



TOWN OF PEMBROKE  
DEPARTMENT OF PUBLIC WORKS  
100 CENTER STREET  
PEMBROKE, MASSACHUSETTS 02359  
781-709-1425 fax 781-293-2964 781-709-1426

**DPW Commissioners**

Paul Whitman - Chair  
Tom Irving - V. Chair  
Ben Bastianelli-Clerk

**Divisions**

Cemetery Parks & Commons Highway Tree Water

April 29, 2013

Glenda Velez - CIP  
United States Environmental Protection Agency – Region 1  
5 Post Office Square – OEP06-01  
Boston, Massachusetts 02109-3912

Re: *NPDES General Permit for Storm Water Discharges from Small MS4s  
Annual Report for the Town of Pembroke (Permit Year 10)*

***Permit Number: MAR041054/MA DEP Transmittal Number: W035403***

Dear Ms. Velez:

Pursuant to the requirements of EPA's "National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) issued May 1, 2003, the Town of Pembroke is submitting the enclosed Annual Report for Permit Year 10.

If you have any questions regarding our annual report, please feel free to contact me at (781) 709-1426.

Very truly yours,

Eugene B. Fulmine Jr.  
Director

cc: Edwin J. Thorne, Town Administrator  
Jaurice A. Schwartz, P.E., Weston & Sampson

**Municipality/Organization:** Pembroke, MA

**EPA NPDES Permit Number:** MAR041054

**MassDEP Transmittal Number:** W-035403

**Annual Report Number  
& Reporting Period:**

Year 10: April 1, 2012 – March 31, 2013

**NPDES PII Small MS4 General Permit  
Annual Report  
(Due: May 1, 2013)**

**Part I. General Information**

**Contact Person:** Eugene B. Fulmine Jr.

**Title:** DPW Director

**Telephone #:** (781) 709-1427

**Email:** efulminejr@townofpembrokemass.org

**Mailing Address:** 100 Center Street, Pembroke, MA 02359

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, 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.

**Signature:**



**Printed Name:** Edwin J. Thorne

**Title:** Town Administrator

**Date:**

April 19, 2013

## **Part II. Self-Assessment**

**The Town of Pembroke has completed the required self-assessment and has determined that our municipality is generally in compliance with the conditions of the permit. See Part III for status of BMPs.**

### Part III. Summary of Minimum Control Measures

#### 1. Public Education and Outreach

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 10</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Permit Year 11</b> (if applicable)
1a	Air stormwater messages on local cable channel	Department of Public Works	Air a message every two weeks	Stormwater messages were developed and have been aired on the local cable access channel in previous years on a daily basis with a new stormwater message aired each month. However, stormwater messages were not aired in Permit Year 10.	Continue to air stormwater messages on the local cable access channel.
Revised					
1b	Distribute/post non-point source pollution posters	Department of Public Works	Post in all schools and town-owned buildings	The Town checked and confirmed that non-point source pollution posters were still displayed in town buildings during Permit Year 10.	Continue to display non point source pollution posters in town buildings.
Revised					
1c	Include stormwater info in Consumer Confidence Report	Department of Public Works	Distribute Consumer Confidence Report yearly to all residents	The Town included information on stormwater pollution prevention in its 2012 Consumer Confidence Report, which is distributed annually to all residents. Several of the water bodies in town are drinking water sources for surrounding towns, and preventing pollution discharges from stormwater outfalls is necessary to keep these sources clean.	Continue to include information on stormwater pollution prevention in the Town's Consumer Confidence Report which is distributed annually to residents.
Revised					
1d	Develop children's coloring book on Pembroke recycling	Board of Selectmen	Distribute coloring books outside of Board of Health office	The Town has developed an informative coloring book to educate children on the importance of recycling, which has been made available outside the Board of Health office in previous permit years, although it was not available in Permit Year 10.	Continue to make the coloring book on recycling available outside the Board of Health office.
Revised					

