Vascular Plant	Equisetum scirpoides	Dwarf Scouring-Rush	SC		1903
Vascular Plant	Eriocaulon parkeri	Estuary Pipewort	E		1996
Vascular Plant	Eriophorum gracile	Slender Cottongrass	T		1958
Vascular Plant	Galium boreale	Northern Bedstraw	E		
Vascular Plant	Gentiana andrewsii	Andrews' Bottle Gentian	E		1958
Vascular Plant	Goodyera repens	Dwarf Rattlesnake-Plantain	E		1966
Vascular Plant	Houstonia longifolia var longifolia	Long-Leaved Bluet	E		1882
Vascular Plant	Juncus filiformis	Thread Rush	E		1903
Vascular Plant	Leymus mollis ssp mollis	Sea Lyme-Grass	E		1995
Vascular Plant	Liatris borealis	New England Blazing Star	SC		2000
Vascular Plant	Listera cordata	Heartleaf Twayblade	E		1905
Vascular Plant	Lygodium palmatum	Climbing Fern	SC		1885
Vascular Plant	Magnolia virginiana	Sweetbay Magnolia	E		1995
Vascular Plant	Myriophyllum alterniflorum	Alternate-Flowered Water-Milfoil	T		2001
Vascular Plant	Ophioglossum	Adder's-Tongue	T		1928

	pusillum	Fern			
Vascular Plant	Oxalis violacea	Violet Wood-Sorrel	E		18--
Vascular Plant	Panicum philadelphicum	Philadelphia Panic-Grass	SC		1953
Vascular Plant	Paronychia argyrocoma	Silverling	E		1997
Vascular Plant	Platanthera flava var herbiola	Pale Green Orchis	T		1921
Vascular Plant	Prenanthes serpentaria	Lion's Foot	E		1936
Vascular Plant	Ranunculus micranthus	Tiny-Flowered Buttercup	E		1912
Vascular Plant	Ranunculus pensylvanicus	Bristly Buttercup	T		1879
Vascular Plant	Rotala ramosior	Toothcup	E		1928
Vascular Plant	Rumex pallidus	Seabeach Dock	T		1999
Vascular Plant	Rumex verticillatus	Swamp Dock	T		1953
Vascular Plant	Sabatia kennedyana	Plymouth Gentian	SC		18--
Vascular Plant	Sagina nodosa ssp nodosa	Knotted Pearlwort	T		2000
Vascular Plant	Sagittaria calycina var spongiosa	Estuary Arrowhead	E		1981
Vascular Plant	Sanicula odorata	Long-Styled Sanicle	T		1902
Vascular Plant	Scheuchzeria palustris	Pod-Grass	E		1886
Vascular Plant	Scirpus longii	Long's Bulrush	T		2001
Vascular Plant	Senna hebecarpa	Wild Senna	E		1882
Vascular Plant	Sparganium natans	Small Bur-Reed	E		1997
Vascular Plant	Sphenopholis pensylvanica	Swamp Oats	T		1903
Vascular Plant	Suaeda calceoliformis	American Sea-Blite	SC		1982
Vascular Plant	Trisetum triflorum ssp molle	Spiked False Oats	E		1914
Vascular Plant	Vaccinium vitis-idaea ssp minus	Mountain Cranberry	E		1988
Vascular Plant	Veronica catenata	Sessile Water-Speedwell	E		

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Rare Species by County: Suffolk

Last Updated on 3/1/2003

Taxonomic Group	Scientific Name	Common Name	State Rank	Federal Rank	Most Recent Obs
Fish	Gasterosteus aculeatus	Threespine Stickleback	T	(PS)	1996
Amphibian	Ambystoma laterale	Blue-Spotted Salamander	SC		2000
Amphibian	Hemidactylium scutatum	Four-Toed Salamander	SC		1939
Amphibian	Scaphiopus holbrookii	Eastern Spadefoot	T		1932
Reptile	Clemmys guttata	Spotted Turtle	SC		1995
Reptile	Clemmys insculpta	Wood Turtle	SC		1979
Reptile	Terrapene carolina	Eastern Box Turtle	SC		1989
Bird	Accipiter striatus	Sharp-Shinned Hawk	SC	(PS)	1898
Bird	Bartramia longicauda	Upland Sandpiper	E		1993
Bird	Charadrius melodus	Piping Plover	T	(LE,LT)	1983
Bird	Falco peregrinus	Peregrine Falcon	E	(PS:LE)	2001
Bird	Gavia immer	Common Loon	SC		1824
Bird	Pooecetes gramineus	Vesper Sparrow	T		1985
Bird	Sterna antillarum	Least Tern	SC	(PS:LE)	1998
Bird	Sterna hirundo	Common Tern	SC		1998
Bird	Tyto alba	Barn Owl	SC		1989
Bird	Vermivora chrysoptera	Golden-Winged Warbler	E		1877
Mussel	Ligumia nasuta	Eastern Pondmussel	SC		1841
Beetle	Cicindela duodecimguttata	Twelve-Spotted Tiger Beetle	SC		1914
Beetle	Cicindela purpurea	Purple Tiger Beetle	SC		1928
Beetle	Cicindela rufiventris hentzii	Hentz's Redbelly Tiger Beetle	T		1927
Beetle	Desmocerus palliatus	Elderberry Long-Horned Beetle	SC		1926
Butterfly/Moth	Apodrepanulatrix liberaria	New Jersey Tea Inchworm	E		1900

