

**United States Environmental Protection Agency (EPA)
National Pollutant Discharge Elimination System (NPDES)**

**GENERAL PERMITS FOR STORMWATER DISCHARGES FROM
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS
IN MASSACHUSETTS**

**AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

In compliance with the provisions of the Federal Clean Water Act (CWA), as amended (33 U.S.C. §1251 *et seq.*) any operator of a small municipal separate storm sewer system whose system:

- Is located in the areas described in Part 1.1;
- Is eligible for coverage under Part 1.2 and part 1.9; and
- Submits a complete and accurate Notice of Intent in accordance with Part 1.7 of this permit and EPA issues a written authorization.

is authorized to discharge in accordance with the conditions and requirements set forth herein.

The following appendices are also included as part of these permits:

- Appendix A – Definitions, Abbreviations, and Acronyms
- Appendix B – Standard permit conditions applicable to all authorized discharges
- Appendix C – Endangered Species Act Eligibility Guidance
- Appendix D – National Historic Preservation Act Eligibility Guidance
- Appendix E – Information required for the Notice of Intent (NOI)
- Appendix F – Requirements for MA Small MS4s Subject to Approved TMDLs
- Appendix G – Permit Monitoring Requirements for Discharges into Impaired Waters
- Appendix H – Requirements related to discharges to certain water quality limited waterbodies
- Appendix I – Required Illicit Discharge Detection and Elimination (IDDE) Program Components
- Appendix J – New Permittee Requirements to Reduce Pollutants to the Maximum Extent Practicable

These permits shall become effective on the first day of the calendar month immediately following 60 days after signature.

These permits and the authorization to discharge expire at midnight, five years from the last day of the month preceding the effective date.

These permits supersede the permits issued on April 4, 2016 and modified on December 7, 2020.

Signed this day of

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1. INTRODUCTION

This document consists of three (3) general permits listed in Part 1.1. Each general permit is applicable to a particular type of municipal system within Massachusetts. The permit terms and conditions in Parts 1-2, Part 4, and Appendices A through E are applicable across all regulated entities. Certain permit terms and conditions, presented in Part 3 and Appendices F through H, are applicable to a particular set of authorized entities. Throughout the permit, the terms “this permit” or “the permit” will refer to the three general permits.

1.1. Areas of Coverage

This permit covers small municipal separate storm sewer systems (MS4s) located in the Commonwealth of Massachusetts:

- Traditional Cities and Towns (NPDES Permit No. MAR041000)
- State, federal, county and other publicly owned properties (Non-traditional) (MAR042000)
- State transportation agencies (except for MassDOT-Highway Division) (MAR043000)

1.2. Eligibility

The MS4 shall meet the eligibility provisions described in Part 1.2.1 and Part 1.9 to be eligible for authorization under this permit.

1.2.1. Small MS4s Covered

This permit authorizes the discharge of stormwater from small MS4s as defined at 40 CFR § 122.26(b)(16). This includes MS4s described in 40 CFR §122.32(a)(1) and (a)(2). An MS4 is eligible for coverage under this permit if it is:

- A small MS4 within the Commonwealth of Massachusetts;
- Not a large or medium MS4 as defined in 40 CFR §§122.26(b)(4) or (7);
- Located either fully or partially within an urbanized area as determined by the latest Decennial Census by the Bureau of Census as of the effective date of this permit (the 2020 Census); or
- Located in a geographic area designated by EPA as requiring a permit.

If the small MS4 is not located entirely within an urbanized area, only the portion of the MS4 that is located within the urbanized area is regulated under 40 CFR §122.32(a)(1), unless designated by EPA as requiring a permit.

A small municipal separate storm sewer system means all separate storm sewers that are:

- a. Owned or operated by the United States, a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States.
- b. Not defined as large or medium municipal separate storm sewer systems pursuant to 40 CFR § 122.26(b)(4) and (b)(7) or designated under 40 CFR § 122.26(a)(1)(v).
- c. This term includes systems similar to separate storm sewer systems in municipalities such as systems at military bases, large hospitals or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

1.3. Limitations on Coverage

This permit does not authorize the following:

- a. Stormwater discharges mixed with sources of non-stormwater unless such non-stormwater discharges are:
 - i. Authorized under a separate NPDES permit; or
 - ii. An allowable non-stormwater discharge as listed in Part 1.4.
- b. Stormwater discharges associated with industrial activity as defined in 40 CFR §122.26(b)(14)(i)-(ix) and (xi).
- c. Stormwater discharges associated with construction activity as defined in 40 CFR §122.26(b)(14)(x) or (b)(15).
- d. Stormwater discharges currently authorized under another NPDES permit, including discharges covered under other regionally issued general permits.
- e. Stormwater discharges or discharge related activities that are likely to adversely affect any species that are listed as endangered or threatened under the Endangered Species Act (ESA) or result in the adverse modification or destruction of habitat that is designated as critical under the ESA.
- f. Stormwater discharges whose direct or indirect impacts do not prevent or minimize adverse effects on any Essential Fish Habitat.
- g. Stormwater discharges, or implementation of a stormwater management program, which adversely affects properties listed or eligible to be listed on the National Register of Historic Places.
- h. Stormwater discharges prohibited under 40 CFR § 122.4.
- i. Under the Safe Drinking Water Act certain subsurface stormwater controls are subject to the State's Underground Injection Control (UIC) regulations. Authorization

for such discharges shall be obtained from Massachusetts Department of Environmental Protection, Bureau of Resource Protection, Drinking Water Program, Underground Injection Control, 100 Cambridge Street, Suite 900, Boston, MA 02114. All stormwater discharge structures meeting the definition of a "well " in MassDEP's UIC regulations, 310 CMR 27.00, require the submittal of a UIC registration applications. Therefore, the following actions require UIC registration:

- i. Infiltration trenches or seepage pits (if stormwater is directed to any trench or pit that has been backfilled with greater than 18 inches of permeable fill material or that is deeper than its widest surface dimension); and
 - ii. Any subsurface infiltration structure receiving stormwater, regardless of depth versus horizontal dimensions (e.g., drywell, leaching chambers, perforated pipe drainfield, etc.)
- j. Any non-traditional MS4 facility that is a "new discharger" as defined in 40 CFR § 122.2 and Part 5.1.4 of this Permit and discharges to a waterbody listed in category 5 or 4b on the Massachusetts Integrated Report of waters listed pursuant to Clean Water Act section 303(d) and 305(b) due to nutrients (Total Nitrogen or (Total Phosphorus), metals (Cadmium, Copper, Iron, Lead or Zinc), solids (TSS or Turbidity), bacteria/pathogens (E. Coli, Enterococcus or Fecal Coliform), chloride (Chloride) or oil and grease (Petroleum Hydrocarbons or Oil and Grease), or discharges to a waterbody with an approved TMDL for any of those pollutants.

1.4. Non-Stormwater Discharges

The following categories of non-stormwater discharges are allowed under this permit unless, during the course of implementing the Illicit Discharge Detection and Elimination (IDDE) program, the permittee, EPA, or the MassDEP finds that any category or individual discharge of non-stormwater discharge in Part 1.4.a-s as a significant contributor of pollutants to the MS4, then that category or individual discharge is not allowed under Part 1.4, shall be deemed an "illicit discharge" under Part 2.3.4.1, and the permittee shall address that category or individual discharge as part of the IDDE Program described in Part 2.3.4 of this permit.

- a. Water line flushing
- b. Landscape irrigation
- c. Diverted stream flows
- d. Rising ground water
- e. Uncontaminated ground water infiltration (as defined at 40 CFR § 35.2005(20))
- f. Uncontaminated pumped ground water
- g. Discharge from potable water sources
- h. Foundation drains

- i. Air conditioning condensation
- j. Irrigation water, springs
- k. Water from crawl space pumps
- l. Footing drains
- m. Lawn watering
- n. Individual resident car washing
- o. Flows from riparian habitats and wetlands
- p. De-chlorinated swimming pool discharges
- q. Street wash waters
- r. Residential building wash waters without detergents
- s. Discharges or flows from firefighting activities except where they are identified as significant sources of pollutants to waters of the United States.

1.5. Permit Compliance

Non-compliance with any of the requirements of this permit constitutes a violation of the permit and the CWA and may be grounds for an enforcement action and may result in the imposition of injunctive relief and/or penalties.

1.6. Continuation of this Permit

If this permit is not reissued prior to the expiration date, it will be administratively continued in accordance with the Administrative Procedure Act and remain in force and effect for discharges that were authorized prior to expiration. If a small MS4 was granted permit authorization prior to the expiration date of this permit, it will automatically remain authorized by this permit until the earliest of:

- a. Authorization under a reissued general permit following timely and appropriate submittal of a complete and accurate NOI requesting authorization to discharge under the reissued permit; or
- b. Issuance or denial of an individual permit for the MS4's discharges; or
- c. Authorization or denial under an alternative general permit.

If the MS4 operator does not submit a timely, appropriate, complete, and accurate NOI requesting authorization to discharge under the reissued permit or a timely request for authorization under an individual or alternative general permit, authorization under this permit will terminate on the due date for the NOI under the reissued permit unless otherwise specified in the reissued permit.

1.7. Obtaining Authorization to Discharge

1.7.1. How to Obtain Authorization to Discharge

To obtain authorization under this permit, a small MS4 shall:

- a. Be located in the areas listed in Part 1.1 of this permit;
- b. Meet the eligibility requirements in Part 1.2 and Part 1.9;
- c. Submit a complete and accurate Notice of Intent (NOI) in accordance with the requirements of Part 1.7.2; and
- d. Receive a written authorization from EPA.

1.7.2. Notice of Intent

- a. Operators of small MS4s seeking authorization to discharge under the terms and conditions of this permit shall prepare and submit a complete, accurate, and signed Notice of Intent (NOI) that contains the information identified in Appendix E using EPA's NPDES eReporting Tool (NeT). This includes operators of small MS4s that were previously authorized under the 2016 Massachusetts Small MS4 General Permit (MS4-2016 Permit). To access NeT, go to: <https://cdx.epa.gov/cdx>
- b. Waivers from electronic reporting may be granted based on one of the following conditions:
 - i. If the MS4 is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband internet access in the most recent report from the Federal Communications Commission;
 - ii. If you have limitations regarding available computer access or computer capability. If EPA Region 1 grants approval to use a paper NOI, and you elect to use it, you must provide all of the information required in Appendix E; or
 - iii. If instructed by EPA.
- c. The NOI shall be signed by an appropriate official in accordance with the signatory requirements in 40 CFR § 122.22 (see Appendix B, Subparagraph B.11, Standard Conditions).
- d. The NOI shall be submitted within 90 days of the effective date of the permit. If EPA notifies an MS4 that it is designated under 40 CFR § 122.32(a)(2) or (b), the NOI shall be submitted within 180 days of receipt of notice unless granted a longer period of time by EPA.
- e. Late notification: A small MS4 is not prohibited from submitting a NOI after the dates provided in Part 1.7.2.d. However, if a late NOI is submitted, authorization is only for discharges that occur after permit authorization is granted. EPA reserves the right to take enforcement actions for any unpermitted discharges.

- f. State Application: Permittees must submit a copy of the NOI to the Massachusetts Department of Environmental Protection (MassDEP) along with payment of applicable fees (unless exempt) via the ePlace portal. Instructions for submittal to MassDEP are available at <https://www.mass.gov/how-to/wm-15-npdes-general-permit-notice-of-intent>.

1.7.3. Public Notice of NOI and Effective Date of Coverage

- a. EPA will provide a minimum of 30 calendar days for public notice and opportunity for comment on the contents of the submitted NOIs. NOIs can be viewed at <https://permitsearch.epa.gov/epermit-search/ui/search>.
- b. Based on a review of a small MS4's NOI or other information, EPA may grant authorization, extend the public comment period, or deny authorization under this permit and require submission of an application for an individual or alternative NPDES permit. See Part 1.8. A small MS4 will be authorized to discharge under the terms and conditions of this permit upon receipt of notice of authorization from EPA.
- c. Permittees whose authorization to discharge under the MS4-2016 permit, which expired on June 30, 2022, has been administratively continued in accordance with the Administrative Procedure Act 5 U.S.C. § 558(c) and 40 CFR § 122.6, who wish to obtain coverage under this permit, must submit a new NOI requesting permit coverage in accordance with the requirements of Part 1.7 of this permit to EPA within 90 days after the effective date of this permit. Permittees whose authorization to discharge under the expired MS4-2016 permit was administratively continued, who fail to submit a timely, complete and accurate NOI or an application for an individual NPDES permit within 90 days after the effective date of this permit will be considered to be discharging without a permit. See 40 CFR § 122.28(b)(3)(iii).

