

**Year 3 Annual Report**  
**Massachusetts Small MS4 General Permit**  
**New Permittees**  
**Reporting Period: July 1, 2020-June 30, 2021**

*\*\*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, 2020 and June 30, 2021 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.

<b>Impairment(s)</b>			
<input type="checkbox"/> Bacteria/Pathogens	<input type="checkbox"/> Chloride	<input type="checkbox"/> Nitrogen	<input checked="" type="checkbox"/> Phosphorus
<input type="checkbox"/> Solids/ Oil/ Grease (Hydrocarbons)/ Metals			
<b>TMDL(s)</b>			
<i>In State:</i>	<input type="checkbox"/> Assabet River Phosphorus	<input type="checkbox"/> Bacteria and Pathogen	<input type="checkbox"/> Cape Cod Nitrogen
	<input type="checkbox"/> Charles River Watershed Phosphorus	<input type="checkbox"/> Lake and Pond Phosphorus	
<i>Out of State:</i>	<input type="checkbox"/> Bacteria/Pathogens	<input type="checkbox"/> Metals	<input type="checkbox"/> Nitrogen
			<input type="checkbox"/> 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 3 Requirements

- IDDE ordinance or other regulatory mechanism complete and adopted
- Construction/ Erosion and Sediment Control (ESC) ordinance or other regulatory mechanism complete and adopted
- Post-construction bylaw, ordinance, or other regulatory mechanism complete and adopted
- Developed written procedures for site inspections and enforcement of sediment and erosion control measures
- Developed written procedures for site plan review
- Kept a log of catch basins cleaned and inspected

*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 3 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 Town adopted a new General Bylaw, Chapter 178: Stormwater Management, at the June 12, 2021 Annual Town Meeting. The Bylaw contains IDDE, construction/ESC, and post-construction provisions and is currently under review at the Attorney General's office. Associated Stormwater Management Regulations, which include written procedures for site inspections, enforcement of sediment and erosion control measures, and site plan review, were developed in Permit Year 3 and will be adopted in Permit Year 4. Properties within wetlands jurisdiction are currently regulated under the procedures in Pepperell's Wetlands Protection Bylaw.

In Permit Year 3, the Pepperell DPW and GIS Analyst have set up ArcGIS Online mapping of the stormwater system for internal Town use, which includes a new application for tracking catch basin cleaning and inspection efforts. The DPW is in the process of preparing a catch basin cleaning contract and anticipates beginning to contract this work out in Permit Year 4.

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

*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:

The Town has stockpiled materials located at the Town's Highway Department Facility at 45 Lowell Road, including one pile that contains comingled street sweepings and catch basin cleanings generated over several years. The stockpile is located on a gravel-packed surface away from receiving waters. In 2020, the Town worked with a consultant to complete representative sampling and laboratory analyses of the stockpiles on site, and submitted a pre-Beneficial Use Determination (BUD) permit application to MassDEP. Pepperell intends to submit a BUD permit application to MassDEP in Permit Year 4 for consideration of the reuse of the cleanings and sweepings. Since beginning the BUD application process, the Town has not comingled street sweepings and catch basin cleanings. In Permit Year 4, the Town will also be contracting out catch basin cleaning, ensuring proper disposal of cleanings moving forward.

**Phosphorus** (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)Annual Requirements*Public Education and Outreach\**

- Distributed 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
- 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:

N/A

*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: The 2016 303(d) List includes a phosphorus impairment for a segment of the Nashua River (MA81-07) in Pepperell based on data collected in 1998 by MassDEP. However, MassDEP water quality monitoring has since found a downward trend in phosphorus in the river and stated that the impairment was issued in error. This impairment is removed in the draft 2018/2020 Integrated List of Waters; therefore, the associated Appendix H requirements are anticipated to no longer be applicable for Pepperell upon finalization of the 2018/2020 303(d) List. At that time, the Town will update the SWMP.