Butterfly/Moth	Erynnis persius persius	Persius Duskywing	E		
Butterfly/Moth	Metarranthis apiciaria	Barrens Metarranthis Moth	E		1934
Butterfly/Moth	Rhodoecia aurantiago	A Noctuid Moth	T		1988
Vascular Plant	Agrimonia pubescens	Hairy Agrimony	T		1913
Vascular Plant	Arabis missouriensis	Green Rock-Cress	T		1930
Vascular Plant	Aristida purpurascens	Purple Needlegrass	T		18--
Vascular Plant	Aristida tuberculosa	Seabeach Needlegrass	T		1882
Vascular Plant	Asclepias purpurascens	Purple Milkweed	E		1896
Vascular Plant	Asclepias verticillata	Linear-Leaved Milkweed	T		1918
Vascular Plant	Carex striata var brevis	Walter's Sedge	E		
Vascular Plant	Elymus villosus	Hairy Wild Rye	E		1909
Vascular Plant	Eriophorum gracile	Slender Cottongrass	T		1885
Vascular Plant	Eupatorium aromaticum	Lesser Snakeroot	E		1896
Vascular Plant	Gentiana andrewsii	Andrews' Bottle Gentian	E		1882
Vascular Plant	Houstonia longifolia var longifolia	Long-Leaved Bluet	E		1918
Vascular Plant	Liatris borealis	New England Blazing Star	SC		1933
Vascular Plant	Linum medium var texanum	Rigid Flax	T		1909
Vascular Plant	Lycopus rubellus	Gypsywort	E		1896
Vascular Plant	Myriophyllum alterniflorum	Alternate-Flowered Water-Milfoil	T		
Vascular Plant	Ophioglossum pusillum	Adder's-Tongue Fern	T		1884
Vascular Plant	Pedicularis lanceolata	Swamp Lousewort	E		
Vascular Plant	Platanthera flava var herbiola	Pale Green Orchis	T		1908
Vascular Plant	Ranunculus micranthus	Tiny-Flowered Buttercup	E		1891
Vascular Plant	Rumex pallidus	Seabeach Dock	T		1984
Vascular Plant	Sanicula odorata	Long-Styled Sanicle	T		1910
Vascular Plant	Scirpus longii	Long's Bulrush	T		1999
Vascular Plant	Suaeda calceoliformis	American Sea-Blite	SC		1909
Vascular Plant	Viola brittoniana	Britton's Violet	T		1990

Attachment C

Letter from the Massachusetts Historical Commission

The Commonwealth of Massachusetts

William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

June 30, 2003

Sandra Pereira Gonneville
Fay, Spofford & Thorndike, LCC
5 Burlington Woods
Burlington, MA 01803

RE: NPDES Phase II General Permits, Nahant, MA. MHC #RC.33235.

Dear Ms. Gonneville:

Thank you for your inquiry regarding the proposed project referenced above. Staff of the Massachusetts Historical Commission have reviewed the information and have the following comments.

Review of MHC's Inventory of the Historic and Archaeological Assets of the Commonwealth indicates that there are 226 historic properties within the town of Nahant, including five properties (Greenlawn Cemetery, Henry Cabot Lodge residence, Nahant Civic Historic District, Nahant Public Library, Nahant Town Hall) listed on the National and State Register of Historic Places as individual listings or as part of a district. There are two additional properties (U.S. Coast Guard Life Saving Station and Valley Road School) that are listed only in the State Register of Historic Places. Additionally, there are nine ancient Native American archaeological sites listed in the Inventory in Nahant.

MHC understands that no construction is planned for this project.

After review of MHC's files and the information submitted, MHC has determined that the proposed project is unlikely to affect significant historic or archaeological resources. If construction is planned for this project at a future date, MHC requests the opportunity to review scaled project plans as early in the planning process as possible.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966 as amended (36 CFR 800) and Massachusetts General Laws, Chapter 9, Sections 26-27C as amended by Chapter 254 of the Acts of 1988 (950 CMR 71). If you have any questions, please feel free to contact Margo Muhl Davis, Archaeologist/Preservation Planner, at this office.

Sincerely,

Eric S. Johnson
Archaeologist/Preservation Planner
Massachusetts Historical Commission

xc: Jeannie Brochi
DEP–NERO

220 Morrissey Boulevard, Boston, Massachusetts 02125
(617) 727-8470 • Fax: (617) 727-5128
www.state.ma.us/sec/mhc

Attachment D

Documentation of Public Notice &
Board of Selectmen Meeting Minutes

Board of Selectmen Meeting

August 14, 2003

Present: *Michael Manning, Chairman* *Mark Cullinan, Town Administrator*
Richard Lombard, Vice Chairman *Charles Riley, Town Counsel*

Not Present: *Robert Frary, Secretary*

The meeting convened at 7:31 p.m.

MINUTES APPROVAL:

A motion was made to approve the minutes of the August 14, 2003.

Motion:	Lombard
Seconded:	Manning
Voted:	Unanimous in favor.

FAY, SPOFFORD & THORNDIKE:

Mr. Cullinan stated that Dan Donahue and Sandra Gonneville, representatives from Fay, Spofford & Thorndike were here to present a slide show on Nahant's Stormwater Management Program.

Mr. Donahue and Ms. Gonneville explained the program to the Board of Selectmen and DPW Superintendent for Phase II. Ms. Gonneville stated that the goals of Phase II were to reduce pollutants to maximum extent practicable, protect water quality and meet clean water act requirements. Ms. Gonneville stated that there were six minimum control measures in Phase II, which are: 1) public outreach and education; 2) public involvement/participation; 3) illicit detection & elimination; 4) construction site stormwater runoff control; 5) post-construction stormwater management in new developments and redevelopments; and 6) pollution prevention/good housekeeping for municipal operations.

Mr. Donahue and Ms. Gonneville stated that they have been working on this phase for the past 3 – 4 months and wanted to explain what's involved in becoming permitted through the Environmental Protection Agency and Department of Environmental Protection. Ms. Gonneville stated that once the town has completed the permitting process, that the permit is good for five years. Ms. Gonneville also stated that the town would have to do regular reports yearly on the progress.

John Benson and Sherry Smith, Open Space Committee members; Sheila Hambleton,

Planning Board Committee and Ellen Steeves, Conservation Commission were at the meeting as well. Mr. Benson stated that he was interested in the public outreach and education factor and stated that it would be a good idea to get the public involved with this.

Ms. Gonneville stated that residents could submit written comments to the Town Administrator, Mark Cullinan and set another hearing date for sometime in the future.

A motion was made to leave the public comment portion open until the October 23, 2003 Board of Selectmen meeting.