1.8. Individual Permits and Alternative General Permits

- a. EPA may require a small MS4 to apply for and obtain authorization under either an individual NPDES permit or an alternative NPDES general permit. Any interested person may petition EPA in accordance with the provisions of 40 CFR § 122.26(f) to require a small MS4 to apply for and/or obtain authorization under either an individual NPDES permit or an alternative NPDES general permit. If EPA requires a small MS4 to apply for an individual or alternative NPDES permit, EPA will notify the small MS4 in writing that a permit application is required. This notification will include a brief statement of the reasons for this decision and will provide application information and an application deadline. If a small MS4 is authorized under the MS4-2016 permit or this permit and fails to submit an individual NPDES or an alternative general permit NPDES permit application as required by EPA, then the authorization under the MS4-2016 permit or this permit to the small MS4 is automatically

terminated at the end of the date specified by EPA as the deadline for application submittal. EPA reserves the right to take enforcement action for any unpermitted discharge.

- b. A small MS4 may request to be excluded from this general permit by applying for an individual permit or authorization under an alternative general permit. In such a case, a small MS4 shall submit an individual permit application in accordance with the requirements of 40 CFR § 122.33(b)(2)(i) or § 122.33(b)(2)(ii), with reasons supporting the request, to EPA at R1NPDESReporting@epa.gov. The request may be granted by issuance of an individual permit or authorization under an alternative general permit if EPA determines that the reasons stated by the small MS4 are adequate to support the request. See 40 CFR § 122.28(b)(3).
- c. When an individual NPDES permit is issued, or a small MS4 is authorized to discharge under an alternative NPDES general permit, authorization under this permit automatically terminates on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit.

1.9. Special Eligibility Determinations

1.9.1. Documentation Regarding Endangered Species

The small MS4 shall certify eligibility regarding endangered species in the NOI required by Part 1.7.2 and Appendix C. The Stormwater Management Program (SWMP) shall include documentation supporting the permittee's eligibility determination with regard to federal Endangered and Threatened Species and Critical Habitat Protection, including:

- a. Results of the Certification that the permittee meets one of the eligibility criteria in Appendix C; and
- b. If applicable, a description of the measures the small MS4 shall implement to protect federally listed endangered or threatened species, or critical habitat, including any conditions imposed by the U.S. Fish and Wildlife Service. If a permittee fails to document and implement such measures, the permittee's discharges are ineligible for coverage under this permit.

1.9.2. Documentation Regarding Historic Properties

The small MS4 shall certify eligibility regarding historic properties on the NOI required by Part 1.7.2 and Appendix D. The NOI and SWMP shall include documentation supporting the small MS4's eligibility determination with regard to Historic Properties Preservation, including:

- a. Information on whether the permittee's subsurface earth disturbance activities would have an adverse effect on a property that is listed or eligible for listing on the National Register of Historic Properties (NRHP);

- b. Where such effects may occur, any documents received by the permittee or any written agreements the permittee has made with the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (THPO), or other Tribal representative to mitigate those effects;
- c. Results of the Appendix D screening investigations; and
- d. If applicable, a description of the measures the permittee shall implement to avoid or minimize adverse impacts on places listed, or eligible for listing, on the NRHP, including any conditions imposed by the SHPO or THPO. If the permittee fails to document and implement such measures, those discharges are ineligible for coverage under this permit.

1.10. Stormwater Management Program (SWMP)

- a. The permittee shall develop and implement a written, electronic SWMP. The SWMP shall be signed in accordance with Part 11 of Appendix B, including the date of signature. A signature and date is required for initial program preparation and for any significant revision to the program, which shall be documented in writing.
- b. The SWMP shall describe and detail the activities and measures that are implemented to meet the terms and conditions of the permit. The SWMP shall accurately describe the permittees plans and activities. The document shall be updated and/or modified during the permit term as the permittee's activities are modified, changed, or updated to meet permit conditions during the permit term. The permittee shall include in the SWMP all required information as described in Parts 2.1, 2.2, 2.3, and 3.0 (if applicable) of this permit once each of the requirements have been completed.
- c. Permittees authorized by the MS4-2016 permit shall modify or update their existing Best Management Practices (BMPs) to meet the terms and conditions of Parts 2.1, 2.2, and 2.3 of this permit within one (1) year of the effective date of the permit. These modifications and updates shall be reflected in the written SWMP. Permittees authorized by the MS4-2016 permit shall continue to implement their existing SWMP until the program has been updated.
 - i. For each permit condition, identify the person(s) or department responsible for the measure and; the BMPs for the control measure or permit requirement. Each control measure shall include milestones and timeframes for its implementation and have a quantity or quality associated with its endpoint. Each control measure shall have a metric associated with it.
 - ii. Permittees shall also update the SWMP within one (1) year to include:
 - 1. Identification of names and titles of people responsible for program implementation. If a position is currently unfilled, list the title of the position and modify the SWMP with the name once the position is filled
 - 2. Documentation of compliance with Part 1.9.1 (if applicable);

3. Documentation of compliance with Part 1.9.2;
 4. Documentation of authorization of all new or increased discharges granted by MassDEP in compliance with Part 2.1.2;
 5. Listing of all discharges identified pursuant to Part 2.1.1 and description of response;
- d. New permittees shall complete a written SWMP within one (1) year of the effective date of the permit. Permit requirements under Part 2.3 for new permittees seeking authorization to discharge under this general permit for the first time are explained in Appendix J. New permittees shall follow the deadlines for permit requirements under Part 2.2 and in Appendix J and, if applicable, Appendix H.

1.10.1. Stormwater Management Program Availability

- a. Permittees that maintain a public website shall post a copy of the current SWMP required by this permit online.
- b. Permittees shall retain a copy of the current SWMP at the office or facility of the person listed as the program contact on the submitted NOI. The SWMP shall be immediately available to representatives from EPA, MassDEP, U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) at the time of an onsite inspection or upon request. The permittee shall make the SWMP available to the public during normal business hours.

2. PERMIT CONDITIONS AND EFFLUENT LIMITATIONS

This section includes terms and conditions necessary to reduce the discharge of pollutants from the MS4 to the maximum extent practicable; to protect water quality and to satisfy the appropriate water quality requirements of the Clean Water Act and the Massachusetts Water Quality Standards.

2.1. Water Quality Based Effluent Limitations

Pursuant to Clean Water Act 402(p)(3)(B)(iii), this permit includes provisions to ensure that discharges from the permittee's small MS4 meet applicable water quality standards as set forth in Part 2.1.1. below.

2.1.1. Requirement to Meet Water Quality Standards

- a. The permittee's discharges shall meet applicable water quality standards by complying with Parts 2.1.1.b and/or 2.1.1.c in accordance with the schedules set forth therein. Any other discharge of a pollutant that: (i) is not addressed by Part 2.1.1.b, Part 2.1.1.c, Part 2.2.1, and/or Part 2.2.2, (ii) is not the result of an illicit discharge subject to Part 2.3.4, and (iii) does not meet applicable water quality

standards, either independently or in conjunction with other discharges, shall comply with Part 2.1.1.d.

- b. If there is a discharge from the MS4 to a waterbody (or its tributaries in some cases) that is subject to an EPA approved or established TMDL identified in Part 2.2.1, the permittee is subject to the requirements of Part 2.2.1 and Appendix F of this permit and the permittee shall comply with all applicable schedules, alternative schedules and requirements in Appendix F. A permittee's compliance with all applicable requirements and BMP implementation schedules in Appendix F or any alternative schedules applicable to it will constitute compliance with Part 2.1.1.a. of the Permit for discharges of pollutants addressed in Appendix F.
- c. If (i) there is a discharge from the MS4 to a waterbody (or its tributaries in some cases) that is water quality limited (as defined in Appendix A) due to nutrients (Total Nitrogen or Total Phosphorus), metals (Cadmium, Copper, Iron, Lead or Zinc), solids (TSS or Turbidity), bacteria/pathogens (E. Coli, Enterococcus or Fecal Coliform), chloride (Chloride) or oil and grease (Petroleum Hydrocarbons or Oil and Grease) and is not subject to an approved TMDL, or (ii) the MS4 is located within a municipality listed in Part 2.2.2., then the permittee is subject to the requirements of Part 2.2.2 and Appendix H of this permit and the permittee shall comply with all applicable schedules and requirements in Appendix H. A permittee's compliance with all applicable requirements and implementation schedules in Appendix H will constitute compliance with Part 2.1.1.a. of the Permit for discharges of pollutants addressed in Appendix H.
- d. Pursuant to Part 2.1.1.a, upon notice from EPA or MassDEP to the permittee that a discharge of nutrients (Total Nitrogen or Total Phosphorus), metals (Cadmium, Copper, Iron, Lead or Zinc), solids (TSS or Turbidity), bacteria/pathogens (E. Coli, Enterococcus or Fecal Coliform), chloride (Chloride) or oil and grease (Petroleum Hydrocarbons or Oil and Grease) or other pollutant from the MS4 is exceeding applicable water quality standards, the permittee must, within 60 days, remedy the exceedance by complying with the applicable requirements for the pollutant of concern in Appendix H or eliminate the discharge. However, where such remedy or elimination within 60 days is infeasible, the permittee shall submit to EPA, by the same deadline, a schedule of actions to achieve a remedy or elimination in the shortest time not infeasible. The permittee shall implement such actions on the schedule submitted to EPA and report on progress in its annual reports unless or until EPA takes any other action that effectively replaces the schedule.

2.1.2. Increased Discharges

- a. Any increased discharge, including increased pollutant loading(s) through the MS4 to waters of the United States is subject to Massachusetts antidegradation regulations at 314 CMR 4.04. The permittee shall comply with the provisions of 314 CMR 4.04 including information submittal requirements and obtaining authorization for

- increased discharges where appropriate. Any authorization of an increased discharge by MassDEP shall be incorporated into the permittee's SWMP. If an applicable MassDEP approval specifies conditions or requirements related to the increased discharge, such requirements may be independently enforceable under State law and may be adopted into a future permit.
- b. There shall be no increased discharges, including increased pollutant loading(s) from the MS4 to impaired waters listed in categories 5 or 4b on the most recent Massachusetts Integrated Report of waters listed pursuant to Clean Water Act section 303(d) and 305(b) unless the permittee demonstrates that there is no net increase in loading from the MS4 to the impaired water of the pollutant(s) for which the waterbody is impaired. The permittee may demonstrate compliance with this provision by either:
 - i. Documenting that the pollutant(s) for which the waterbody is impaired is not present in the MS4's discharge and retaining documentation of this finding with the SWMP; or
 - ii. Documenting that the total load of the pollutant(s) of concern from the MS4 to any impaired portion of the receiving water will not increase as a result of the activity and retaining documentation of this finding in the SWMP. Compliance with the requirements of Part 2.2.2 and Part 2.3.6 of this Permit, including all reporting and documentation requirements, shall be considered as demonstrating no net increase as required by this part unless otherwise determined by EPA or by MassDEP that additional demonstration is necessary.
 - c. The requirements of this Part are independent of permit conditions requiring reduction in discharges of pollutants as set forth in Parts 2.1.1 and 2.2 (water quality based requirements) and 2.3 (requirements to reduce discharge of pollutants to the maximum extent practicable). Permittees remain subject to requirements to reduce the discharge of pollutants from the MS4 as set forth in those parts.

2.2. Discharges to Certain Impaired Waters

The permittee shall identify in the SWMP and Annual Reports all MS4 discharges, including both outfalls and interconnections to other MS4s or other separate storm sewer systems, that:

- a. Are subject to Total Maximum Daily Load (TMDL) related requirements as identified in Part 2.2.1.
- b. Are subject to additional requirements to protect water quality as identified in Part 2.2.2.
- c. The discharge location from an interconnection shall be determined based on the receiving water of the outfall from the interconnected system.

- d. Permittees are subject to the applicable requirements in Part 2.2.1, Appendix F, or an approved alternative structural control implementation schedule, and/or the applicable requirements in Part 2.2.2, and Appendix H.

2.2.1. Discharges Subject to Requirements Related to an Approved TMDL

“Approved TMDLs” are those that have been approved by EPA as of the date of issuance of this permit.

- a. The following is a list of municipalities that MS4s that discharge to the Charles River Watershed. Operators of MS4s located in municipalities listed below that are located in the Charles River Watershed and any other MS4 that discharges directly to a waterbody segment in the Charles River Watershed shall comply with the requirements of Appendix F, Part I.A. Consistent with Part 1.2.1 of the Permit, permittees shall implement the stormwater management plan, including the requirements in Part I.A of Appendix F over the entire geographic area to the boundary of the Charles River Watershed within the jurisdiction of the municipality. The permittee shall meet the requirements of Appendix F Part I.A with respect to reduction of phosphorus discharges from their MS4. Alternatively, EPA may notify the permittee that an individual permit application is necessary in accordance with Part 1.8.a.

