

Year 2 Annual Report
New Hampshire Small MS4 General Permit
Reporting Period: July 1, 2019-June 30, 2020

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. Please ONLY report on activities between July 1, 2019 and June 30, 2020 unless otherwise requested.

Part I: Contact Information

Name of Municipality or Organization:

EPA NPDES Permit Number:

Primary MS4 Program Manager Contact Information

Name:

Title:

Street Address Line 1:

Street Address Line 2:

City:

State:

Zip Code:

Email:

Phone Number:

Stormwater Management Program (SWMP) Information

SWMP Location (web address):

Date SWMP was Last Updated:

If the SWMP is not available on the web please provide the physical address:

Part II: Self-Assessment

First, in the box below, select the impairment(s) and/or TMDL(s) that are applicable to your MS4. Make sure you are referring to the most recent EPA approved Section 303(d) Impaired Waters List which can be found here: <https://www.epa.gov/tmdl/region-1-impaired-waters-and-303d-lists-state>

Impairment(s)			
<input checked="" type="checkbox"/> Bacteria/Pathogens	<input checked="" type="checkbox"/> Chloride	<input type="checkbox"/> Nitrogen	<input checked="" type="checkbox"/> Phosphorus
<input checked="" type="checkbox"/> Solids/ Oil/ Grease (Hydrocarbons)/ Metals			
TMDL(s)			
<input checked="" type="checkbox"/> Bacteria and Pathogen	<input type="checkbox"/> Chloride	<input checked="" type="checkbox"/> Lake and Pond Phosphorus	
			<input type="button" value="Clear 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 2 Requirements

- Completed Phase I of system mapping
- Developed a written catchment investigation procedure and added the procedure to the SWMP
- Developed written procedures to require the submission of as-built drawings and ensure the long term operation and maintenance of completed construction sites and added these procedures to the SWMP
- Enclosed or covered storage piles of salt or piles containing salt used for deicing or other purposes
- Developed written operations and maintenance procedures for parks and open space, buildings and facilities, and vehicles and equipment and added these procedures to the SWMP
- Developed an inventory of all permittee owned facilities in the categories of parks and open space, buildings and facilities, and vehicles and equipment and added this inventory to the SWMP
- Completed a written program for MS4 infrastructure maintenance to reduce the discharge of pollutants
 - Developed written SWPPPs, included in the SWMP, for all of the following permittee owned or operated facilities: maintenance garages, public works yards, transfer stations, and other waste handling facilities where pollutants are exposed to stormwater

Optional: If you would like to describe progress made on any incomplete requirements listed above, provide any additional information, and/or if any of the above year 2 requirements could not be completed due to the impacts of COVID-19, please identify the requirement that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

- The written catchment investigation procedures are located in the separate Illicit Discharge Detection and Elimination Plan. This plan is referenced in the SWMP.
- The written operations and maintenance procedures for parks and open space, buildings and facilities, and vehicles and equipment are located in the separate Operations and Maintenance Plan. This plan is referenced in the SWMP.
- SWPPPs - One SWPPP was not prepared during the permit year. It was believed a SWPPP was not required based on a preliminary evaluation of the facility and the minor maintenance activities known to be performed

indoors. A visit to the facility was planned from Spring of 2020, but was delayed and the visit was performed by the Consultant in September after COVID-19 restrictions were lessened to confirm that a SWPPP was not needed. During the inspection it was determined that a SWPPP was needed and is currently in progress, to be completed in October 2020. Other facilities requiring SWPPPs already had them under the MSGP Program. A summary of SWPPP compliance is included in Appendix H of the SWMP. SWPPPs are kept at the facilities they were developed for.

Annual Requirements

- Provided an opportunity for public participation in review and implementation of SWMP and complied with State Public Notice requirements
- Kept records relating to the permit available for 5 years and made available to the public
- The SSO inventory has been updated, including the status of mitigation and corrective measures implemented
 - This is not applicable because we do not have sanitary sewer
 - This is not applicable because we did not find any new SSOs
 - The updated SSO inventory is attached to the email submission
 - The updated SSO inventory can be found at the following website:
- Properly stored and disposed of catch basin cleanings and street sweepings so they did not discharge to receiving waters
- Provided training to employees involved in IDDE program within the reporting period
- All curbed roadways were swept at least once within the reporting period
- Updated outfall and interconnection inventory and priority ranking as needed