Motion:	Lombard
Seconded:	Manning
Voted:	Unanimous in favor.

EMERGENCY MANAGEMENT PLAN:

Mr. Cullinan stated that there were no changes made to the emergency management plan since the last review by the Board of Selectmen members. Mr. Cullinan asked the Board of Selectmen to accept the draft of the plan as presented.

A motion was made to approve the Emergency Management Plan draft as presented.

Motion:	Lombard
Seconded:	Manning
Voted:	Unanimous in favor.

APPOINTMENTS:

Mr. Cullinan stated that Molly Conlin, Board of Appeals member has decided to resign, as well as Edmund Locke, Golf Course Committee. Mr. Cullinan was asking the Board of Selectmen to approve the appointment of Christine Liscio from Associate Board of Appeals to Board of Appeals and to appoint Donald Wyse to be a member of the Associate Board of Appeals.

A motion was made to approve the appointment of Christine Liscio as a member of the Board of Appeals.

Motion:	Lombard
Seconded:	Manning
Voted:	Unanimous in favor.

A motion was made to approve the appointment of Donald Wyse as an associate member of the Board of Appeals.

Motion: Lombard
Seconded: Manning
Voted: Unanimous in favor.

A motion was made to approve the appointment of Dave Walsh as an associate member of the of the Board of Appeals.

Motion: Lombard
Seconded: Manning
Voted: Unanimous in favor.

A motion was made to approve the appointment of Joanne Dunn as a member of the Golf Course Committee.

Motion: Lombard
Seconded: Manning
Voted: Unanimous in favor.

Mr. Lombard thanked those individuals who come forward to volunteer their time to help with different Boards and Committees.

A motion was made to write a letter to Molly Conlin and Edmund Locke for their years of service on the different Boards and Committees.

Motion: Lombard
Seconded: Manning
Voted: Unanimous in favor.

AGENDA TAKEN OUT OF ORDER:

Mr. Manning stated that at the last meeting of the Board of Selectmen, a brief discussion was held regarding the Smoking Ban. Mr. Manning reiterated that there was a draft put forward. Mr. Manning stated that at the next meeting of the Board of Selectmen, they would set a goal for more discussion and/or amendments for consideration/provision. Mr. Manning stated that all three Selectmen would come to a consensus and decide on a date for the smoking ban to take affect.

RANS:

A motion was made to approve the RANS in the amount of $780,000 at the rate of 1.25% payable to Cede & Co. (Sovereign Bank) May 13, 2004.

Motion: Lombard
Seconded: Manning

Voted: Unanimous in favor.

EVENT REQUEST:

Mr. Cullinan stated that an event request from Darlene Crifo, 25 Highland Avenue was submitted to hold a Softball game fundraiser for Federal Express Employees. Mr. Cullinan stated that the Chief of Police has approved his portion but wanted to make sure the Board of Selectmen had no objections to the request.

A motion was made to approve the event request for a softball game fundraiser on September 13, 2003 with a rain date of September 20, 2003 for the use of the women's softball field.

Motion:	Lombard
Seconded:	Manning
Voted:	Unanimous in favor.

MITCHELL'S CORNER ONE-DAY LIQUOR LICENSE:

A motion was made to approve a one-day liquor license (all alcoholic) for Sunday, August 31, 2003 from 6:00 to 12 midnight for the 150th Anniversary Celebration at Mitchell's Corner.

Motion:	Lombard
Seconded:	Manning
Voted:	Unanimous in favor.

FISCAL YEAR CLOSE:

Mr. Cullinan stated that as he reported at the last meeting, that FY03 was closed on July 15, 2003. Mr. Cullinan stated that the Town is in good condition with the revenue and appropriations. Mr. Cullinan also stated that the auditors from Sullivan and Rogers would be in at the end of August to audit the town's books. Mr. Cullinan further stated that the Schedule 19 report has been forwarded to the School. Mr. Manning stated that he was glad to hear that the town is ready for the auditors and thanked Ms. Cormier, Town Accountant for making sure the school had the correct information for their Schedule 19.

CELL TOWER UPDATE:

Mr. Cullinan stated that the cell tower had been erected and the next step was waiting for the phone service connection. Mr. Cullinan stated that is waiting to see the improvements when finished of the cell tower area. Mr. Ward stated that the DPW will be screening the dirt and taking down some trees and weeds in the next week.

WHARF USE:

Mr. Cullinan stated that the Jay Cashman Corp. had contacted him to use the wharf for parking for their employees who are working on the pipeline project. Mr. Cullinan stated that Jay Cashman Corp. would pay the town with approval from the Board of Selectmen to allow employees to park their vehicles at the Town Wharf and allow them to be picked up and dropped off twice a day. Mr. Cullinan stated that Jay Cashman would pay the town $275 per day. Mr. Cullinan stated that he was seeking an approval from the Board of Selectmen.

A motion was made to approve the "Use Agreement" between Jay Cashman Corp. and the Town of Nahant to receive $275 per day for parking of employees at the Town Wharf in connection with the Mass Bay Pipeline Project and be picked up and dropped off two times per day.

Motion:	Manning
Seconded:	Lombard
Voted:	Unanimous in favor.

BEACH TEST RESULTS:

Mr. Manning stated that he had asked Mr. Cullinan for a summary of the beach testing results. Mr. Manning stated that it was important to let people know about the results of that testing. Mr. Cullinan stated that he had a data sheet showing the results of Black Rock Beach, Canoe Beach, Tudor Beach and Short Beach and that all samples were well within the standards of acceptable results. Mr. Manning stated that he would like to see that information posted on the website.

NOT ON AGENDA:

Mr. Lombard stated that he had received a request from residents in the Bass Point Area for a stop sign at Castle & Gardner Road (stopping on Gardner before going down Castle). Mr. Lombard stated that he would like Chief Waters and Robert Ward, DPW Superintendent to take a look at that area and see if that would be a good place for a stop sign. Mr. Ward stated that cars come out of there on a sharp turn and that it might be a good idea to have a stop sign placed at that location.