Arlington	Hopedale	Newton
Ashland	Hopkinton	Norfolk
Bellingham	Lexington	Sherborn
Belmont	Lincoln	Walpole
Brookline	Medfield	Waltham
Cambridge	Medway	Watertown
Dedham	Mendon	Wayland
Dover	Milford	Wellesley
Foxborough	Millis	Weston
Franklin	Natick	Westwood
Holliston	Needham	Wrentham

- b. The following is a list of municipalities that contain a lake or pond subject to an approved lake or pond phosphorus TMDL in the Northern Blackstone Basin, Chicopee Basin, Connecticut Basin, East Monponsett Pond, French Basin, Millers Basin or in the watersheds of Bare Hill Pond, Flint Pond, Indian Lake, Lake Boon, Lake Quinsigamond, Leesville Pond, Salisbury Pond, Stetson Pond, Quaboag Pond, Quacumquasit Pond, West Monponsett Pond, or White Oak Reservoir. Operators of MS4s located in municipalities listed below that discharge to a waterbody listed in Table F-6 in Appendix F or that discharges directly to a waterbody segment listed on Table F-6 in Appendix F shall meet the requirements of Appendix F, Part I.B with respect to reduction of phosphorus discharges from their MS4.

Ashburnham	Hanson	Shrewsbury
Auburn	Harvard	Spencer
Charlton	Hudson	Springfield
Dudley	Leicester	Stow
Gardner	Ludlow	Templeton
Grafton	Millbury	Wareham
Granby	Oxford	Westminster
Hadley	Pembroke	Wilbraham
Halifax	Plymouth	Winchendon

- c. The following is a list of municipalities that contain waters subject to an approved TMDL for bacteria or pathogens. Operators of MS4s located in municipalities listed below or that discharge to a waterbody subject to an approved TMDL for bacteria or pathogens shall meet the requirements of Appendix F, Part I.C with respect to reduction of bacteria/pathogens discharges from their MS4.

Abington	Essex	Medfield	Sandwich
Amesbury	Everett	Medford	Saugus
Andover	Fairhaven	Medway	Scituate
Arlington	Fall River	Melrose	Seekonk
Ashland	Falmouth	Mendon	Sharon
Attleboro	Foxborough	Middleborough	Sherborn
Avon	Franklin	Milford	Somerset
Barnstable	Freetown	Millis	Somerville
Bedford	Georgetown	Milton	Stoneham
Bellingham	Gloucester	Nahant	Stoughton
Belmont	Groveland	Natick	Swampscott
Berkley	Halifax	Needham	Swansea
Beverly	Hamilton	New Bedford	Taunton
Billerica	Hanover	Newbury	Tewksbury
Bourne	Hanson	Newburyport	Truro
Boxford	Harwich	Newton	Wakefield
Braintree	Hingham	Norfolk	Walpole
Brewster	Holbrook	North Andover	Waltham
Bridgewater	Holliston	North Falmouth	Wareham
Brockton	Hopedale	Norton	Watertown
Brookline	Hopkinton	Norwell	Wayland
Burlington	Hull	Norwood	Wellesley
Cambridge	Hyannis	Orleans	Wellfleet
Canton	Ipswich	Peabody	Wenham
Charlestown	Kingston	Pembroke	West Bridgewater
Chatham	Lakeville	Plainville	West Newbury
Chelsea	Lawrence	Plymouth	Weston

Cohasset	Lexington	Plympton	Westport
Concord	Lincoln	Provincetown	Westwood
Danvers	Lynn	Quincy	Weymouth
Dartmouth	Lynnfield	Randolph	Whitman
Dedham	Malden	Raynham	Wilmington
Dennis	Manchester	Reading	Winchester
Dighton	Mansfield	Rehoboth	Winthrop
Dover	Marblehead	Revere	Woburn
Duxbury	Marion	Rockland	Wrentham
East Bridgewater	Marshfield	Rockport	Yarmouth
Eastham	Mashpee	Rowley	
Easton	Mattapoisett	Salem	

- d. The following is a list of municipalities that contain waters subject to an approved TMDL for nitrogen in the Buzzards Bay and Cape Cod watersheds, the New Bedford Inner Harbor Embayment System, and the Wareham River Estuary System. Operators of MS4s located in municipalities listed below or that discharge to a waterbody subject to an approved nitrogen TMDL listed on Table F-9 in Appendix F shall meet the requirements of Appendix F, Part I.D with respect to reduction of nitrogen discharges from their MS4.

Acushnet	Fairhaven	Orleans
Barnstable	Fall River	Plymouth
Bourne	Falmouth	Rochester
Brewster	Fairhaven	Sandwich
Carver	Freetown	Truro
Chatham	Harwich	Wareham
Dartmouth	Lakeville	Wellfleet
Dennis	Mashpee	Westport
Eastham	New Bedford	Yarmouth

- e. The following is a list of municipalities located in the SuAsCo (Sudbury, Assabet, and Concord) Watershed that contain waters subject to the approved Assabet River TMDL for phosphorus (Total Phosphorus). Operators of MS4s located in municipalities listed below that discharge to the Assabet River shall meet the requirements of Appendix F, Part I.E with respect to reduction of phosphorus discharges from their MS4.

Acton	Concord	Northborough
Berlin	Grafton	Shrewsbury
Bolton	Harvard	Stow
Boxborough	Hudson	Westborough
Boylston	Littleton	Westford

Carlisle	Marlborough	
Clinton	Maynard	

- f. The MS4s specified below discharge to waters, or tributaries of waters, that have been identified in an adjacent state's approved TMDL as being impaired due, in part, to MS4 stormwater discharges in Massachusetts, and shall comply with the requirements of Appendix F, Part II. Appendix F identifies, by section, the provisions the permittee shall implement to be consistent with the reasonable assumptions related to Massachusetts MS4 discharges. Alternatively, EPA may notify the permittee that an individual permit application is necessary in accordance with Part 1.8.a.
- i. The following is a list of municipalities in Massachusetts located in Connecticut River Watershed to Long Island Sound, which has an approved TMDL for nitrogen (Total Nitrogen). Operators of MS4s located in municipalities listed below and/or that discharge to a waterbody segment subject to the Long Island Sound nitrogen TMDL shall meet the requirements of Appendix F, Part II.A with respect to reduction of nitrogen discharges from their MS4.

Adams	Gardner	North Adams	Spencer
Agawam	Granby	Northampton	Springfield
Amherst	Hadley	Oxford	Sturbridge
Ashburnham	Hampden	Palmer	Sutton
Ashby	Hatfield	Paxton	Templeton
Auburn	Hinsdale	Pelham	Ware
Belchertown	Holyoke	Pittsfield	Webster
Charlton	Lanesborough	Richmond	West Springfield
Cheshire	Leicester	Russell	Westfield
Chicopee	Lenox	Rutland	Westhampton
Dalton	Longmeadow	South Hadley	Westminster
Douglas	Ludlow	Southampton	Wilbraham
Dudley	Millbury	Southbridge	Williamsburg
East Longmeadow	Monson	Southwick	Winchendon
Easthampton			

- ii. The following is a list of municipalities in Massachusetts identified in a TMDL as containing MS4s contributing phosphorus to waterbody segments that have out of state approved TMDLs for phosphorus. Operators of MS4s located in municipalities listed below and/or that discharge to a waterbody segment subject to the Rhode Island Phosphorus TMDLs listed in Table F-12 in Appendix F shall meet the requirements of Appendix F, Part II.B with respect to reduction of phosphorus discharges from their MS4.

Attleboro	Rehoboth
North Attleborough	Seekonk
Plainville	Swansea

- iii. The following is a list of municipalities in Massachusetts identified in a TMDL as containing MS4s contributing bacteria/pathogens to waterbody segments that have out of state approved TMDLs for bacteria/pathogens. Operators of MS4s located in municipalities listed below and/or that discharge to a waterbody segment listed on Table F-13 in Appendix F shall meet the requirements of Appendix F, Part II.C with respect to reduction of bacteria/pathogens discharges from their MS4.

Attleboro	Rehoboth
North Attleborough	Seekonk
Plainville	Swansea

- iv. The following is a list of municipalities in Massachusetts identified in a TMDL as containing MS4s contributing metals (cadmium, lead, aluminum, iron) to waterbody segments that have out of state approved TMDLs for metals (cadmium, lead, aluminum, iron). Operators of MS4s located in municipalities listed below and/or that discharge to a waterbody segment listed on Table F-14 in Appendix F shall meet the requirements of Appendix F, Part II.D with respect to reduction of discharges of metals from their MS4.

Attleboro	Plainville
North Attleborough	Seekonk

2.2.2. Discharges to Certain Water Quality Limited Waters Subject to Additional Requirements

For purposes of this permit, a ‘water quality limited water body’ is any water body that does not meet applicable water quality standards, including but not limited to waters listed in categories 5 or 4b on the Massachusetts Integrated Report of waters listed pursuant to Clean Water Act section 303(d) and 305(b).

If there is a discharge from the MS4 to a water quality limited waterbody where the cause(s) of the impairment are pollutants typically found in stormwater: nutrients (Total Nitrogen or Total Phosphorus), solids (TSS or Turbidity), bacteria/pathogens (*E. Coli*, *Enterococcus* or Fecal Coliform), chloride (Chloride), metals (Cadmium, Copper, Iron, Lead or Zinc), and oil and grease (Petroleum Hydrocarbons or Oil and Grease) and the permittee is not subject to Part 2.1.1.b for those pollutants, or the MS4 is located in a town listed in Parts 2.2.2.a and/or 2.2.2.b, the permittee shall comply with the applicable provisions in Appendix H. Permittees notified by EPA or MassDEP during the

permit term that they are discharging to a water quality limited water shall update their SWMP to include measures they must take in accordance with Appendix H.

In the absence of a defined pollutant reduction target and where no approved TMDL has been established as of the issuance date of this permit, Part 2.2.2 and Appendix H define an iterative approach addressing pollutant reductions to waterbodies where the permittee's discharge is not meeting applicable water quality standards due to nutrients (Total Nitrogen Total Phosphorus), solids (TSS or Turbidity), bacteria/pathogens (*E. Coli*, *Enterococcus* or Fecal Coliform), chloride (Chloride), metals (Cadmium, Copper, Iron, Lead or Zinc) or oil and grease (Petroleum Hydrocarbons or Oil and Grease).

- a. Permittees that discharge to water quality limited waterbodies where nitrogen (Total Nitrogen) is the cause of the impairment, or their tributaries, shall meet all requirements of Appendix H Part I with respect to reduction of nitrogen discharges from the MS4. The requirements of this Part are applicable to:
 - i. Any MS4 discharge identified by the permittee on their NOI as discharging directly to an impaired waterbody on the most recent EPA approved Massachusetts 303(d) list where nitrogen is the cause of the impairment or a tributary of such water.
 - ii. Any other MS4 that, during the permit term, becomes aware that its discharge is to a waterbody that is water quality limited due to nitrogen, or a tributary of such water.
- b. Permittees that discharge to water quality limited waterbodies where phosphorus ("Total Phosphorus") is the cause of the impairment, or their tributaries, shall meet all requirements of Appendix H Part II with respect to reduction of phosphorus discharges from the MS4. The requirements of this Part are applicable to:
 - i. Any MS4 discharge identified by the permittee on their NOI as discharging directly to an impaired waterbody on the most recent EPA approved Massachusetts 303(d) list where phosphorus is the cause of the impairment or a tributary of such water.
 - ii. Any other MS4 that, during the permit term, becomes aware that its discharge is to a waterbody that is water quality limited due to phosphorus, or a tributary of such water.
- c. Permittees that discharge to water quality limited waterbodies where bacteria or pathogens is the cause of the impairment shall meet all requirements of Appendix H Part III with respect to reduction of bacteria or pathogens (*E. Coli*, *Enterococcus* or Fecal Coliform) discharges from the MS4. The requirements of this Part are applicable to:
 - i. Any MS4 discharge identified by the permittee on their NOI as discharging directly to an impaired waterbody on the most recent EPA approved Massachusetts 303(d) list where bacteria or pathogens (*E. Coli*, *Enterococcus* or Fecal Coliform) is the cause of the impairment.

- ii. Any other MS4 that, during the permit term, becomes aware that its discharge is to a waterbody that is water quality limited due to bacteria or pathogens.
- d. Permittees that discharge to water quality limited waterbodies where chloride (Chloride) is the cause of the impairment shall meet all requirements of Appendix H Part IV with respect to reduction of chloride discharges from the MS4. The requirements of this Part are applicable to:
 - i. Any MS4 discharge identified by the permittee on their NOI as discharging directly to an impaired waterbody on the most recent EPA approved Massachusetts 303(d) list where chloride (Chloride) is the cause of the impairment.
 - ii. Any other MS4 that, during the permit term, becomes aware that its discharge is to a waterbody that is water quality limited due to chloride (Chloride).
- e. Permittees that discharge to water quality limited waterbodies where oil and grease (Petroleum Hydrocarbons or Oil and Grease), solids (TSS or Turbidity) or metals (Cadmium, Copper, Iron, Lead or Zinc) is the cause of the impairment shall meet all requirements of Appendix H Part V with respect to reduction of solids, oil and grease or metals discharges from the MS4. The requirements of this Part are applicable to:
 - i. Any MS4 discharge identified by the permittee on their NOI as discharging directly to an impaired waterbody on the most recent EPA approved Massachusetts 303(d) list where oil and grease, solids or metals (Oil and Grease, Petroleum Hydrocarbons TSS, Turbidity, Cadmium, Copper, Iron, Lead or Zinc) is the cause of the impairment.
 - ii. Any other MS4 that, during the permit term, becomes aware that its discharge is to a waterbody that is water quality limited due to oil and grease (Petroleum Hydrocarbons or Oil and Grease), solids (TSS or Turbidity) or metals (Cadmium, Copper, Iron, Lead or Zinc).
- f. Permittees that discharge to water quality limited waterbodies, or in some cases, to tributaries of waters, in the Mystic River Watershed within the municipalities listed below shall comply with the requirements of Appendix H, Part IV to address water quality impairments due to phosphorus assessed in the approved Alternative Restoration Plan. Alternatively, EPA may notify the permittee that an individual permit application is necessary in accordance with Part 1.8.a.