## 2. Public Involvement and Participation

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 10</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Permit Year 11</b> (if applicable)
2a Revised	Form Storm Water Advisory Committee	Department of Public Works	Hold quarterly meetings	During Permit Year 10, the Town held bi-weekly DPW Commissioner Meetings on the first and third Mondays of the month where drainage issues are discussed. In years past, the Town has been working on expanding their existing Drainage Commission.	Continue to hold bi-weekly DPW Commissioner Meetings and work to expand the existing Drainage Commission.
2b Revised	Collect household hazardous waste from residents	Board of Selectmen	Hold household hazardous waste collection day once per year The Town is holding their Household Hazardous Waste Collection Day in August as opposed to the spring as previously indicated.	During Year 10, the Town held household hazardous waste collection days on October 27, 2012, and March 23, 2013. It was announced in the local press, on cable and at BOH and Selectmen meetings.	Continue to hold a Household Hazardous Waste Collection Day annually.
2c Revised	Implement annual, volunteer waterways clean-up day	Pembroke Watershed Association/ Department of Public Works	Hold waterways clean-up day once per year beginning in the Spring of 2005 (Permit Year 3)	During Year 10, the Town held its annual, volunteer waterways clean-up day on May 19, 2012.	Continue to hold a volunteer waterways clean-up day annually.
2d Revised	Make SWMP available for public comment/review	Department of Public Works	Post SWMP in DPW office and Town library	Throughout Permit Year 10, copies of the Town's Stormwater Management Plan were made available for public review and comment at the Town Library and at the DPW office.	Continue to make copies of the Town's Stormwater Management Plan available for public review and comment at the Town Library and at the DPW office.

### 3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 11 (if applicable)
3a	Map outfalls and receiving waters	Department of Public Works	Complete mapping by end of fifth permit year	The Town completed mapping of all outfalls in urbanized areas during Permit Year 4, which was a year ahead of schedule. Although not required at this time, the Town also completed the mapping of 2,534 catch basins and 901 storm drain manholes during the sixth permit year. In Year 10, the Town continued to add drainage for newly developed areas in town and add flow directions for storm drains.	The Town will continue to update their storm drain mapping as needed.
Revised					
3b	Develop illicit discharge detection & elimination plan	Department of Public Works	Make recommendations for proposed plan	During Permit Year 5, the Town made a number of recommendations regarding items to be included in their illicit discharge detection and elimination plan. These items included methods for identifying priority areas and locating illicit discharges and their sources. It also included procedures for removal of illicit discharges. All actions were documented. During Permit Year 10, the Town followed the Illicit Discharge Detection and Elimination plan that they developed during Permit Year 5.	The Town will continue to follow the Illicit Discharge Detection and Elimination Plan that they developed during Permit Year 5.
Revised					
3c	Review existing bylaws and regulations	Department of Public Works/Stormwater Advisory Committee	Determine whether existing bylaws/regs are adequate	The Town reviewed their existing bylaws and regulations for requirements relating to illicit discharge detection and elimination during Permit Year 3. No goals related to this item were planned for Permit Year 10.	<b>BMP Completed.</b>
Revised					
3d	Develop/modify general illicit discharge bylaw	Department of Public Works/Stormwater Advisory Committee	If necessary, propose recommendations for bylaw updates	A general illicit discharge bylaw that meets USEPA requirements was developed during Permit Year 3. After having their attorneys review the general illicit discharge bylaw that was developed, the Town distributed the bylaw to local town boards and commissions for their review. Based on input from these departments, the bylaw was revised during Permit Year 5. No goals related to this item were planned for Permit Year 10.	<b>BMP Completed.</b>
Revised					
3e	Present bylaw for Town meeting action	Department of Public Works/Stormwater Advisory Committee	Make presentations for Town meeting action, if necessary	The bylaw was presented for Town Meeting action during Permit Year 5 and was adopted. This bylaw was enforced by the Town during Permit Year 10 and there were no violations.	The Town will continue to enforce the IDDE bylaw that they adopted during Permit Year 5.
Revised					