Mr. Lombard also thanked Mr. Ward for his time and effort for the 150th Anniversary Parade held on July 26, 2003. Mr. Lombard stated that without the efforts of him and his committee, the parade would not have been such a huge success. Mr. Lombard commended him on a spectacular job and stated that the entire day was "awesome."

Mr. Lombard also commended Mr. Frary and his wife, Kellie and their team of fundraisers for the fireworks on the July 26th weekend.

Mr. Lombard requested Mr. Manning to write a letter to be put in Mr. Ward's employee file commending him on the 150th Anniversary Parade and would like mention made in the year-end report for next April's town meeting.

MEETING ADJOURNED:

A motion was made to adjourn the meeting of the Board of Selectmen.

Motion:	Lombard
Seconded:	Manning
Voted:	Unanimous in favor.

The meeting was adjourned at 9:00 p.m.

The minutes were prepared by Susan J. Behen, Administrative Assistant

The minutes were approved on the _____ day of September 2003 by the Board of

Selectmen _____.

Attachment E

Massachusetts Department of Environmental Protection
Summary of Regulations Governing Catch Basin Cleanings (October 28, 1997)

COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
ONE WINTER STREET BOSTON MA 02108 617-292-5500

JANE M. SWIFT
Governor

BOB DURAND
Secretary

LAUREN A. LISS
Commissioner

SUMMARY OF REGULATIONS GOVERNING CATCH BASIN CLEANINGS

October 28, 1997

Catch basin cleanings are classified as a solid waste by the Massachusetts Department of Environmental Protection (DEP) and must be handled and disposed in accordance with all DEP regulations, policies and guidance. In the absence of written approval from DEP, catch basin cleanings must be taken to a facility permitted by DEP to accept solid waste.

Catch basin cleanings are not exempt from the Hazardous Waste Regulations and must be handled as hazardous waste when they exhibit any of the characteristics of a hazardous waste. However, unless there is an indication that the catch basin cleanings have been contaminated by a hazardous material, for example, by a spill, the Department will not require catch basin cleanings (except cleanings from combined sewers, see below) to be routinely tested before disposal. Therefore, catch basin cleanings will be typically classified as a solid waste. As is the case with any waste, the generator has the ultimate responsibility for determining whether the waste is a hazardous waste.

Disposal: Catch basin cleanings from stormwater only drainage systems (see note below) may be disposed at any (lined or unlined) landfill that is permitted by DEP to accept solid waste.

DEP regulations (310 CMR 19 130(7)) prohibit landfills from accepting materials that contain free draining liquids. For purposes of disposal of catch basin cleanings the absence of free water in the truck containing the catch basin cleanings is sufficient evidence that the catch basin cleanings do not contain free draining liquids. Alternatively, materials must pass the Paint Filter Liquids Test.

One approach to removing liquids is to use hydraulic lift trucks during catch basin cleaning operations so that the material can be decanted at the site. After materials from several catch basins along the same system is loaded onto the truck, the truck can be elevated so any free draining liquid is allowed to drain back into the drainage structure

Use at Landfills: Catch basin cleanings shall not be used for any purpose, such as for daily cover or grading material, at any landfill unless specific approval is obtained from the Department for the proposed use. The Solid Waste Section Chief in the appropriate Department Regional Office should be consulted to determine what application must be submitted.

[NOTE: As used here, a "stormwater only drainage system" means a system that collects only stormwater runoff and is not connected to a sanitary sewer. Systems that collect stormwater runoff and are connected to sanitary sewers are called "combined sewers." The Department may require that cleanings from catch basins that are part of combined sewers be tested prior to disposal.]

Attachment F

Massachusetts Department of Environmental Protection Bureau of Waste Prevention
Reuse and Disposal of Street Sweepings Policy (BWP-94.092)

REUSE AND DISPOSAL OF STREET SWEEPINGS

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF WASTE PREVENTION

FINAL POLICY # BWP-94.092

This document was formatted into HTML November 2001.
Document notes:
Section 9 - Address to the Northeast Regional Office updated.
Boston Office Telephone # updated.

This Policy provides guidance on the Department of Environmental Protection's requirements, standards, and approvals for handling, reuse and disposal of street sweepings.

_____
Date

By Signature on Original
Carl F. Dierker,
Assistant Commissioner
Bureau of Waste Prevention

POLICY # BWP-94.092
TABLE OF CONTENTS

1 POLICY STATEMENT AND SCOPE

This Policy explains the Department of Environmental Protection's requirements for managing street sweepings. Street sweepings are solid waste subject to the Massachusetts solid waste regulations. The options for managing street sweepings are as follows.

1. Use the street sweepings in accordance with the preapproved uses described in Section 4 of this policy.

2. Use the street sweepings for a beneficial use after obtaining prior approval from the Department under the provisions of the solid waste regulations, 310 CMR 19.060, Beneficial Use of Solid Wastes.

3. Dispose of street sweepings at a permitted solid waste landfill.

The provisions and requirements for managing street sweepings under these options are the subject of this policy.

2 APPLICABILITY

This policy applies to the reuse or disposal of street sweepings that are generated in the ordinary and customary maintenance of roadways. The policy does not apply to catch basin cleanings or street sweepings mixed with catch basin cleanings or other wastes. The policy does not apply to the material generated as the result of the clean up of an oil or hazardous material spill.

Street sweepings are not exempt from the Hazardous Waste Regulations, 310 CMR 30.000, and must be handled as hazardous waste when they exhibit any of the characteristics of a hazardous waste. If there is no evidence of unusual contamination, the Department does not require street sweepings to be routinely tested, but, as is the case with any waste, the generator has the ultimate responsibility for determining whether the waste is a hazardous waste.

3 DEFINITIONS

Department or DEP means the Massachusetts Department of Environmental Protection.

Public Way means the strip of land over and under a publicly owned, paved road or highway and includes the publicly owned land adjacent to the road or highway.

Street Sweepings means materials consisting primarily of sand and soil generated during the routine cleaning of roadways but may also contain some leaves and other miscellaneous solid wastes collected during street sweeping. Street sweepings does not mean the material generated during the clean up of a spill or material from other structures associated with a roadway such as catch basins.