Arlington	Malden	Wakefield
Belmont	Medford	Watertown
Burlington	Melrose	Wilmington
Cambridge	Reading	Winchester
Chelsea	Revere	Winthrop
Everett	Somerville	Woburn
Lexington	Stoneham	

2.3. Requirements to Reduce Pollutants to the Maximum Extent Practicable (MEP)

The permittee shall reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP) as detailed in Parts 2.3.2 through 2.3.7. New permittees shall follow the deadlines and requirements in Appendix J instead of Parts 2.3.1-2.3.7 below.

2.3.1. Control Measures

- a. Permittees authorized under the 2016-MS4 permit shall continue to implement their existing SWMPs while updating their SWMPs pursuant to this permit. This permit does not extend the compliance deadlines set forth in the 2016-MS4 permit.
- b. Implementation of one or more of the minimum control measures described in Parts 2.3.2- 2.3.7 or other permit requirements may be shared with another entity (including another interconnected MS4) or the other entity may fully implement the measure or requirement, if the following requirements are satisfied:
 - i. The other entity, in fact, implements the control measure.
 - ii. The particular control measure or component thereof undertaken by the other entity is at least as stringent as the corresponding permit requirement.
 - iii. The other entity agrees to implement the control measure on the permittee's behalf. The annual reports must specify that the permittee is relying on another entity to satisfy some of its permit obligations and specify what those obligations are.
 - iv. If the permittee is relying on another governmental entity regulated under 40 CFR § 122 to satisfy all of its permit obligations, including the obligation to file annual reports, the permittee shall note that fact in its NOI, but is not required to file annual reports.
 - v. The permittee remains responsible for compliance with all permit obligations if the other entity fails to implement the control measures (or component thereof). The permittee may enter into a legally binding agreement with the other entity regarding the other entity's performance of control measures, but the permittee remains ultimately responsible for permit compliance.

2.3.2. Public Education and Outreach

The permittee shall implement an education program that includes educational goals based on stormwater issues of significance within the MS4 area. The ultimate objective of a public education program is to increase knowledge and change behavior of the public so that pollutants in stormwater are reduced.

- a. The permittee shall continue to implement the public education program required by the 2016-MS4 permit by distributing educational material to the MS4 community. The educational program shall define educational goals, express specific messages, define the targeted audience for each message, and identify responsible parties for program implementation. At a minimum, the program shall provide information

- concerning the impact of stormwater discharges on waterbodies within the community, especially for waters that are impaired. The program shall identify steps and/or activities that the public can take to reduce the pollutants in stormwater runoff and their impacts to the environment.
- b. The educational program shall include education and outreach efforts that at a minimum distribute 9 messages over the permit term:
- i. **4 messages to specific audiences:** The permittee shall distribute a minimum of one educational message over the permit term to each of the following audiences: (1) residents, (2) businesses, (3) institutions (churches, hospitals), and (4) commercial facilities, unless one of these audiences is not present in the MS4 community. In such a situation, the MS4 must document in the SWMP which audience is absent from the community and an educational message to that audience is not required. These messages can be in any outreach format (see Table 1 below for examples).
 - ii. **1 active and interactive message each year to any audience(s):** The permittee shall distribute a minimum of 1 message each year for a total of at least 5 distinct messages over the permit term. These messages shall be active and interactive. Active and interactive messages are messages that allow for a two-way flow of information, are engaging, inspire immediate calls to action, and/or encourage audience participation (see the “Active and Interactive Outreach” column in Table 1 for examples).
- c. The permittee shall determine the top three non-English languages in their MS4 area. If appropriate for the target audience, materials shall be developed in the 3 identified languages, along with English. If there are fewer than three non-English languages spoken in the MS4 area, the permittee shall develop materials in as many languages as present, along with English.¹
- d. The permittee may use existing materials if they are appropriate for the messages the permittee chooses to deliver or the permittee may develop its own educational materials. The permittee may partner with other MS4s, community groups, or watershed associations to implement the education program to meet this permit requirement.
- e. The permittee shall track progress toward the defined educational goals of the program and the objective of changing behaviors and increasing knowledge. The permittee shall identify the methods they will use to evaluate the effectiveness of each of the educational messages and the overall educational program. The permittee shall note any ineffective messages or distribution techniques to either improve upon in the future or not repeat.

¹ Resources such as the “Languages Spoken in Massachusetts” tab found here: <https://mass-eoea.maps.arcgis.com/apps/MapSeries/index.html?appid=535e4419dc0545be980545a0eeaf9b53> may be utilized to determine top languages in the MS4 area.

- f. The permittee shall document in each annual report the number of messages completed that year and for each message, the theme or title of the message, the type of message (active and interactive or passive), the audience, the method of distribution, the measures/methods used to assess the effectiveness of the messages, and the language(s) the message was distributed in.

Table 1: Education and Outreach Activities	
Active and Interactive Outreach	Passive Outreach
• Ongoing social media program • Ongoing advertisement/promotion of a stormwater hotline number or other method to report an illicit discharge • Distribute rain barrels • Participate in or sponsor a water festival or environmental event • Organize, participate in, or sponsor a water clean-up and trash removal event • Participate in or sponsor a stormwater related presentation • Participate in or sponsor a service project related to stormwater and/or watershed health • Participate in or sponsor a household hazardous waste event • Participate in or sponsor an Adopt-a-Street program • Participate in or sponsor an Adopt-a-Waterway program • Participate in or sponsor an Adopt-a-Storm Drain program • Stormwater booth at a community event • Storm drain marking program performed by the community/ public • Install and maintain a minimum of two new pet waste stations with signage in heavily trafficked areas • Develop or present stormwater materials to schools • Implement a stormwater demonstration project to show a control measure, including educational signage • Produce a stormwater pollution themed	• Publish article (hardcopy or electronic) • Distribute educational materials by brochure or fact sheet • Distribute educational materials by utility bill insert • Ongoing newsletter (hardcopy or electronic) • Distribute promotional items or giveaways with a stormwater related message • Develop/update stormwater page(s) on town website • Stormwater related signage: Post signage at municipally-owned green infrastructure sites that describe the function and importance of the infrastructure, along with contact information and/or website for more information • Storm drain marking performed by town staff • Newspaper advertisement • Radio/ television/ movie theater advertisement • Bus shelter/ bench advertisement • Billboard advertisement • Promote existing local stormwater/ environmental events or program that helps protect water quality

mural, storm drain art, or other artwork at a well trafficked area within the MS4 area • Develop a program incentivizing street leaf cleanup by residents	
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2.3.3. Public Involvement and Participation

The permittee shall provide opportunities to engage the public to participate in the review and implementation of the permittee's SWMP.

- All public involvement activities shall comply with state public notice requirements (MGL Chapter 30A, Sections 18-25). The SWMP and all documents submitted to EPA in accordance with Appendix F and Appendix H shall be available to the public online.
- The permittee shall annually provide the public an opportunity to participate in the review and implementation of the SWMP. EPA encourages permittees to provide communities with environmental justice concerns within the MS4's regulated area opportunities for meaningful public participation.
- The permittee shall report on the activities undertaken to provide public participation opportunities including compliance with Part 2.3.3.a. in each annual report.

2.3.4. Illicit Discharge Detection and Elimination (IDDE) Program

The permittee shall implement an IDDE program to systematically find and eliminate sources of non-stormwater discharges to its municipal separate storm sewer system and implement procedures to prevent such discharges. This permit Part is applicable to those permittees previously covered under the MS4-2003 permit or MS4-2016 permit. The Illicit Discharge Detection and Elimination (IDDE) Program applicable to new permittees is found in Part 2.3.4 of Appendix J.

- The IDDE program shall include adequate legal authority consisting of a currently effective ordinance, by-law, or other regulatory mechanism to prohibit illicit discharges; investigation of suspected illicit discharges; elimination of illicit discharges, including discharges from properties not owned by or controlled by the MS4 that discharge into the MS4 system; and implementation of appropriate enforcement procedures and actions. For permittees previously authorized by the 2003-MS4 permit or the 2016-MS4 permit, the ordinance, by-law, or other regulatory mechanism was a requirement of both the 2003-MS4 permit and the 2016-MS4 permit. No additional time to adopt an ordinance, by-law, or other regulatory mechanism is afforded to any permittee previously covered by the 2003-MS4 permit or the 2016-MS4 permit.

- b. The permittee shall prohibit illicit discharges and sanitary sewer overflows (SSOs), defined in Appendix A, to its MS4 and require removal of such discharges consistent with Parts 2.3.4.d and 2.3.4.e of this permit.
- c. Permittees authorized by this permit must continue to implement the IDDE requirements in Appendix I and in accordance with the schedules below.
- d. Elimination of Illicit Discharges
 - i. Upon detection of an illicit discharge, the permittee shall locate, confirm the source(s), and eliminate the illicit discharge as expeditiously as possible. Upon confirmation of an illicit source the MS4 must notify all responsible parties for any such discharge and require immediate cessation of improper disposal practices in accordance with its legal authorities. Where elimination of an illicit discharge within 60 days of source confirmation is not possible, the permittee shall establish an expeditious schedule for its elimination and report the dates of source confirmation and schedules for removal in the permittee's annual reports. The permittee shall immediately commence actions necessary for elimination. The permittee shall diligently pursue elimination of all illicit discharges. In the interim, the permittee shall take all reasonable and prudent measures to minimize the discharge of pollutants to and from its MS4.
 - ii. The period between detection and elimination of an illicit discharge is not a grace period. Discharges from an MS4 that are mixed with an illicit discharge are not authorized by this Permit (Part 1.3.a) and remain unlawful until eliminated.
- e. Non-Stormwater Discharges

The permittee may presume that the sources of non-stormwater listed in Part 1.4 of this permit need not be addressed. However, if, during the course of implementing the IDDE program, the permittee, MassDEP, or EPA finds that any of these sources as significant contributors of pollutants to the MS4, then the permittee shall implement measures to control these sources so they are no longer significant contributors of pollutants, and/or eliminate them entirely, consistent with Part 2.3.4.
- f. Sanitary Sewer Overflows
 - i. Upon detection of an SSO the permittee shall eliminate it as expeditiously as possible and take interim mitigation measures to minimize the discharge of pollutants to and from its MS4 until elimination is completed. The permittee shall maintain the SSO inventory as a part of the SWMP and update the inventory annually. All updates shall include:
 - 1. Location (approximate street crossing/address and receiving water, if any);
 - 2. A clear statement of whether the discharge entered a surface water directly or entered the MS4;
 - 3. Date(s) and time(s) of each known SSO occurrence (i.e., beginning and end of any known discharge);
 - 4. Estimated volume(s) of the occurrence;

5. Description of the occurrence indicating known or suspected cause(s);
 6. Mitigation and corrective measures completed with dates implemented; and
 7. Mitigation and corrective measures planned with implementation schedules.
- ii. In accordance with Paragraph B.12 of Appendix B of this permit, upon becoming aware of an SSO to the MS4, the permittee shall provide oral notice to EPA within 24 hours. Additionally, the permittee shall provide written notice to EPA within five (5) days of becoming aware of the SSO occurrence and shall include the information in the updated inventory. The notice shall contain all of the information listed in Part 2.3.4.4.b. Where common notification requirements for SSOs are included in multiple NPDES permits issued by EPA to a permittee, a single notification may be made to EPA as directed in the permittee's wastewater or CSO NPDES permit and constitutes compliance with this Part. Notifications to MassDEP shall be made in accordance with 314 CMR 12.00 and 314 CMR 16.00.
 - iii. The permittee shall include the updated SSO inventory in its annual report, including the status of mitigation and corrective measures implemented by the permittee to address each SSO identified pursuant to this Part. The permittee shall also report the number of SSOs identified and SSOs removed during the reporting period in each annual report.
 - iv. The period between detection and elimination of a discharge from the SSO to the MS4 is not a grace period. Discharges from an MS4 that are mixed with an SSO are not authorized by this Permit (see Part 1.3) and remain unlawful until eliminated.
- g. System mapping
- i. The system mapping shall include a depiction of the permittee's separate storm sewer system in the permit area, intended to facilitate the identification of key infrastructure and factors influencing proper system operation, and the potential for illicit sanitary sewer discharges.
 - ii. The system map shall be updated annually as the following information becomes available during implementation of catchment investigation procedures in Part 2.3.4.j. The following information must be included in the map for all outfalls no later than June 30, 2028 for existing permittees covered under the MS4-2003 permit or June 30, 2031 for existing permittees covered under the MS4-2016 permit:
 1. Outfall spatial location (latitude and longitude with a minimum accuracy of +/-30 feet);
 2. Pipes;
 3. Manholes;
 4. Catch basins;
 5. Refined catchment delineations. Catchment delineations shall be updated to reflect information collected during catchment investigations;
 6. Municipal sanitary sewer system (if available); and