#### 4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 11 (if applicable)
4a	Review existing bylaws and regulations	DPW/Planning/Zoning	Determine whether existing bylaws/regs are adequate	The Town reviewed the relevant sections of the Rules and Regulations Governing the Subdivision of Land, the Zoning Bylaws, and the Water Resource Protection Bylaw during Permit Year 3. No goals related to this item were planned for Permit Year 10.	<b>BMP Completed.</b>
Revised					
4b	Develop/modify bylaws for construction site runoff	DPW/Planning/Zoning	If necessary, propose recommendations for bylaw updates	In Permit Year 4, the Town completed the development of a bylaw for the control of construction site runoff. After having their attorneys review the bylaw that was developed, the Town distributed the bylaw to local town boards and commissions for their review. Based on input from these departments, the bylaw was revised during Permit Year 5. No goals related to this item were planned for Permit Year 10.	<b>BMP Completed.</b>
Revised					
4c	Present bylaw for Town meeting action	DPW/Planning/Zoning	Make presentations for Town meeting action, if necessary	The bylaw was presented for Town Meeting action during Permit Year 5 and was adopted. This bylaw was enforced by the Town during Permit Year 10, and there were no violations.	The Town will continue to enforce the bylaw that they adopted.
Revised					
4d	Review existing site inspection practices	DPW/Planning/Zoning	Determine whether existing practices are adequate	The Town reviewed their erosion/sedimentation control and drainage submittal requirements, as well as their site inspection practices, during Permit Year 4. No goals related to this item were planned for Permit Year 10.	<b>BMP Completed.</b>
Revised					
4e	Develop/modify site inspection practices	DPW/Planning/Zoning	If necessary, make recommendations for updating existing practices	During Permit Year 4, the Town completed review of their construction site inspection practices. The Town currently uses a consultant, Merrill Associates, who works for the Planning Board to oversee private developments. The DPW and the Conservation Commission also assist with internal site reviews. Any recommended changes to these site inspection practices were incorporated into the Town's Construction Site Runoff Control Bylaw, which was adopted during Permit Year 5. Changes to the Town's site inspection practices were enforced under this bylaw during Permit Year 10.	The Town will continue to enforce changes to their site inspection practices under their Construction Site Runoff Control Bylaw.
Revised					

## 5. Post-Construction Stormwater Management in New Development and Redevelopment

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 11 (if applicable)
5a	Review existing bylaws and regulations	DPW/Planning/Zoning	Determine whether existing bylaws/regs are adequate	The Town evaluated regulations regarding the control of post-construction stormwater runoff, including the Rules and Regulations Governing the Subdivision of Land and the Zoning Bylaws during Permit Year 3. No goals related to this item were planned for Permit Year 10.	<b>BMP Completed.</b>
Revised					
5b	Develop/modify bylaws for post-construction runoff	DPW/Planning/Zoning	If necessary, propose recommendations for bylaw updates	During Permit Year 4, the Town developed a post-construction site runoff control bylaw that meets USEPA requirements and considers MA DEP Stormwater Management Policy Standard 3 (Recharge to Groundwater). After having their attorneys review the bylaw that was developed, the Town distributed the bylaw to local town boards and commissions for their review. Based on input from these departments, the bylaw was revised during Permit Year 5. No goals related to this item were planned for Permit Year 10.	<b>BMP Completed.</b>
Revised					
5c	Present bylaw for Town meeting action	DPW/Planning/Zoning	Make presentations for Town meeting action, if necessary	The bylaw was presented for Town Meeting action during Permit Year 5 and was adopted. This bylaw was enforced by the Town during Permit Year 10 and there were no violations.	The Town will continue to enforce the bylaw that they adopted.
Revised					
5d	Review existing site inspection practices	DPW/Planning/Zoning	Determine whether existing practices are adequate	During Permit Year 4, the Town completed review of their existing site inspection and maintenance practices. No goals related to this item were planned for Permit Year 10.	<b>BMP Completed.</b>
Revised					
5e	Develop/modify site inspection practices	DPW/Planning/Zoning	If necessary, make recommendations for updating existing practices	During Permit Year 4, the Town completed review of their post-construction site inspection and maintenance practices. Once construction is complete, the Town takes ownership of new developments, and the DPW is responsible for the maintenance and operation of stormwater controls. Any recommended changes to these site inspection practices were incorporated into the Town's Post Construction Site Runoff Control Bylaw during Permit Year 5. Changes to the Town's site inspection practices were enforced under this bylaw during Permit Year 10.	The Town will continue to enforce changes to their site inspection practices under their Post Construction Site Runoff Control Bylaw.
Revised					

