DARTMOUTH

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DEPARTMENT OF PUBLIC WORKS

Director David T. Hickox, P.E.

BOARD OF PUBLIC WORKS

Richard Alves, Jr., P.E. Brian E. Hawes Robert Rapoza

March 22, 2018

CERTIFIED MAIL #70160910000060570817

Ms. Thelma Murphy US EPA, Region I 5 Post Office Square, Suite 100 (CMU) Boston, MA 02109

RE: Town of Dartmouth, MA

EPA NPDES Permit #: MAR041102

Dear Ms. Murphy:

Please find enclosed the Town of Dartmouth's NPDES PII Small MS4 General Permit Annual Report for reporting period No. 15 March 2017-March 2018. If you have any questions, please do not hesitate to contact my office.

Sincerely,

David T. Hickox, P.E. Director of Public Works

DTH:jk

Enclosure

Municipality/Organization: Dartmouth, Massachusetts

EPA NPDES Permit Number: MAR041102

MaDEP Transmittal Number: W
Annual Report Number
& Reporting Period: No.15: March 17- March 18

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: David T. Hickox, P.E. Title: Director

Telephone #: (508) 999-0740 Email: dhickox@town.dartmouth.ma.us

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: Energy W. Barnes

Printed Name: Gregory Barnes

Title: Interim Executive Administrator

Date: March 20, 2018

Part II. Self-Assessment

The Town of Dartmouth Massachusetts has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – New Permit
1-1 Revis ed	Partnerships Install tributary signage.	DPW,BOH Planning	Partnerships, Press releases, distribute .Maintain and replace as necessary tributary signs.	The Department of Public Works continues to maintain and replace as necessary tributary signs. The Apponagansett Bay final report has been received by the Town.	Town intends to maintain tributary signs under new permit.
				The Town has continued a multi-year partnership with the University of Massachusetts, the Dartmouth Lloyd Center, and the Coalition for Buzzards Bay to restore the health of Dartmouth's coastal estuaries and rivers. Wet and dry weather sampling will be a part of the new MS4 permit.	Town will expand the collection of wet and dry flows as part of the new NOI to be submitted in Sept. 2018
1-2	Educational Materials	DPW,BOH	Distribute Fact Sheets at municipal buildings,	The Town implemented a new "Don't Let Pollution Go Down The Drain" posters displayed throughout all Town building. The Town initiated a Cigarette Litter	Maintain and monitor Pollution IDDE progress.

Revised				Prevention Educational Program in July of 2011. The DPW will continue to declare July as Cigarette Litter Prevention Month and will post appropriate signage thru-out the Town particularly at traffic lights where the cigarette liter is problematic.	The Town plans to continue this litter in the new 2018MS4 Permit.
			**	The Town continues to provide Storm Drain Information via fact sheets at various locations throughout the Town. The Town utilized Highway Division laborers to maintain cigarette dispensers and install public notices as part of the "cigarettes are litter" campaign. Damaged or missing storm water education logo's were replaced on an as needed basis by DPW laborers.	The Town plans to continue with storm water education in the 2018 MS4 Permit. Continue to maintain storm water logo maintenance on catch basins.
1-3 Revised	Reaching Diverse Audiences	DPW, BOH		The Town will oreder new cigarettes are litter signs in 2018 to continue to reach a diverse audience. The Town continues to provide storm water general info/programs to the general public as well as the building/construction industry via notice with all construction contracts. The Town provided "Community Clean Up Day" in addition to "Hazardous Waste Day".	Town intends to continue with the cigarettes are litter campaign in July 2018.
Revised					

2. Public Involvement and Participation

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – New Permit
2-1 Revised	Storm Drain Stenciling	Planning, ConCom, DPW	Number of stormwater logos maintained.	Town continued utilize DPW laborers to maintain and install new metal stormwater logos and tributary signage. Due to budget constraints the use of Umass college interns during the summer of 2017 was not possible.	New Permit to be issued in 2018 Town intends to utilize engineering interns or staff to install new and maintain existing storm water stencils.
2-2 Revised	Existing Program Assistance	DPW, ConCom	Request funding and update status of the NPDES Program to Town Boards	Staff has retained a consultant to update stormwater bylaw. Town BOH adopted new stormwater regulations. The Town continued year 8 of a community clean up day consisting of multiple community groups, and support from local business groups, and assistance from the DPW Highway Division. The 2018 Clean Up will be for the weekend of April 22, the Town will distribute free PAYT Bags to community groups and residents to assist in the clean up.	Implement consultant and Town Counsel recommended action plan for implementation BOH IDDE Regulations and Town Meeting to vote on Stormwater Bylaw. In June 2018.
Revised					
Revised					
Revised			-	3	

