

New Hampshire Small MS4 General Permit

Annual Report

City of Dover

Permit Year 3

July 1, 2020 through June 30, 2021

EPA NPDES Permit Number NHR041000

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 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

J. Michael Joyal, Jr.

Signature



Date

9/22/2021

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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, 2020 through June 30, 2021** 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 the City of Dover's Stormwater Management Plan (SWMP) and Illicit Discharge Detection and Elimination Plan (IDDE). Those documents can be found 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>

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

MCM1 - Public Education and Outreach

Year 3 Activities

BMP: Grass and Fertilizer

Description:

Organic gardening program (virtual) held by the Dover Public Library

Targeted Audience:

Residential and/or Business and Institutions

Measurable Goal(s):

Reach at least 50 attendees

Goal was achieved – 248 attended

Message Date:

Spring - 2021

BMP: Pet Waste Disposal

Document Name and/or Web Address:

"Every Drop" post cards or flyer https://www4.des.state.nh.us/nh-ms4/?page_id=54

Description:

Distribution and promotion of "Every Drop" post cards with proper pet waste management, impacts of improper management, pet waste ordinance, and disposal requirements messaging in every renewal letter that was sent. Included pledge to pick up pet waste. "Every Drop" is a collaborative education effort with PREP, NHDES and other partners.

Targeted Audience:

Residents - Pet Owners

Measurable Goal(s):

Dog owners and/or dog walkers are aware of the potential water quality impacts from pet waste, local pet waste ordinances, and how to dispose of pet waste properly. If pledges are signed, there will be an increase of dog owners committed to picking up pet waste.

Following is the number of residents that pledged through the PREP "Every Drop" website:
Year 3 = 13

Goal was achieved.

Message Date: April 2021 - time of license renewal

BMP: Disposal of Leaf and Grass Clippings

Document Name and/or Web Address:

Due to COVID, we were not able to hold our regular outreach and raffle at the Dover Apple Harvest Day event. This year we provided Water Quality Friendly Lawn Care While Sheltering At Home - A series of blog entries for Spring 2021 were included in the weekly Dover-Download.

Description:

Water Quality Friendly Lawn Care While Sheltering At Home – tips on landscaping for folks who were sheltering at home during the Covid-19 pandemic and associated safer-at-home recommendations.

Targeted Audience:

Residential and/or Business and Institutions

Measurable Goal(s):

Residents are aware of the water quality impacts of yard waste dumping near or in water bodies and safe alternatives for yard waste disposal.

Message was sent to 11,700 subscribers of the Dover Download. On average the open rate is about 65%. **Goal was achieved.**

Message Date:

Fall - 2020

BMP: Septic System Maintenance

Document Name and/or Web Address:

https://www4.des.state.nh.us/nh-ms4/?page_id=54

Description:

Septic Smart Week messaging, provided by NHDES included in the City of Dover, Dover Download. Dover Download is a weekly message to residents that includes pertinent information for the week.

Targeted Audience:

Septic System Owners

Measurable Goal(s):

Residents are aware of water quality impacts from septic systems, the importance of maintaining septic systems and how to maintain them. Message was sent to 11,700 subscribers of the Dover Download. On average the open rate is about 65%. **Goal was achieved.**

Message Date:

September 2020

BMP: Industrial Outreach

Description:

Distribute outreach letter and stormwater fact sheet to industrial facilities located within municipal boundaries to explain best management practices related to maintenance of parking lots, spill prevention, storage of industrial materials, and winter maintenance. Industrial facility operators were also made aware that they fall under the EPA Multi-Sector General Permit (MSGP) and must meet those requirements as well.

Targeted Audience:

Industrial Facilities

Measurable Goal(s):

Industrial facility operators are aware of the need for proper stormwater best management practices within their facilities and requirements under the EPA Multi-Sector General Permit (MSGP).

Following is the number of letters, including fact sheets, that were distributed:

Year 3 = 9

Goal was achieved.