## 6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 11 (if applicable)
6a	Sweep streets & clean catch basins	Department of Public Works	Sweep all town-owned streets and clean all catch basins once per year	During Permit Year 10, the Pembroke Highway Department swept approximately 52 miles of roadway. The Town cleans their catch basins on a continual basis. In Permit Year 10, 1,462 catch basins were cleaned.	Attempt to sweep streets in Town at least once per year and clean catch basins on a continual basis.
Revised					
6b	Maintain filtration system at North & Indian Head Rivers	Department of Public Works	Inspect baffle tank and leaching basin, and remove sediment	During Permit Year 10, the Town inspected the filtration system installed at the confluence of the North and Indian Head Rivers and removed sediment as needed, although in Year 10, it was found not to be in need of cleaning.	Continue to inspect the filtration system at the confluence of the North and Indian Head Rivers and clean as needed.
Revised					
6c	Train municipal employees at each facility	Department of Public Works	Target all applicable municipal facilities	During Permit Year 3, the Town examined existing practices at municipal facilities, and trained employees at these facilities in construction methods to prevent soil erosion. In Permit Year 10, the Town conducted continual follow-ups to ensure that employees working at these facilities are following the required stormwater management practices.	Continue to conduct follow-ups at municipal facilities to ensure that employees are following the required stormwater management practices.
Revised					
6d	Implement items in EPA env. audit report for DPW facility	Department of Public Works	Ensure action items completed and BMPs followed	The Town made changes at the DPW Facility during Permit Year 1 to comply with the EPA Environmental Audit Report that was completed. These changes included developing a SPCC plan, which the Town continued to follow throughout Permit Year 10 with the exception of washing vehicles inside.	Continue to follow those changes implemented at the DPW Facility in response to the environmental audit report completed for this facility.
Revised					
6e	Retrofit catch basins around Furnace and Oldham Ponds	Department of Public Works	Install vortex separators and new piping	The catch basins around Furnace Pond and Oldham Pond were retrofitted with vortex oil/water separators during Permit Year 3 and they were maintained during Permit Year 10.	Maintain and clean regularly those catch basins around Furnace Pond and Oldham Pond that were retrofitted with vortex oil/water separators.
Revised					

### 6a. Additions

6f	Perform Stream Maintenance	Department of Public Works	Complete stream maintenance each year in coordination with the Plymouth County Mosquito Control Project	During Permit Year 10, the Town worked with crews from the Plymouth County Mosquito Control Project to remove blockages, brush and other obstructions from ditches and streams to prevent water overflows and stagnation. This included 2,915 linear feet of stream and 2,455 linear feet of upland ditch.	The Town will continue to remove blockages, brush and other obstructions from ditches and streams in coordination with the Plymouth County Mosquito Control Project.
6g	Enhance Existing Storm Drainage Infrastructure	Department of Public Works	Incorporate BMPs wherever feasible into annual drainage improvement projects	During Permit Year 10, the Town completed drainage improvements at Oldham Street.	The Town will continue to assess drainage infrastructure needs and take advantage of opportunities to enhance their existing drainage system by retrofitting with BMPs.

**7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) <<if applicable>>**

*In Pembroke, there are no approved TMDLs. There are impaired waters in Pembroke that the MS4 discharges into and that require the development of a TMDL, as listed on the Draft 2012 and Final 2010 Integrated List of Waters, including Indian Head River, Furnace Pond, North River and Stetson Pond. Once TMDLs for these waters are approved, further evaluation is required to determine whether the pollutant of concern is likely to be found in stormwater discharges from the MS4.*

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Revised					

**7a. Additions**

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**7b. WLA Assessment**

*Not applicable.*

**Part IV. Summary of Information Collected and Analyzed**

*No additional information has been collected or analyzed outside of what was listed in Part III above.*