Sweeping: Approximately half of all town-owned streets, including all curbed roadways within the MS4, were swept in Permit Year 3. Note that the Town is not responsible for sweeping at the Nissitissit Middle School and Varnum Brook Elementary School as operation and maintenance of these facilities is the responsibility of the North Middlesex Regional School District. Due to the significant investment needed to sweep all streets in the urbanized area twice per year and in anticipation of the Nashua River (MA81-07) phosphorus impairment being removed in the final 2018/2020 303(d) List, the Town does not plan to increase sweeping to twice per year at this time as the removal of this impairment would render this requirement not applicable.

Potential Structural BMPs: No known municipal BMPs were installed in Pepperell's urbanized area/Nashua River watershed after the General Permit issuance; therefore, this requirement is not applicable.

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

### 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? 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>

- Yes  
 No

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

The Town's current GIS mapping includes 58 possible outfalls located within the urbanized area. Receiving waters and an initial priority ranking were assigned for each possible outfall as part of development of the IDDE Plan, which was drafted in Permit Year 3 and will be finalized in Permit Year 4. The following is the initial list of receiving waters and number of outfalls discharging into each receiving water based on the draft outfall/interconnection inventory:

Nashua River (MA81-07): 3 outfalls  
Reedy Meadow Brook: 4 outfalls  
Varnum Brook: 1 outfall  
Tributary/Wetland to Nashua River (MA81-07): 6 outfalls  
Tributary/Wetland to Nissitissit River (MA81-21): 1 outfall  
Tributary/Wetland to Squannacook River (MA81-18): 3 outfalls  
Unnamed Isolated Wetland off Independence Road: 2 outfalls  
Unnamed Isolated Wetland off Village Road: 1 outfall  
Outside Receiving Water Area: 37 outfalls

Outfall mapping, receiving waters, initial priority ranking, impairments, and TMDLs will be refined as the IDDE Program is implemented in future permit years, including Phase I mapping improvements and outfall investigations. Further refinements will be made based on the final 2018/2020 303(d) List as the Nashua River (MA81-07) phosphorus impairment is proposed to be removed in the draft 2018/2020 303(d) List.

## Part IV: Minimum Control Measures

Part IV includes some of the metrics that will be required in upcoming annual reports. For this annual report, please report on MCM1 and MCM2 and any other metrics below that have an asterisk (\*), along with any other metrics that you have started within this reporting period. Other than the metrics with an asterisk, the rest of the metrics are optional for new permittees. Then, proceed to Part V.

### \*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: Brochures - Pet Waste**

Message Description and Distribution Method:

The Town's Stormwater webpage includes an informational brochure entitled "Do Your Doody" and a link to a webpage entitled "Hazards of Dog Waste" which has additional brochures. The brochures provide information on the importance of picking up dog waste and disposing of it properly in the trash to prevent stormwater contamination. The Town also provides pet waste disposal bags at the library and some conservation lands throughout town.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

The Hazards of Dog Waste educational materials are available online for all visitors of the website.

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:

#### **BMP: Brochures - Fertilizer & Septic Systems**

Message Description and Distribution Method:

The Town's Stormwater webpage includes a link to a webpage entitled "Hazards of Residential Runoff" which includes a brochure entitled "Stormwater Pollution Education: Fertilizing the Lawn" which discusses the impacts of improperly applying fertilizer and its effect on stormwater runoff to lakes and streams. The webpage also includes a brochure entitled "Do Your Part. Be Septic Smart!" which provides information on how septic systems work and proper septic system maintenance.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

The Hazards of Residential Runoff webpage is available online for all residents.

Message Date(s): Ongoing

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: Webpages - Think Blue Massachusetts, Why Stormwater Matters and EPA & MassDEP Requirem**

Message Description and Distribution Method:

Pepperell is part of the Northern Middlesex Stormwater Collaborative (NMSC) which participated in the Think Blue Massachusetts Fiscal Year 2021 educational advertising campaign. The campaign included distributing the "Fowl Water" video on Facebook, Instagram, and Youtube which educates viewers on stormwater pollution from motor oil, pet waste, and trash.