3. Illicit Discharge Detection and Elimination

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – New Permit
3-1 Revised	Mapping	DPW,ConCom	Coordination of data from Dartmouth DPW and Conservation Commission Budget for new NPDES Permit .	Continue to update mapping as required through the DPW Engineering Division and the Conservation Commission. The Town has budgeted funds to retain a consultant to assist in the implementation of the new NPDES Permit. The Town utilized an engineering intern in FY 2017to locate and photo all outfalls utilizing an iPad with GPS. The data is being utilized for the development of the composite GIS mapping plan based on the draft permit and has made recommendations to the Town as it pertains to the existing permit and looking forward to the new permit.	Testing of water quality will be a requirement under the new permit to be issued in 2017. Budget for new NPDES Permit is currently proposed in DPW FY 2019 operating budget. One our ongoing tasks will be to complete the Town composite drainage plan including all outlets to resource locations in 2018. In 2017, the Town retained a consultant to develop a plan of action to meet the proposed 2018 MS4 Permit and develop the NOI scope In the coming year the Town intends to adopt updated stormwater bylaws, improve the BOH IDDE Program and continue the collection and development of our outfall inventory map generation. Development of the GIS Stormwater Map is a priority. Develop stormwater bylaws and improve IDDE monitoring program.

3-2	Legal Prohibited – Enforcement	BOH, ConCom	Continued review and upgrading of existing stormwater related bylaws	Consultant to assist the Town in the development of Stormwater Bylaws and BOH IDDE Regulations DPW crews perform sanitary inspections of all drainage structures during routine maintenance. DPW, Board of Health and Conservation Commission regulations have been reviewed to strengthen if required areas that prohibit illicit connections to storm drain systems.	Develop new Stormwater Bylaws. Develop written protocol for inventorying stormwater outfalls and for monitoring out The Town anticipates the installation of storm water treatment facilities on Rogers Street in 2018.
Revised			DPW personnel have been directed to perform inspections on all SMH's and DMH's when ever the cover is opened. Inspections include condition of MH and evaluation of function to identify illicit connections.	DPW maintained the two Vortec Units discharging to Padanaram Harbor and were impressed by the unit capture rates resulting in reduced TSS impacting the bay. These units have reduced documented siltation of Apponagansett Bay.	
3-3 Revised	Detection Plan	BOH,DPW	Water quality testing and monitoring.	The Town has received the Final Report for Apponagansett Bay.	Inspect on an as needed basis in accordance with the BOH IDDE Regulations.

3-4 Revised	Awareness & Education	BOH,Planning	Continue to update the placement of Fact Sheets in Public Facilities, prepare and fund Household Hazardous Waste Days during this reporting period	Town developed an IDDE Stormwater BOH Regulation . Improves awareness and protocol for notification of possible illicit discharges.	Promote new Stormwater Bylaw in advance of Town Meeting vote.
Revised					
Revised					

4. Construction Site Stormwater Runoff Control

BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – New Permit
Stormwater Management	ConCom	Providing Stormwater Management Guidelines & Requirements	The Town continues to enforce storm water BMP's for private sector projects. Town has retained a consultant to assist development of the NOI for the new NPDES Permit to be issued in 2018. The DPW and Conservation Commission continues to inventory structural storm water technologies within the Town.	New Permit to be issued in 2018 Town to seek approval for new Stormwater Bylaws Upgrade IDDE Program per BOH Regulations, outfall inventory and monitoring protocol.
Stormwater Regulations	Planning Board	Review of Subdivision Regulations relative to stormwater control during construction.	Continue the development of the Stormwater Bylaws.	
Education Materials	DPW	Provide Stormwater Information to all contractors that have been awarded construction contracts with the Department of Public Works.	All contractors performing site work or utility work on significant size projects are provided with a Memorandum and wall guide to Planning & Implementing Erosion & Sediment Control Practices. New "Don't Let Pollution Go Down The Drain" posters provided to engineers and contractors for posting in their place of business.	Develop new Stormwater Bylaws. Develop upgraded IDDE Program.
	Stormwater Management Stormwater Regulations	Stormwater Management ConCom Stormwater Regulations Planning Board	Stormwater Management ConCom Providing Stormwater Management Guidelines & Requirements Stormwater Regulations Planning Board Review of Subdivision Regulations relative to stormwater control during construction. Education Materials DPW Provide Stormwater Information to all contractors that have been awarded construction contracts with the Department	Dept./Person Name

