

**Year 4 Annual Report**  
**New Hampshire Small MS4 General Permit**  
**Reporting Period: July 1, 2021 - June 30, 2022**  
**City of Dover**

EPA NPDES Permit Number NHR041037

# Certification of Small MS4 Year 4 Annual Report

"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 gathered and evaluated 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."

Printed Name

Title

Signature  Date

**Primary MS4 Program Manager Contact Information:**

Name: Gretchen Young, PE Title/Position: Environmental Projects Manager

Department: Community Services Department

Street Address: 288 Central Avenue

City: Dover State: New Hampshire Zip Code: 03820

Email:g.young@dover.nh.gov Phone Number: (603) 516-6450

## Small MS4 Authorization

The following annual report, which serves as a self-assessment, is intended to document the activities undertaken over the **reporting period from July 1, 2021 through June 30, 2022** in accordance with the Permit.

The Notice of Intent (NOI) can be found at the following (document name or web address):

<https://www.epa.gov/npdes-permits/regulated-ms4-new-hampshire-communities>

Compliance activities have been identified and described in Dover’s Stormwater Management Plan (SWMP) and Illicit Discharge Detection and Elimination Plan (IDDE). Those documents and other pertinent Year 4 information can be found in submission or at the following websites, and will be referred to throughout this report:

SWMP: <https://www.dover.nh.gov/government/city-operations/planning/stormwater/index.html>

Date SWMP was Last Updated: June 2022

IDDE Program Plan: <https://www.dover.nh.gov/government/city->

SSO Inventory: N/A

Dry Weather Screening Data: See attached submission

Inventory and Ranking of Outfalls/Interconnections: See IDDE plan  
<https://www.dover.nh.gov/government/city-operations/planning/stormwater/index.html>

Wet Weather Screening Data: N/A not completed to date

Catchment Investigation Data: See attached submission

Illicit Discharge Removal Report: See attached submission

Salt Reduction Plan: <https://www.dover.nh.gov/government/city-operations/planning/stormwater/index.html>

Nitrogen Source Identification Report: <https://www.dover.nh.gov/government/city-operations/planning/stormwater/index.html>

# Self-Assessment

Select the impairment(s) and/or TMDL(s) that are applicable to your MS4. Make sure you are referring to the 2018 EPA approved Section 303(d) Impaired Waters List which was used for the Year 4 reporting period and can be found here:

<https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/2020-01/2018-epa-approval-20200225.pdf>.

All **Appendix F and H requirements** can be found under “Appendix F and H: Water Quality Limited Waters & TMDLs” section of this report.

|  |  |   |
|--|--|---|
| Impairment(s)  |  |   |
| <input type="checkbox"/> Bacteria/Pathogens                | <input checked="" type="checkbox"/> Chloride                                   | <input checked="" type="checkbox"/> Nitrogen      |
| <input type="checkbox"/> Phosphorus                        | <input checked="" type="checkbox"/> Solids/ Oil/ Grease (Hydrocarbons)/ Metals |   |
| TMDL(s)  |  |   |
| <input checked="" type="checkbox"/> Bacteria and Pathogens | <input type="checkbox"/> Chloride  | <input type="checkbox"/> Lake and Pond Phosphorus |

# Receiving Waters/Impaired Waters/TMDL

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

Yes

No

Dover has not made changes to the list of receiving waters, outfalls, or impairments since the NOI submission.

Describe progress made on any **incomplete requirements** listed above or optionally provide any additional relevant details, in the box below:

N/A

# Minimum Control Measures

## MCM 1: Public Education

Total number of all MS4 related educational efforts completed *during this reporting period*: 5.