A web page entitled "Why Stormwater Matters" is linked on Pepperell's Stormwater webpage. This webpage lists common sources of stormwater pollution including car grease, pet waste, fertilizer, and litter and explains the impacts of this pollution. The webpage also includes a link to the "Fowl Water" video from Think Blue Massachusetts.

A webpage entitled "EPA & MassDEP Requirements" is also linked on the Town's Stormwater webpage and provides information on permit requirements and a link to the Northern Middlesex Stormwater Collaborative (NMSC) page.

Targeted Audience: All Audiences

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

The FY2021 Think Blue Massachusetts campaign ran from May 17, 2021 to July 4, 2021 and resulted in a total of 19,376 impressions from Pepperell residents (4,867 from Facebook/Instagram, 12,389 from YouTube, and 2,120 Spanish language impressions).

The Why Stormwater Matters and EPA & MassDEP Requirements webpages are available online for all audiences.

Message Date(s): Ongoing

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:Pamphlet - Stormwater Management Bylaw and Stormwater Pollution Prevention Brochure**

Message Description and Distribution Method:

An informational pamphlet entitled "Stormwater Management in Pepperell" was distributed at the Annual Town Meeting on June 12, 2021 and provides an overview and FAQs for the new Stormwater Management Bylaw adopted at the meeting. The document also discusses measures residents can take to help prevent stormwater pollution including proper pet waste, leaf litter, grass clipping, and yard waste management and fertilizer use. The brochure includes a link to Pepperell's Stormwater webpage and contact information for the DPW in case residents have questions on the SWMP.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

The Stormwater Management in Pepperell pamphlets were available to the approximately 200 attendees who were present at the Annual Town Meeting on on June 12, 2021.

Message Date(s): June 12, 2021

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 Stormwater Management Plan (SWMP) was made publicly available on the Town's website.

As part of development and adoption of the new Stormwater Management Bylaw, a Planning Board public meeting was held on February 1, 2021 where the SWMP was reviewed and public input was solicited. The meeting was held via GoToMeeting due to COVID-19 gathering restrictions. A recording of this meeting can be viewed on Pepperell Public Access TV or on the Town's website. The Bylaw was also presented at the



Annual Town Meeting on June 12, 2021 and approved.

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:**

A Town-wide volunteer clean up called "Pepperell Green-Up" was conducted from April 12, 2021 to May 2, 2021. Trash bags were provided by the Town. The Highway Department collected the bags of trash and disposed of them.

Residents can dispose of household hazardous waste and waste oil at the Pepperell Transfer Station throughout the year. The Town distributes an informational flyer annually inviting residents to participate in this recycling program.

The Town's Conservation Commission has established a Trail Monitoring and Maintenance Program for which residents volunteer to assist in monitoring trail status and maintaining trail conditions. The Town provides pet waste disposal bags at several trailheads and disposes of collected used bags left on the trails as well as debris from trail clearing and maintenance.

Pepperell had volunteers help remove debris and water chestnuts in the Nashua River during spring and summer 2021. The Town partners with the Department of Conservation and Recreation on efforts to reduce water chestnuts in the river.

### **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:

Below, report on the total number of SSOs identified in the MS4 system and removed to date. At a minimum, report SSOs identified **since the effective date of the permit (July 1, 2018).**

Total number of SSOs identified:

Total 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:

Pepperell has begun to satisfy Phase I and some Phase II mapping components of the MS4 permit including locating possible outfalls, catch basins, drain manholes, and drainage pipes. The Town has developed an ArcGIS Online map of the drainage system for internal Town use and will make improvements as the IDDE Program is implemented in future permit years. The Town has also obtained an Asset Management Grant, which will be completed in FY2022/FY2023 and partially focus on improving the system mapping.