Message Date:

June 2021

MCM2 - Public Participation

BMP: Public Participation in Stormwater Management Program Development

Description: The Stormwater Management Program was publicly reviewed at the May 2021 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.**

MCM3 – Illicit Discharge Detection and Elimination

BMP: IDDE Legal Authority

The municipality has established legal authority as outlined in the IDDE plan.

BMP: Sanitary Sewer Overflow (SSO) Inventory

This is not applicable to the City of Dover because we do not have sanitary sewer or known sanitary sewer overflows.

BMP: Map of Storm Sewer System

Map of storm sewer system and associated outfalls was completed prior to Year 2. Map is continually updated by our City GIS technician and highway staff.

BMP: IDDE Program (Screenings of Outfalls/Interconnections, Catchment Investigations, and IDDE Progress)

All outfalls and interconnections (excluding problem and excluded outfalls) were inspected and screened. Outfall catchments and interconnections priority ranking were updated based on the information collected during the dry weather inspections. A written IDDE plan has been developed and updated, and written catchment investigation procedures are included.

Outfall identification, characterization and prioritization information has been updated and included in the IDDE plan based on dry weather sampling.

The following tasks have been completed in accordance with the permit.

Number of dry weather outfall investigations/screenings: All 454 public outfalls were visited and assessed for signs of dry weather flow.

Number of dry weather samples taken: 8 locations showed signs of dry weather flow so were sampled, two locations had bacteria hits and follow-up samples and investigation was completed.

Number of wet weather outfall inspections/sampling events: 0

Number of wet weather samples taken: 0

Number of catchment investigations: 2 (on going)

Number of illicit discharges: 1

Number of illicit discharges removed: 1

Estimated gallons of flow removed: minimal (dripping from a sewer pipe into a drain pipe)

Description of removal: there was an existing sewer pipe coming from the restaurant near the old Strand Theater on Third Street. During our SRF funded assessment of the urban drainage system we found that the sewer line intersected with the drain line, and that there was a sewer joint exposed allowing for minor dripping of sewer into the drain line. Dover Staff dug up and lined the sewer services with a ductile iron sleeve, then reinstalled the sewer line with updated water proof joints.

BMP: Employee Training

Staff watched NHDES created IDDE dry weather sampling videos as part of finalizing and implementing Dry Weather Sampling process. Trained highway/drain staff members on investigating outfalls. Also, gave full presentation to Town of Exeter Staff and Seacoast Stormwater Coalition.

MCM4 – Construction Site Stormwater Runoff Control

BMP: Sediment and Erosion Control Ordinance

Section 149-19 (d) of the City of Dover Site Review Regulations and the City of Dover, New Hampshire, Community Services - Construction Guidelines, Permits, Rules and Regulations (<https://www.dover.nh.gov/government/city-charter-code/>)

BMP: Site Plan Review Procedures

Section 149-4 of the City of Dover Site Review Regulations outlines applicability and review process.

BMP: Site Inspections and Enforcement of Sediment and Erosion Control Measures Procedures:

Section 149-19 (d) of the City of Dover Site Review Regulations and the City of Dover, New Hampshire, Community Services - Construction Guidelines, Permits, Rules and Regulations (<https://www.dover.nh.gov/government/city-operations/community-services/index.html>)

The following tasks are in progress in accordance with the accepted NOI.

Number of site plan reviews completed: **The total amount of applications submitted during this reporting period is 99, each of which were evaluated based on the limit of impact. 100% of sites requiring review under this MS4 permit, have been reviewed. 2 projects input information into the NHDES lead PTAP tracking program during this reporting period. We will continue to input city projects and require that private developments input data as part of planning board approvals.** The City of Dover requires all new development and redevelopment projects with impervious expansions over 1,000 sf or disturbance over 20,000 sf, as well as all subdivisions and lot line adjustments, at a minimum be reviewed by the Technical Review Committee. As part of the Technical Review process, projects are required to meet the stormwater erosion control and post development standards. Additionally, the Community Services Department reviews all driveway and road cutting applications, stormwater is considered as part of those reviews.