Optional: If you would like to describe progress made on any incomplete requirements listed above, provide any additional information, and/or if any of the above annual requirements could not be completed due to the impacts of COVID-19, please identify the requirement that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

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

Annual Requirements

*Public Education and Outreach**

- Annual message was distributed encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- Permittee or its agents disseminated educational material to dog owners at the time of issuance or renewal of dog license, or other appropriate time
- Provided 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)*

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

Educational materials were not disseminated to dog owners at the time of renewal of dog licenses in April 2020 due to COVID-19, which resulted in City office closures and limited staff resources. An educational fact sheet was added to the dog license registration form on June 12, 2020 and will be available to dog owners during licensing moving forward.

Chloride Impairment

Annual Requirements

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

Phosphorus Impairment

Annual Requirements

*Public Education and Outreach**

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

- Increased 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 already existing or installed in the regulated area by the permittee or its agents was tracked and the phosphorus removal by the BMP was estimated consistent with Attachment 3 to Appendix F. 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 were documented.

- The BMP information is attached to the email submission
- The BMP information can be found at the following website:

No attachment. This isn't applicable to Manchester; see Optional notes below.

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

Increased Street Sweeping - The City performs street sweeping on municipal roads at least once a year and

implements a City-wide leaf collection program in lieu of a fall sweeping. The combined sweeping and leaf collection program satisfies the requirements of the permit for phosphorus impaired watersheds.

Structural Stormwater BMPs - Namaske Lake is the only phosphorus impaired (non-TMDL) water listed in the MS4 Permit for the City. The City does not have any structural BMPs in the Namaske Lake watershed for which the phosphorus removal tracking requirements apply.

City-owned BMPs within the regulated MS4 were inspected during Permit Year 2. The BMP inspection logs are included in Appendix G of the SWMP.

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

Annual Requirements

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

- Increased street sweeping frequency of all municipal owned streets and parking lots to a schedule that targets areas with potential for high pollutant loads

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

Increased Street Sweeping - Increased sweeping was determined not to be necessary for metals impaired watersheds as these areas are not observed to accumulate more sediment and debris than other areas within the City.

Lake and Pond Phosphorus TMDL

- Completed Legal Analysis

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

Optional: Use the box below to provide any additional information you would like to share as part of your self-assessment:

The MS4 Permit requires the City to achieve a significant reduction in phosphorus loads to waters with phosphorus TMDLs, a significant portion of which comes from existing privately developed properties and Interstate 93 that discharge to the City's MS4 or directly to surface waters. These existing private properties are currently not subject to stormwater permits and are not regulated to reduce their share of phosphorus contributions to TMDL waters. Instead, the City is responsible for achieving phosphorus reductions from these private developments because these developments are located within Manchester's MS4. The City recommends a state or federal level stormwater permit for existing large commercial, industrial and institutional properties located within TMDL watersheds, similar to that in Vermont or that proposed for the Charles River Watershed in Massachusetts, with the same phosphorus or more stringent reduction requirements that the MS4 permitted communities are required to achieve to help mitigate impacts from future development.

Part III: 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

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

Updated list of impaired waters based on the 2018 303(d) list included in Appendix C of the updated SWMP.

Additional impairments include:

-Phosphorus impairment - Merrimack River

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 this reporting period:**

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

BMP: Septic System Outreach

Message Description and Distribution Method:

EPD leaves "Get Pumped" magnets and brochures at the WWTF front desk for septic haulers to take and distribute to their customers. A post was also made to the Urban Ponds Facebook page on 4/30/2020.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

Number of materials distributed. To date, 34 of 50 magnets/brochures have been picked up. Number of people reached, engagements, and likes to Facebook post (92 people reached, 3 engagements, 1 like).

Message Date(s):

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

Education to septic owners was not specifically called out in the NOI, but does apply to a small percentage of City residents.

BMP: Stormwater School Presentation

Message Description and Distribution Method:

EPD conducted a joint presentation with a representative from Manchester Water Works for fourth grade students at Northwest Elementary School. The presentation was focused on water and stormwater with a focus on what residents can do to reduce contaminants (i.e., managing pet waste, using slow release fertilizers, proper disposal of wastes, and managing erosion).

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

Attendance by 20 school students.