### **BMP: Grass and Fertilizer**

|  |   |
|--|---|
| <b>Description:</b>                    | Host the “Community Conversations” meeting in cooperation with PREP and CLF. Discuss how Dover, and specifically individuals are connected to the waterways and estuary. Focus messaging on proper grass and fertilizer as a way individuals can make a difference. |
| <b>Targeted Audience:</b>              | Residential and/or Business   |
| <b>Responsible Department/Parties:</b> | Community Services  |
| <b>Measurable Goal(s):</b>             | Attract a minimum of 20 residents and business members to the event.<br><b>Fewer than 20 residents attended - goal was not achieved</b>   |
| <b>Message Date:</b>                   | Spring  |

### **BMP: Pet Waste Disposal**

|  |   |
|--|---|
| <b>Description:</b>                    | Distribute Every Drop pet waste card with each dog license issued. Also, create new signage to accompany dog waste bag dispensers.  |
| <b>Targeted Audience:</b>              | Pet Owners  |
| <b>Responsible Department/Parties:</b> | Community Services  |
| <b>Measurable Goal(s):</b>             | Track the number of residents who log in and take the pledge to Scoop the Poop.<br><b>2 were reported; Goal was achieved however; we are not sure that this metric is very informative.</b> |

Message Date: April

### **BMP: Disposal of Leaf and Grass Clippings**

**Description:** Pass out leaf and debris brochures and information promoting the use of curbside yard waste collection program at the Apple Harvest Day event. Raffle off a rain-barrel for residents committing to property yard maintenance.

Work with local partner to develop a City of Dover compost facility. Facility is privately owned but receives all yard waste from residents who bring to the City Recycling Center.

**Targeted Audience:** Residential and/or Business

**Responsible Department/Parties:** Community Services

**Measurable Goal(s):** 100 raffle entries  
**330 entries – goal was achieved**

**Message Date:** Fall

### **BMP: Septic System Maintenance**

**Description:** Sent the NHDES created “Get Pumped” brochure along with City of Dover cover letter to all properties with septic systems within the city.

**Targeted Audience:** Septic System Owners

**Responsible Department/Parties:** Community Services Department

**Measurable Goal(s):** Reach all septic owners.  
**Goal was achieved**

**Message Date:** Fall

### **BMP: Construction/Developers Outreach**

**Description:** Distribute and educate developers and contractors about the

new EPA Construction General Permit requirements. Specifically, include a discussion of the Erosion Control requirements at every pre-construction meeting for all planning board approved projects.

**Targeted Audience:** Developer/Construction

**Responsible Department/Parties:** Community Services.

**Measurable Goal(s):** Educate all developers and contractor who participate in preconstruction meetings.

**Goal was achieved**

**Message Date:** Ongoing.

Describe progress made on any **incomplete requirements** listed above or optionally provide any additional relevant details, in the box below:

N/A

## MCM 2: Public Participation

Provided an opportunity for public participation in review and implementation of SWMP and complied with State Public Notice requirements as described in the City of Dover SWMP.

Kept records relating to the permit available for 5 years and made available to the public

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

**Description:** The Stormwater Management Program was publicly reviewed at the June 2022 meeting of the Dover Utilities Committee. Documents and records relating to the permit review are retained and are available on the public website.

**Measurable Goal(s):**

Input was received and records are maintained. **Goal was achieved.**

Describe progress made on any **incomplete requirements** listed above or optionally provide any additional relevant details, in the box below:

N/A

# MCM 3: Illicit Discharge Detection and Elimination (IDDE)

## Sanitary Sewer Overflows (SSOs)

- This SSO section is NOT applicable because we DO NOT have sanitary sewer.
- This SSO section is NOT applicable because we DID NOT find any new SSOs.
- The SSO inventory has been updated, including the status of mitigation and corrective measures implemented or was addressed and can be found in submission **AND/OR** found at the following website ##website link.

*Below, report on the number of SSOs identified in the MS4 system and removed:*

Number of SSO's identified **during this reporting period:** 1

Number of SSO's removed **during this reporting period:** 1

Note that the SSO was not part of the infrastructure, but rather was a onetime incident associated with construction on a sewer line and a large rain event. The incident was reported to NHDES and was corrected immediately. The city continues to have now SSO interconnections in the system.

## MS4 System Mapping

- Updated system map due in Year 2 as necessary:

Provide additional status information regarding your map:

Map of storm sewer system and associated outfalls is continually updated to reflect findings and changes.

## Screening of Outfalls/Interconnections

- No outfalls were inspected for dry weather screening **during this report period.**
- Dry weather outfall screening data can be found in submission.