7. Municipal combined sewer system (if applicable).
- iii. Recommended elements to be included in the system map as information becomes available:
 1. Storm sewer material, size (pipe diameter) and age;
 2. Sanitary sewer system material, size (pipe diameter) and age;
 3. Privately-owned stormwater treatment structures;
 4. Where a municipal sanitary sewer system exists, properties known or suspected to be served by a septic system, especially in high-density urban areas;
 5. Area where the permittee's MS4 has received or could receive flow from septic system discharges (e.g., areas with poor soils, or high ground water elevations unsuitable for conventional subsurface disposal systems);
 6. Seasonal high water table elevations impacting sanitary alignments;
 7. Topography;
 8. Orthophotography;
 9. Alignments, dates, and representation of work completed (with legend) of past illicit discharge investigations (e.g., flow isolation, dye testing, CCTV); and
 10. Locations of suspected, confirmed and corrected illicit discharges (with dates and flow estimates).
- iv. The mapping may be produced by hand or through computer-aided methods (e.g. GIS). The required scale and detail of the map shall be appropriate to facilitate a rapid understanding of the system by the permittee, EPA, and the state. In addition, the mapping shall serve as a planning tool for the implementation and phasing of the IDDE program and demonstration of the extent of complete and planned investigations and corrections. The permittee shall update the mapping as necessary to reflect newly discovered information and required corrections or modifications.
- v. The permittee shall report on the progress towards the completion of the system map in each annual report.
- h. Written Illicit Discharge Detection and Elimination Program: The IDDE program shall be recorded in a written (electronic) document. The IDDE program shall include procedures to effectively complete each of the elements described in Appendix I as well as a procedure for outfall screening and sampling and catchment investigations required by the MS4-2016 permit.
- i. Assessment and Priority Ranking of Outfalls/Interconnections: The permittee shall provide an updated inventory and ranking in each annual report. The assessment and ranking of outfalls/interconnections shall be completed in accordance with the requirements of Part I of Appendix I.
- j. Catchment Investigations: The permittee shall follow the systematic catchment investigation procedure in Part III of Appendix I.
- k. Timelines for Catchment Investigations:

1. Investigations of catchments associated with High and Low Priority Outfalls shall follow the ranking of outfalls updated in Part 2.3.4.i.
 2. Investigations of catchments associated with Problem Outfalls shall be completed by June 30, 2025 for permittees covered for the first time under the MS4-2003 permit or June 30, 2028 for permittees covered for the first time under the MS4-2016.
 3. Investigations of catchments where any information gathered on the outfall/interconnection identified sewer input shall be completed by June 30, 2025 for permittees covered for the first time under the MS4-2003 permit or June 30, 2028 for permittees covered for the first time under the MS4-2016 permit.
 4. Investigations of catchments associated with all High- and Low-Priority Outfalls shall be completed by June 30, 2028 for permittees covered under the MS4-2003 permit or June 30, 2031 for permittees covered under the MS4-2016 permit but not under the MS4-2003 permit.
 5. For the purposes of these milestones, an individual catchment investigation will be considered complete if all relevant procedures in Part III of Appendix I have been completed.
- I. Illicit Discharge Removal: The permittee shall exercise its authority as necessary to require removal of all identified illicit discharges pursuant to Parts 2.3.4.d or 2.3.4.e.
- i. Outfall, interconnection, or key junction manhole screening shall be conducted within one year of removal of all confirmed illicit discharges within a catchment area to verify removal. Verification screening shall be conducted in dry weather unless System Vulnerability Factors have been identified, in which case both dry weather and wet weather screening shall be conducted in accordance with Part II of Appendix I. If verification screening indicates evidence of additional illicit discharges, the catchment shall be scheduled for additional investigation.
 - ii. For each confirmed source the permittee shall include in the annual report the following information:
 1. The location of the discharge and its source(s);
 2. A description of the discharge;
 3. The method of discovery;
 4. The date of discovery;
 5. The date of elimination, mitigation, or enforcement action OR planned corrective measures and a schedule for completing the illicit discharge removal; and
 6. An estimate of the volume of flow removed.
- m. Indicators of IDDE Program Progress
- i. The permittee shall define or describe indicators for tracking program success and evaluate and report on the overall effectiveness of the IDDE program in each

annual report. At a minimum the permittee shall document in each annual report:

1. The number of SSOs and illicit discharges detected, confirmed, and removed;
2. The number and percent of total outfall catchments served by the MS4 evaluated using the catchment investigation procedure;
3. All dry weather and wet weather screening and sampling results; and
4. The volume of sewage removed.

n. Ongoing Screening

- i. Upon completion of all catchment investigations and illicit discharge removal and verification (if necessary) pursuant to Part 2.3.4.j, each outfall or interconnection shall be reprioritized for screening in accordance with Part 2.3.4.i and scheduled for ongoing screening once every five years. Ongoing screening and sampling shall consist of the following elements:
 1. Dry weather screening and sampling shall be completed in accordance with procedures in Part II of Appendix I.
 2. Wet weather screening and sampling shall be required at outfalls where wet weather screening was required due to SVFs and shall be conducted in accordance with Part II of Appendix I.
 3. Catchment investigations shall be scheduled for where screening indicates evidence of additional illicit discharges. Each catchment investigation shall be completed in accordance with Part III of Appendix I.
- ii. All sampling results shall be reported in the permittee's annual report.

o. Training

The permittee shall, at a minimum, annually provide training to employees involved in IDDE program about the program, including how to recognize illicit discharges and SSOs. The permittee shall report on the frequency and type of employee training in the annual report.

2.3.5. Construction Site Stormwater Runoff Control

An effective construction stormwater runoff control program must minimize or eliminate erosion and maintain sediment on site so that it is not transported in stormwater and allowed to discharge to a water of the U.S through the permittee's MS4. The construction site stormwater runoff control program required by this permit is a separate and distinct program from EPA's Construction General Permit (CGP) and EPA's Dewatering and Remediation General Permit (DRGP) in that the CGP and DRGP are implemented by construction site operators to comply with the terms and conditions of EPA's general permits and this program is implemented by the MS4 operator to ensure that runoff from construction sites discharging to the MS4 are controlled consistent with the MS4's applicable requirements.

- a. Permittees shall maintain and enforce a program to reduce pollutants in any stormwater runoff discharged to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre within the regulated area. The permittee's program shall include construction activities that result in disturbances less than one acre if that disturbance is part of a larger common plan of development or sale that would disturb one or more acres.
- b. The permittee is not required to apply its construction program requirements to projects that receive a waiver from EPA under the provisions of 40 CFR § 122.26(b)(15)(i).
- c. The construction site runoff control program must include the elements in Paragraphs i. through iii. of this Part:
 - i. An ordinance or regulatory mechanism that requires the use of sediment and erosion control practices at construction sites including a requirement to control other site wastes such as demolition debris, litter, and sanitary wastes. The ordinance or regulatory mechanism shall provide that the permittee may, to the extent authorized by law, impose sanctions to ensure compliance with the local program. Development and implementation of an ordinance or other regulatory mechanism was a requirement of the MS4-2003 and MS4-2016 Permits.
 - ii. Review and update, as necessary, the written (hardcopy or electronic) procedures for site plan review, site inspections, and enforcement of sediment and erosion control measures by the permittee. Completion of these procedures was a requirement of the MS4-2016 Permit. Permittees must report on continued compliance with site plan reviews, inspections, and necessary enforcement of sediment and erosion control measures in the annual report required by Part 4.4.
 1. The site plan review procedure must include:
 - Pre-construction review by the permittee of the site design, the planned operations at the construction site, planned BMPs during the construction phase, and plans to address post-construction stormwater runoff in compliance with Part 2.5.6 of this permit;
 - Consideration of potential water quality impacts;
 - Procedures for the receipt and consideration of information submitted by the public; and
 - Incorporation of Low Impact Development (LID) site planning and design strategy rubric to evaluate use of designs in site design, unless such practices are infeasible.
 2. The site inspection and enforcement procedures must include:
 - Who is responsible for site inspections and the necessary qualifications for performing inspections, as well as who has authority to implement enforcement procedures;

- Requirement that inspections of soil and erosion control BMPs occur both during and after construction of BMPs to ensure they are working as described in the approved plans;
 - Use of mandated inspection forms, if appropriate; and
 - Procedure for tracking the number of site reviews, inspections, and enforcement actions.
- iii. Requirements for construction site operators performing land disturbance activities within the MS4 jurisdiction that result in stormwater discharges to the MS4 to implement a sediment and erosion control program that includes non-structural BMPs and structural SCMs appropriate for the conditions at the construction site. At a minimum, BMPs and SCMs should be consistent with the requirements of EPA's CGP. The program may include references to the requirements of EPA's CGP and DRGP (including the development of a SWPPP) to the extent they are consistent with the program requirements of this Part. The program may include references to SCM design standards in state manuals, such as the Massachusetts Stormwater Handbook, or design standards developed by the MS4. EPA supports and encourages the use of design standards in local programs. Examples of appropriate sediment and erosion control measures for construction sites include local requirements to:
1. Minimize the amount of disturbed area and protect natural resources;
 2. Stabilize sites when projects are complete or operations have temporarily ceased;
 3. Protect slopes on the construction site;
 4. Protect all storm drain inlets and armor all newly constructed outlets;
 5. Use perimeter controls at the site;
 6. Stabilize construction site entrances and exits to prevent off-site tracking;
 7. Control wastes that may be discharged, including but not limited to, discarded building materials, concrete truck wash out, chemicals, litter, and sanitary wastes (these wastes may not be discharged to the MS4); and
 8. Inspect stormwater controls at consistent intervals.

2.3.6. Stormwater Management in New Development and Redevelopment

Stormwater management must minimize post-construction water quality impacts of stormwater runoff from new development and redevelopment projects.

- a. Permittees shall review, enforce, and modify as necessary their program to address post-construction stormwater runoff from all new development and redevelopment sites that disturb one or more acres and discharge into the permittee's MS4 at a minimum. The permittee's new development/redevelopment stormwater management program shall include sites less than one acre if the site is part of a larger common plan of development or redevelopment which disturbs one or more

acre. Development and implementation of a post-construction stormwater management program was a requirement of the MS4-2003 and MS4-2016 Permits.

- b. Provisions of the ordinance or other regulatory mechanism must be at least as stringent as the following requirements:
 - i. Low Impact Development (LID) site planning and design strategies must be implemented unless infeasible in order to reduce the discharge of stormwater from development sites.
 - ii. Stormwater management systems design shall be consistent with, or more stringent than, the requirements of the Massachusetts Stormwater Handbook.
 - iii. Stormwater management systems on new development shall be designed to meet an average annual pollutant removal equivalent to 90% of the average annual load of Total Suspended Solids (TSS) related to the total post-construction impervious area on the site AND 60% of the average annual load of Total Phosphorus (TP) related to the total post-construction impervious surface area on the site. Average annual pollutant removal requirements shall be achieved through one of the following methods:
 - 1. Installing SCMs that meet the pollutant removal percentages based on calculations developed consistent with the methodology described in Attachment 3 to Appendix F; or
 - 2. Retaining the volume of runoff equivalent to, or greater than, one (1.0) inch multiplied by the total post-construction impervious surface area on the new development site; or
 - 3. Meeting a combination of retention and treatment that achieves the above standards; or
 - 4. Utilizing offsite mitigation that meets the above standards within the same USGS HUC12 as the new development site.
 - iv. Stormwater management systems on redevelopment sites shall be designed to meet an average annual pollutant removal equivalent to 80% of the average annual post-construction load of Total Suspended Solids (TSS) related to the total post-construction impervious area on the site AND 50% of the average annual load of Total Phosphorus (TP) related to the total post-construction impervious surface area on the site. Average annual pollutant removal requirements shall be achieved through one of the following methods:
 - 1. Installing SCMs that meet the pollutant removal percentages based on calculations developed consistent with the methodology described in Attachment 3 to Appendix F; or
 - 2. Retaining the volume of runoff equivalent to, or greater than, 0.8 inch multiplied by the total post-construction impervious surface area on the redeveloped site; or
 - 3. Meeting a combination of retention and treatment that achieves the above standards; or
 - 4. Utilizing offsite mitigation that meets the above standards within the same USGS HUC12 as the redevelopment site.