Message Date(s): 11/14/2019

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

If yes, describe why the change was made:

Manchester EPD participates in various school education programs to distribute information on stormwater with a goal of targeting future generations. They were not included in the NOI.

BMP: Scoop the Poop Pet Waste Management Summer Message

Message Description and Distribution Method:

A pet waste management brochure was added to the renewal/registration form for dog licenses in Manchester on 6/12/2020. The form can be accessed online: http://www.manchesternh.gov/Portals/2/Departments/city_clerk/forms/Dog%20Registration%20Application.pdf?ver=2 and is available at the City Clerk's office. The information has a link to take the Scoop the Poop pledge.

Targeted Audience: Residents

Responsible Department/Parties: DPW-EPD

Measurable Goal(s):

Number of online pet pledges (2 pledges made in Year 2).

Message Date(s): Ongoing; posted to the website on 6/12/2020.

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

If yes, describe why the change was made:

BMP: Rake it or Leave it Leaf Litter Fall Message

Message Description and Distribution Method:

An article outlining proper disposal of leaf litter was published in the Sunday edition of the Union Leader on 11/3/2019. Brochures with the same message were left at the Drop-off Facility for residents from 10/1/2019-6/30/2020.

Targeted Audience: Residents, Businesses, Institutions and Commercial Facilities

Responsible Department/Parties: DPW-EPD

Measurable Goal(s):

Number of materials distributed (150); newspaper distribution (166,000)

Message Date(s): 11/3/2019 (article) and ongoing (brochures)

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

BMP: Green Grass Clippings/Fertilizer Spring Message

Message Description and Distribution Method:

An article outlining proper disposal of grass clippings and proper application of fertilizer was published in the Sunday edition of the Union Leader on 4/12/2020. A post to the Urban Pond Facebook feed with the same message was posted on 6/14/2020.

Targeted Audience: Residents, Businesses, Institutions and Commercial Facilities

Responsible Department/Parties: DPW-EPD, NHDES

Measurable Goal(s):

Newspaper distribution (166,000); number of Facebook likes (2 likes)

Message Date(s): 4/12/2020 newspaper article; 6/14/2020 Facebook post

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

BMP: Union Leader Article Share - Ending Sewer Discharges

Message Description and Distribution Method:

An article entitled "Ending Sewer Discharges" was shared to the Urban Pond Facebook Feed. The article discusses the City's efforts to remove combined sewer overflows and associated pollutants from discharging into the Merrimack River.

Targeted Audience: Residents

Responsible Department/Parties: DPW-EPD, NHDES

Measurable Goal(s):

Number of people reached/engagements, likes to Facebook post (149 people reached, 20 engagements, 3 likes)

Message Date(s): 8/22/2019

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

CSO topics were not included in the NOI, however, was added to the education outreach to show the important work the City is doing to reduce pollutants to its waters.

BMP: Hazardous Waste and Yard Waste Message

Message Description and Distribution Method:

A post about Manchester's Hazardous Waste and yard waste drop off locations and hours was made to the Urban Ponds Facebook page.

Targeted Audience: Residents

Responsible Department/Parties: DPW-EPD, NHDES

Measurable Goal(s):

Number of people reached/engagements/likes to Facebook post (362 people reached, 15 engagements, 16 likes)

Message Date(s): 10/8/2019, 10/25/2019, 4/29/2020, 6/26/2020

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

BMP: "Poop Fairy" Pet Waste Post

Message Description and Distribution Method:

A video developed by a Regional Stormwater Coalition entitled "There is No Poop Fairy" was posted to the Urban Ponds Facebook page.

Targeted Audience: Residents

Responsible Department/Parties: DPW-EPD, NHDES

Measurable Goal(s):

Number of people reached/engagements/likes to Facebook post (153 people reached, 27 engagements, 9 likes)

Message Date(s): 2/12/2020

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

BMP: Salt Reduction News Broadcast

Message Description and Distribution Method:

A news story on WMUR about salt reduction and its impacts on the environment was shared to the Urban Ponds Facebook page.