Number of inspections: **100% of sites requiring inspection under this MS4 permit, have been inspected.** The City of Dover has an Engineering Technician who is responsible for inspections of all private development that has gone through the Planning Board approval process within the City. A kick-off meeting is held at the start of every project with city staff, the developer, and the site work contractor. At this meeting, clear stormwater runoff control expectations are discussed. Throughout the construction, the sites are regularly inspected and maintenance is mandated if necessary.

Number of enforcement actions: While no formal fines have been collected, the Engineering Technician and other staff have regularly asked contractors to make improvements and modifications to the erosion control practices being implemented.

MCM5 – Post Construction Stormwater Management in New Development and

Redevelopment

BMP: Post-Construction Ordinance (due in year 3)

A Post-Construction Ordinance, consistent with the permit requirements, has been adopted.

BMP: As-built Drawings

A program to address post-construction stormwater runoff from all new development and redevelopment projects has been developed and implemented, and includes projects that disturb a minimum of one acre, or less than one acre if part of a larger common plan. Procedures for new development and re-development have been adopted. Submission requirements for stormwater management reports and plans are included in local regulations and can be found at: <https://www.dover.nh.gov/government/city-charter-code/>. The regulations require that all applications shall include a comprehensive Stormwater Management Plan. The plan shall include a narrative description and an Existing Conditions Site Plan showing all pre-development impervious surfaces, buildings and structures; surface water bodies and wetlands; drainage patterns, sub-catchment and watershed boundaries; building setbacks and buffers, locations of various hydrologic group soil types, mature vegetation, land topographic contours. Additional submissions include as-built plans and inspection and maintenance plans for all permanent stormwater control measures. As-built drawings are required to be submitted as part of the completion of the project and surety is withheld until such plans have been submitted.

BMP: Long-term Operation and Maintenance Procedures

A program to address long-term post-construction stormwater runoff from all new development and redevelopment projects has been developed and implemented, and include projects that disturb a minimum of one acre, or less than one acre if part of a larger common plan. Procedures for long-term Operation and Maintenance have been adopted. Submission requirements for stormwater management reports and plans are included in local regulations and can be found at: <https://www.dover.nh.gov/government/city-charter-code/>. In an effort to standardize the long-term O&M and inspection submission requirements across all New Hampshire MS4 communities, as well as standardize any non-compliance actions taken by the municipality, the Seacoast Stormwater Coalition is in the process of working with a selected engineering group (VHB) to develop standardized resources, guidance and an inspection template that towns and municipalities can use to better promote, track and enforce the implementation of best management practices for privately-owned parking areas and drainage infrastructure. These are anticipated to be finalized in the fall of 2021.

BMP: Street Design and Parking Lot Guidance Report (due in year 4)

Deliverables will progress in accordance with the permit and is scheduled for year 4.

BMP: Green Infrastructure Report (due in year 4)

Deliverables will progress in accordance with the permit and is scheduled for year 4.

BMP: List of Municipal Retrofit Opportunities (due in year 4)

Deliverables will progress in accordance with the permit and is scheduled for year 4.

MCM6 – Good Housekeeping and Pollution Prevention for Permittee Owned Operations

BMP: Catch Basin Cleaning Program

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. Catch basin cleanings were properly stored and disposed of so that they did not discharge to receiving waters. This is detailed in the SWMP.

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

Number of catch basins within MS4 regulated area: 3312

Number catch basins inspected in accordance with the SWMP: 1,506

Number of catch basins cleaned: 1,506

Total volume or mass of material removed: 1,355 cy (assumes 4' sump, 4' diameter, ½ full)

BMP: Street Sweeping Program

A street sweeping program has been established such that all streets with curbing and/or catch basins and permittee-owned parking lots are swept in accordance with permit conditions. Street sweepings were properly stored and disposed so that they did not discharge to receiving waters.

