Year 1 Annual Report Massachusetts Small MS4 General Permit Reporting Period: May 1, 2018-June 30, 2019

Please DO NOT attach any documents to this form. Instead, attach all requested documents to an email when submitting the form

Unless otherwise noted, all fields are required to be filled out. If a field is left blank, it will be assumed the requirement or task has not been completed.

Part I: Contact Information

Name of Municipality or Organ	nization: Town of Dover	
EPA NPDES Permit Number:	MAR041107	

Primary MS4 Program Manager Contact Information

Name:	Craig S. Hughes		Title: Su	perintendent of Streets
Street 2	Address Line 1: P.O. Box 250			
Street .	Address Line 2: 2 Dedham Street			
City:	Dover	State: MA	Zip Code:	02030
Email:	streets@doverma.org		Phone N	Sumber: (508) 785-0058
Fax Nı	umber: (508) 785-8115			

Stormwater Management Program (SWMP) Information

SWMP Location (web address):	https://doverftp.com/Dover%20Stormwater%20Management% 20Program.pdf
Date SWMP was Last Updated:	June 28, 2019

If the SWMP is not available on the web please provide the physical address and an explanation of why it is not posted on the web:

N/A

Part II: Self Assessment

First, in the box below, select the impairment(s) and/or TMDL(s) that are applicable to your MS4.

Impairment(<u>s)</u>			
	Bacteria/Pathogens	Chloride	🗌 Nitrogen	⊠ Phosphorus
	Solids/ Oil/ Grease (Hyd	rocarbons)/ Metals	S	
TMDL(s)				
In State:	Assabet River Phosphore	us 🛛 🖾 Bacte	eria and Pathogen	Cape Cod Nitrogen
	Charles River Watershee	l Phosphorus	\Box Lake and Pond	Phosphorus
Out of State:	Bacteria/Pathogens	☐ Metals	□ Nitrogen	Phosphorus
			Cle	ear Impairments and TMDLs

Next, check off all requirements below that have been completed. **By checking each box you are certifying that you have completed that permit requirement fully.** If you have not completed a requirement leave the box unchecked. Additional information will be requested in later sections.

Year 1 Requirements

- Develop and begin public education and outreach program
- Identify and develop inventory of all known locations where SSOs have discharged to the MS4 in the last 5 years
 - \bigcirc The SSO inventory is attached to the email submission
 - The SSO inventory can be found at the following website:

https://doverftp.com/Dover%20Stormwater%20Management%20Program.pdf

- Develop written IDDE plan including a procedure for screening and sampling outfalls
- IDDE ordinance complete
- Identify each outfall and interconnection discharging from MS4, classify into the relevant category, and priority rank each catchment for investigation
 - The priority ranking of outfalls/interconnections is attached to the email submission
 - The priority ranking of outfalls/interconnections can be found at the following website:

https://doverftp.com/Dover%20Stormwater%20Management%20Program.pdf

- Construction/ Erosion and Sediment Control (ESC) ordinance complete
- Develop written procedures for site inspections and enforcement of sediment and erosion control measures
- Develop written procedures for site plan review
- Keep a log of catch basins cleaned or inspected
- Complete inspection of all stormwater treatment structures

Annual Requirements

- Annual opportunity for public participation in review and implementation of SWMP
- Comply with State Public Notice requirements
- Keep records relating to the permit available for 5 years and make available to the public
- Properly store and dispose of catch basin cleanings and street sweepings so they do not discharge to
- [△] receiving waters
- $\hfill\square$ Annual training to employees involved in IDDE program
- \boxtimes All curbed roadways have been swept a minimum of one time per year

Bacteria/ Pathogens (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)

Annual Requirements

Public Education and Outreach*

- \bowtie Annual message encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- \bowtie Permittee or its agents disseminate educational material to dog owners at the time of issuance or renewal of dog license, or other appropriate time
- Provide information to owners of septic systems about proper maintenance in any catchment that discharges to a water body impaired for bacteria

* Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information)

Phosphorus (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)

Annual Requirements

Public Education and Outreach*

- Distribute an annual message in the spring (April/May) that encourages the proper use and disposal of grass clippings and encourages the proper use of slow-release and phosphorus-free fertilizers
- Distribute an annual message in the summer (June/July) encouraging the proper management of pet waste, including noting any existing ordinances where appropriate

Distribute an annual message in the fall (August/September/October) encouraging the proper disposal of leaf litter

* Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information)

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

Increase street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.a.iii.(c) to a minimum of two times per year (spring and fall)

Potential structural BMPs

Any structural BMPs listed in Table 3 of Attachment 1 to Appendix H already existing or installed in the regulated area by the permittee or its agents shall be tracked and the permittee shall estimate the

□ phosphorus removal by the BMP consistent with Attachment 1 to Appendix H. Document the BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated phosphorus removed in mass per year by the BMP in each each annual report

Charles River Watershed Phosphorus TMDL

Begin Phase 1 Phosphorus Control Plan (PCP)

Use the box below to input additional details on any unchecked boxes above or any additional information you would like to share as part of your self assessment:

- Dover currently has an Erosion and Sedimentation Control SOP in place as part of its SWMP. Dover is evaluating required measures to make the SOP a Town ordinance in Year 2. Dover's existing Subdivision of Land - Drainage bylaw includes detailed requirements for erosion control measures.

- Dover plans to conduct annual training for employees involved in the IDDE Program beginning in the Fall of 2019.

- Dover will distribute a public education message in October 2019 encouraging the proper disposal of leaf litter.

- Potential structural BMPs - Dover does not currently have any existing structural BMPs for phosphorus removal in place for tracking. Dover plans to evaluate the potential for future addition of structural BMPs in Year 2.

- Dover plans to begin its Phase 1 Phosphorus Control Plan (PCP) in Year 2.

Have you made any changes to your lists of receiving waters, outfalls, or impairments since the NOI was submitted?

Yes 🗌 No 🖂

If yes, describe below, including any relevant impairments or TMDLs:

N/A

Part IV: Minimum Control Measures

Please fill out all of the metrics below. If applicable, include in the description who completed the task if completed by a third party.

MCM1: Public Education

Number of educational messages completed during the reporting period: 4

Below, report on the educational messages completed during the first year. For the measurable goal(s) please describe the method/measures used to assess the overall effectiveness of the educational program.

BMP: Stormwater Pollution and Lawn Maintenance

Message Description and Distribution Method: The public education flyer included tips involving lawn maintenance and use of phosphorus free slow release fertilizers to help reduce stormwater pollution. The flyer was distributed at Town offices and displayed on the

Town website stormwater link.

Targeted Audience: Residents

Responsible Department/Parties: Highway Department

Measurable Goal(s):

500 copies were initially printed for distribution. The Town is monitoring the number of copies distributed and will report this value in the Year 2 annual report.

Message Date(s): 05/30/2019

Message Completed for:	Appendix F Requirements 🗌	Appendix H Requirements 🖂	
Was this message different	t than what was proposed in your N	NOI? Yes 🗌 No 🖂	

If yes, describe why the change was made:

BMP: Proper Disposal of Pet Waste

Message Description and Distribution Method:

The public education flyer encourages pet owners to properly dispose of pet waste in order to help reduce stormwater pollution. The flyer was distributed at Town offices and displayed on the Town website stormwater link.

Targeted Audience: Residents

Responsible Department/Parties: Highway Department

Measurable Goal(s):

500 copies were initially printed for distribution. The Town is monitoring the number of copies distributed

Town of Dover	Page 7
and will report this value in the Year 2 annual report.	
Message Date(s): 05/30/2019	
Message Completed for: Appendix F Requirements 🖂 Appendix H Requirements 🖂	
Was this message different than what was proposed in your NOI? Yes \square No \boxtimes	
If yes, describe why the change was made:	

BMP: Stormwater Pollution Prevention

Message Description and Distribution Method:

The public education flyer provides tips to residents as to how they can help reduce stormwater pollution. This includes creating rain gardens, maintaining septic systems, and using rain barrels. The flyer was distributed at Town offices and displayed on the Town website stormwater link.

Targeted Audience: Residents

Responsible Department/Parties: Highway Department

Measurable Goal(s):

500 copies were initially printed for distribution. The Town is monitoring the number of copies distributed and will report this value in the Year 2 annual report.

Message Date(s): 05/30/2019

Message Completed for:	Appendix F Requirements	Appendix H Requirements 🖂	
Was this message different	than what was proposed in your N	NOI? Yes 🗌 No 🖂	
If yes, describe why the cha	ange was made:		

BMP: Caring for Your Septic System

Message Description and Distribution Method:

The public education brochure included tips involving caring for and maintaining a septic system that would help reduce stormwater pollution. The brochure was distributed at Town offices and displayed on the Town website stormwater link.