Targeted Audience: Residents, Businesses, Institutions and Commercial Facilities

Responsible Department/Parties: DPW-EPD

Measurable Goal(s):

Number of people reached/engagements/likes to Facebook post (91 people reached, 16 engagements, 6 likes)

Message Date(s): 2/21/2020

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

BMP: Solid Waste Guide

Message Description and Distribution Method:

The 2020 City of Manchester Solid Waste Guide provides information to residents and businesses regarding disposal of their solid waste including a calendar for pick up of yard waste, hazardous waste disposal days, and other pick ups. The guide also includes educational messages on the proper disposal of household hazardous waste to prevent contamination of ground and surface waters, and on keeping leaves and brush out of the street and drainage system. This guide was posted to the Urban Pond Facebook page and hard copies were left at the Drop-off Facility.

Targeted Audience: Residents, Businesses, Institutions and Commercial Facilities

Responsible Department/Parties: DPW-EPD, NHDES

Measurable Goal(s):

Number of people reached/engagements/likes to Facebook post (84 people reached, 8 engagements, 1 like); number of hard copies left at the Drop-off Facility.

Message Date(s): 3/31/2020

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

BMP: Earth Day Clean up Stormwater Message

Message Description and Distribution Method:

Messages regarding Earth Day Clean up and other information were shared to the Urban Ponds Facebook page.

Targeted Audience: Residents

Responsible Department/Parties: DPW-EPD, NHDES

Measurable Goal(s):

Number of people reached/engagements/likes to Facebook post (1290 people reached, 264 engagements, 46 likes)

Message Date(s): 4/9/2020, 4/22/2020,4/24/2020

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

Clean ups were not included as a message in the NOI, however, have been added to increase awareness and promote participation in environmental clean up programs.

BMP: LID Rain Garden Webinar

Message Description and Distribution Method:

A link to an LID Rain Garden Webinar was posted to the Urban Ponds Facebook page.

Targeted Audience: Residents

Responsible Department/Parties: DPW-EPD, NHDES

Measurable Goal(s):

Number of people reached/engagements/likes to Facebook post (172 people reached, 18 engagements, 6 likes)

Message Date(s): 5/6/2020, 5/25/2020

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

BMP: Recycling Information

Message Description and Distribution Method:

A link to information about the correct way to recycle and recycling locations in Manchester was posted to the Urban Ponds Facebook page.

Targeted Audience: Residents, Businesses, Institutions and Commercial Facilities

Responsible Department/Parties: DPW-EPD, NHDES

Measurable Goal(s):

Number of people reached/engagements/likes to Facebook post (1203 people reached, 102 engagements, 15 likes)

Message Date(s): 7/23/2019, 12/28/2019

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

Recycling was not included as a message in the NOI, however, has been added to increase awareness and promote participation in proper recycling and keep waste out of the environment.

BMP: Landscaping Workshop

Message Description and Distribution Method:

A link to a Two-day Landscaping Workshop for Water Quality was posted to the Urban Ponds Facebook page.

Targeted Audience: Residents, Businesses, Institutions and Commercial Facilities

Responsible Department/Parties: DPW-EPD, NHDES

Measurable Goal(s):

Number of people reached/engagements/likes to Facebook post (114 people reached, 8 engagements, 3 likes)

Message Date(s): 3/4/2020

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

BMP: Flushable Wipes Message

Message Description and Distribution Method:

A link to a NHDES informational web page regarding the use of flushable wipes was posted to the Urban Ponds Facebook page. The page discourages flushing wipes and explains how flushing wipes can clog sewer lines and lead to sewer system overflows into stormwater drains.

Targeted Audience: Residents, Businesses, Institutions and Commercial Facilities

Responsible Department/Parties: DPW-EPD, NHDES

Measurable Goal(s):

Number of people reached/engagements/likes to Facebook post (119 people reached, 29 engagements, 5 likes)

Message Date(s): 3/24/2020

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

Sewer system overflows (SSOs) were not specifically identified as a message in the NOI. The City added messages to help prevent causes of SSOs into the storm drain network.

BMP: Rain Garden Videos

Message Description and Distribution Method:

Links to videos about using rain gardens to treat stormwater runoff were posted to the Urban Ponds Facebook page.

Targeted Audience: Residents

Responsible Department/Parties: DPW-EPD, NHDES

Measurable Goal(s):
Number of people reached/engagements/likes to Facebook post (186 people reached, 10 engagements, 5 likes)

Message Date(s): 5/6/2020, 5/25/2020

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

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 this reporting period:**

The SWMP is published on Manchester's website (<https://www.manchesternh.gov/Departments/Environmental-Protection/Stormwater/Stormwater-Management-Program>) and available for public review. A hard copy of the SWMP is also available at the EPD office at 300 Winston Street, Manchester, NH

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

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

MCM3: Illicit Discharge Detection and Elimination (IDDE)

Sanitary Sewer Overflows (SSOs)

Check off the box below if the statement is true.