Urban center roads means local roads in central commercial and retail business districts and industrial and manufacturing areas.

4 PRE-APPROVED USES, RESTRICTIONS AND CONDITIONS

This policy allows street sweepings to be used in several applications. No approval from the Department is required when the restrictions and conditions identified in this policy are adhered to. However, sweepings shall not be used unless prior approval is obtained from the owner of the location where the sweepings are to be used.

4.1 Use at Landfills

Street sweepings may be used for daily cover at lined or unlined permitted solid waste landfills and need no prior DEP approval if the sweepings satisfy the requirements for daily cover material specified at 310 CMR 19.130(15).

4.2 Use as Fill in Public Ways

Street sweepings shall be used for fill in public ways without prior approval from the Department only when the following restrictions and conditions are observed:

The sweepings have not been collected from Urban Center Roads (see definition);

The sweepings are used under the road surface or as fill along the side of the road within the public way;

The sweepings are not used in residential areas;

The sweepings are kept above the level of the groundwater;

The sweepings are not used in designated "No Salt Areas";

The following definitions have been taken verbatim from the solid waste regulations and are repeated here for clarity in understanding this policy.

The sweepings are not used within the 100 foot buffer zone of a wetland or within wetland resource areas including bordering vegetative wetlands and

riverfront areas;

The sweepings are not used within 500 feet of a ground or surface drinking water supply.

4.3 Use As an Additive to Restricted Use Compost

Street sweepings shall be used as an additive to compost without prior approval from the Department only when the following restrictions and conditions are observed:

The sweepings have not been collected from Urban Center Roads (see definition);

The compost is used only in public ways;

The compost is not used in residential areas;

The compost is kept above the level of the groundwater;

The compost is not used in designated "No Salt Areas";

The compost is not used within the 100 foot buffer zone of a wetland or within wetland resource areas including bordering vegetative wetlands and riverfront areas;

The compost is not used within 500 feet of a ground or surface drinking water supply.

5 OTHER USES

Any use not pre-approved in the preceding section requires prior Department approval under the Beneficial Use provisions of the *Solid Waste Management Facility Regulations* at 310 CMR 19.060. A "Beneficial Use Determination" or BUD can be made only after the submission of an application characterizing the waste and describing the proposed beneficial use.

6 DISPOSAL

While the beneficial use of street sweepings is strongly encouraged, the Department does not prohibit the disposal of street sweepings. Street sweepings may be disposed in either lined or unlined permitted solid waste landfills without prior approval from the Department.

7 HANDLING

7.1 Collection of Street Sweepings

Although DEP does not regulate the collection of street sweepings, collection

practices should be compatible with intended uses. For example, sweepings from Urban Center Roads are not approved for the uses allowed for sweepings from other areas. Keeping sweepings from Urban Center Roads separate from sweepings from other areas will make the full benefits of this policy available.

This policy does not cover sweepings known to be contaminated by spills, and such sweepings should be collected separately and kept segregated. Depending on the contamination and circumstances, the handling of contaminated sweepings may be governed by the Massachusetts Contingency Plan, 310 CMR 40, the Massachusetts Hazardous Waste Regulations, 310 CMR 30, the Massachusetts Site Assignment Regulations for Solid Waste Facilities, 310 CMR 16 or the Massachusetts Solid Waste Management Facility Regulations, 310 CMR 19.

7.2 Storage

Street sweepings shall be temporarily stored prior to use, only when the following conditions are satisfied:

Storage must be at the site where the sweepings are generated (in the public way) or at a location, such as a DPW yard, that is under the control of the governmental entity which is doing the sweeping or has contracted for the sweeping;

The sweepings shall be protected from wind and rain to the extent necessary to prevent dust, erosion and off-site migration;

The sweepings shall not be stored within the 100 foot buffer zone of a wetland or within wetland resource areas including bordering vegetative wetlands and riverfront areas;

The sweepings shall not be stored within 500 feet of a ground or surface drinking water supply;

Storage shall incorporate good management practice and result in no public nuisance;

Storage must be temporary. Street sweepings shall be used within one year of collection unless the DEP Regional Office in the region where the sweepings are stored grants a written extension. An extension may be granted when it is demonstrated that all storage conditions will continue to be satisfied and the stored sweepings will be put to a specific identified use prior to the expiration of the extension period.

7.3 Preparation Prior to Use

Solid waste, such as paper, auto parts and other trash, shall be removed from the sweepings prior to use. Leaves, twigs and other organic matter should also be removed when good engineering practice indicates this is necessary to produce a material that is suitable for the intended use.

8 BACKGROUND

The Department has consistently classified street sweepings as solid waste subject to Massachusetts General Law Chapter 111, Section 150A and the Massachusetts Solid Waste Regulations (*Site Assignment Regulations for Solid Waste Facilities*, 310 CMR 16.00 and *Solid Waste Management Facility Regulations*, 310 CMR 19.000). There has been confusion among some in the regulated community about this classification.

Prior to the development of this policy, the options for handling street sweepings were limited to:

1. Disposal at a permitted solid waste landfill,

2. Use as cover at a permitted solid waste landfill or

3. Use in accordance with a Beneficial Use Determination (BUD). BUD decisions are made on a case-by-case basis and require the submittal of a formal application to the Department containing data showing the chemical composition of the street sweepings.

The simplest of these options was either to use the sweepings for landfill cover or to dispose of the sweepings at the local landfill. As many local landfills close, these options become less available to many communities. However, transporting sweepings to a distant landfill involves increased transportation costs and possibly payment of tipping fees.

To clarify the requirements and to provide simpler and less expensive alternatives for handling street sweepings, the Department undertook the development of this policy. Because useful studies of the chemical composition of street sweepings could not be found in the literature, the Department solicited the help of municipalities and state agencies in conducting a study of the composition of street sweepings from various types of areas. The results showed that sweepings from all areas, except Urban Center Roads, were similar with the main constituents of concern being total petroleum hydrocarbons (TPH) and polynuclear aromatic hydrocarbons (PAHs). Very limited data from Urban Center Roads indicated that sweepings from these areas may be more contaminated than sweepings from other areas.