### **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. Please also include the updated inventory and ranking of outfalls/interconnections based on monitoring results.*

- No outfalls were inspected
- 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 outfalls/interconnections screened **to date**.*

Percent of outfalls screened:

*Optional:* Provide additional information regarding your outfall/interconnection screening:

No outfalls were inspected in Permit Year 3 as outfall screening is not required for new permittees until Permit Year 6. The selection for attaching data to the email submission is N/A.

### **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.*

- No catchment investigations were conducted
- The catchment investigation data is attached to the email submission
- 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:

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

Percent of total catchments investigated: 0

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

[Empty text box for optional catchment investigation information]

**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.

- No illicit discharges were found
- The illicit discharge removal report is attached to the email submission
- The illicit discharge removal report can be found at the following website:

[Empty text box for website information]

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 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: 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:

[Empty text box for optional illicit discharge information]

**Employee Training**

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

[Empty text box for employee training information]

### **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:

The new Stormwater Management Bylaw adopted on June 12, 2021 and the new Stormwater Management Regulations to be adopted in Permit Year 4 include procedures for site plan reviews, inspections, and enforcement. Pepperell has a new Town Planner starting in Permit Year 4 to aid in implementing and tracking these items.

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

#### **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:

The new Stormwater Management Bylaw adopted on June 12, 2021 requires the submission of as-built drawings in Section 178-19 as part of the Final Reports. Any Land Disturbance Permit obtained under the Bylaw must include measures to ensure adequate long-term operation and maintenance of stormwater management design features and BMPs and the Stormwater Authority may choose to impose requirements to ensure compliance.

#### **Street Design and Parking Lots Report**

Describe the status of the street design and parking lots assessment including any planned or completed changes to local regulations and guidelines:

Preparation for the Street Design and Parking Lots Report has not yet begun as this requirement is due in Permit Year 6.

#### **Green Infrastructure Report**

Describe the status of the green infrastructure report including the findings and progress towards making the practice allowable:

Preparation for the Green Infrastructure Report has not yet begun as this requirement is due in Permit Year 6. Pepperell's Master Plan, adopted in October 2020, makes a number of recommendations for local code improvements related to green infrastructure, LID, and resiliency. The plan is currently in the implementation phase and is available on the Town's website at the following link: <https://www.town.pepperell.ma.us/553/Master-Plan>

**Retrofit Properties Inventory**

Describe the status of the inventory 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:

Preparation for the Retrofit Properties Inventory has not yet begun as this requirement is due in Permit Year 6.

**MCM6: Good Housekeeping**

**\*Catch Basin Cleaning**

Describe the status of the catch basin cleaning optimization plan:

The Catch Basin Cleaning Optimization Plan is included in the Catch Basin Cleaning and Inspection SOP.

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

- 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:

*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, if known.*

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:

There are approximately 1,100 catch basins in Town, with 702 catch basins located within the urbanized area. The Town uses mostly salt for deicing operations instead of sand which reduces sediment loading in catch basins. Pepperell DPW and GIS Analyst have set up ArcGIS Online mapping of the stormwater system for internal Town use, which includes a new application for tracking catch basin cleaning and inspection efforts. The DPW is in the process of preparing a catch basin cleaning contract and anticipates beginning to contract this work out in Permit Year 4. Catch basin inspections and cleaning in Permit Year 3 were completed as needed during roadway projects and routine catch basin maintenance.

**\*Street Sweeping**

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

Written procedures for street sweeping were drafted during Permit Year 3 during development of the written operation and maintenance program and will be finalized in Permit Year 4 in accordance with the General Permit schedule.

As the operation and maintenance program is implemented, the Town will continue to sweep all curbed municipal streets and parking lots within the MS4 once annually. If the Nashua River (MA81-07) phosphorus impairment is removed in the final 2018/2020 303(d) List as anticipated, the requirement to sweep twice per year will not be applicable.