- This SSO section is NOT applicable because we DO NOT have sanitary sewer

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

Number of SSOs identified:

Number of SSOs removed:

MS4 System Mapping

Below, check all that apply.

The following elements of the Phase I map have been completed:

- Outfalls and receiving waters
- Open channel conveyances
- Interconnections
- Municipally-owned stormwater treatment structures
- Waterbodies identified by name and indication of all use impairments
- Initial catchment delineations

Describe any additional progress you made on your map during this reporting period or provide additional status information regarding your map:

The City is using a real-time GIS platform during dry weather outfall inspections that allows changes identified in the field to be recorded directly into GIS, including more accurate outfall locations, identification of new outfalls, and relabeling of structures misidentified as outfalls. Culverts throughout the City have also been mapped during Year 2.

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.

- The outfall screening data is attached to the email submission
- 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:

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

Percent of total outfalls screened:

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.

- The catchment investigation data is attached to the email submission

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

Not conducted this reporting period.

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

Number of catchment investigations completed this reporting period:

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

Percent of total catchments investigated:

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.

- 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:

Number of illicit discharges removed:

Estimated volume of sewage removed: gallons/day

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 (July 1, 2018)**.

Total number of illicit discharges identified:

Total number of illicit discharges removed:

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

Employee Training

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

Employee training was conducted on February 5, 2020 at the Manchester Highway Department offices at 475 Valley Street. Training focused on Water Pollution, MS4 Permit Requirements, IDDE Program Requirements, Illicit Discharge Investigations, Sanitary Sewer Overflows, and Good Housekeeping. Approximately ten City of Manchester employees from DPW-EPD, Highway Department, and the Sewer Department attended the training. A training log is included in Appendix J of the Illicit Discharge Detection Plan.

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:

Number of inspections completed:

Number of enforcement actions taken:

Optional: Enter any additional information relevant to construction site plan reviews, inspections, and enforcement actions:

64 site inspections were performed by DPW-EPD on a monthly basis, and 206 were performed at a greater frequency by independent parties and sent to/reviewed by EPD for a total of 270 inspections.

When performing construction site inspections, the City discusses any observed issues with the Contractor at the time of the inspection. These are resolved through the inspection process, limiting the need for formal enforcement actions.

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

Ordinance or Regulatory Mechanism

Below, select the option that describes your ordinance or regulatory mechanism progress.

- Bylaw, ordinance, or regulations are updated and adopted consistent with permit requirements
- Bylaw, ordinance, or regulations are updated consistent with permit requirements but are not yet adopted
- Bylaw, ordinance, or regulations have not been updated or adopted

As-built Drawings

Describe 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:

The City of Manchester has a Stormwater Ordinance and Regulations that were reviewed in Year 1 to determine required updates to comply with the MS4 Permit. These regulations already require the submission

of as-builts as part of their existing regulations. However, these regulations do not currently have a requirement to ensure long-term operation and maintenance of completed construction sites. This requirement is included in the drafted updated regulations that have yet to be adopted. It is anticipated they will be adopted in the next permit year.

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:

A preliminary review of the City of Manchester's existing bylaws and applicable regulations to assess current street design and parking lots was conducted in Year 2. To be completed in future years.

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:

A preliminary review of the City of Manchester's existing bylaws and applicable regulations to assess allowing for green infrastructure was conducted in Year 2. To be completed in future years.

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:

The inventory of City-owned properties was completed in Year 2. The Retrofit Properties Inventory will be completed in future years now that the Year 2 inventory is complete.

MCM6: Good Housekeeping

Catch Basin Cleaning

*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:

Number of catch basins cleaned:

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

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

Total number of catch basins:

If applicable:

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

Two consecutive routine inspections have not occurred to date.

Street Sweeping

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

Number of miles cleaned:

Volume of material removed: [Select Units]

Weight of material removed: [Select Units]

O&M Procedures and Inventory of Permittee-Owned Properties

Below, check all that apply.