The test results indicate that sweepings may contain levels of contamination that are unsuitable for unrestricted use. However, except for sweepings from Urban Center Roads, the levels of contamination were consistent and low enough to allow the use of sweepings in restricted applications without requiring testing or pre-approval as long as certain conditions were met. Sweepings from urban areas were excluded from some pre-approved uses. This situation could change when more data are available from Urban Center Roads.

This policy makes it possible for municipalities, state agencies and other governmental entities to handle street sweepings in an environmentally sound

manner with a minimum of paperwork and expense.

9 ADDITIONAL INFORMATION

For additional copies of this policy, permit application forms or other DEP documents (except regulations) call any DEP Regional Office and ask for the Service Center or call the DEP Infoline in Boston. The permit application number for a Beneficial Use Determination is BWP SW-13 (Major) and BWP SW-30 (Minor).

Many DEP documents, including this policy, are available via modem from the DEP electronic bulletin board system, (617)292-5546. Information about the DEP and some documents are also available from the DEP's internet site at http://www.magnet.state.ma.us/dep.

Copies of all Massachusetts regulations, including the solid waste regulations, may be purchased from the State House Bookstore, (617)727-2834. The solid waste regulations are:

310 CMR 16.000, *Site Assignment Regulations for Solid Waste Facilities*

310 CMR 19.000, *Solid Waste Management Facility Regulations*

Questions about the Provisions of the Policy

If you have technical questions about the policy, please call any DEP office and ask to speak with a staff member about the provisions of the policy.

DEP InfoLine: from area code 617 and outside MA: (617)338-2255 from area codes 413 and 508: (800)462-0444 e-mail: infoline@state.ma.us

DEP Western Regional Office
436 Dwight Street
Springfield, MA 01103
Main Number: (413)784-1100
Service Center: extension 214

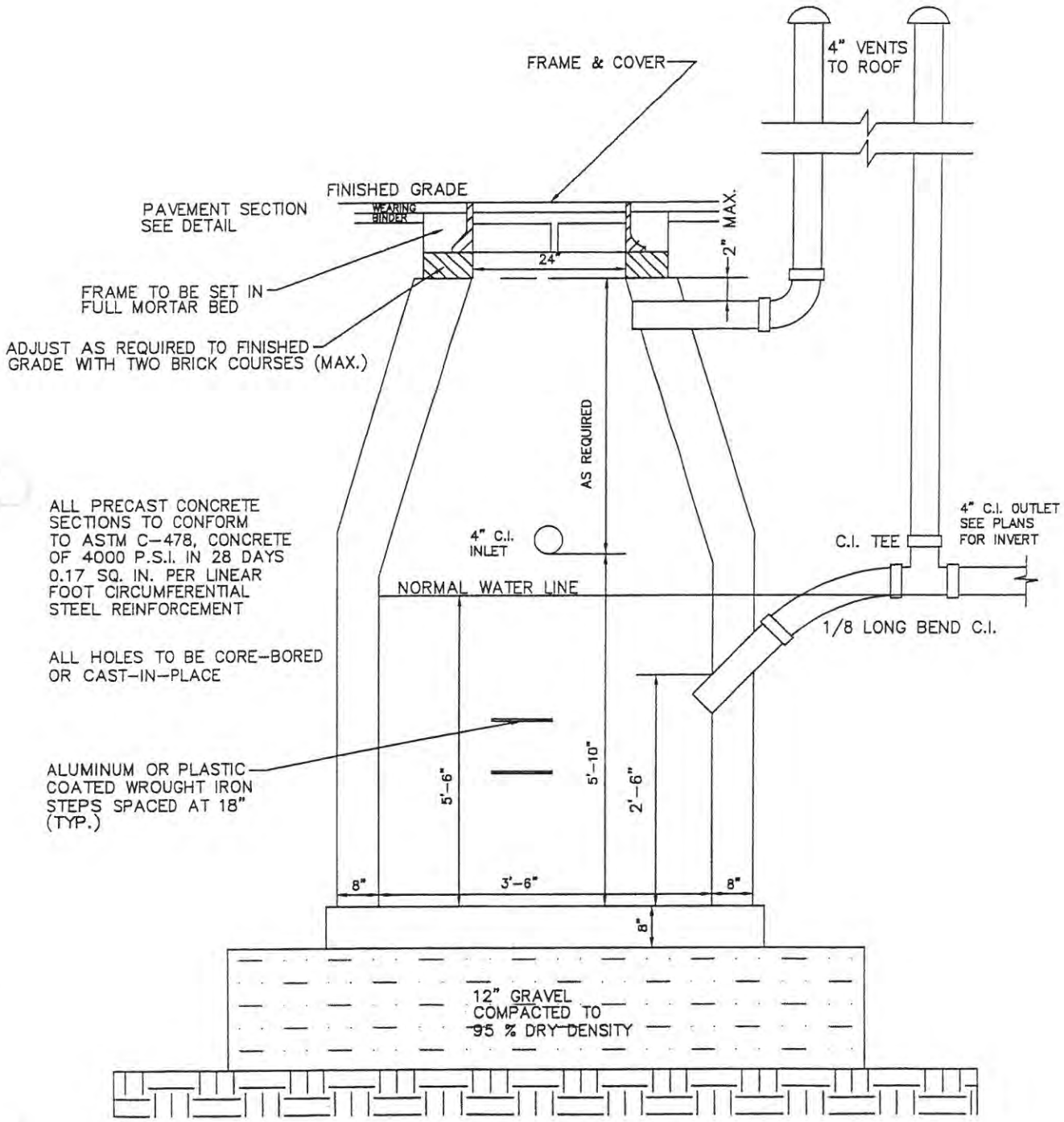
DEP Southeast Regional Office
20 Riverside Drive
Lakeville, MA 02347
Main Number: (508)946-2700
Service Center: (508)946-2714

DEP Central Regional Office
627 Main Street
Worcester, MA 01605
Main Number: (508)792-7650
Service Center: (508)792-7683