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

- Number of miles cleaned:
- Volume of material removed:
- Weight of material removed:

*If applicable:*

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

There is no separate program for rural uncurbed roadways with no catch basins at this time.

**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

### **Winter Road Maintenance**

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

Written procedures for winter road maintenance were drafted during Permit Year 3 during development of the written operation and maintenance program and will be finalized in Permit Year 4 in accordance with the General Permit schedule.

Pepperell stores deicing materials at 45 Lowell Road (Highway Facility) in covered sand and salt storage sheds. Liquid deicer is also covered. The Town has significantly reduced sand use in recent years.

### **Stormwater Pollution Prevention Plan (SWPPP)**

Describe the status of any SWPPP 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:

The Town determined the Highway Facility requires a site-specific SWPPP, which will be prepared in accordance with the General Permit requirements by the end of Permit Year 4. An initial inspection of the facility was completed on August 31, 2021.

*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:

### **O&M Procedures for Stormwater Treatment Structures**

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

Written procedures for operation and maintenance of stormwater treatment structures were drafted during Permit Year 3 during development of the written operation and maintenance program and will be finalized in Permit Year 4 in accordance with the General Permit schedule.



## Part V: 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.nashuariverwatershed.org/what-we-do/protect-water-and-land/river-water-quality-overview/wqm-data-historic.html>

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:

The Nashua River Watershed Association (NRWA) is an important partner in Pepperell's stormwater program and NRWA has been monitoring water quality in Pepperell's receiving waters for many years. Analysis includes dissolved oxygen, E.coli, conductivity, pH, and temperature. Historic water quality data and "Report Cards" from these efforts will help the Town prioritize MS4 program activities, particularly public education and IDDE Plan implementation.

### **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:

Phosphorus Impairment: The 2016 303(d) List includes a phosphorus impairment for a segment of the Nashua River (MA81-07) in Pepperell based on data collected in 1998 by MassDEP. However, MassDEP water quality monitoring has since found a downward trend in phosphorus in the river and stated that the impairment was issued in error. This impairment is removed in the draft 2018/2020 Integrated List of Waters; therefore, the associated Appendix H requirements are anticipated to no longer be applicable for Pepperell upon finalization of the 2018/2020 303(d) List.

Draft O&M Procedures and an Inventory of Permitted-Owned Properties have been developed and will be finalized in Permit Year 4.

### **COVID-19 Impacts**

*Optional:* If any of the above year 3 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:

**\*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 4 requirements summarized below. (Note: impaired waters and TMDL requirements are not listed below)

Yes, I agree

- Identify and develop inventory of all known locations where SSOs have discharged to the MS4 in the last 5 years
- Identify each outfall and interconnection discharging from MS4, classify into the relevant category, and priority rank each catchment for investigation
- Develop written IDDE plan including a procedure for screening and sampling outfalls
- Develop written procedures to require the submission of as-built drawings and ensure the long term operation and maintenance of completed construction sites and add these procedures to the SWMP
- Develop written operations and maintenance procedures for parks and open space, buildings and facilities, and vehicles and equipment and added these procedures to the SWMP
- Develop 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
- Complete a written program for MS4 infrastructure maintenance to reduce the discharge of pollutants
- Develop 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
- Enclose or cover storage piles of salt or piles containing salt used for deicing or other purposes

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
- Continue public education and outreach program
- Sweep all curbed roadways at least once within the reporting period
- Provide training within the reporting period to employees involved in IDDE program
- Clean catch basins in accordance with catch basin cleaning procedures to ensure that no catch basin is greater than 50% full

Provide any additional details on activities planned for permit year 4 below:

The Town acknowledges the General Permit Year 4 requirements and will complete as many activities as possible based on funding and staff availability.

## \*Part VI: Certification of Small MS4 Annual Report 2021

### 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:  Title:

Signature:  Digitally signed by Kenneth Kalinowski, PE  
Date: 2021.09.28 12:50:53 -04'00' Date:

*[Signatory may be a duly authorized representative]*