The following permittee-owned properties have been inventoried:

- Parks and open spaces
- Buildings and facilities
- Vehicles and equipment

The following O&M procedures for permittee-owned properties have been completed:

- Parks and open spaces
- Buildings and facilities
- Vehicles and equipment

Stormwater Pollution Prevention Plan (SWPPP)

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

Number of site inspections completed:

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

Not applicable, no corrective actions have been taken to date. Quarterly site inspections will begin during Year 3.

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
- The results from additional reports or studies are attached to the email submission
- The results from additional reports or studies can be found at the following website(s):

<https://www.manchesternh.gov/Departments/Environmental-Protection/Pond-Restoration/Water-Quality-Data>

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:

Water quality testing of five Manchester ponds is performed under the State's Volunteer Lake Assessment Program (VLAP). VLAP establishes a volunteer-driven lake sampling program to assist NHDES in evaluating lake water quality, and provides volunteer monitors and lake residents with reports on lake health. Ponds tested under the program include Crystal Lake, Dorrs Pond, Nutts Pond, Pine Island Pond and Stevens Pond, which are monitored for alkalinity, Chlorophyll-a, Chloride, Color, Conductivity, Total Phosphorus, Transparency, Turbidity and pH. Annual reports of the monitoring results are posted on the City's and NHDES's websites.

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:

MCM3: SSOs - Six of the SSOs reported are associated with the CSO system and will be addressed with the City's CSO program.

MCM3: Screening of Outfalls - 286 outfall locations were visited this period. Of these, 71 could not be located/accessed; 33 were found not to be outfalls (e.g., inlet structures, culvert); 182 were inspected as outfalls.

MCM6: CB Cleaning - The reported number of catch basins inspected and cleaned under MCM1 includes catch basins within and outside of the City's MS4. The City has over 12,000 catch basins that it cleans on a rotating cycle. About 6,900 of these are part of the MS4.

MCM6: Street Sweeping - The reported miles of streets swept represent lane miles as tracked through GPS and include streets within and outside of the City's MS4 and also accounts for multiple sweepings of the same road. The Year 1 Annual Report reported road miles based on all City roads being swept once (rather than actual GPS data).

Other Stormwater Programs - The City is in the process of inventorying and assessing the condition and maintenance needs of stormwater conveyance channels and culverts (48" and larger) to ensure existing conditions provide safe and reliable passage to both the public and flood waters. A report with recommendations for infrastructure improvements and ongoing maintenance needs will be developed. Proper maintenance of these structures can help prevent erosion, flooding and road damage that can impact water quality and cost more to address once they become a problem.

COVID-19 Impacts

Optional: If any of the above year 2 requirements could not be completed due to the impacts of COVID-19, please identify the requirement that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

SWPPPs - One SWPPP was not prepared during the permit year. It was believed a SWPPP was not required based on a preliminary evaluation of the facility and the minor maintenance activities known to be performed indoors. A visit to the facility was planned from Spring of 2020, but was delayed and the visit was performed by the Consultant in September after COVID-19 restrictions were lessened to confirm that a SWPPP was not needed. During the inspection it was determined that a SWPPP was needed and is currently in progress, to be completed in October 2020.

Posting of SWMP on Website - EPD recently hired a new Environmental Permits Coordinator that is responsible for updating EPD's website with stormwater related information, including posting of the SWMP and IDDE Plan. Reduced office hours during COVID-19 have delayed the development and activation of the new website materials. The Environmental Permits Coordinator is working with IT to activate the website and anticipates it to be active by the end of the year. Hard copies of all plans remain available at the EPD office at 300 Winston Street.

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 3 requirements summarized below. (Note: impaired waters and TMDL requirements are not listed below)

Yes, I agree

- Inspect all outfalls/ interconnections (excluding Problem and Excluded outfalls) for the presence of dry weather flow
- Complete follow-up ranking as dry weather screening becomes available

Annual Requirements

- 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
- Continue investigations of catchments associated with Problem Outfalls
- Review inventory of all permittee owned facilities in the categories of parks and open space, buildings and facilities, and vehicles and equipment; update if necessary

Provide any additional details on activities planned for permit year 3 below:

Part V: Certification of Small MS4 Annual Report 2020

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.

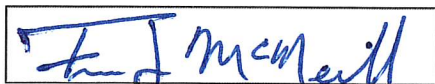
Name:

Frederick J. McNeill

Title:

Chief Engineer - EPD

Signature:



Date:

9/25/20

[Signatory must be a duly authorized representative]