## Dry Weather Screening

Number of outfalls screened **during this reporting period: 0**

Percent of total known outfalls screened to date: 100%

*The inventory and ranking of outfalls/interconnections was updated and the IDDE Program Plan was revised as a result. The revised inventory and ranking of outfalls/interconnections can be found at the following website <https://www.dover.nh.gov/government/city-operations/planning/stormwater/index.html>.*

## Wet Weather Screening

No outfalls were inspected for wet weather screening **during this report period.**

Wet weather outfall screening data can be found in submission **AND/OR** found at the following website ##website link.

Number of outfalls screened **during this reporting period: 0**

Percent of total outfalls screened to date **during this reporting period: 0**

## Catchment Investigations

No catchment investigations were conducted **during this report period.**

Catchment investigation data can be found in submission **AND/OR** found at the following website ##website link.

Number of catchment investigations **during this reporting period: 0**

Percentage of total catchments investigated to date (Years 1 - Year 4): 100% of catchments with fecal bacteria hits indicating human waste have been investigated.

## IDDE Progress

No illicit discharges were found **during this reporting period.**

The illicit discharges removal report can be found in submission.

Number of illicit discharges identified **during this reporting period: 1**

Number of illicit discharges removed **during this reporting period:** 1

Estimated gallons of flow removed **during this reporting period:** 600 gallons/day

Total number of illicit discharges identified since the effective date of the permit (July 2018):2

Total number of illicit discharges removed since the effective date of the permit (July 2018): 2

## Employee Training

Provided training to employees involved in IDDE program **during the reporting period:**

Dover staff were trained by UNH Stormwater Center staff. Topics included collecting data and water samples in the field, analyzing for pertinent parameters as identified in the permit, how to identify an illicit discharge, and general IDDE sampling protocols. Training logs are included in Appendix F of the IDDE report.

In addition, as a routine, IDDE materials and training, including information on how to identify illicit discharges and SSOs are made available to applicable employees in accordance with IDDE plan.

Describe progress made on any **incomplete requirements** listed above **or** optionally provide any additional relevant details, in the box below:

N/A

## MCM 4: Construction Site Stormwater Runoff Control

The following tasks are in progress in accordance with the permit.

Number of site plan reviews completed **during this reporting period**: 38 projects came to the Technical Review Committee (17 came more than once, so 55 total TRC reviews)

Number of inspections completed **during this reporting period**: 100% of all sites under construction are inspected a minimum of one time, but typically many more times if not daily by City of Dover Engineering Technician and other City Staff.

Number of enforcement actions taken **during this reporting period**: 0; city staff works closely with contractors to address environmental concerns for the least environmental impact in a way that is proactive and avoids after-the-fact enforcement actions.

Describe progress made on any **incomplete requirements** listed above or optionally provide any additional relevant details, in the box below:

N/A

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

## Ordinance or Regulatory Mechanism

- City of Dover has regulatory mechanism consistent with permit requirements 2.3.6.a.ii.

Date regulatory mechanism was adopted: Prior to July 1<sup>st</sup> 2021

## As-built Drawings

Number of as-built drawings received *during this reporting period*: 10

## Retrofit Properties Inventory

- Identified permittee-owned properties that could potentially be modified or retrofitted with BMPs to reduce impervious cover

Dover has identified the following permittee-owned properties that could be modified or retrofitted with BMPs to mitigate impervious areas:

271 Mast Rd, 484 Middle Rd, 25 Alumni Dr, 100 Portland Av, 16 Daley Dr, East Watson St, 31 River St, Woodman Park Dr, Towne Dr, 78 Horne St, 50 Garrison Rd, 61 Locust St, 131 Central Av, 31 Union St, 6 Washington St, 11 Lowell Av, Abbey Sawyer Memorial Dr, 46 Chestnut St, 262 Sixth St, Orchard St, 32 Long Hill Rd, 279 Central Av

- Developed a report assessing current street design and parking lot guidelines and other local requirements within the municipality that affect the creation of impervious cover, made it available as part of the SWMP, and:
- No updates were recommended.
- Updates were recommended. The anticipated date or date of completion for updates is ##date outlined in the report.
- Developed a report assessing local regulations to determine the feasibility of making green infrastructure practices allowable when appropriate site conditions exist, made it available as part of the SWMP, and:

No updates were recommended.

Updates were recommended. The anticipated date or date of completion for updates is ##date outlined in the report.