Targeted Audience: Residents

Responsible Department/Parties: Highway Department

Measurable Goal(s):

250 copies were initially printed for distribution. The Town is monitoring the number of copies distributed

Town of Dover	Page 8
and will report this value in the Year 2 annual report.	
Message Date(s): 06/24/2019	
Message Completed for: Appendix F Requirements 🖂 Appendix H Requirements 🗌	
Was this message different than what was proposed in your NOI? Yes \square No \boxtimes	
If yes, describe why the change was made:	

Add an Educational Message

MCM2: Public Participation

Describe the opportunity provided for public involvement in the development of the Stormwater Management Program (SWMP) during the reporting period:

The SWMP is posted on the Town of Dover website stormwater link for viewing by the public. In addition, a hard copy of the SWMP is located at the Highway Department Office for review by the public.

Was this opportunity different than what was proposed in your NOI? Yes \Box No \boxtimes

Describe any other public involvement or participation opportunities conducted during the reporting period:

The Town of Dover hosted a number of annual public events during Year 1 to promote public participation in Town cleanups, which help enhance stormwater best management practices. These included the following: - Dover Day's Fair in September 2018, which was hosted by the Dover Recycling Committee.

Environmentally-friendly concepts are a part of the Fair, an example being the use of rain barrels. The Annual Dover Clean Up Day is promoted at the Fair as well.

- The annual Dover Clean Up Day occurred in April 2019.

- The annual Hazardous Waste Collection event occurred in April 2019.

MCM3: Illicit Discharge Detection and Elimination (IDDE)

Sanitary Sewer Overflows (SSOs)

Below, report on the number of SSOs identified in the MS4 system and removed during this reporting period.

Number of SSOs identified: 0

Number of SSOs removed: 0

Below, report on the total number of SSOs identified in the MS4 system and removed to date. At a minimum, report SSOs identified since 2013.

Total number of SSOs identified: 0

Total number of SSOs removed:0

MS4 System Mapping

Describe the status of your MS4 map, including any progress made during the reporting period:

The Town currently has two MS4 maps. One MS4 map shows all outfalls numbered in the MS4 regulated area, as well as labeled water bodies within Town boundaries. The other map shows all catch basins, as well as wetlands and water bodies.

In addition, Dover has mapped the majority of its stormwater pipes, catch basins, and drain manholes within the MS4 regulated area using the Town's Geographic Information System (GIS) mapping system. This mapping continues to be updated.

Screening of Outfalls/Interconnections

If conducted, please submit any outfall monitoring results from this reporting period. Outfall monitoring results should include the date, outfall/interconnection identifier, location, weather conditions at time of sampling, precipitation in previous 48 hours, field screening parameter results, and results from all analyses.

 \bigcirc The outfall screening data is attached to the email submission

 \bigcirc The outfall screening data can be found at the following website:

Below, report on the number of outfalls/interconnections screened during this reporting period.

Number of outfalls screened: 0

Below, report on the percent of total outfalls/ interconnections screened to date.

Percent of total outfalls screened: 0

Catchment Investigations

If conducted, please submit all data collected during this reporting period as part of the dry and wet weather investigations. Also include the presence or absence of System Vulnerability Factors for each catchment.

 \bigcirc The catchment investigation data is attached to the email submission

 \bigcirc The catchment investigation data can be found at the following website:

Below, report on the number of catchment investigations completed during this reporting period.

Number of catchment investigations completed this reporting period: 0

Below, report on the percent of catchments investigated to date.

Optional: Provide any additional information for clarity regarding the catchment investigations below:

N/A

IDDE Progress

If illicit discharges were found, please submit a document describing work conducted over this reporting period, and cumulative to date, including location source; description of the discharge; method of discovery; date of discovery; and date of elimination, mitigation, or enforcement OR planned corrective measures and schedule of removal.

 \bigcirc The illicit discharge removal report is attached to the email submission

○ The illicit discharge removal report can be found at the following website:

Below, report on the number of illicit discharges identified and removed, along with the volume of sewage removed during this reporting period.

Number of illicit discharges identified:	0	
Number of illicit discharges removed:	0	
Estimated volume of sewage removed:	0	

Below, report on the total number of illicit discharges identified and removed to date. At a minimum, report on the number of illicit discharges identified and removed since the effective date of the permit.