- v. Redevelopment activities that are exclusively limited to maintenance and improvement of existing roadways that increase the amount of impervious area on the redevelopment site by greater than or equal to a single lane width shall meet the requirements of Part 2.3.6.a.ii.4. Roadway widening or improvements including widening less than a single lane, adding shoulders, correcting substandard intersections, improving existing drainage systems, and repaving projects shall improve existing conditions unless infeasible and are exempt from Part 2.3.6.a.ii.4.
- c. The permittee shall require, at a minimum, the submission of as-built drawings no later than two (2) years after completion of construction projects. The as-built drawings must depict all on site controls, both structural and non-structural, designed to manage the stormwater associated with the completed site, and quantify removal of total suspended solids and total phosphorus consistent with Part 2.3.6.b. The new development/redevelopment program shall have procedures to ensure adequate long-term operation and maintenance of stormwater management practices that are put in place after the completion of a construction project. These procedures may include the use of dedicated funds or escrow accounts for development projects or the acceptance of ownership by the permittee of all privately owned SCMs. These procedures may also include the development of maintenance contracts between the owner of the SCM and the permittee. Alternatively, these procedures may include the submission of an annual certification documenting the work that has been done over the last 12 months to properly operate and maintain the stormwater control measures. The procedures to require submission of as-built drawings and ensure long term operation and maintenance shall be a part of the SWMP. The permittee shall report in the annual report on the measures that the permittee has utilized to meet this requirement and the average annual pounds of total phosphorus and total suspended solids removed on new and redevelopment sites during the reporting period.
- d. Green Street Design Standards
 - i. The permittee shall implement recommendations in the assessment of the current street design and parking lot guidelines and other local requirements to support Low Impact Development (LID) options for streets and parking lots in accordance with the schedules developed under the MS4-2016 assessment. The assessment and any recommendations shall be documented in the SWMP. The permittee shall report on the status of planned or completed changes to local regulations and guidelines and/or procedures to minimize impervious cover attributable to parking areas and street designs in each annual report.
 - ii. The permittee shall implement recommendations in the assessment of existing local regulations impeding or precluding the use of green infrastructure and/or LID designs in accordance with the schedules developed under the MS4-2016 assessment. The assessment and any recommendations shall be documented in the SWMP. The permittee shall report on the status of planned or completed

changes to local regulations and guidelines impeding or precluding the use of green infrastructure and LID in each annual report.

- iii. Within three (3) years of the effective date of the permit, the permittee shall develop and implement an applicable street design ordinance, policy and/or standard to promote use of green infrastructure and incorporate the updated street design policy or standard into relevant documents and procedures applicable to transportation projects, parking areas, and rights-of-way. At a minimum, the ordinance shall require project planners to evaluate incorporating green infrastructure during the design phase of projects in new or redeveloped rights-of way and parking areas. When drafting the ordinance, the permittee shall ensure that no existing ordinances prohibit the use of green infrastructure in transportation projects, parking areas, and rights-of-way. The municipal planning board, municipal transportation board, and municipal stormwater management staff, and other municipal staff affected by a street design policy should be involved in reviewing and implementing updated street design standards, including evaluation of green infrastructure during the project design phase. Green infrastructure designs suitable for streets and parking areas include, but are not limited to, vegetated swales, rain gardens/planters, curb extensions, tree pits and trenches, and permeable surfaces. Street design standards should address new and redevelopment of rights-of-way and parking lots, as well as capital improvement projects within existing rights-of way and parking areas, and should include flood management considerations (see Part 2.3.7). The permittee shall report on the status of street designs upgrades in the Year 3 annual report.

2.3.7. Good House Keeping and Pollution Prevention for Permittee Owned Operations

The permittee shall implement an operations and maintenance program for permittee-owned operations that has a goal of preventing or reducing pollutant runoff and protecting water quality from all permittee-owned operations. The Permittee shall continue to implement written (hardcopy or electronic) operations and maintenance procedures developed under the MS4-2016 Permit. These written procedures shall be included as part of the SWMP and be updated as necessary to comply with this permit. Additional operations and maintenance plans for new facilities created or acquired by permit holders since July 1, 2022 for facilities or activities listed below shall be incorporated into existing operation and maintenance plans or additional operation and maintenance plans shall be created within one year of permit effective date, or within one year of acquisition or creation.

- a. Procedures for Parks and Open Space shall, at a minimum:
 - i. Address the proper use, storage, and disposal of pesticides, herbicides, and fertilizers including minimizing the use of these products in accordance with statewide standards at 330 CMR 31.00 for application of plant nutrients to non-

- agricultural turf and lawns and only in accordance with the manufacturer's instruction.
- ii. Evaluate lawn maintenance and landscaping activities to ensure practices are protective of water quality including reduced mowing frequencies, proper disposal of lawn clippings, and use of alternative landscaping materials (e.g., drought resistant planting).
 - iii. Establish pet waste handling collection and disposal locations at all parks and open space where pets are permitted, including the placing of proper signage concerning the proper collection and disposal of pet waste, and proper cleaning schedules for all disposal receptacles.
 - iv. Establish procedures to address waterfowl congregation areas where appropriate to reduce waterfowl droppings from entering the MS4.
 - v. Establish procedures for management of trash containers at all parks and open space. At a minimum, procedures must include proper cleaning schedules and sufficient number of containers.
 - vi. Establish procedures to address erosion or poor vegetative cover when the permittee becomes aware of it, especially if the erosion is within 50 feet of a surface water.
- b. Procedures for permittee-owned or operated Buildings and Facilities where pollutants are exposed to stormwater runoff, including, but not limited to, permittee-owned or operated schools, town offices, police and fire stations, municipal pools, and parking garages shall, at a minimum:
- i. Evaluate the use, storage, and disposal of petroleum products and other potential stormwater pollutants.
 - ii. Provide employee training as necessary so that those responsible for handling petroleum products and other potential stormwater pollutants know proper handling procedures.
 - iii. Ensure that Spill Prevention Plans are in place, if applicable, and coordinate with the fire department as necessary.
 - iv. Develop management procedures for dumpsters and other waste management equipment including a schedule for cleanings to avoid overfilling.
 - v. Establish parking lot sweeping frequencies to reduce runoff of pollutants.
- c. Procedures for Vehicles and Equipment shall, at a minimum:
- i. Establish procedures for the storage of permittee's vehicles. Vehicles with fluid leaks shall be stored indoors or containment shall be provided until repaired.
 - ii. Evaluate fueling areas owned or operated by the permittee and place fueling areas under cover in order to minimize exposure.
 - iv. Establish procedures to ensure that vehicle wash waters are not discharged to the municipal storm sewer system or to surface waters. This permit does not authorize such discharges.

d. Asset Management

- i. The permittee shall continue to implement and update, as necessary, the infrastructure Operations and Maintenance Procedures for MS4 assets developed under the 2016-MS4 Permit. The Operations and Maintenance Procedures shall be updated and included as part of the SWMP within one (1) year of the effective date of the permit. The Operations and Maintenance Procedures must ensure that the MS4 system is operating as expected and the system's assets are replaced as needed to ensure proper system function and minimize the discharge of pollutants.
- ii. The permittee shall develop an asset management system to track attributes, maintenance schedules, and pollutant reductions for critical assets. A system shall be implemented within two (2) years of the effective date of the permit and updated to include all existing critical assets (described in 1, below) and SCMs (in 2, below) within three (3) years of the effective date of the permit. The asset management system must track all activities, pollutant loads, and schedules necessary to comply with this Permit for the purposes of annual reporting. At a minimum, the asset management system shall include the following:

1. Critical Assets

The management system shall include an inventory of critical assets to include, at a minimum, the key infrastructure components included in the Phase I and Phase II system mapping (to the extent the information is available) and catch basin inventory completed under the MS4-2016 Permit. In the SWMP, the Permittee shall document the basis and assumptions used to define critical assets (e.g., relative to the overall performance of the system). The inventory shall, at a minimum, include basic information about the assets, including:

- Location
- Age
- Condition
- Date of last maintenance
- Whether the physical extent of the asset intersects with the FEMA Special Flood Hazard Area (SFHA) or the 1% chance storm in 2030 MC-FRM ("current" conditions)²
- Whether the physical extent of the asset intersects with the FEMA X (shaded) or B zones or the 0.2% chance storm in 2030 MC-FRM ("future" conditions)
- Catch basin sump levels during routine cleaning and whether a catch basin sump is more than 50 percent full during two consecutive routine inspections/cleaning events, to the extent the information is available. See Part 2.3.7.f.i of this Permit.

² "Current" and "Future" conditions shall be based on the FEMA Flood Map and/or Massachusetts Coast Flood Risk Model (MC-FRM) effective and available at the time of permit issuance.

2. Stormwater Control Measures

The management plan shall include an inventory of structural stormwater control measures (SCMs) such as water quality swales, retention/detention basins, infiltration structures, proprietary treatment devices or other similar structures.

- The management plan shall include an inventory of existing SCMs. The inventory shall include, at a minimum, basic information about the SCMs including:
 - Location
 - Age
 - Condition
 - Date of last maintenance
 - Whether the SCM intersects with the FEMA SFHA or the 1% chance storm in 2030 MC-FRM.
 - Whether the SCM intersects with the FEMA X (shaded) or B zones or the 0.2% chance storm in 2030 MC-FRM.
 - The estimated nutrient reduction achieved by the SCMs based on the methodology described in Attachment 3 to Appendix F of this Permit, if the permittee is tracking reductions in compliance with requirements in Appendix F and/or H.
- The management plan shall track all new stormwater assets and control measures installed by the permittee or stormwater treatment devices discharging to the MS4. At a minimum, the management plan shall include the following information for new SCMs:
 - Date of installation
 - Location (street address or GPS location with accuracy of +/- 30 feet)
 - Ownership and party responsible for maintenance
 - Type of treatment device consistent with the naming convention found (if applicable)
 - Impervious area in acres draining to the treatment device
 - Land use(s) of drainage area draining to the treatment device
 - Design Storage Volume of the treatment device (if applicable)
 - TP and TN removed by the treatment device in pounds per year (lb/yr). Calculations for pollutant removal must be consistent with the methodology described in Attachment 3 to Appendix F of this Permit.
 - Date of last maintenance activity for the treatment device
 - Whether the SCM intersects with the FEMA SFHA zone or the 1% chance storm in 2030 MC-FRM
 - Whether the SCM intersects with the FEMA X (shaded) or B zones or the 0.2% chance storm in 2030 MC-FRM

3. Inspection and Maintenance

The management plan shall track inspection and maintenance frequencies and procedures for all stormwater assets and control measures. All permittee-owned stormwater assets and SCMs (excluding catch basins) shall

be inspected annually at a minimum or more frequently in accordance with BMP design or manufacturer specification.

e. Retrofit on Permittee-owned Property

The permittee must review and maintain an inventory of a minimum of 5 permittee-owned properties that could potentially be modified or retrofitted with stormwater control measures (SCMs) designed to reduce the pollutant loads of stormwater discharges to and from its MS4 consistent with, or more stringent than, the requirements of the Massachusetts Stormwater Handbook. Beginning two (2) years after the effective date of the permit, the permittee shall retrofit a minimum of one (1) permittee owned property per year with SCMs, until such a time where all identified permittee-owned sites have been retrofitted. This inventory shall be maintained until such a time as when the permittee has less than 5 sites remaining that could be retrofitted.