Describe progress made on any **incomplete requirements** listed above or optionally provide any additional relevant details, in the box below:

N/A

# MCM 6: Good Housekeeping

## Catch Basin Cleaning

- Properly stored and disposed of catch basin cleanings so they did not discharge to receiving waters
- Report on the actions taken if a catch basin sump is more than 50% full during two consecutive routine inspections/cleaning events:

Number of catch basins inspected **during this reporting period:** 1,523

Number of catch basins cleaned **during this reporting period:** 1,523

Total volume or mass of material removed from all catch basins **during this reporting period:** Approx. 1,416 cy (based on approx. 4' sump @ 50% full and 4' diameter basin)

Total number of catch basins within the MS4 system: 3298

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

A schedule for catch basin cleaning has been established with the goal of ensuring that a catch basin should not be more than 50% full.

## Street Sweeping

- Properly stored and disposed of street sweepings so they did not discharge to receiving waters
- All curbed roadways were swept at least once within the reporting period

Number of (lane) miles swept **during this reporting period:** 271+

Volume of swept material **during this reporting period:** 1,000+ cy

Note that a new CB and street sweeping receiving facility was brought on-line this year. Dover is participating in the Clean Sweep Pilot Project along with NHDES, PREP and UNHSC. We look forward to having more measurements in the future.

## Stormwater Pollution Prevention Plan (SWPPP)

- Implemented SWPPPs for all permittee owned or operated maintenance garages, public works

yards, transfer stations, and other waste handling facilities

Number of site inspections completed **during this reporting period:** 8

Number of corrective actions taken **during this reporting period:** 0

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

No corrective actions necessary, staff regularly maintain building as part of ongoing maintenance program.

### Operations and Maintenance (O & M) Programs

- O&M programs for all permittee owned facilities have been completed and/or updated as noted below:
- Implemented all maintenance procedures for permittee owned facilities in accordance with O&M programs
- Updated inventory of all permittee owned facilities as necessary

All permittee owned facilities, including an inventory, are included in our SWMP. There were no changes to report during Year 4.

- Implemented program for MS4 infrastructure maintenance to reduce the discharge of pollutants as outlined in the SWMP
- Inspected all permittee owned treatment structures (excluding catch basins) as outlined in the SWMP
- Enclosed all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt as outlined in the SWMP

Describe progress made on any **incomplete requirements** listed above or optionally provide any additional relevant details, in the box below:

Note that a formal BMP inspection program is underway as part of creating a Stormwater Utility, however, as outlined in the SWMP, all BMP's are informally inspected routinely throughout the year and are addressed when any erosion, flooding or other damage occurs.

# Appendix F and H: Water Quality Limited Waters & TMDLs

## Bacteria/Pathogens Impairment (Appendix H) AND TMDL (Appendix F)

- Annual message was distributed encouraging the proper management of pet waste, including noting any existing ordinances where appropriate *during this reporting period*
- Permittee or its agent(s) disseminated educational material to dog owners at the time of issuance or renewal of dog license, or other appropriate time *during this reporting period*
- Provided information to owners of septic systems about proper maintenance in any catchment that discharges to a water body impaired for bacteria *during this reporting period*

Describe progress made on any **incomplete requirements** listed above or optionally provide any additional relevant details, in the box below:

N/A

## Chloride Impairment (Appendix H)

- Permittee does not have a chloride impairment
- Updated Salt Reduction Plan as necessary *during this reporting period* and can be found in at the following website <https://www.dover.nh.gov/government/city-operations/planning/stormwater/index.html>.

Describe progress made on any **incomplete requirements** listed above or optionally provide any additional relevant details, in the box below:

N/A

## Nitrogen Impairment (Appendix H)

- Permittee does not have a nitrogen impairment
- Distributed an annual message that encourages the proper use and disposal of grass clippings and encourages the proper use of slow-release fertilizers *during this reporting period*
- Distributed an annual message encouraging the proper management of pet waste, including

noting any existing ordinances where appropriate **during this reporting period**

- Distributed an annual message encouraging the proper disposal of leaf litter **during this reporting period**
- Increased street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.d.iii to a minimum of two times per year (spring and fall) **during this reporting period**

**Or**

- Increased street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.d.iii to a minimum of one time per year (spring) and implemented a fall leaf litter collection program in lieu of post-drop street sweeping **during this reporting period**

### **Nitrogen Source Identification Report**

- The Nitrogen Source Identification Report can be found at <https://www.dover.nh.gov/government/city-operations/planning/stormwater/index.html>.