Total number of illicit discharges identified: 0

Total number of illicit discharges removed: 0

Optional: Provide any additional information for clarity regarding illicit discharges identified, removed, or planned to be removed below:

N/A

Employee Training

Describe the frequency and type of employee training conducted during the reporting period:

Dover plans to conduct annual training for employees involved in the IDDE Program beginning in the Fall of 2019.

MCM4: Construction Site Stormwater Runoff Control

Below, report on the construction site plan reviews, inspections, and enforcement actions completed during this reporting period.

Number of site plan reviews completed: 20		
Number of inspections completed:	40	
Number of enforcement actions tak	ten: 0	

MCM5: Post-Construction Stormwater Management in New Development and Redevelopment

Ordinance Development

Describe the status of the post-construction ordinance required to be complete in year 2 of the permit term:

A post-construction ordinance has not been completed to date.

As-built Drawings

Describe the status of the measures the MS4 has utilized to require the submission of as-built drawings and ensure long term operation and maintenance of completed construction sites required to be complete in year 2 of the permit term:

Measures to require submission of as-built drawings have not been completed to date.

Street Design and Parking Lots Report

Describe the status of the street design and parking lots assessment due in year 4 of the permit term, including any planned or completed changes to local regulations and guidelines:

This assessment has not yet been started to date.

Green Infrastructure Report

Describe the status of the green infrastructure report due in year 4 of the permit term, including the findings and progress towards making the practice allowable:

This report has not been started to date.

Retrofit Properties Inventory

Describe the status of the inventory, due in year 4 of the permit term, of permittee-owned properties that could be modified or retrofitted with BMPs to mitigate impervious areas and report on any properties that have been modified or retrofitted:

This inventory has not been compiled to date.

MCM6: Good Housekeeping

Catch Basin Cleaning

Describe the status of the catch basin cleaning optimization plan:

A Catch Basin Inspection and Cleaning SOP has been completed and is part of the Town's SWMP.

If complete, attach the catch basin cleaning optimization plan or the schedule to gather information to develop the optimization plan:

- \bigcirc The catch basin cleaning optimization plan or schedule is attached to the email submission
- The catch basin cleaning optimization plan or schedule can be found at the following website:

https://doverftp.com/Dover%20Stormwater%20Management%20Program.pdf

Below, report on the number of catch basins inspected and cleaned, along with the total volume of material removed from the catch basins during this reporting period.

Number of catch basins inspected: 1,800

Number of catch basins cleaned: 1,800

Total volume or mass of material removed from all catch basins: 450 cubic yards

Below, report on the total number of catch basins in the MS4 system, if known.

Total number of catch basins: unknown

If applicable:

Report on the actions taken if a catch basin sump is more than 50% full during two consecutive routine inspections/cleaning events:

The Town of Dover cleans all of its catch basins frequently. At no time are there any catch basins that are more than 50% full.

Street Sweeping

Describe the status of the written procedures for sweeping streets and municipal-owned lots:

A Street Sweeping Standard Operating Procedure has been completed and is part of the Town's SWMP.

Report on street sweeping completed during the reporting period using one of the three metrics below.

Number of miles cleaned: 292 lane miles
Volume of material removed:
Weight of material removed: 3,400 Tons

If applicable:

For rural uncurbed roadways with no catch basins, describe the progress of the inspection, documentation, and targeted sweeping plan:

All Town roads are swept twice annually, once in the fall and once in the spring, using the same process.

Winter Road Maintenance

Describe the status of the written procedures for winter road maintenance including the storage of salt and sand:

A Winter Road Maintenance Standard Operating Procedure has been completed and is part of the Town's SWMP.

Inventory of Permittee-Owned Properties

Describe the status of the inventory, due in year 2 of the permit term, of permittee-owned properties, including parks and open spaces, buildings and facilities, and vehicles and equipment, and include any updates:

The inventory of permittee-owned properties has not been started to date.

O&M Procedures for Parks and Open Spaces, Buildings and Facilities, and Vehicles and Equipment

Describe the status of the operation and maintenance procedures, due in year 2 of the permit term, of permittee-owned properties (parks and open spaces, buildings and facilities, vehicles and equipment) and include maintenance activities associated with each:

Operation and maintenance procedures have not been started to date.