- i. At a minimum, the permittee shall consider municipal properties with significant impervious cover (including parking lots, buildings, and maintenance yards) that could be modified or retrofitted with an SCM to enhance pollutant removal and/or address other operational or maintenance issues such as drainage failure caused by flooding. MS4 infrastructure to be considered includes existing rights-of-way, outfalls and conventional stormwater conveyances and controls (including swales and detention practices) that could be readily modified or retrofitted to provide reduction in frequency, volume and pollutant loads of such discharges.
- ii. In prioritizing the schedule for modifying or retrofitting particular permittee-owned properties with SCMs, the permittee shall consider properties that are vulnerable to flooding during major storm or flood events and/or with high pollutant loads (as defined in Appendix A), and, whether the property is located within a flood zone under current and future conditions as defined in Part 2.3.7.d.ii.1, above. The permittee shall also consider factors such as schedules for planned capital improvements to storm and sanitary sewer infrastructure and paving projects; current storm sewer level of service; and control of discharges to water quality limited waters, first or second order streams, public swimming beaches, drinking water supply sources and shellfish growing areas.
- iii. Beginning 3 years after the effective date of the permit (i.e, in the year 3 annual report) the permittee shall report the number and location(s) of new SCMs installed by the permittee during the reporting year and the factor(s) considered in prioritizing the retrofit. Permittees shall also report the total amount of TP and TN (in pounds per year) removed by all treatment structures tracked in the integrated management system.

f. Catch Basins

The Asset Management System shall include inspection, maintenance and replacement schedules and procedures for catch basins, including the following:

- i. Cleaning, Inspection and Maintenance

Cleaning, inspection, and maintenance procedures shall be implemented such that the following conditions are met:

1. Prioritize inspection and maintenance for catch basins located near construction activities (roadway construction, residential, commercial, or industrial development or redevelopment). Clean catch basins in such areas more frequently if inspection and maintenance activities indicate excessive sediment or debris loadings.
 2. Prioritize inspection and maintenance for catch basins that experience flooding in major storm and flood events (as defined in Appendix A).
 3. Establish and update as necessary a schedule with a goal that the frequency of routine cleaning will ensure that no catch basin at any time will be more than 50 percent full. A catch basin sump is more than 50 percent full if the contents within the sump exceed one half the distance between the bottom interior of the catch basin to the invert of the deepest outlet of the catch basin.
 4. If a catch basin sump is more than 50 percent full during two consecutive routine inspections/cleaning events, the permittee shall document that finding, investigate the contributing drainage area for sources of excessive sediment loading, and to the extent practicable, abate contributing sources. The permittee shall describe any actions taken in its annual report.
 5. Drainback water resulting from catch basin cleaning shall be discharged to the sanitary sewer, other facility designed for the treatment and disposal of catch basin drainback water, or a permittee-owned infiltration SCM. No catch basin cleaning drainback water shall be discharged to the MS4 unless discharge to a sanitary sewer or treatment facility is infeasible; such a determination shall be documented in the SWMP and each annual report.
 6. The permittee shall update the catch basin inventory included in the Asset Management System when catch basins are cleaned or inspected. This inventory shall be updated as part of the SWMP. At a minimum, this inventory shall include the sump depth, last cleaning or maintenance, estimated volume of sediment removed at last cleaning, and whether the catch basin is located within a flood zone under current and future conditions as defined in Part 2.3.7.d.ii.1.
 7. The permittee shall report in each annual report the total number of catch basins inspected, number cleaned, and the total volume or mass of material removed from all catch basins during the reporting year.
- ii. Catch Basin Upgrade and Replacement
- Within one (1) year of the effective date of the permit the permittee shall develop a Catch Basin Upgrade and Replacement Prioritization Program for all catch basins in the permittee's MS4 that are not designed in compliance with the Massachusetts Stormwater Handbook. The permittee shall upgrade or replace 20% of the permittee's total catch basins in need of an upgrade within five (5) years of the effective date of the permit. The upgrade and replacement program shall rank all catch basins needing an upgrade or replacement. The permittee

shall first prioritize upgrading and replacing catch basins according to the following criteria:

1. Catch basins that are a part of upcoming planned capital improvement projects or that are in need of minimal upgrade such as installation of a hood.
2. Catch basins observed to be more than 50% full during two consecutive routine inspections/cleaning events.
3. Catch basins that are prone to flooding during major storm and flood events or that are located within a flood zone under current and future conditions as defined in Part 2.3.7.d.ii.1.
4. Catch basins located in areas with high proportion of impervious cover relative to the total MS4 area.
5. In lieu of replacing a catch basin in need of an upgrade or replacement, the permittee may elect to install a SCM, or series of SCMs, within the catch basin catchment area that achieves water quality improvements and additional benefits (e.g., reduction in peak flow, alleviates flooding, provides co-benefits to a community with environmental justice concerns) such that the performance of the SCM, accounting for additional benefits, is greater than that of a catch basin designed in compliance with the Massachusetts Stormwater Handbook. A permittee may install any of the infiltration-based SCMs listed in Attachment 3 to Appendix F in lieu of replacing a catch basin and may receive credit for nutrient reductions achieved by the SCM. All SCMs must be inspected and maintained according to the frequencies and procedures determined in permit Part 2.3.7.d.ii.3.
6. Where it is determined that a catch basin replacement consistent with the requirements of the Massachusetts Stormwater Handbook is infeasible and an alternative SCM cannot be installed, the permittee shall document the information that supports the infeasibility determination and design the replacement catch basin consistent with Volume 2 Chapter 2 of the Massachusetts Stormwater Handbook to the maximum extent feasible. All information on infeasibility of catch basin replacement shall be included SWMP.
7. The permittee shall report on the number of catch basins upgraded or replaced per year in each annual report, including the number and estimated performance of SCMs installed in lieu of a catch basin replacement, and the number of catch basins where it was determined fully meeting the requirements of the Massachusetts Stormwater Handbook and an additional SCM installation was infeasible, along with the justification.

g. Street Sweeping and Winter Maintenance

i. Street Sweeping

The permittee shall update procedures for sweeping and/or cleaning permittee-owned streets, and parking lots within one (1) year of the effective date of the permit and include the following (at a minimum):

1. All permittee-owned streets with the exception of rural uncurbed roads with no catch basins or high speed limited access highways shall be swept and/or cleaned a minimum of twice per year; once in the spring (following winter activities such as sanding) and once in the fall following leaf fall.
2. The procedures shall include more frequent sweeping of targeted areas determined by the permittee on the basis of pollutant load reduction potential, based on inspections, pollutant loads, catch basin cleaning or inspection results, land use, water quality limited or TMDL waters, or other relevant factors as determined by the permittee.
3. The permittee shall report in each annual report the average number of times roadways were swept that reporting year, and the number of miles cleaned or the volume or mass of material removed.
4. Rural uncurbed roadways with no catch basins and limited access highways, shall either meet the minimum frequencies above, or the permittee shall update and implement its targeted sweeping plan for such roadways. The targeted sweeping plan for uncurbed roads with no catch basins and limited access highways shall be documented in the SWMP.

ii. Winter Road Maintenance

1. The permittee shall update and implement procedures for winter road maintenance including the use and storage of salt and sand in order to minimize the use of sodium chloride and other salts. The permittee shall adopt temperature dependent deicing procedures and salt application rates including the use of pre-wetting procedures and alternative deicing materials.
2. The permittee shall annually train employees who are responsible for implementing winter road maintenance procedures. At a minimum the training must include information related to the proper storage and handling of deicing chemicals, proper application rates based on temperature, the use of brines or other pre-wetting solutions, the use of salt alternatives (if applicable), and other factors to minimize deicer use.
3. The permittee shall report the total tons of salt used per year on municipal roadways and parking lots in each annual report.
4. The permittee shall ensure that snow disposal activities do not result in disposal of snow into waters of the United States.
5. For purposes of this MS4 Permit, salt shall mean any chloride-containing material used to treat paved surfaces for deicing, including sodium chloride, calcium chloride, magnesium chloride, and brine solutions.

h. Stormwater Pollution Prevention Plan (SWPPP)

The permittee shall update and continue to implement a SWPPP for each 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 as determined by the permittee. If facilities are located at the same property, the permittee may develop one SWPPP for the entire

property. The SWPPP is a separate and different document from the SWMP required in Part 1.10. A SWPPP does not need to be developed for a facility if the permittee has either developed a SWPPP or received a no exposure certification for the discharge under the Multi-Sector General Permit, or the discharge is authorized under another NPDES permit.

- i. For new facilities built or acquired by the permittee since July 1, 2022 the permittee shall develop and implement a SWPPP for those facilities no later than one (1) year from the date the facility or building was acquired. The permittee shall develop and implement a written (hardcopy or electronic) SWPPP for the facilities described above. The SWPPP shall be signed in accordance with the signatory requirements of Appendix B – Subparagraph 11.
- ii. The SWPPP shall contain the following elements:
 1. Pollution Prevention Team
 - Identify the staff on the team, by name and title. If the position is unstaffed, the title of the position should be included and the SWPPP updated when the position is filled. The role of the team is to develop, implement, maintain, and revise, as necessary, the SWPPP for the facility.
 2. Description of the facility and identification of potential pollutant sources
 - The SWPPP shall include a map of the facility and a description of the activities that occur at the facility. The map shall show the location of the stormwater outfalls, receiving waters, and any structural controls. Identify all activities that occur at the facility and the potential pollutants associated with each activity including the location of any floor drains. These may be included as part of the inventory required by Part 2.3.7.a.
 3. Identification of best management practices
 - The permittee shall select, design, install, and implement the BMPs detailed in Section 2.3.7.h.ii.4 below to prevent or reduce the discharge of pollutants from the permittee-owned facility.
 - The selection, design, installation, and implementation of BMPs shall be in accordance with good engineering practices and manufacturer's specifications and take into consideration whether control measures are located within a flood zone under current and future conditions as defined in Part 2.3.7.d.ii.1. The permittee shall also take all reasonable steps to control or address the quality of discharges from the site that may not originate at the facility.
 - If the discharge from the facility is to a water quality limited water and the facility has the potential to discharge the pollutant identified as causing the water quality limitation, the permittee shall identify the BMPs that will be used to address this pollutant at the facility so that the discharge meets applicable water quality standards.
 4. Best Management Practices
 - Minimize or Prevent Exposure: The permittee shall to the extent practicable either locate materials and activities inside, or protect them

with storm-resistant coverings in order to prevent exposure to rain, snow, snowmelt and runoff (although significant enlargement of impervious surface area is not recommended). Materials do not need to be enclosed or covered if stormwater runoff from affected areas will not be discharged directly or indirectly to surface waters or to the MS4 or if discharges are authorized under another NPDES permit.

- **Good Housekeeping:** The permittee shall keep clean all exposed areas that are potential sources of pollutants, using such measures as sweeping at regular intervals. Ensure that trash containers are closed when not in use, keep storage areas well swept and free from leaking or damaged containers, and store leaking vehicles needing repair indoors.
- **Preventative Maintenance:** The permittee shall regularly inspect, test, maintain, and repair all equipment and systems to avoid situations that may result in leaks, spills, and other releases of pollutants in stormwater to receiving waters. Inspections shall occur at a minimum once per quarter.
- **Spill Prevention and Response:** The permittee shall minimize the potential for leaks, spills, and other releases that may be exposed to stormwater and develop plans for effective response to such spills if or when they occur. At a minimum, the permittee shall have procedures that include:
 - Preventive measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling.
 - Response procedures that include notification of appropriate facility personnel, emergency agencies, and regulatory agencies, and procedures for stopping, containing, and cleaning up leaks, spills and other releases. Measures for cleaning up hazardous material spills or leaks shall be consistent with applicable Resource Conservation and Recovery Act (RCRA) regulations at 40 CFR section 264 and 40 CFR section 265. Employees who may cause, detect, or respond to a spill or leak shall be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals should be a member of the Pollution Prevention Team; and
 - Contact information for individuals and agencies that shall be notified in the event of a leak, spill, or other release. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under 40 CFR section 110, 40 CFR section 117, or 40 CFR section 302, occurs during a 24-hour period, the permittee shall notify the National Response Center (NRC) at (800) 424-8802 in accordance with the requirements of 40 CFR section 110, 40 CFR section 117, and 40 CFR section 302 as soon as the permittee has knowledge of the discharge. Permittees must immediately call MassDEP's Emergency Response

line at: 888-304-1133 in the event of an oil spill or leak, the release of hazardous materials, the contamination of drinking water, or other threats to the public health, safety, or the environment. Local requirements may necessitate additional reporting of spills or discharges to local emergency, public health or drinking water supply agencies, and owners of public drinking water supplies. Contact information shall be in locations that are readily accessible and available.