DEP Boston Office
Bureau of Waste Prevention
One Winter Street
Boston, MA 02108 (617)292-5500

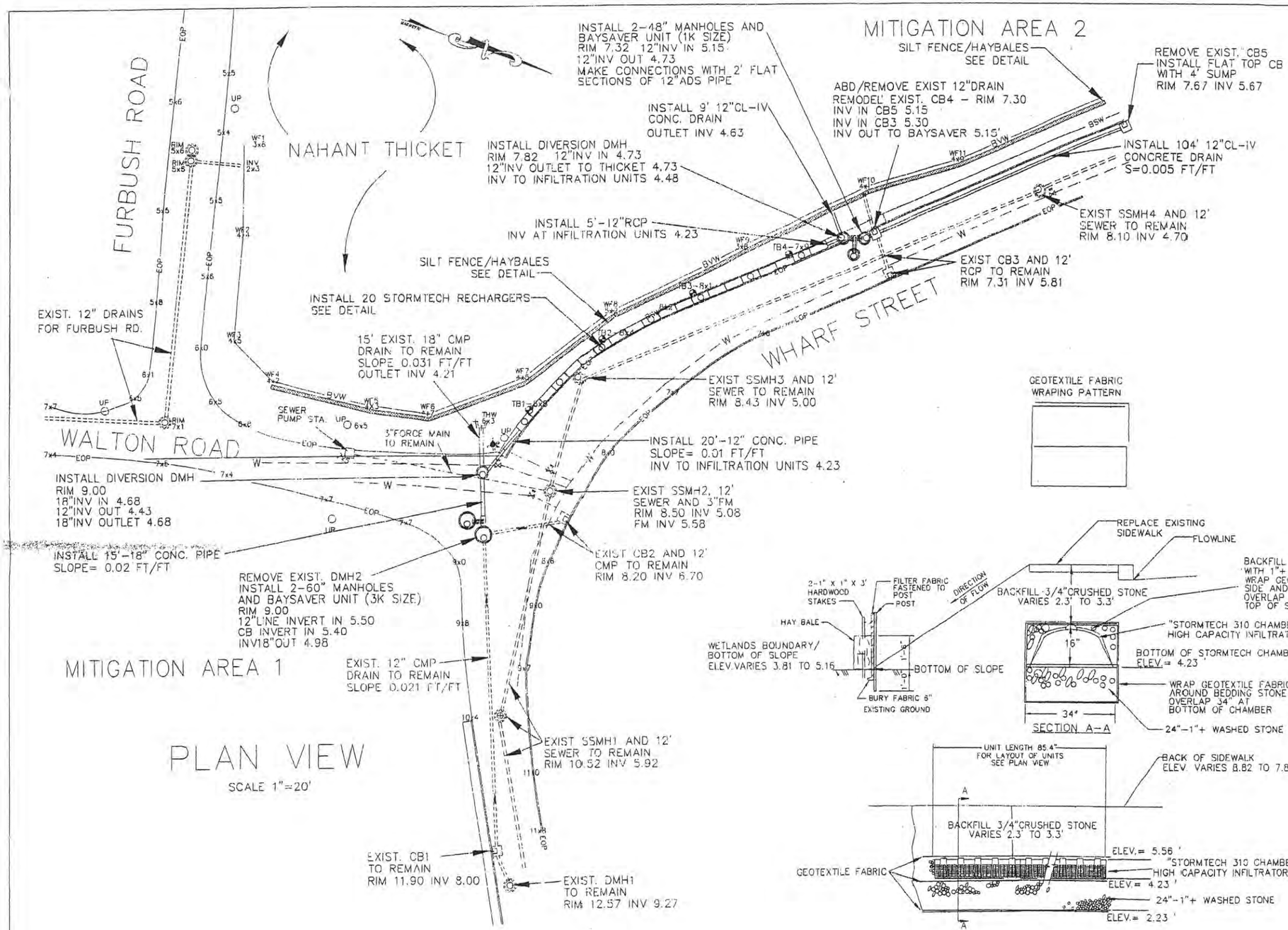
DEP Northeast Regional Office
One Winter Street
Boston, Massachusetts 02108
Main Number: 617-654-6500
Service Center: 617-654-6500

Sedimentation Chamber/Oil & Gas Separation Chamber Detail



MASSACHUSETTS GAS & OIL SEPERATOR

NOT TO SCALE



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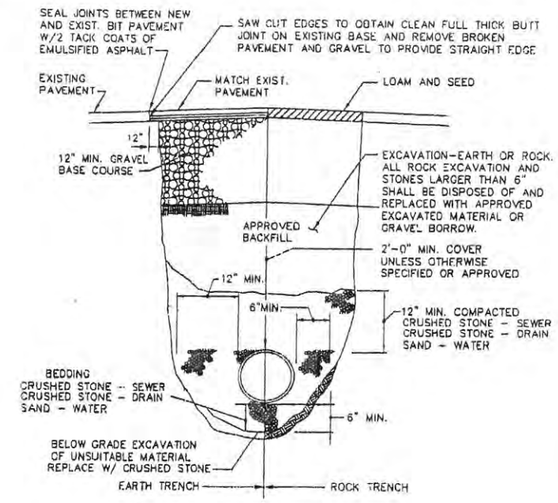
SCALE 1"=20'