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 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – New Permit
5-1 Revised	Stormwater Management	ConCom	Enforcement of Town of Dartmouth's and Mass DEP's Stormwater Guidelines.	Retained consultant to review and upgrade current stormwater bylaws and regulations. The Town's Environmental Affairs Coordinator monitors all construction related activities.	New Permit to be issued in 2018 Seek approval for new Stormwater Bylaws and implement BOH IDDE Regulations.
5-2 Revised	Drainage Consultant	ConCom	Consistent Technical Review of Stormwater design and policy.	Consultant continues to provide technical input Conservation Commission pursuant to Stormwater Regulations and IDDE Bylaws. Consultant continues the review of all Notice of Intents involving the construction of drainage facilities and drainage calculations.	
5-3 Revised	Subdivison Rules & Regulations	Planning	Enforcement of regulations pertaining to stormwater facilities being fully operational prior to release of lots.	Developers are aware that they must construct all drainage facilities, and provide fully operational system prior to the release of any lot for sale.	

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 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – New Permit
6-1 Revised	Employee Training	DPW	Provide employee training in conjunction with 40 CFR 112 program.	DPW provides staff training on Storm Water Good Housekeeping. The DPW retained a consultant to provide good housekeeping training in municipal facilities. SPCC training was performed in 2015 by Tighe & Bond to all field personnel on "Good Housekeeping Methods". Examples of daily maintenance procedures and equipment inspections will be presented.	Continue Good Housekeeping Training Program
				Director of Public Works routinely reviews sites with Department Heads to identify potential areas of concern.	Director to continue to monitor DPW sites with Department Heads
6-2	O&M Program	DPW	Implementation of O&M program designed to reduce and or eliminate the discharge of pollutants form various DPW facilities.	DPW Highway Division has purchased salt brine production equipment. In 2017/2018, the Town continued with a salt brine pretreatment program that will reduce the volume of salt used for snow and ice operations. The new snow and ice procedures have	DPW will continue to equip snow and ice equipment with brine treatment equipment. DPW to send employees to APWA Snow & Ice Training in 2018

Revised				dramatically reduced the volume of sand collected in catch basins and discharged to steams and the bay. Operators have ongoing training on the proper procedures for delivery of salt to roadway,4 staff employees have become certified in winter snow operations. The Town has requested a new vacuum sweeper. The new sweeper will supplement the existing three sweepers and will allow the Town to complete sweeping operations in a more timely manner. Staff monitors all exterior stored equipment for fluid leakage. Stormwater detention ponds at the Highway Division garage have been serviced and the remaining Highway Division Yard is swept clean of salt residues, the existing oil/gas separator has been fully serviced after the winter season in preparation for the new season	New sweeper has been purchased. Town has constructed a new Truck Wash facility for DPW operations. The facility includes a knock down area and recycles wash water. Supplemental water is from cisterns filled from roof runoff.
6-3 Revised	Roadway Maintenance	DPW	Sweep all streets. Clean all catch basins annually.	The Town swept all primary roadways and a majority of secondary roadways. The addition of a third sweeper has improved street cleaning operations. The Town will service all Vortec Units with the Vac4All The Town has cleaned all catch basins in Town under private contract on an annual basis	The Town will continue the complete sweeping of Town streets on an annual basis.
Revised					
Revised					
Revised			2		

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

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – New Permit
7-1 Revised	BMP's for TMDL Reduction	DPW	Review of Final Apponagansett Report and discussion on recommended response to findings,	The will continue to work closely with Umass in setting up the necessary programs to meet the expected TMDL limits. The Town continues to uses Vacum Truck for servicing stormwater facilities. DPW requests new street sweeper.	Complete the review of findings from the Final Apponagansett Bay.
Revised					