- Erosion and Sediment Control: The permittee shall use structural and non-structural control measures at the facility to stabilize and contain runoff from exposed areas and to minimize or eliminate onsite erosion and sedimentation. Efforts to achieve this may include the use of flow velocity dissipation devices at discharge locations and within outfall channels where necessary to reduce erosion.
- Management of Runoff: The permittee shall manage stormwater runoff from the facility to prevent or reduce the discharge of pollutants. This may include management practices which divert runoff from areas that are potential sources of pollutants, contain runoff in such areas, or reuse, infiltrate or treat stormwater to reduce the discharge of pollutants.
- Salt Storage Piles or Piles Containing Salt: For storage piles of salt or piles containing salt used for deicing or other purposes (including maintenance of paved surfaces) for which the discharge during precipitation events discharges to the permittee's MS4, any other storm sewer system, or to a Water of the U.S., the permittee shall prevent exposure of the storage pile to precipitation by enclosing or covering the storage piles. The permittee shall implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile. The permittee is encouraged to store piles in such a manner as not to impact surface water resources, ground water resources, recharge areas, and wells.
- Employee Training: The permittee shall, at a minimum, provide annual training to employees who work in areas where materials or activities are exposed to stormwater, or who are responsible for implementing activities identified in the SWPPP (e.g., inspectors, maintenance personnel), including all members of the Pollution Prevention Team. Training shall cover both the specific components and scope of the SWPPP and the control measures required under this Part, such as spill response, good housekeeping, material management practices, any best management practice operation and maintenance. The permittee shall document the following information for each training in the SWMP:
 - The training date, title and training duration;
 - List of municipal attendees;
 - Subjects covered during training

- Maintenance of Control Measures: The permittee shall maintain all control measures required by this permit in effective operating condition. The permittee shall keep documentation onsite that describes procedures and a regular schedule for preventative maintenance of all control measures and discussions of back-up practices in place should a runoff event occur while a control measure is off-line. Nonstructural control measures shall also be diligently maintained (e.g., spill response supplies available, personnel trained).
- iii. The permittee shall conduct the following inspections:
1. Site Inspections: Inspect all areas that are exposed to stormwater and all stormwater control measures. Inspections shall be conducted at least once each calendar quarter. More frequent inspections may be required if significant materials are exposed to stormwater. Inspections shall be performed when the facility is in operation. At least one of the quarterly inspections shall occur during a period when a stormwater discharge is occurring. The permittee shall document the following information for each facility inspection:
 - The inspection date and time;
 - The name of the inspector;
 - Weather information and a description of any discharge occurring at the time of the inspection;
 - Identification of any previously unidentified discharges from the site;
 - Any control measures needing maintenance or repair;
 - Any failed control measures that need replacement.
 - Any SWPPP changes required as a result of the inspection.
 2. If during the inspections, or any other time, the permittee identifies control measures that need repair or are not operating effectively, the permittee shall repair or replace them before the next anticipated storm event if possible, or as soon as practicable following that storm event. In the interim, the permittee shall have back-up measures in place.
 3. The permittee shall report the findings from the Site Inspections in the annual report.
- iv. The permittee must keep a written (hardcopy or electronic) record of all required activities including but not limited to maintenance, inspections, and training. The permittee shall maintain all records associated with the development and implementation of the SWPPP required by this Part consistent with the requirements of Part 4.2.
- i. Flood Management
- The permittee may identify ways to ensure that new flood management projects related to MS4 operations assess the impacts on water quality and examine existing flood management projects for incorporating additional water quality protection devices or practices. EPA encourages permittees to coordinate with flood control

managers for the purpose of identifying and addressing water quality impacts from flood management projects.

2.4. Additional Requirements for Discharges to Surface Drinking Water Supplies and Their Tributaries

- a. Permittees which discharge to public surface drinking water supply sources (Class A and Class B surface waters used for drinking water) or their tributaries should consider these waters a priority in the implementation of the SWMP.
- b. Permittees should provide pretreatment and spill control measures to stormwater discharges to public drinking water supply sources or their tributaries to the extent feasible.
- c. Direct discharges to Class A waters should be avoided to the extent feasible.

3. PERMIT CONDITIONS AND LIMITS SPECIFIC TO NON-TRADITIONAL MS4S

Non-traditional MS4s are MS4s owned and operated by the Commonwealth of Massachusetts, counties or other public agencies within the Commonwealth of Massachusetts, and properties owned and operated by the United States (Federal Facilities) within the Commonwealth of Massachusetts, MS4s owned or operated by any state or federal transportation agency (except Massachusetts Department of Transportation – MassDOT- Highway Division, which is subject to a separate permit). This Part addresses all non-traditional MS4s.

3.1. Requirements for Non-Traditional MS4s

All requirements and conditions of Parts 1, 2, and 4 of this Permit apply to all Non-traditional MS4s, except as specifically provided below.

3.1.1. Public Education

For the purpose of this permit, the audiences for a Non-traditional MS4 can include the employees, clients and customers (including students at education MS4s), visitors to the property, tenants, long term contractors and any other contractors working at the facility where the MS4 is located. The audiences for a transportation agency education program can include the general public (users of the roadways), employees, and any contractors working at the location. The permittee shall distribute four (4) educational messages to audiences of their choosing in accordance with Part 2.3.2.b.i. and a total of five (5) messages to audiences of their choosing in accordance with Part 2.3.2.b.ii. The permittee shall document the chosen audiences and educational topics for each target audience in the SWMP and annual reports.

3.1.2. Ordinances and Regulatory Mechanisms

Some Non-traditional MS4s may not have authority to enact an ordinance, by-law, or other regulatory mechanisms. MS4s without the authority to enact an ordinance shall ensure that written policies or procedures are in place to address the requirements of Part 2.3.4.a., Part 2.3.5.c., and Part 2.3.6.a. The policies and procedures shall be documented in the SWMP.

3.1.3. Permittees Subject to Appendix F Part I.A

Non-Traditional MS4s identified in Table F-3 of Appendix F Part I.A, with the exception of the Massachusetts Department of Conservation and Recreation, shall use the information submitted in their Year 4 annual report under the MS4-2016 Permit along with any other additional information necessary to complete a Phase 1 Phosphorus Control Plan that contains the following elements within one (1) year of the effective date of the permit. Phase 1 of the PCP shall be included with the SWMP. All milestones and requirements contained in Appendix F Part I.A are applicable to those permittees identified in Table F-3 of Appendix F.

- a. Baseline Phosphorus Load, Phosphorus Reduction Requirement, & Allowable Phosphorus Load consistent with the Table F-3 in Appendix F;
- b. Description of Non-structural Controls and Structural stormwater controls to be used to meet the milestones in Table F-1 in Appendix F;
- c. Description of Operation & Maintenance Program for Planned and Existing Structural Controls;
- d. Phase I Implementation Schedule consistent with the milestones in Table F-1 of Appendix F;
- e. Estimated Cost for Implementing Phase 1; and
- f. Complete Written Phase 1 Plan.

3.1.4. New Dischargers

New MS4 facilities are subject to additional water quality-based requirements if they fall within the definition of “new discharger” under 40 CFR § 122.2: “A new discharger is any building, structure, facility or installation (a) from which there is or may be a ‘discharge of pollutants’ (b) that did not commence the ‘discharge of pollutants’ at a particular ‘site’ prior to August 13, 1979; (c) which is not a ‘new source’; and (d) which never received a finally effective NPDES permit for discharges at that ‘site.’ The term “site” is defined in § 122.2 to mean “the land or water area where any ‘facility or activity’ is physically located or conducted including adjacent land used in connection with the facility or activity.”

- a. Consistent with these definitions, a Non-traditional MS4 is a “new discharger” if it discharges stormwater from a new facility with an entirely new separate storm sewer system that is not physically located on the same or adjacent land as an existing facility and associated system operated by the same MS4.
- b. Any Non-traditional MS4 facility that is a “new discharger” and discharges to a waterbody listed in category 5 or 4b on the Massachusetts Integrated Report of waters listed pursuant to Clean Water Act section 303(d) and 305(b) due to nutrients (Total Nitrogen or Total Phosphorus), metals (Cadmium, Copper, Iron, Lead or Zinc), solids (TSS or Turbidity), bacteria/pathogens (*E. Coli*, *Enterococcus* or Fecal Coliform), chloride (Chloride) or oil and grease (Petroleum Hydrocarbons or Oil and Grease), or discharges to a waterbody with an approved TMDL for any of those pollutants, is not eligible for coverage under this permit and shall apply for an individual permit.
- c. Any Non-traditional MS4 facility that is a “new discharger” and discharges to a waterbody that is in attainment is subject to Massachusetts antidegradation regulations at 314 CMR 4.04. The permittee shall comply with the provisions of 314 CMR 4.04 including information submittal requirements and obtaining authorization for new discharges where appropriate. Any authorization of new discharges by MassDEP shall be incorporated into the permittee's SWMP. If an applicable MassDEP approval specifies additional conditions or requirements, then those requirements are incorporated into this permit by reference. The permittee must comply with all such requirements.

4. PROGRAM EVALUATION, RECORD KEEPING, AND REPORTING

4.1. Program Evaluation

- a. The permittee shall annually self-evaluate its compliance with the terms and conditions of this permit and submit each self-evaluation in the Annual Report. The permittee shall also maintain the annual evaluation documentation as part of the SWMP.
- b. The permittee shall evaluate the appropriateness of the selected BMPs in achieving the objectives of each control measure and the defined metrics. Where a BMP is found to be ineffective the permittee shall change BMPs in accordance with the provisions below. In addition, permittees may augment or change BMPs at any time following the provisions below:
 - i. Changes adding (but not subtracting or replacing) components or controls may be made at any time.
 - ii. Changes replacing an ineffective or infeasible BMP specifically identified in the SWMP with an alternative BMP may be made as long as the basis for the changes is documented in the SWMP by, at a minimum:
 - iii. An analysis of why the BMP is ineffective or infeasible;
 - iv. Expectations on the effectiveness of the replacement BMP; and

- v. An analysis of why the replacement BMP is expected to achieve the defined goals of the BMP to be replaced.
- c. The permittee shall indicate BMP modifications along with a brief explanation of the modification in each Annual Report.
- d. EPA or MassDEP may require the permittee to add, modify, repair, replace or change BMPs or other measures described in the annual reports as needed to satisfy the conditions of this permit.
- e. Any changes required by EPA or MassDEP will be in writing and may set forth the schedule for the permittee to develop the changes and may offer the permittee the opportunity to propose alternative program changes to satisfy the permit conditions.

4.2. Record Keeping

- a. The permittee shall keep all records required by this permit for a period of at least five years. EPA may extend this period at any time. Records include information used in the development of any written (hardcopy or electronic) program required by this permit, any monitoring results, copies of reports, records of screening, follow-up and elimination of illicit discharges; maintenance records; inspection records; and data used in the development of the notice of intent, SWMP, SWPPP, and annual reports. This list provides examples of records that should be maintained, but is not all inclusive.
- b. Records other than those required to be included in the annual report, as described in Part 4.4, shall be submitted only when requested by the EPA or the MassDEP.
- c. The permittee shall make the records relating to this permit, including the written stormwater management program, available to the public. The public may view the records during normal business hours. The permittee may charge a reasonable fee for copying requests. Where specified in this permit, permittees must make certain documents available on a public website; permittees are encouraged to satisfy this requirement by posting available records online.

4.3. Outfall Monitoring Reporting

- a. The permittee shall monitor and sample its outfalls at a minimum through sampling and testing at the frequency and locations required in connection with IDDE screening under Part 2.3.4. j. and Appendix I. The monitoring program may also include additional outfall and interconnection monitoring as determined by the permittee in connection with assessment of SWMP effectiveness pursuant to Part 4.1; evaluation of discharges to water quality limited waters pursuant to Part 2.2; assessment of BMP effectiveness pursuant to Part 2.2 or 2.3; or otherwise.

- b. The permittee shall document all monitoring results each year in the annual report. The report shall include the date, outfall or interconnection identifier, location, weather conditions at time of sampling, precipitation in previous 48 hours, field screening parameter results, and results of all analyses. The annual report shall include all of this information and data for the current reporting period and for the entire permit period.
- c. The permittee shall also include in the annual report results from any other stormwater or receiving water quality monitoring or studies conducted during the reporting period where that data is being used by the permittee to inform permit compliance or program effectiveness. If such monitoring or studies were conducted on behalf of the permittee, or if monitoring or studies conducted by other entities were reported to the permittee, a brief description of the type of information gathered or received shall be included in the annual report(s) covering the time period(s) the information was received.

4.4. Annual Reports

- a. The permittee shall submit annual reports each year of the permit term. The reporting period will be a one year period commencing on the permit effective date, with annual reports due each year within 90 days of the last day of the reporting period.
- b. The annual reports shall be submitted using EPA's NPDES eReporting Tool NeT. To access NeT, go to: <https://cdx.epa.gov/cdx>
- c. The annual reports shall contain, at a minimum, the following information:
 - i. An assessment of compliance with the permit terms and conditions;
 - ii. An assessment of the appropriateness of the selected BMPs and documentation of any changes or modifications to BMPs in accordance with the performance evaluation in Part 4.1;
 - iii. The status of any plans or activities required by Parts 2.1 and/ or 2.2, including:
 - 1. For discharges subject to TMDL related requirements, identification of specific BMPs used to address the pollutant identified as the cause of impairment and assessment of the BMPs effectiveness at controlling the pollutant (Part 2.2.1. and Appendix F) and any deliverables required by Appendix F;
 - 2. For discharges to water quality limited waters a description of each BMP required by Appendix H and any deliverables required by Appendix H.
 - iv. An assessment of the progress towards achieving the objectives of each control measure as described in Part 2.3 and additional reporting requirements in Part 4.1.
 - v. All outfall screening and monitoring data collected by or on behalf of the permittee during the reporting period and cumulative for the permit term,

including but not limited to all data collected pursuant to Parts 2.3.4 and 4.3, during the reporting period.

- viii. Identify any control measures described in Parts 2.3.2 through 2.3.7 or other permit requirements that are shared with another entity in accordance with Part 2.3.1.b.

5. STATE CONDITIONS

This permit is in the process of receiving state water quality certification issued by the Massachusetts Department of Environmental Protection under § 401 of the CWA and 40 CFR § 124.53. EPA will incorporate by reference all State water quality certification requirements (if any) into the Final Permit.