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

Number of (lane) miles swept: The City of Dover has approximately 154 miles of roadway. All paved roads, regardless of curbs or drainage structures are swept at least once a year. Targeted street sweeping in downtown or high-load areas is ongoing, and occurs once or twice a week. All publicly owned parking lots, including schools, are swept at a minimum once a year. Additionally, Dover has a sidewalk sweeper that sweeps in downtown areas throughout the warmer months.

Volume or mass of swept material: 1,257 cy

BMP: Winter Road Maintenance Program

The City of Dover has adopted a Salt Reduction Plan in accordance with Appendix H that has been implemented in the MS4 regulated area and/or community-wide. The City of Dover Salt Reduction Plan can be found at: <https://www.dover.nh.gov/government/city-operations/planning/stormwater/index.html>

BMP: Permittee Owned Facilities Inventory

All permittee owned facilities, including inventory, are included in our SWMP. There were no changes to report during Year 3.

BMP: O&M Programs And Procedures For Permittee-Owned Properties

O&M programs for all permittee owned facilities have been completed and are included in our SWMP. All maintenance procedures have been implemented for permittee owned facilities in accordance with O&M programs.

BMP: Permittee Owned Treatment Structures

The City of Dover continues to collect information with a goal of inventorying and formally inspecting all municipally owned BMPs. Any BMPs that are safety or flooding hazards are dealt with as needed.

BMP: SWPPP (due year 3)

SWPPPs were implemented for the following facilities: maintenance garages, public works yards, transfer stations where pollutants are exposed to stormwater.

Inspections are completed, corrective actions taken, and employees regularly trained as outlined in the SWPPP(s). The SWPPP(s) and associated documentation are located at the Community Services Department and within the VUEWorks workorder program

Number of site inspections for facilities that require a SWPPP completed: 2

Number of corrective actions identified: 1

Number of corrective actions taken: 1

BMP: Stormwater Treatment Structures Inspection and Maintenance Procedures

The City of Dover continues to collect information with a goal of inventorying and documenting inspections of all municipally owned BMPs. Maintenance is carried out in accordance with the procedures outlined in the SWMP. Any BMPs that are safety or flooding hazards are dealt with as needed.

TMDL's and Water Quality Limited Waters

Bacteria/Pathogens

Outfalls to these receiving waters have been ranked as high priority for the IDDE implementation in the initial outfall ranking and enhanced BMP's have been implemented in accordance with the SWMP.

Nitrogen

Outfalls to these receiving waters have been ranked as high priority for the IDDE implementation in the outfall ranking and enhanced BMP's have been implemented in accordance with the SWMP.

The City of Dover, through its participation in the Seacoast Stormwater Coalition(s), and continued involvement with the NHDES led Pollutant Tracking and Accounting Program (PTAP) and the Pollutant Loading Maps (aka Hot Spot Maps), will satisfy the tracking and accounting requirement of the municipally-owned structural and non-structural BMP's. Calculations are in accordance with attachments of Appendix F.

Solids, Oil and Grease (Hydrocarbons), or Metals

Outfalls to these receiving waters have been ranked as high priority for the IDDE implementation in the initial outfall ranking and enhanced BMP's have been implemented in accordance with the SWMP.

Chloride

Outfalls to these receiving waters have been ranked as high priority for the IDDE implementation in the initial outfall ranking.

Tracking of the amount of salt applied to all municipally owned and maintained surfaces, and reporting of salt use has been completed either using the [New Hampshire DES MS4 annual salt usage](#) reporting form.

City of Dover, through its participation in the Seacoast Stormwater Coalition(s), and continued involvement with the NHDES-led Green Snow Pro Program, have completed winter road maintenance procedures and continue to develop public education efforts regarding impacts of salt use, methods to reduce salt use on private property, and modifications to driving behavior in winter weather.

The Municipal Green Snow Pro Certification Program bill was delayed during the 2020 legislative session due to COVID-19. The bill was put back into legislation during the 2021 legislative session. In June of 2021, it was noted as "ought to pass" by the House of Representatives.

Additional Required Information

Monitoring or Study Results

No additional monitoring or studies were completed.

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 SWMP are appropriate.

Activities for the Next Reporting Cycle

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