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

- The Town Board of Health and Department of Public Works continue to respond and inspect all potential sources of illicit discharge when applicable. Town implemented new BOH IDDE Regulations in 2017 and new Stormwater Regulations for Town Meeting vote in June 2018.
- The Town implemented a "Cigarette is Liter Prevention" campaign during July 2011. The program will continue in 2018. The program includes the installation of "cigarette liter is trash" posters that are placed at major traffic intersections during the month of July. The Town also held the ninth annual Community Clean Up Day in 2017, the Clean Up Day is scheduled for April 22, 2018 and will utilize residents and community groups to collect liter. DPW staff will collect all liter at designated drop off locations.
- The Town continued to maintain the Vortec 9000 storm water unit installed to service a large watershed to the Padanaram Harbor. The Town has designed and applied for funding for the installation of a storm treat system to service a significant watershed to Clarks Cove, fortunately funding for this unit installation has been received and the units are scheduled for installation in 2018. The units will provide treatment to New Bedford and Dartmouth storm water on Rogers Street.
- Stormwater improvements have been designed for Elm Street and Bridge Street in Padanaram Village.
- The Coalition for Buzzards Bay, and the University of Massachusetts on the Turn the Tide Project is a commitment by the Town to protect Buzzards Bay and the contributing river bodies by restoring the health and vitality of Dartmouth's waters. The Final Apponagansett Bay Reports was received by the Town and is currently under review.
- The DPW Highway Division has continued to maintain and replace damaged or missing storm water logo and tributary signs.
- The program continues to support the local estuary projects including the overall progress being made by the Umass Dartmouth School of Marine Science and Technology of the various brooks and ponds in the Town of Dartmouth.
- The DPW purchased additional salt brine equipment and has installed on all dispensing units to reduce the impact snow & ice operations have on the environment,
- Conservation Commission continues to provide guidance and direction in prioritizing the placement of structural storm water units in Town.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	
Annual program budget/expenditures	(\$)	
		-11-200

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)
Stormwater management committee established	(y/n)
Stream teams established or supported	(# or y/n)
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)
Household Hazardous Waste Collection Days	
 days sponsored 	(#)
 community participation 	(%)
 material collected 	(tons or gal)
School curricula implemented	(y/n)

Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted	Adopted
Regulatory Mechanism Status (indicate with "X")	F)			
 Illicit Discharge Detection & Elimination 				
 Erosion & Sediment Control 				
Post-Development Stormwater Management				

 Illicit Discharge Detection & Elimination 		
 Erosion & Sediment Control 		
 Post-Development Stormwater Management 		

Mapping and Illicit Discharges

Outfall mapping complete	(%)
Estimated or actual number of outfalls	(#)
System-Wide mapping complete	(%)
Mapping method(s)	
Paper/Mylar	(%)
CADD	(%)
• GIS	(%)
Outfalls inspected/screened	(# or %)
Illicit discharges identified	(#)
Illicit connections removed	(#) (est. gpd)
% of population on sewer	(%)
% of population on septic systems	(%)

Construction

Number of construction starts (>1-acre)	(#)	
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	
Site inspections completed	(# or %)	
Tickets/Stop work orders issued	(# or %)	
Fines collected	(# and \$)	
Complaints/concerns received from public	(#)	

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post- construction stormwater control	(%)	
Site inspections completed	(# or %)	
Estimated volume of stormwater recharged	(gpy)	

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)
Total number of structures cleaned	(#)
Storm drain cleaned	(LF or mi.)
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)	
Cost of screenings disposal	(\$)

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)
Qty. of sand/debris collected by sweeping	(lbs. or tons)
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)
Cost of sweepings disposal	(\$)
Vacuum street sweepers purchased/leased	(#)
Vacuum street sweepers specified in contracts	(y/n)

Reduction in application on public land of: ("N/A" = never used; "100%" =	elimination)
 Fertilizers 	(lbs. or %)
 Herbicides 	(lbs. or %)

 Pesticides 	(lbs. or %)
Anti-/De-Icing products and ratios	% NaCl
	% CaCl ₂
	% MgCl ₂
	% CMA
	% Kac
	% KCl
	% Sand
Pre-wetting techniques utilized	(y/n)
Manual control spreaders used	(y/n)
Automatic or Zero-velocity spreaders used	(y/n)
Estimated net reduction in typical year salt application	(lbs. or %)
Salt pile(s) covered in storage shed(s)	(y/n)
Storage shed(s) in design or under construction	(y/n)