Stormwater Pollution Prevention Plan (SWPPP)

Describe the status of any SWPPP, due in year 2 of the permit term, for permittee-owned or operated facilities including maintenance garages, public works yards, transfer stations, and other waste handling facilities where pollutants are exposed to stormwater:

Stormwater Pollution Prevention Plans for the Dover Highway Dept. Garage and Dover Transfer Station are approximately 75% complete.

Below, report on the number of site inspections for facilities that require a SWPPP completed during this reporting period.

Number of site inspections completed: 0

Describe any corrective actions taken at a facility with a SWPPP:

No corrective actions were required during the reporting period.

O&M Procedures for Stormwater Treatment Structures

Describe the status of the written procedure for stormwater treatment structure maintenance:

A Stormwater Treatment Structures Standard Operating Procedure has been completed and is part of the Town's SWMP.

Additional Information

Monitoring or Study Results

Results from any other stormwater or receiving water quality monitoring or studies conducted during the reporting period not otherwise mentioned above, where the data is being used to inform permit compliance or permit effectiveness must be attached.

- Not applicable
- \bigcirc The results from additional reports or studies are attached to the email submission
- \bigcirc The results from additional reports or studies can be found at the following website(s):

If such monitoring or studies were conducted on your behalf or if monitoring or studies conducted by other entities were reported to you, a brief description of the type of information gathered or received shall be described below:

N/A

Additional Information

Optional: Enter any additional information relevant to your stormwater management program implementation during the reporting period. Include any BMP modifications made by the MS4 if not already discussed above:

Although no illicit discharges were detected during the current reporting period, the Town's catch basin cleaning contractor is instructed to report to the Town any illicit discharges that are observed during catch basin cleaning operations.

Activities Planned for Next Reporting Period

Please confirm that your SWMP has been, or will be, updated to comply with all applicable permit requirements including but not limited to the year 2 requirements summarized below. (Note: impaired waters and TMDL requirements are not listed below)

Yes, I agree 🖂

- Complete system mapping Phase I
- Begin investigations of catchments associated with Problem Outfalls
- Develop or modify an ordinance or other regulatory mechanism for post-construction stormwater runoff from new development and redevelopment
- Establish and implement written procedures to require the submission of as-built drawings no later than two years after the completion of construction projects
- Develop, if not already developed, written operations and maintenance procedures
- Develop an inventory of all permittee owned facilities in the categories of parks and open space, buildings and facilities, and vehicles and equipment; review annually and update as necessary
- Establish a written program detailing the activities and procedures the permittee will implement so that the MS4 infrastructure is maintained in a timely manner
- Develop and implement a written SWPPP for maintenance garages, public works yards, transfer stations, and other waste handling facilities where pollutants are exposed to stormwater
- Enclose or cover storage piles of salt or piles containing salt used for deicing or other purposes
- Develop, if not already developed, written procedures for sweeping streets and municipal-owned lots
- Develop, if not already developed, written procedures for winter road maintenance including storage of salt and sand
- Develop, if not already developed, a schedule for catch basin cleaning
- Develop, if not already developed, a written procedure for stormwater treatment structure maintenance
- Develop a written catchment investigation procedure (18 months)

Annual Requirements

Town of Dover

- Annual report submitted and available to the public
- Annual opportunity for public participation in review and implementation of SWMP
- Keep records relating to the permit available for 5 years and make available to the public
- Properly store and dispose of catch basin cleanings and street sweepings so they do not discharge to receiving waters
- Annual training to employees involved in IDDE program
- Update inventory of all known locations where SSOs have discharged to the MS4 in the last 5 years
- Continue public education and outreach program
- Update outfall and interconnection inventory and priority ranking and include data collected in connection with the dry weather screening and other relevant inspections conducted
- Implement IDDE program
- Review site plans of construction sites as part of the construction stormwater runoff control program
- Conduct site inspection of construction sites as necessary
- Inspect and maintain stormwater treatment structures
- Log catch basins cleaned or inspected
- Sweep all uncurbed streets at least annually

Provide any additional details on activities planned for permit year 2 below:

The Town of Dover plans to continue to host annual public events to raise environmental awareness, promote Town cleanup, and stormwater pollution awareness and education. This includes the Dover Day's Fair in September 2019, the Dover Clean Up Day in April 2020, and the Hazardous Waste Collection event in April 2020.

Part V: Certification of Small MS4 Annual Report 2019

40 CFR 144.32(d) 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.

Name:	Craig S. Hughes	Title: Superintendent of Streets
	[Signatory may be a duly authorized representative]	Date: 9-27-19