TYPICAL TRENCH SECTION

NOT TO SCALE

GEOTEXTILE FABRIC WRAPING PATTERN

TYPICAL LEACHING TRENCH DETAILS

NOT TO SCALE

DANIEL T. DONAHUE No. 20148 REGISTERED PROFESSIONAL ENGINEER

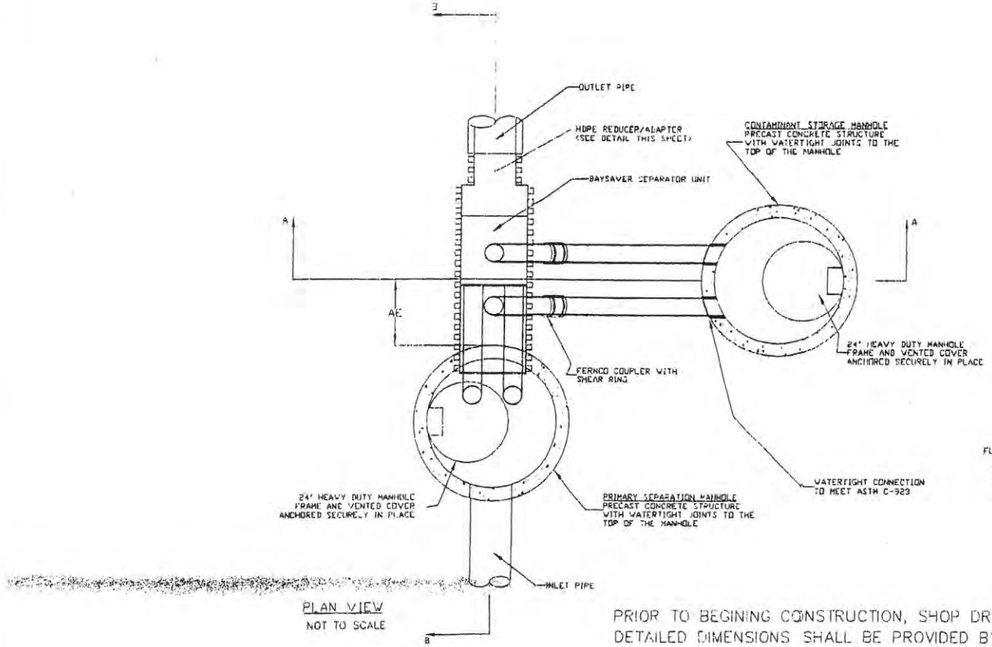
Daniel T. Donahue

POLLUTION REMEDIATION
NAHANT THICKET

TOWN OF NAHANT
334 NAHANT ROAD
NAHANT, MA 01908
781-581-0026

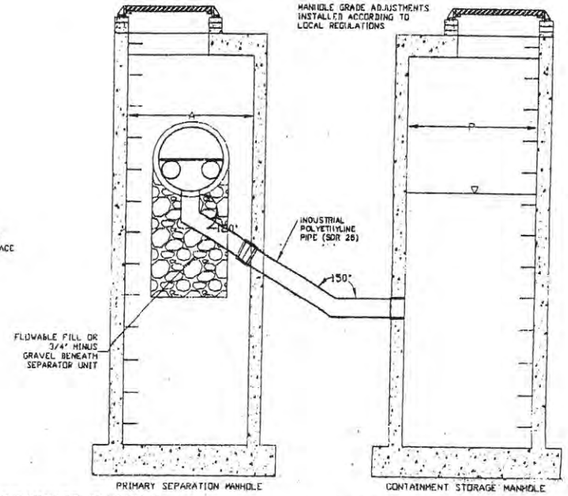
PREPARED BY
MONUMENT ENGINEERING
SUITE 205A 110 WINN STREET
WOBURN, MA 01801
781-939-5600

SCALE AS SHOWN	MAY 22, 2002
	REV. JUNE 15, 2002
SHEET 1 OF 2	



PLAN VIEW
NOT TO SCALE

PRIOR TO BEGINING CONSTRUCTION, SHOP DRAWINGS SHOWING DETAILED DIMENSIONS SHALL BE PROVIDED BY MANUFACTURER.



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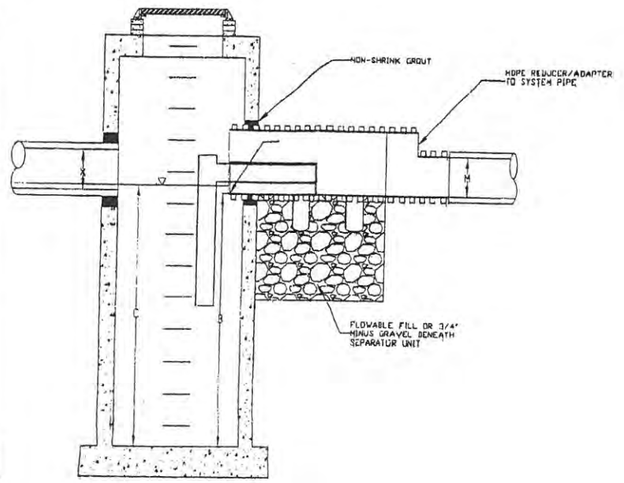

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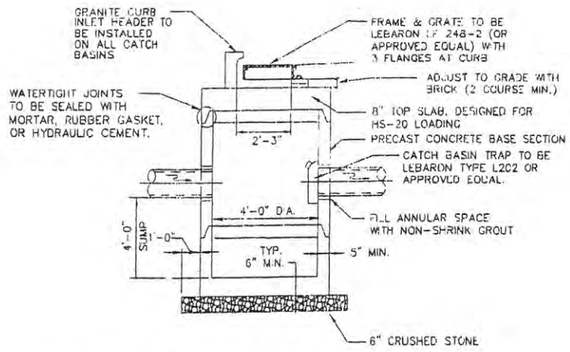

PRECAST CATCH BASIN WITH TOP SLAB
NOT TO SCALE

DANIEL T. DONAHUE No. 30148 REGISTERED PROFESSIONAL ENGINEER

Daniel T. Donahue

POLLUTION REMEDIATION
NAHANT THICKET

TOWN OF NAHANT
334 NAHANT ROAD
NAHANT, MA 01908
781-581-0026

PREPARED BY
MONUMENT ENGINEERING
SUITE 205A 110 WINN STREET.
WOBURN, MA 01801
781-939-5600

SCALE AS SHOWN | MAY 22, 2002

REV. JUNE 15, 2002

SHEET 2 OF 2

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Commonwealth of Massachusetts Executive Office of Environmental Affairs, October 2002. Massachusetts Year 2002 Integrated List of Waters (Proposed Listing for Public Comment), CN: 125.1.

Kristen Hall, Project Manager Community Support Program, Massachusetts Water Resources Authority. Conversation on April 2, 2003.