### **Potential Structural BMPs**

The tracking and accounting elements associated with the NH MS4 permit are ongoing, adaptive and are consistent with Attachment 3 of Appendix F of the permit. Currently there is emergent utilization of a new database tracking system called the Pollutant Tracing and Accounting Program (PTAP) supported by NHDES and a select number of municipalities. Coalition communities understand the importance of this effort and are committed to continuing to work towards better tracking and accounting strategies for both structural and non-structural BMPs. PTAP theoretically has limitless expansion capacity in the region and is already integrated with the EPA Region 1 supported BMP Accounting and Tracking Tool (BATT). This emerging collaboration will be a large component of future implementation efforts. While BMP tracking and accounting programs are not fully functional, these integrated planning tools provide a comprehensive solution to successful tracking and accounting metrics now and moving forward in the future.

Describe progress made on any **incomplete requirements** listed above **or** optionally provide any additional relevant details, in the box below:

|     |
|-----|
| N/A |
|-----|

## Phosphorus Impairment (Appendix H)

- Permittee does not have a phosphorus impairment

### **Only complete if you have a phosphorus impairment**

- Distributed an annual message that encourages the proper use and disposal of grass clippings and encourages the proper use of slow-release fertilizers **during this reporting period**
- Distributed an annual message encouraging the proper management of pet waste, including noting any existing ordinances where appropriate **during this reporting period**
- Distributed an annual message encouraging the proper disposal of leaf litter **during this reporting period**
- Increased street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.d.iii to a minimum of two times per year (spring and fall) **during this reporting period**
- Increased street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.d.iii to a minimum of one time per year (spring) and implemented a fall leaf litter collection program in lieu of post-drop street sweeping **during this reporting period**

## Solids, Oil and Grease (Hydrocarbons), or Metals Impairment(s) (Appendix H)

- Permittee does not have a solids, oil and grease, or metals impairment(s)
- Increased street sweeping frequency of all municipal owned streets and parking lots to a schedule that targets areas with potential for high pollutant loads **during this reporting period**

Describe progress made on any **incomplete requirements** listed above **or** optionally provide any additional relevant details, in the box below:

N/A

## Chloride TMDL (Appendix F)

- Permittee does not have a chloride TMDL

### **Only complete if you have a chloride TMDL.**

- Updated Chloride Reduction Plan as necessary **during this reporting period** and can be found in

submission **AND/OR** found at the following website ##website link.

Describe progress made on any **incomplete requirements** listed above or optionally provide any additional relevant details, in the box below:

N/A

### Lake and Pond Phosphorus TMDL (Appendix F)

Permittee does not have a lake and pond phosphorus TMDL

***Only complete if you have a lake or pond phosphorus TMDL.***

Calculated baseline phosphorus, allowable phosphorus load, and phosphorus reduction requirement ***during this reporting period***

Defined the scope of the Lake Phosphorus Control Plan (LPCP).

Describe progress made on any **incomplete requirements** listed above or optionally provide any additional relevant details, in the box below:

N/A

# Additional Required Information

## Monitoring or Study Results

Results from all stormwater or receiving water quality monitoring or studies conducted **during the reporting period** and **not otherwise mentioned above**, where the data is being used to inform permit compliance or permit effectiveness is:

Not applicable

The results from additional reports or studies are in submission AND/OR can be found at the following ##website.

### ***If applicable:***

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

## Description of Any Changes in Identified BMPs or Measurable Goals

The City of Dover has implemented activities in accordance with the permit and outlined in the SWMP. All BMPs and measurable goals outlined in the most current SWMP are appropriate.

## COVID-19 Impacts

If any of the above Year 4 requirements could not be completed **during this reporting period** due to the impacts of COVID-19, please identify the requirement(s) that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

N/A

## Activities Planned for Next Reporting Period

The City of Dover will continue to implement activities in accordance with the permit and SWMP.